



16th ESC CONGRESS

25-28 MAY 2022, GHENT, BELGIUM

Challenging times, are we ready?
Novel approaches to sexual and reproductive health

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ESC Abstract Book 2022

16th Congress of the European Society
of Contraception and Reproductive Health
25-28 May 2022 • Ghent, Belgium

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Keynote Lectures

KL 01

Rights, access, equity: improving sexual and reproductive health in a rapidly changing world

Julia Bunting

Population Council, President, New York, USA

Women, men and young people around the world have the right to decide freely and for themselves whether, when and how many children they have and to have access to the information, services and supplies they need to achieve their reproductive health intentions and prevent sexually transmitted infections. And yet, for millions of people, particularly the poorest and most marginalized populations, these rights are not being realized — with vast unmet need for high quality, voluntary, and rights-based information and services including for contraception, safe abortion, HIV/STI prevention, maternal and newborn health, sexuality education, and many other areas under the comprehensive and integrated definition of sexual and reproductive health and rights.

For example, in low- and middle-income countries (LMICs):

- An estimated 218 million women of reproductive age want to avoid a pregnancy but are not using a modern method of contraception.
- 35 million women have abortions in unsafe conditions.
- An estimated 133 million women of reproductive age need but do not receive treatment for one of the four major curable STIs—chlamydia, gonorrhea, syphilis or trichomoniasis.
- Adolescents, in particular, have substantial unmet needs for sexual and reproductive health care. For example, women aged 15–19 who want to avoid a pregnancy have much higher unmet need for modern contraception than do all women of reproductive age who want to avoid a pregnancy (43% vs. 24%).

And while we most often focus on the unmet contraceptive needs of women, we also must recognize that there is no highly effective, non-surgical contraceptive option for men; leaving half the world's population with very limited options.

These needs exist within the backdrop of a rapidly changing world. The intertwined health, climate, and economic crises during the COVID-19 pandemic are further hindering progress made in sexual and reproductive health while laying bare and exacerbating gender, racial, and social inequalities — both within and between countries and regions. And worryingly, the sexual health and reproductive choices of people around the world are under increasing threat from ideologically driven forces seeking to roll-back hard-won gains, slash funding for life-saving services, and remove references to SRHR from international agreements.

How do these mega trends challenge the sexual and reproductive health community to think and act differently, particularly for those who are continually being left behind and marginalized? What does the future look like for the field given these trends and what are the possibilities for the sector?

KL 03

Keynote Lecture - James Trussell Memorial Lecture

Keeping up Sexual and Reproductive Health and Rights in times of pandemics

Marleen Temmerman

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In 1994, the International Conference on Population and Development (ICPD) laid out impressive and ambitious goals for improving sexual and reproductive health and rights (SRHR) by 2015. One of these goals was universal access to a full range of safe and reliable family-planning methods. Progress made during the second half of the nineties slowed down considerably between 2000 and 2010 despite the beneficial impacts on public health, environmental sustainability, social and economic development, and women agency. In 2015, ensuring universal access to sexual and reproductive healthcare services was endorsed as Target 3.7 of the United Nations Sustainable Development Goals (SDG), underpinned by five principles—equity, quality, accountability, multisectorality, and meaningful engagement.

In 2018, the Lancet-Guttmacher Commission published a landmark report confirming that SRHR are essential for sustainable development because of their links to gender equality and women's wellbeing, their impact on maternal, newborn, child, and adolescent health, and their roles in shaping future economic development and environmental sustainability.

Political will to support the advancement of SRHR is often lacking, which is fundamental to ensuring access, especially for vulnerable groups including adolescents, refugees, migrant women and minority groups. Violations of SRHR include denial of health services to vulnerable groups; lack of dignity as a barrier to care; the vulnerability of adolescents; child marriage; weaponized rape; gender-based violence; and sexual trafficking.

During the COVID-19 pandemic, many countries have reported decreased access to and increased violations of SRHR. Pandemic mitigation measures have been associated with a negative impact on access and provision of essential health care services including reproductive health services.

COVID-19 mitigation measures negatively impacted SRH of women in low and middle income countries (LMICs). Reduction in antenatal & postnatal clinic care as well as health facility deliveries has been reported, lower family planning clinic attendance, and reduced post abortion care. Gender-based violence especially intimate partner violence has increased globally. The impact on birth outcomes is equivocal, but evidence points in the direction of higher risk of poor pregnancy outcome for mother and newborn. Vaccine inequity as well as fake news, misconceptions and fear lead to vaccine hesitancy in pregnant women, and should be addressed by governments and professional bodies.

Finally, SRHR and the ICPD Plan of Action deserve renewed attention at global, regional and local level, from governments, policy makers, civil society and all stakeholders, including academia and teaching institutions where SRHR is often neglected in training curricula.

Congress sessions

CONSES 01: Abortion (part A) - Access to abortion

CONSES 01-01

Low-tech low-cost MTOP in the community - the Irish experience

Caitriona Henchion

Irish Family Planning Association, Dublin, Ireland (Rep. of)

Drawing on the IFPA's experience since January 2019 of providing early medical abortion at two clinics in Dublin, the presentation will outline how Ireland has implemented low tech, low cost early medical abortion by community providers. It will also provide insights into diverse patient journeys through the care pathway, including those which are seamless and empowering, but also patient and provider experiences of the ways in which the model of care can frustrate access, delay care and interfere with reproductive autonomy and dignity for some people who need abortion care.

This presentation will

- Consider the strengths and weaknesses of the model in terms of equality of access and quality of care.
- Provide an overview of the legal and policy framework for abortion provision in Ireland. It will discuss the legal requirements of and the obstacles created by the law, including the mandatory waiting period, and will discuss the national model of care for early medical termination.
- Discuss the impacts of issues including the limited geographical distribution of community and hospital services and limited choice of method on those who need early abortion care.
- Discuss key aspects of the model of care, including the non-requirement for ultrasound to date gestation and how that interacts with the strict gestation limit; the mainstreaming of care within general practice; and the model of partial self-management, both with and without telemedicine.
- Discuss the introduction of telemedicine in April 2020 as a public health measure and the importance of its retention beyond the pandemic.
- Draw primarily on the IFPA's experience of the introduction and provision of abortion care at primary level, and also on national data on abortion incidence and peer-reviewed research on the implementation of Ireland's 2018 legislation, including research conducted by the WHO, journal articles by abortion providers and research commissioned by government and by civil society.

CONSES 01-02

Shaping abortion for change: evidence from the SACHA study

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Recent years have seen significant changes in the delivery of abortion care and support, notably an increase in the proportion of abortions carried out by medical as opposed to surgical methods, a shift towards greater patient autonomy and shared care, and an extension of the role of non-specialist health care practitioners in provision. The COVID-19 pandemic has accelerated these trends. Public health measures designed to limit transmission of the virus brought changes in the regulatory frameworks around abortion and in many countries – in the UK, France, Australia and New Zealand, for example – have led to less restrictive protocols. In March 2020, professional bodies in the UK produced national guidelines that included the use of telemedicine to ensure abortion care could be continued safely in the pandemic and the government announced temporary approval of home use of both abortion medications.

The trends are likely to be the shape of things to come in many settings and have the potential for yielding considerable benefits: making earlier abortion more likely, according women more control over their abortion, making abortion part of routine health care, saving public health resources by allowing task shifting to nurses and midwives and removing obstacles in the care pathway. For the benefits to be realised, however, health systems and services will need to be adequately prepared and fit for purpose. More needs to be known about women's needs for support and care; on how quality of care is to be assessed; and how maximum advantage may be taken of new models of care, abortion techniques and sources of support.

The NIHR-funded SACHA study in the UK was established with the aim of providing an evidence base with which to inform the optimal configuration of health services and systems in response to current and future changes in the legal and regulatory context of abortion provision. The research draws on published reports of novel models of care; comparative evidence from countries spearheading innovation in abortion; the views of practitioners and patients on the implications of new developments for abortion health care. In this presentation we describe the views of women on their experience of abortion, on their preferences for models of care and on the legal and regulatory frameworks surrounding abortion.

CONSES 01-03

The Italian abortion experience

Marina Toschi

Private practice, Corciano; Pro Choice RICA, Rome, Italy

Italy has a legislation for abortion from May 1978 that establishes abortion for woman choice until 90 days of pregnancy and until 22 weeks for medical reasons. It sets also free of charge contraception for all in Family Planning Clinics (FPC). The Ministry of Health must make every year a report in the Parliament with numbers on abortion and abortion services, prepared by national institute of health, so the epidemiology of the legal phenomenon is clear, but not the hidden part of the iceberg.

From August 2020 guide lines provided from Ministry of Health on medical abortion, gave right to abortion in FPC and raise the limit of medical abortion up to 9 weeks. Only 4 Regions have accepted these guidelines but with big differences of protocols chosen as for contraception.

In fact the situation of SRHR is very patchy, depending from every regional law and organization. Different protocols exist, even from one Hospital/FPC to another in the same region. The number of conscious objectors doctor, nurses, midwives can get to 90% of hospital/FPC staff. Women have difficult access to abortion especially in Southern Italy and the use of medical abortion is still under 30%. In Universities especially the Catholic ones, abortion and contraception are not taught and ob/gyn specialists can come out from 5 years specialization without knowing how to put an IUC or how to deal with a medical abortion.

The use of IUC is not very common and to obtain tube ligation is almost impossible in most Hospitals even after 3 CS.

CONSES 02: Contraception and attitudes (part A) - Rethinking contraception

CONSES 02-01

From contraception to contragestion

Kristina Gemzell-Danielsson

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Today many women are reluctant to use any of the existing contraceptive methods due to side effects or fear of experiencing such effects. Unsafe abortion is a major contributor to maternal mortality. Therefore, effective and acceptable methods for contraception are required to meet this unmet need. In addition safe and acceptable abortion methods are prerequisites for reproductive health, for gender equality and for the empowerment of women. New methods for contraception include improved methods for emergency contraception and methods with new mechanisms of action as well as mode of delivery. Based on their mechanisms of action Progesterone receptor modulators (PRMs) can be used for emergency contraception as well as regular contraception by various modes of delivery. Progesterone receptor modulators have been shown to be effective when used on demand post coital, as daily pills, once-weekly or once-a-month and is a well established method for medical first and second trimester abortion. The use of progesterone receptor modulators for contraception and positive health benefits such as the possible protection against breast cancer as well as prevention of uterine leiomyomas and endometriosis deserves to be further explored. Due to their effect on endometrial receptivity and possibility to prevent or disrupt implantation PRMs have also been studied for contragestion in the form of "late emergency contraception" and for menstrual induction. Very early medical abortion (VEMA) before an intrauterine pregnancy can be visualized by ultrasound has been shown to be acceptable, safe and effective. Thus PRMs such as mifepristone if offered in a suitable dosage and mode of delivery provides a model for a woman centred contragestive method with added health benefits and increased autonomy for women.

CONSES 02-02

Unmet need for contraception after miscarriage and ectopic pregnancy

Helena Kopp Kallner

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Any unplanned pregnancy may result in abortion and birth and these are the most studied outcomes. Post abortion contraception is well studied and it has been shown in numerous studies that effective post abortion contraceptive counseling prevents new unintended and unwanted pregnancies. Recent focus has also been of effective post partum contraception resulting in longer interpregnancy intervals and fewer abortions in nearest post partum years.

However, an unplanned pregnancy may also result in miscarriage or ectopic pregnancy. As miscarriage and ectopic pregnancy constitute a set proportion of pregnancies, a significant proportion of these pregnancies in fact are a result of unplanned and unwanted pregnancies. As ectopic pregnancy affects future fertility, preventing subsequent unplanned pregnancies is an important task of health care providers who treat this condition. Asking questions such as “do you wish to become pregnant again” could help meet unmet need of contraception in women seeking care for miscarriage or ectopic pregnancy and prevent new unplanned pregnancies.

In this lecture I will discuss the current knowledge base and research into contraceptive use at the time of and after miscarriage and ectopic pregnancy and outline knowledge gaps and areas for much needed research.

CONSES 02-03

Provision of immediate postpartum contraception: changing hearts and minds

Sharon Cameron

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High rates of unintended pregnancy in the year after delivery reflect an unmet need for effective contraception. It has been common practice that a postpartum contraception discussion consists of a brief discussion between a midwife and/ or obstetrician with a woman after delivery before she leaves the maternity service, with advice on where to get contraception. However, at this time mothers are tired and preoccupied with caring for their newborn. Also, the need to attend a clinic at a later date to access contraception is a particular barrier for women at this time. Fertility and sexual activity resume quickly after birth and so delays in accessing and initiating effective contraception increases the margin for unintended pregnancy.

Research amongst pregnant women shows that they find the offer of a discussion about contraception in the antenatal period to be highly acceptable to them and that they value the opportunity to receive contraceptive supplies from the maternity hospital, including the option to receive long-acting reversible methods immediately after delivery. Research also shows higher uptake of effective contraception when this is made available. Although, evidence-based guidelines support the approach of antenatal contraceptive counseling coupled with provision of a comprehensive range of methods from the maternity service, implementation often lags far behind. In order for contraception to become a routine part of maternity care, healthcare providers need to be convinced of the benefits of this approach, systems need to be in place to support staff training and funding needs to be available to ensure that contraception can be provided at this time. Improving access to effective methods of contraception in the immediate postpartum period should prevent more unintended pregnancies and optimise birth spacing. Ultimately this will result in better outcomes for women and for babies.

CONSES 02-04

Population and Overpopulation: Malthus versus Marx

Jan Greguš

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Objectives: The human overpopulation currently being witnessed is causing severe problems to both the planet Earth and humanity itself (i.e. climate change, environmental degradation, resource depletion, mass species extinction, political instability, extremism, poverty, forced migration, not to mention a major obstacle to achieving the Sustainable Development Goals).

Because the issues presented by human overpopulation tend to be seen as a politically incorrect topic, they are largely ignored in the public and political domains, despite being identified as important by many great thinkers in recent history. Among them, Malthus and Marx gathered the largest following. The goal of this presentation is to highlight and compare the Malthusian and Marxist approaches, and then discuss the possibilities to solve these problems.

Methods: This presentation is based on analysis of An Essay on the Principle of Population, the Kapital, Anti-Dühring, the Origin of the Family, and other Marxist and Malthusian literature, as well as on fresh data from United Nations (World Population Prospects, FAOSTAT Database on Agriculture); the Alliance of World Scientists (World Scientist's Warning to Humanity: A Second Notice); the World Wildlife Fund (Living Planet Report), and reports from population conferences.

Results: The Malthusian views on population were demographic, i.e. it is necessary to reduce population to improve the economy. The Marxist views were rather economic: it is necessary to improve the economy to reduce population; in other words, if there is economic growth, people will decide to have fewer children. These two opposite approaches can even be found in the themes of international population conferences. While the 1974 conference raised the slogan that "Family planning is the solution," the 1984 conference upheld the slogan that "Development is the best contraceptive pill." Nevertheless, it was the 1994 conference that managed to bridge both approaches, as it acknowledged both the importance of family planning and development while also recognizing sexual and reproductive health as well as girls' and women's rights, education, and empowerment as the pathway to sustainable development.

Conclusion: As healthcare providers, we need to continue our work in the promotion of sexual and reproductive health, voluntary family planning, and women's rights, education and empowerment. Nevertheless, given the current political climate and public ignorance of the problem, it is also necessary to – in the tradition of Malthus and Marx – put the population and overpopulation agenda back into public discourse and onto the political table, so to speak, due to their imminence and importance.

CONSES 03: Abortion (part B) - The ever changing saga of abortion rights

CONSES 03-03

New to the table—the Irish journey

Maeve Taylor

Irish Family Planning Association, Dublin, Ireland (Rep. of)

Ireland has changed from being a country whose laws on abortion were among the harshest in the world to one where abortion is provided within mainstream healthcare. This presentation will discuss the current legislation and model of care in Ireland from the perspective of reproductive autonomy and health rights. It will discuss tensions between the aspects of the 2018 Act that support reproductive autonomy, access and choice, such as the provision of abortion on request up to 12 weeks and at no charge to women and pregnant people, and the provisions that impede and frustrate autonomy and rights.

The presentation will consider aspects of the legislative process that influenced the framing and structure of the law and the impact of the current framing on access and on the normalisation of abortion within the law and within mainstream healthcare in Ireland.

The presentation will reflect on the emergence of a community of committed conscientious abortion providers in Ireland and discuss the impact on providers of the criminal and conscientious objection provisions of the law. The presentation will argue that the law continues to frame abortion as morally wrong, and disproportionately protects non-providers' right to refuse to provide care while, at the same time, retaining the risk of prosecution.

Finally, the presentation will discuss the review of the legislation: the law requires a review within three years of its commencement, and this is taking place in 2022.

CONSES 03-04

Why we still need Women on Web

Rebecca Gomperts

women on waves, Amsterdam, The Netherlands; women on web, research department, Toronto, Canada

When Women on Web started its operations in 2006, there was only one other website that claimed to provide abortion pills and as we ordered and analyzed them, the medicines turned out to be fake.

That website does not exist anymore but there are now many other online abortion services, some more legit than others. Now 16 years later, Women on Web has supported over 120,000 women around the world with access to medical abortions and our trained and compassionate helpdesk members have answered over a million emails in 25 different languages. Our research papers have supported the process of legalising abortion in Ireland, Northern Ireland, The Isle of Man, Queensland, Australia and South Korea.

In the last 2 years Women on Web research has shown the obstacles to access abortion care in countries where abortion is not legally restricted and even in countries where this is supposed to be legal and free, like the UK, Hungary, The Netherlands, USA, US Military, Germany, Italy and France. In many countries access to abortion pills is extremely restricted and our research showed that cost of the abortion, distance to the clinic, obligations from childcare, work and school, psychiatric illnesses, domestic violence and concerns about privacy cause severe obstacles to access abortion care.

As shown by our research COVID-19 the security and isolation measures implemented to prevent the spread of COVID-19 have further hampered access to safe abortion care for people of family members with COVID-19 symptoms, in situations of domestic violence and without private transportation living far from abortion services. Many schools and childcare facilities were closed, and it can be impossible to find or afford the replacement needed to be able to get an abortion in a clinic.

Especially now, during the Corona crisis, telemedical abortion services are the solution. Pregnant people can receive the abortion pills by post and do the abortion at home so they don't have to go for a physical visit to a clinic. An abortion with pills has many advantages over surgical abortions, the abortion can be done together with a partner or friend, women can control the timing of process, there is no need for expensive doctors time, anesthesia and operation rooms. It gives individuals control over their own bodies and lives.

CONSES 04: Contraception and attitudes (part B) - Delivering quality abortion care during covid

CONSES 04-01

Medical Abortion Pills by Post

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Shortly after imposing a nationwide lockdown, the governments in England, Scotland and Wales approved the use of mifepristone as well as misoprostol for home use to protect access to early abortion services for women and reduce the risk of infection in clinic staff. Services rapidly transformed to offer fully telemedical early medical abortion involving a consultation by phone or video call, screening for an ultrasound or other pre-abortion tests, and posting medications to eligible women. This talk will review the care pathway for pill by post, evidence of clinical safety and acceptability, and impact of this service nationally with regard to method choice, location of care and gestational age at treatment. It will also explore the role of fully telemedical services post-pandemic and the challenges of providing some aspects of comprehensive abortion care, such as contraception and screening for sexually transmitted infections.

CONSES 04-02

Maintaining post abortion contraception with telemedicine abortion

Ingrid Sääv

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Today a large proportion of early abortions are medical terminations, in accordance to the woman's choice. Long-acting reversible contraception (LARC) are the most effective methods for preventing another unwanted pregnancy. Intrauterine contraceptives (IUC) provide highly effective, reversible, long-acting contraception, but the effects of timing of IUC insertion after medical abortion are in favour of early insertion during the first week after the abortion treatment. Routine insertion after the first menstruation means an obvious risk of a new pregnancy.

During the Covid pandemic, many countries have simplified the use of medical abortion, limiting the obstacles for postal delivery or reduced the number of mandatory visits.

However, when women opt for a long-acting-reversible contraception, this means an obvious risk for not being able to initiate the contraceptive method promptly after the abortion. I.e., many clinics initiate Nexplanon at the time of mifepristone, if taken at a clinic. The last years a large effort in Sweden has been at initiating IUC during the first week after the abortion, or even before leaving the clinic. Now these improvements in simplifying access to abortion via telemedicine may potentially lead to a risk of more women using less effective short-acting reversible contraception, or even worse, may not be able to initiate a contraceptive method at all directly after the abortion.

Focus should be on identifying obstacles and to maintain the chain of care, from diagnosis of pregnancy, counselling, abortion care to also include postabortion contraception and ensure every woman's need as well as simplifying access to prompt initiating of LARC. Depending on the healthcare structures in different countries, the needs are different. In some regions, LARC is mainly inserted at the abortion clinic, and there will therefore continue to be a need for this visit, but in other regions, primary health care units may be an alternative caregiver. Regardless, the time from abortion to initiating LARC should not increase but optimally remain less than week, meaning an obvious logistic challenge. For some regions this might mean there is a need for "bridging" with progestin-only contraceptive pill, in order not to leave women without acceptable postabortion contraception.

Key words: IUC, medical abortion, contraception, LARC

CONSES 04-03

Women's experiences of telemedicine and medical abortion during the COVID-19: A qualitative evaluation

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Objective: To explore the experiences of women in Scotland who accessed medical abortion at home up to 12 weeks gestation, delivered via a telemedicine abortion service implemented in response to the coronavirus (COVID-19) pandemic: acceptability of the telephone consultation and remote support; views on no pre-abortion ultrasound scan; and self-administration of abortion medications at home.

Methods: Qualitative interview study conducted via an abortion service in one National Health Service health board in Scotland. 20 women, that accessed telemedicine abortion services and self-administered mifepristone and misoprostol at home up to 12 weeks gestation, were interviewed. Thematic analysis of semi-structured qualitative interviews, was informed by the Framework analytic approach.

Results: Key findings were threefold: (1) participants valued the option of accessing abortion care via telemedicine, and emphasised the benefits of providing a choice of telephone and in-person consultation to suit those with different life circumstances; (2) the quality of abortion care was enhanced by the telemedicine service in relation to access, comfort and flexibility, and ongoing telephone support; (3) participants described being comfortable with, and in some cases a preference for, not having an ultrasound scan.

Conclusions: This research demonstrates support for the continuation of telemedicine abortion services beyond the temporary arrangements in place during COVID-19, and lends weight to the argument that offering the option of telemedicine abortion care can enable women to access this essential health service.

CONSES 04-04

Access to Safe Abortion Care in Humanitarian settings: MSF's experience.

Severine Caluwaerts, Eva De Plecker

MSF, Medical, Brussels, Belgium

Objective: Although unsafe abortion is a major cause of maternal death and suffering worldwide, safe abortion care (SAC) has remained largely unavailable in crisis and conflict settings. Despite having a policy since 2004, for over a decade Médecins Sans Frontières (MSF) struggled to provide SAC in its projects. In 2016, MSF launched the Task Force for Safe Abortion Care, a new initiative aimed at addressing internal barriers and providing direct field support.

Method: From March 2017 to April 2018, a field-based coordinator organized visits to 10 pilot projects in Sub-Saharan Africa.

Each visit followed a systematic approach composed of six components targeted at the main internal barriers: (1) Exploring Values and Attitudes (EVA) Workshops; (2) clinical trainings; (3) engagement with local stakeholders; (4) threat and risk assessment; (5) implementation plan; and (6) data collection and monitoring.

Results: From January 2017 to December 2019, there was a significant and steady increase in SAC provided in the 10 pilot projects: from 3 SAC provided in the Q1 2017 to 759 SAC provided in Q4 2019. MSF teams received 3831 patients seeking SAC and provided 3640 safe abortions – including both first and second trimester abortion and over 99% via the medication method. 156 (4.29%) medical complications were reported and the rate of severe, life-threatening complication was 0.2%. No major security incidents were reported. MSF's provision of SAC worldwide increased from 74 SAC provided in five countries in 2015 to 31,824 SAC provided in 33 countries in 2020.

Conclusions: The Task Force experience demonstrates that implementation of SAC in low-resource and conflict settings - even those with important legal restrictions - is both possible and necessary. Addressing internal barriers and direct field support are keys to stimulating organizational cultural change and increasing access to SAC in humanitarian settings.

CONSES 05: Me, myself & STI (part A) - STI's are getting meaner! (part 1)

CONSES 05-01

The importance of antibiotic stewardship and treatment guidelines for common STIs (*Neisseria gonorrhoeae*, *Chlamydia trachomatis* and *Mycoplasma genitalium*)

Suneeta Soni

University Hospitals Sussex, Sexual Health and HIV, Brighton, United Kingdom

Antimicrobial resistance is an urgent global issue and the UK government delivered its 5 year action plan to tackle this in 2019. In particular there are now two STIs of particular importance, *Neisseria gonorrhoea* which is on the CDC Urgent Threat list and *Mycoplasma genitalium*, an organism of increasing importance which has acquired alarmingly high rates of resistance despite diagnostic assays only recently becoming available.

This talk will outline the issues around antibiotic resistance in STI but with a focus on Gonorrhoea and *M. genitalium*, and discuss aspects of management which align with better antibiotic stewardship principles.

CONSES 05-02

What is new in the diagnosis of chlamydia/mycoplasma infection?

Paula Baraitser

SH:24, London, United Kingdom

Chlamydia trachomatis and *Mycoplasma genitalium* commonly cause asymptomatic infection in sexually active populations but may also cause symptomatic urethritis, proctitis and pelvic inflammatory disease. This session will introduce changing approaches to prevention, diagnosis and management of chlamydia and mycoplasma infection.

Using case studies, it will discuss common presentations and clinical dilemmas including:

- When to test (and when not to test for) *Mycoplasma genitalium*
- New treatments for *Chlamydia trachomatis*
- Partner tracing/treatment and test of cure for both infections?

This session offers a practical update for clinicians working in sexual health on how to diagnose and manage both infections.

CONSES 05-03

What's new in the diagnosis and management of HPV infections

Brigitte Frey Tirri

Cantonal hospital, women's health, Liestal, Switzerland

There is an ongoing increase in new information in diagnosis and management of HPV infections. HPV related dysplasias and cancers on other sites than cervix, vulva, vagina and anus are in the focus. There is evidence of oropharyngeal, scrotal diseases being HPV related and in the focus of prevention.

The diagnosis and management of HPV related infections depends not only on diagnostic tests, but also knowledge, financial and political resources of a country. I will focus on European countries. In secondary prevention HPV-screening in women > 30 years of age is preferred in most European countries. Which tests should be used for primary screening, is self-sampling as effective as the testing during a gynaecological exam and what about urine self-sampling. Are there propositions in screening for HPV-related vulvar, vaginal, anal and oropharyngeal diseases? In the management of cervical HPV related diseases there is a trend to less invasive excision of dysplastic areas. The management of the postsurgery controls shows a combined cytological and HPV testing (Test of Cure) and there is a tendency to vaccinate women also after a treatment of a HPV related disease.

CONSES 06: What is coming in sexual and reproductive health technology? (part A) - Innovation in hormonal contraception

CONSES 06-01

Oral contraception (CHC and POP): where are we going?

Johannes Bitzer

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The development of oral contraception was a milestone in the history of family planning. Women could and can control their fertility themselves. Taking tablets for preventing an unwanted pregnancy was and is practiced by millions. It became evident that during the decades that this approach has limitations and risks and that other methods have replaced oral hormonal contraception.

Progress on limitations and risks:

The gap between ideal and typical use, the health risk esp VTE, problems with tolerability were the challenges which were responded to:

Increase safety: Diminishing dosage, introducing new estrogens, progestogen only pills

Improve efficacy: Long cycle, long half time of progestogens

Improve tolerability: Different progestogens with different actions on steroid receptors

The challenge for the future is to use the large variety to tailor oral contraception to the specific medical and psychosocial profile of the user.

CONSES 06-02

Short-acting methods but not a pill: what to expect?

Regine Sitruk-Ware, N. Kumar, N. Teleshova, Lisa Haddad

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The availability of a wide range of contraceptive methods is not only important for individuals and couples, but can have positive effects on their families, communities, countries, and the world. While great progress has been made, globally more than 200 million couples' contraceptive needs have not yet been met. Research is therefore needed to offer more contraceptive options to women and men and help ensure that the benefits of rights-based, voluntary family planning extend to everyone. The development of multi-purpose prevention technologies (MPT) combining anti-infective and contraceptive agents has also become a high priority and favored by women.

Long-acting reversible methods showed the highest efficacy. However, these methods require trained health providers for insertion or removal. User-controlled methods such as vaginal rings have become popular and a novel one-year contraceptive vaginal system (Annovera®) used monthly for 13 cycles is available in the US. Other 3-month, or monthly, vaginal rings are in the pipeline, for single or dual-protection. Innovative dosage forms such as microneedles, or vaginal systems, using either fast-dissolving insert or drug-eluting nanofibers combining several molecules are designed to be user-controlled and discreet, becoming potential innovative MPTs.

The promise of a male contraceptive method must be realized. Several male hormonal methods are currently under development; the most advanced being a Nestorone/testosterone transdermal gel applied daily, able to suppress spermatogenesis while maintaining sexual function.

Novel single agent hormonal products with both progestin and androgen oral activity are in clinical trials and may lead to the first male pill in the next decade.

Advanced technologies, such as genomics and proteomics, helped the discovery of biomarkers to identify new contraceptive targets. This opened-up the prospect of innovative non-hormonal contraceptives for women and men. A few of these approaches may enter clinical testing in the next decade. Methods are being developed to increase user control, short or mid-acting for daily, weekly or monthly use, that will prevent the need to rely on a provider for initiation and discontinuation. Improved contraceptive technologies can offer more choices to couples and help meet their disparate needs that emerge at different times of their reproductive lives. More investment in contraceptive research and development can help in that direction.

CONSES 06-03

Long-acting between present and future: intrauterine, subdermal and ...what is new?– who should have what?

Kristina Gemzell-Danielsson

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This presentation will focus on existing long acting reversible methods, on-going promising research and new options which should be further explored to allow women and men all possible options for controlling and preserving their reproductive health and lives.

New delivery systems may not only contribute to reduced risk for complications and side effects but may also offer long acting reversible self controlled highly effective methods for women and men as well as new possibilities for dual protection. PRMS due to their mechanisms of action might offer notable advantages for many women. Potentially a PRM could be used not only as an emergency contraceptive, but also as a LARC method depending on the mode of delivery.

CONSES 07: Me, myself & STI (part B) - STI's are getting meaner! (part 2)

CONSES 07-01

The vaginal microbiome: what every woman should know

Peter Greenhouse

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Understanding of the complex ecosystem of the vaginal microbiome - and the mechanisms controlling the delicate balance of its many constituent organisms - has expanded dramatically in the last decade with the advent of multiplex genomic testing. Yet little of this knowledge has filtered through to family doctors, who remain almost the only defence against the misinformation fed to women by the popular press and broadcast media about their vaginal milieu and the presumed need to interfere unnecessarily with its largely self-regulatory functioning.

While many are now well informed about the health benefits of having a highly diverse gut microbiome, they are unlikely to know that lack of diversity is important for a healthy vagina or understand that the organisms exist within and around a biofilm which helps protect the body from infections and is threatened by such products as soaps and detergents.

So what it should be the essential components of public knowledge about the vaginal microbiome? Perhaps the best plain language analogy to improve understanding is that of Philip Hay's "Littoral Zone"*, where vaginal organisms – similar to the sea shoreline environment in different tide states – adapt naturally to changing conditions of moisture, temperature, pH etc depending on their hormonal milieu and the ebb and flow of fluids and other substances entering or transiting this personal space.

Women need straightforward information about:

1. Healthy changes in vaginal discharge throughout a normal menstrual cycle
2. The self-cleaning function & maintenance of an acidic pH within the vaginal milieu, thus...
3. The lack of need for specific "feminine hygiene" products or deodorants
4. Simple recognition of the commonest causes of symptoms such as itch (candida), abnormal smell (BV) or itch & smell (both conditions together OR possible trichomonas)
5. Instructions to seek medical advice and accurate diagnosis if their first choice or repeated use of over-the-counter preparations have failed to alleviate abnormal symptoms

6. Recognising the effects of a hypoestrogenic environment – due either to progesterone-only contraception, breast feeding or post-menopause – and the long-term benefit and safety of intravaginal estradiol treatment on promoting vaginal health and maintaining normal urinary & sexual function.

Perhaps the simplest and most useful public take-home message about the vaginal microbiome is that the more money used in advertising any “feminine hygiene” product, the more harmful and unnecessary it is likely to be.

*Hay P. Life in the littoral zone: lactobacilli losing the plot. Sex Transm Inf 2005

CONSES 07-02

STIs in Trans People

Kate Nambiar

University Hospitals Sussex NHS Foundation Trust, Brighton Sexual Health & Contraception Service, Brighton, United Kingdom

Transgender and gender diverse people remain an under researched population group particularly in regard to sexually transmitted infections (STIs). Stigma, marginalisation and mistrust of healthcare have been shown to hinder engagement with sexual health services, and a lack of being counted in population measures means that accurate data on a large scale is hard to find. Yet, from the research we do have, we see that there are high rates of STIs particularly in transgender women where there are co-existing established risk factors for STI transmission such as having multiple sexual partners, sex work / transactional sex or illicit drug use. The aim of this presentation is to outline the current research on the prevalence of STIs in transgender people, to explain what additional risk factors may affect trans people, and what can be done to improve care and outcomes.

CONSES 07-03

HPV: genital cancers, head and neck cancers, gender neutral vaccination

Cristian Furau

Western University Vasile Goldis of Arad, Life sciences and Biology, Arad, Romania

HPV infection is one of the most frequent infection that can be acquired through sexual intercourse and has been associated with cervical cancer (zur Hausen). Co-testing for cervical cancer as a screening tool will be analyzed. Further research revealed its involvement in other genital cancers, but also in cancers of the head and neck region. My presentation is aimed to present this correlations, but also the preventive action that is required. Anti HPV vaccination and its success will be presented, as well as arguments for gender neutral vaccination.

CONSES 08: What is coming in sexual and reproductive health technology? (part B) - Contraception and beyond. An update on different strategies

CONSES 08-01

Innovation in vulvovaginitis management

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Major innovations are changing the field of vulvovaginitis. On the diagnostic end, phase contrast microscopy is still the cornerstone, enabling not only to identify pathogens such as candida, trichomonas or bacterial vaginosis (BV), but also to diagnose different severities of aerobic vaginitis (AV) and cytolytic vaginosis (CyV). Recently, Grams stained smears can also be used for the diagnosis of AV. Alongside, point of care tests based on enzymatic or PCR technology, or based on artificial intelligence recognizing microscopic pictures, are rapidly expanding and will assist clinicians in the future. Also on the therapeutic side, major progression is being made. Therapeutic molecules such as combined domiphen bromide/miconazole, eto-seconazole and ibrexafungerp are underway to help us treating intractable and recurrent Candida vaginitis. Also research to develop vaccines and probiotics to prevent Candida vaginitis from recurring are ongoing and very promising. For prevention of recurrent BV, probiotics, new antimicrobials and also endolysins are being developed with unseen successes. Aerobic vaginitis is still best being treated with individualized therapy which is tailored according to the microscopy findings.

Benign gynecological disorders and hormonal contraceptives: a strategic approachGiovanni Grandi

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The tailored choice of hormonal contraceptives (HCs) represents one of the most actual challenges having a wide spectrum of compounds available, both estrogens and progestins. Nowadays, health care professionals have the opportunity and the responsibility to choose for the characteristics and the needs of the specific woman, especially if contraception can bring extra-contraceptive benefits. Not all HCs are the same: switching to the right one needs full information about woman needs (counseling).

In heavy menstrual bleeding (HMB) a high endometrial affinity progestins, such as dienogest (DNG) or norgestrel acetate (NOMAc) should be preferred. The only pill presently on label for HMB without an organic disease (fibroids, adenomyosis, endometrial polyps, etc.) is the quadriphasic estradiol valerate (E2V)/DNG. Even in the case of primary dysmenorrhea, a high endometrial affinity (DNG, NOMAc) or progestins with a slight clinically relevant glucocorticoid activity, such as chlormadinone acetate (CMA), are preferred. A high endometrial affinity reduces also dysmenorrhea, HMB and dyspareunia caused by adenomyosis: DNG, with its high endometrial affinity is preferable. In these cases the treatment with an intrauterine system releasing levonorgestrel (LNG-IUS) at different doses is also very effective.

In endometriosis, the most important point is to achieve the woman's compliance by all necessary means, in order to avoid repeated surgical procedures during reproductive years. To this end, long-acting reversible contraceptives (LNG-IUSs or implants) that last for some years should be preferred to short-acting reversible contraceptives, due to higher long-term adherence with the former. It is still unknown if the administration of estrogens should be completely avoided or it could be permitted in low dosages (how much? E2?) in subjects with symptomatic endometriosis: indeed the presence of the low dose estrogen component could represent an advantage in terms of bleeding control and therapy adherence.

The anti-androgenic action is a fundamental requirement in the presence of hyperandrogenism or polycystic ovary syndrome (PCOS). It is not only the absolute dose of estrogen and/or progestin that should be considered when selecting a product, but also the actual progestin involved. The progestin counteracts the effect of androgens both by competing with androgen receptor and by not counteracting the estrogen-induced raise of sexual hormone binding globulin. The inhibitory effect on 5 α -reductase is also important modulating the peripheral conversion of testosterone into dihydrotestosterone (its active metabolite). Therefore, progestins with strong anti-androgenic activity such as DNG, cyproterone acetate, CMA, drospirenone (DRSP) or norgestimate (with its skin 5- α reductase inhibition) are preferable. More indicated for the treatment of the clinical signs of hyperandrogenism are the associations containing the above progestins plus ethinyl-estradiol (EE).

Formulations containing E2/E2V seem to present a more neutral/beneficial effect on sexual dysfunction.

Finally, in the presence of premenstrual syndrome or more serious premenstrual dysphoric disorder (PMDD), combinations containing long half-life progestins, such as DRSP, seem more effective, probably due to its anti-mineralocorticoid property and to its central effects.

"Listen to what she is telling you and ask about what she may not be telling you": you can make her even happier with her contraceptive method!

Moving forward with the hormonal approach to male contraceptionCristina Meriggiola

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Although many female contraceptives are available, data on uncontrolled population growth and abortion rate demonstrate that contraceptive choices are still inadequate and accessibility is poor. Broader contraceptive options is an ethical issue that would benefit not only the lives of families and women in particular but would also ensure the survival of our planet.

In spite of the shortage of male contraceptives, about 30% of couples rely on a male method including condoms, vasectomy, periodic and coitus interruptus. Men worldwide show interest in actively contributing to birth control. A variety of approaches have been undertaken in developing new male contraceptives but progress has been slow.

The hormonal approach, although imperfect, is the closest to the development on a large scale. Hormones induce profound sperm production through a reversible suppression of gonadotropins and intra-testicular testosterone. In this context, androgen dependent physiological functions must be maintained by exogenous androgen administration. Hormone induced sperm suppression to $1 < \text{million/ml}$ has been demonstrated to provide optimal pregnancy protection. Androgen-progestin regimens induce profound sperm suppression, and allow spermatogenesis to fully recover to levels consistent with normal male fertility. Among the limitations of the hormonal approach is the required time until sperm suppression is achieved and until fertility is regained after discontinuing. Even the most effective regimen suppresses spermatogenesis to the threshold useful for contraceptive protection in only about 90% of subjects. A number of novel molecules have recently reached clinical testing as potential contraceptive agents among which molecules that have both androgenic and progestogenic action in a single, modified steroid, thereby holding promise as single-agent contraceptives. Currently, these novel steroids hold promise as both a “male pill” and long-acting injections. A contraceptive efficacy trial of Nestorone®/testosterone gel is ongoing.

CONSES 09: The Internet as influencer # sex

CONSES 09-01

Contraception: powerful storytelling?

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Contraception has been in the media for a long time, whether it was the high number of pelvic infections after Dalkon shield IUD or the increased risk of venous thromboembolism in COCP.[1] It seems for contraception that bad news has more media coverage than good news. As a result, the public health imperative to balance small risks against potentially greater benefits is lost out of sight.[1]

Nowadays, millions of people use social media daily. When looking at #contraception, birth control pill remains the most discussed contraceptive method and is followed by condoms, intra uterine devices, implants/rods and hormone injectables.[2-3] Women are more active discussing compared to men and the most dominant age group is 18-24 years.[3-4] Research of Linkfluence Search showed a transition from websites and forums to user driven platforms as Facebook or Twitter when comparing 2016 to 2019.[2] The traditional media is not less active concerning contraception, but latest articles are now shared via Twitter or LinkedIn. As a result, this digital transformation calls for new understanding of the concept of public health and how public health messages are conveyed.

The social media platforms can teach us that content written like a story influences the reader. The purpose of the storyteller is to give you questions to think upon and they open up the world of possibility through words and imagery. Clearly, the language used in storytelling is important and the reason to be successful on social media platforms.[4-7]

There seems to be a clash between scientific language used for public health messaging and language for information shared on social media platforms. Science and storytelling mean different things when they speak of truth.[5] As in other contexts, misinformation can lead individuals to make uninformed decisions that negatively impact their lives or society at large.[7] However, narrative formats of communication should not be disregarded when communicating science to non-expert audiences. There is growing recognition among experts in the field of public policy-making of the need to incorporate narratives.[4] In conclusion, social media platforms and storytelling should be considered as an opportunity to increase leadership, improve education, and spread knowledge of contraception.

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CONSES 09-02

Exploring contraception applications # contraception – interactive applications: South Europe

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Background: Access to modern contraception is based on information and availability. With the development of internet, the use of social media and smart phones have become widespread and there are many web sites, social media accounts and smart phone applications for disseminating information, advice on specific matters and even providing contraceptive services.

Objective: To explore the electronic means of providing contraception advice and information in Southern European Countries and if possible assess the effect they may have in improving contraception use.

Methods: A literature search was conducted with the mesh terms of # contraception, application, internet and the name of each specific country in PubMed and Google

Results: Southern European countries vary greatly in the utilization of contraceptive methods with Spain, France and Italy leading the way and Balkan countries and Turkey following with Albania being the last on the list. All countries have contraception societies that have websites of various quality to promote contraception and give advice on several matters. Several applications exist most of them in English being universal and some in local language in the first three countries mentioned.

Conclusion: At present there is insufficient knowledge on their effect in promoting contraception and sexual health.

CONSES 09-03

The Internet as influencer # sex: North Europe

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Access to effective contraception and choices for men and women are both essential components of contraceptive health care services. It is essential that as many choices as possible are informed. To ensure that, access to correct, balanced and understandable information is crucial. This short lecture covers how the internet covers these aspects in Northern Europe with focus on an experience from Denmark.

CONSES 09-04

Using social media to promote sexual health

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Sexual health is a fundamental component of general well-being, relating to the ability of an individual to have pleasurable and safe sexual experience. Several factors interfere with sexual well-being, namely access to good quality information, the ability to access sexual health care and living in an environment that affirms and promotes sexual health.

Mass media have been used for decades as means to promote health information and influence healthy behaviours. With access to the internet now surpassing television and newspaper audiences, social media have become a powerful tool to communicate positive health messages and are taking the lead among mass media, either as part of a general multimedia promotion or as the sole intervention used.

Social media can target audiences with poor access to health services, such as adolescents or members of the LGBTQ community and convey a message or information that thus becomes more accessible and direct. A number of social media interventions have been designed so far, aiming at diagnosis and protection against STIs, contraception use or deferring a pregnancy until adulthood. Their impact has been audited and appears effective, at least in the short run.

With social media proving to be a useful tool in the propagation of information it becomes important to either incorporate them into current campaigns or at least advertise other internet-based sites or blogs through them. This is the case with many learned societies that advertise important scientific conclusions through social media platforms such as Twitter®, Facebook®, LinkedIn® or Instagram®.

However, this information does not necessarily reach laypersons, but rather is usually targeted to health providers that will in their turn promote the information.

Scientific communities need to have a more active role within social media, as often deceptive or unfiltered information is disseminated by private or non-medically trained authors. This may lead to skewed information, as is the case with female cosmetic genital surgery, where social media heavily promote an ideal norm fueled by the cosmetic surgery industry. To counteract such effects, positive outcomes from existing sexual health promotion campaigns could be expanded within social media proactively.

CONSES 10: Diversity of sexualities and provision of health care (part A) - Human sexual identities and behaviours

CONSES 10-01

Sexual identity, attraction and behaviour in Britain

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Sexual orientation can be seen to comprises three dimensions: sexual identity, attraction and behaviour, estimates of which have implications for addressing public health needs. Significant overlap between identity, behaviour and attraction adds to the complexity of delivering appropriate sexual health services and designing and evaluating interventions.

This presentation draws on data from several UK studies, including the British National Survey of Sexual Attitudes and Lifestyles, a large decennial probability sample survey, to illustrate conceptual and methodological issues in the measurement of sexual orientation. We touch on ongoing debates as to how, why and even whether, we should classify and measure gender and sexual diversity. Challenges and controversies surrounding measurement are discussed against a backdrop of changes in gender and sexual politics and the influence of shifts in the political landscape on expression of sexual diversity will be considered. We examine the extent to which the apparent size of sexual minority populations depends on the dimension applied, with implications for the design of epidemiological studies, the targeting and monitoring of public health interventions.

CONSES 10-02

Sexual identity, behaviour and health among Estonian women

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Objective(s): The first aim of this presentation is to describe the prevalence of group sex experiences and prevalence and time trends of same sex experiences among women in Estonia. The second aim is to compare women with same sex and group sex experiences with exclusively heterosexual women concerning selected socio-demographic characteristics, self-reported mental health status and substance use (drugs, alcohol, smoking).

Design & Methods: Prevalence data come from three population-based surveys: the Estonian Women's Health Survey (EWS) 2004 and 2014 and the Sexual Behaviour among Estonian Adult Population Survey (SBEAPS) 2017. Data from the EWS 2014 were used to compare the three groups of women. For this survey stratified random sample (16-17, 18-24, 25-34, 35-44 years) was taken from the state population registry. A postal or electronic questionnaire included 121 questions (response rate 47%). The results are based on the answers from 2413 questionnaires. Chi-square test and Fisher's exact test were used to compare women in the three groups. Multivariate analysis, by means of logistic regression models, was used to explore whether the associations were sustained after adjusting for age, native language, living place, marital status and education. Adjusted odds ratios and their 95% confidence intervals were estimated where heterosexual women served as a reference group.

Results: According to the EWHS in all age groups sexual experiences with the same sex partner were more common in 2014 than ten years earlier, according to the SBEAPS 2017 3,3% of respondents had had same sex experiences during their lifetime. In SBEAPS 2017 5.3% and in EWHS 2014 3.7% of women had experienced sex with more than one partner at the same time. According to multivariate analysis, depression during the last year, satisfaction with life and sexual life were similar among women with homosexual and group sex experiences and heterosexual women. Having homosexual and group sex experiences was associated with higher number of sexual intercours per week and substance use. Odds of using antidepressants were higher among women with group sex experiences when compared with the other two groups. Conclusions: Compared to exclusively heterosexual women, having homosexual and group sex experiences was associated with having more sexual intercours per week and substance usage; having group sex experiences was associated with antidepressant usage.

Full report of the Estonian Women's Health Survey can be found: <https://sisu.ut.ee/naisteterviseuuring/node/1278>

Full report of the Sexual Behaviour among Estonian Adult Population Survey can be found: https://intra.tai.ee/images/prints/documents/153501440828_Eesti_t%C3%A4iskasvanud_elanikkonna_seksuaalk%C3%A4itumine_2017.pdf

CONSES 10-03

How the COVID-19 pandemic affects transgender health care - A cross-sectional online survey in 63 upper-middle-income and high-income countries

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Background: Due to the COVID-19 pandemic, access to medical care is restricted for nearly all non-acute conditions. Due to their status as a vulnerable social group and the inherent need for transition-related treatments, transgender people are assumed to be affected particularly severely by the restrictions caused by the COVID-19 pandemic.

Methods: As an ad hoc collaboration between researchers, clinicians and 23 community organizations, we developed a web-based survey in German that was translated into 26 languages. Participants were recruited via community sources, social media channels, and snowball sampling since May 2020. The present sample is based on the data collected until August 9, 2020. We assessed demographical data, health problems, risk factors, COVID-19 data (e.g., contact history), and the influence of the COVID-19 pandemic on access to transgender health care services. To identify factors associated with the experience of restrictions, we conducted multiple logistic regression analysis.

Results: 5267 transgender people from 63 upper-middle-income and high-income countries participated in the study. Over 50% of the participants had risk factors for a severe course of a COVID-19 infection and were at a high risk of avoiding COVID-19 treatment due to the fear of mistreatment or discrimination. Access to transgender health care services was restricted for 50% of the participants. Male sex assigned at birth and a lower monthly income were significant predictors for the experience of restrictions to health care. 35.0% reported at least one mental health condition and 3.2% have attempted suicide since the beginning of the COVID-19 pandemic.

Discussion: Transgender people suffer under the severity of the pandemic due to the intersections between their status as a vulnerable social group, their high number of medical risk factors, and their need for ongoing medical treatment. The COVID-19 pandemic can potentiate these vulnerabilities, add new challenges for transgender people, and, therefore, can lead to devastating consequences, like severe physical or mental health issues, self-harming behavior, and suicidality.

CONSES 11: LGBT sexual health matters

CONSES 11-01

Sexual health for lesbian and bisexual women

Astrid Hoejgaard

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Being lesbian or bisexual (LB) is a question of sexual behaviour, erotic attraction, self-identification, affective / romantic preference, and social labelling. According to a recent Danish population survey including 62.675 randomly selected adult respondents, 0.6% of women identified as lesbian, and 2.6% as bisexual, whereas 8% had had sex with another woman, 3% felt a strong attraction towards women and 27% had ever been attracted to another female.

Many LB women do not inform their health care providers (HCP) of their sexual orientation and 21.7% of Danish LB women are less open as wanted regarding their orientation with significantly more bisexual women being in the closet. Several (37% of) lesbian women have experienced harassment.

Some lesbian women take a stereotypical butch identity – an androgynous subgroup in contrast to the softer femme subgroup which more easily passes unnoticed. Interestingly butch women have significantly fewer gynecological examinations and perceive greater problems in contacts with HCP.

Regarding reproduction methods depend on local laws. In an online Swedish study, 42% used anonymous donor IUI at a clinic, 28% used known donor insemination, but not in a clinic, 7% used IVF with anonymously donated sperm and one had IVF with identified donated sperm, 14% conceived through sexual intercourse with a male partner and 1% conceived through sexual intercourse with a man who was not her partner. The number of LB women among fertility patients is probably underestimated as HCP usually do not consider the possibility. At least a quarter of LB fertility patients have experienced heterosexism or even homophobia according to studies in Commonwealth countries.

Sexual dysfunction among LB is understudied, it seems as bisexual women are more dissatisfied with their sex life, as compared with heterosexual women. Lesbian women seem to have lower risk for many sexual-related problems.

Sexual practices may increase risk of sexual transmitted diseases, and data about this will be presented.

Minority stress and stigmatization still exists even in open societies, it is apparent that HCP must pay extra attention to a non-biased approach and treatment of non-heterosexual patients. Also, it seems that many lesbians go unnoticed – “under the radar” due to the double taboo – “do not ask, do not tell”, that even prevails in the health care system today. Very few HCP, who are LB themselves, are open and thus role models.

CONSES 11-02

Gender and sexual identity. How do we interact with our young people?

Piet Hoebeke

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Today, many people know that the world is no longer really divided into two groups of people, men and women, but that sexual identities have a broad spectrum of possibilities, a wealth of variations. Social media and the press in general contribute to the spread of knowledge about this spectrum, but very often this gives rise to a polarized image, often based on incorrect or scientifically unsubstantiated information.

At various levels, we are therefore responsible for sharing scientific insights on this subject. At all levels of education from primary school to university education, this should be one of the learning objectives. Being well informed early in life can only help improve tolerance and reduce discrimination.

In addition, the visibility of role models is a possible contribution to improving tolerance.

For young people who struggle with their sexual identity, a safe environment to explore is very important and unfortunately we still see too often today that young people remain in the closet and often have mental problems because of this.

During the lecture, I will try to provide some of the scientific tools that can help to scientifically substantiate the information for young people.

I will also focus on young people who present themselves as patients and offer tools on how we as health-care providers can best deal with them.

Using self reported gender identification in Health and citizenship among trans people in surveys: a better way to take into account their needs

Alain Giami

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Sex — the binary man/woman distinction — is the first variable used in most demographic, sociological or epidemiological surveys and in health care settings. The inclusion of people who do not fit into the sex/gender binary model is both a scientific and a political and a social problem. The presentation will focus on 4 surveys conducted in France, Brazil, Norway, Denmark that were based on a quantitative data collection, using self reported gender identification by the participants themselves. In these 4 surveys, gender identification was an open question; and the responses were used as independent variables for constructing subgroups and analyzing responses. The presentation demonstrates how self reported gender identification data were used to reconstruct the demographic categories of sex/gender and to analyze the quantitative data collected in the questionnaire. Data on the affirmation pathways in these four countries will be presented including : Change of legal sex assigned at birth; Obtaining a Gender Incongruence diagnosis or similar; Hormonization; Genital surgeries, Breast surgeries; Thinking to have completed the process. The presentation will highlight the importance of using self-reported gender identification in the process of care of transgender and gender diverse people in order to better respond to their needs and respect the way they present themselves in social and medical settings. The partnerships that researchers work out with the representatives of trans organizations provide the grounds for conducting a survey with scientifically valid findings and an ethical dimension.

CONSES 12: Diversity of sexualities and provision of health care (part B) - Helping the helpers - identify the helpers

One to one model to encourage professionals to talk about sexual health

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Background: Patients are reluctant to introduce intimate issues as sexual health with the health care provider such as a general practitioner (GP). For instance in Belgium (Flanders) 22% of women and 13% of men suffer from sexual dysfunctions (Buysse et al, 2013)). Only a minority seeks help for these issues. On average it takes 7 years before patients dare to address it themselves with their GP. GPs have a crucial role in reaching the general public and in detecting and addressing sexual health. How can general practitioners be motivated to pro-actively discuss sexual health with their patients?

Methods: Thresholds to discuss sexual health were identified through a literature study and through a questionnaire filled out by 100 GPs. An expert steering group was formed to develop the 'One to one' (O2O) model to support GPs and lower the resistance of patients in discussing these topics. The model is based on the PLISSIT model (Annon, 1977) and motivational interviewing (Miller & Rollnick, 2006) taken into account the specific thresholds. The O2O model is an easy to use 4 step roadmap. It can be described as a tool which consists of 4 simple steps. It will help the physician to start a conversation about sexual health, as well as to listen attentively, finish the talk respectfully and formulate a personalized offer. The O2O model is integrated in a training package for GPs and is being evaluated immediately and after 4 weeks by the GPs who participated in the O2O trainings.

Findings: After 4 weeks the response rate was 36%. Main results, almost every participant (99%) reported that pro-actively talking about sexual health was more important than they perceived it before the training. 97% stated that the O2O model was helpful and was an added value to talk about sexual health. Only 2% reported that they wouldn't discuss sexual health more than before, 10% stated they already discussed it enough and 72% reported the intention to discuss sexual health more than before the training. After 4 weeks, more than half of the participants reported that they discussed sexual health more pro-actively since the training, 60% experienced less thresholds to pro-actively discuss this topic.

Discussion: The O2O model and training had a positive effect on the attitude of the GP toward this topic, but also increased their self-efficacy. To conclude GPs discussed sexual health more pro-actively after this training.

Due to these results the Flemish government decided to invest financially in these O2O training for GPs. In 2019 all the Flemish universities integrate this O2O in their university curriculum for GP students. Sensoa also developed adapted O2O models, for example on talking about contraception and family-planning.

CONSES 12-02

Preconception health care should be integrated in contraception counselling: periconception period and its importance for future health of offspring

Tom Fleming

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Human and animal developmental models have shown the peri-conception period to be sensitive to environmental conditions such as poor maternal nutrition or even use of assisted reproduction treatments (ART) (reviewed Fleming et al, 2018, Lancet 391:1842-52). Environment at this time can influence the developmental programme through embryo sensing capacity affecting metabolic homeostasis and associate with increased risk of chronic cardiometabolic or neurological disease in later life. Detailed mechanisms, comprising epigenetic, cellular and physiological processes, have been investigated using a mouse maternal low protein diet applied exclusively during the preimplantation period and will be discussed. This model indicates stepwise progression in altered phenotype from periconception onwards, differentially affecting embryonic/fetal and extra-embryonic/placental lineages culminating in maladaptation and disease risk. Clinical evidence of periconception vulnerability to environmental exposures have come from historical famines, pregnancy nutritional intervention programmes and ART. Collectively, the sensitivity of the peri-conception period to environmental conditions, a time a mother would not know she is pregnant, supports a policy for preconception health care counselling.

CONSES 12-03

Transgender care for gynaecologists: screening, treatment and follow-up

Steven Weyers

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The prevalence of gender identity disorders (GID) in Western Europe is about 1:12.000 male-to-female (transwomen) and 1:30.000 female-to-male (transmen). In many countries surgery is not reimbursed by social security, moreover healthcare in transpeople is often neglected leading to suboptimal care. Most gynecologists are not used to providing health care to transgender people, however they do play an important role in screening, treatment and follow-up.

In transwomen the role of the gynaecologist is mainly restricted to discussing the options for fertility preservation. In the follow-up of transwomen however, if surgery has been performed, the gynaecologist can play an important role and gynaecological follow-up is deemed necessary by a large part of transwomen. Vaginal health, including screening and treatment of STI's, and sexual functioning are important points of attention. Mammography should be performed according to the local guidelines. And osteoporosis seems to be more prevalent than in cis-men, necessitating a bone density measurement every 5 years.

In transmen discussing the fertility preservation options can also be a role of the gynaecologist. The follow-up of transmen depends on whether surgery is done and what exactly. Before surgery (or if no surgery is ahead), start of cervical cancer screening and mammography should not differ from national guidelines. Genital malignancies are rather rare (and not higher than in cis-women), however any abnormalities should be excluded before onset of hormonal treatment and this through an ultrasound (can be performed transabdominally) and, if patient is non-virginal, a pelvic exam.

Of course, the gynaecologist is the designated person to perform the pelvic surgery. If hysterectomy (with/without ovariectomy) is performed, it can be done laparoscopically.

The role of the gynaecologist in the long-term follow-up of transmen depends on the remaining internal and external organs: in case of a full transition there is no role left for the gynaecologist, when no pelvic surgery is performed, pap-smears and mammographies should follow national guidelines and a yearly ultrasound is advised to exclude endometrial and adnexal pathology. If unexpected bleeding occurs an extra check should be planned. When only the ovaries are left a 2-3 yearly ultrasound should be sufficient. If only the vagina remains no regular follow-up is necessary but the gynaecologist remains the practitioner of choice in case of abnormal discharge.

CONSES 13: The biology of sexuality (part A) - Sexual functioning and hormones

CONSES 13-01

Hormones, sex chromosomes and the sexual differentiation of the human brain

Julie Bakker

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Widespread sex differences have been reported in human brain structure and function. Many of our ideas about the origins of these sex differences are derived from research on animal models which have convincingly shown that sex differences in the brain and behavior are induced by sex hormones during specific, hormone sensitive periods during development. Thus, male-typical psychosexual characteristics seem to develop under the influence of testosterone, mostly acting during early development. By contrast, female-typical psychosexual characteristics may actually be organized under the influence of estradiol during a specific prepubertal period. Likewise, the sexual differentiation of the human brain seems to be primarily driven by gonadal hormones during fetal development. However, direct genetic factors might also contribute to the sexual differentiation of the human brain since several behavioral and neuroimaging studies of Turner (XO) or Klinefelter (XXY) syndrome point to a role for X-chromosomal dosage in the development of the human brain. Since in both disorders there is an aberrant number of sex chromosomes, along with reduced gonadal hormone levels it is difficult to determine whether the results from these syndromes reflect genes on the X or Y chromosome, chromosomal dosage or sex hormone levels. Therefore, we studied brain structure and function in women diagnosed with complete androgen insensitivity disorder (CAIS), who have a 46 XY karyotype but a female phenotype due to complete androgen resistance. These studies have shown that several sexually differentiated aspects of brain structure and function, such as white matter microstructure and neural responses to a 3D mental rotation task, are female-typical in CAIS women, suggesting that these sex differences most likely reflect androgen action, although feminizing effects of estrogens or female-typical socialization cannot be ruled out. By contrast, some male-typical neural characteristics, in particularly regarding gray matter volumes and brain gyrification, were also observed in women with CAIS suggesting direct effects of sex chromosome genes in the sexual differentiation of the human brain. In conclusion, the sexual differentiation of the human brain is most likely a multifactorial process including both sex hormone and sex chromosome effects, acting in parallel or in combination.

CONSES 13-02

Effects of hormonal contraceptives on mood: is there a real danger?

Inger Sundström Poromaa

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The interest in how, and if, hormonal contraceptives influence mood has increased over the past years. Mood symptoms, such as depressive symptoms, irritability, anxiety, and mood swings, are becoming a clinical problem for many hormonal contraceptive users, and are often a reason for discontinuation. While the great majority of hormonal contraceptive users, including those using combined methods as well as progestin-only methods, should not expect to experience negative mood, a smaller percentage of women are hormone sensitive and at risk of experiencing a worsening of their mood. High-quality evidence suggests that use of combined hormonal contraceptives is associated with minor mood changes, like increased irritability, increased anxiety and mood swings, and lowered general well-being, whereas depressive symptoms seem less affected. For some women, these modest changes in mood may be clinically relevant, and the final push to a mental health problem in need of psychotropic treatment. Overall, modern contraceptive counselling should include a discussion about the potential risk of minor mood disturbances while on treatment.

Endocrinology of transgender medicineJustine Defreyne

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During the session 'Sexual functioning and hormones', the lecture on 'Endocrinology of transgender medicine' will provide an introduction on gender affirming care and a more in-depth discussion on gender affirming hormones and their effects as well as side-effects on the human body. One of these topics will include the effects of gender affirming care on fertility. We will conclude with an overview on the effects of the gender affirming process (care-related as well as non-care-related) on sexual functioning. The effects of visiting a mental health professional, gender affirming hormones, gender affirming surgery and - if available- other parts of the gender affirming process on sexual functioning will be discussed.

CONSES 14: How to maintain and promote sexual health (part A) - Sexual health: rights, education and counselling

Sexual and reproductive health and rights – a short global historyGunta Lazdane

Riga Stradins University, Institute of Public Health, Riga, Latvia

"Sexual and reproductive health and rights (SRHR)" is a common term in many international documents, meetings and scientific publications, however, there is a big diversity regarding the attitude towards and understanding of sexual health. In developing new public health programmes and action plans to reach them, it is important to learn from the past.

Sexuality and reproduction are as old as mankind and since ancient civilizations there have been different ways and diverse groups of people helping women and men to improve sexual performance and reproduction and get rid of problems. Human rights linkage with health is dated to late 40-ies of the previous century when the WHO constitution (1946) and the Universal Declaration of Human Rights (UDHR) (1948) were agreed upon by the Member States. The UDHR positioned health under the right to an adequate standard of living: "Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family...". Many public activists united their efforts in improving access to information and contraception and in 1952 the International Planned Parenthood Federation (IPPF) was formed. Since then IPPF has changed the focus of their activities from family planning to SRHR.

In 1974 in a WHO meeting "Education and Treatment in Human Sexuality: the training of health professionals" sexual health definition was discussed and is included in the meeting report. However, the landmark was the International Conference on Population and Development (ICPD) in Cairo, at which "reproductive health" was defined for the first time in an international consensus document and was used instead of the "population control". According to the ICPD definition of reproductive health it "...also includes sexual health, the purpose of which is the enhancement of life and personal relations, and not merely counselling and care related to reproduction and sexually transmitted diseases" (ICPD Cairo, Programme of Action 1994; paragraph 7.2). In 2002 an international meeting organized by WHO produced a working definition of sexuality, sexual health and sexual rights. Since 2006 when the report of the meeting was published, the working definition of sexual health has been widely used as the international consensus on this term is still missing.

During the last decade a number of political documents including words "sexual health" have been approved such as the 2030 Agenda for Sustainable Development (2015), Action Plan for Sexual and Reproductive Health for WHO European Region (2016), etc. Technical documents are developed by WHO and other organizations such as "Sexual health and its linkages to reproductive health: an operational approach" (2017), "Sexual health, human rights and the law" (2015) etc. They are excellent tools in assisting people and organizations involved in improvement of SRHR during these challenging times.

CONSES 14-02

Aspects of Comprehensive Sexuality Education in the WHO European Region

Evert Ketting

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Background: This paper is based on a study on school sexuality education in the WHO European Region, conducted by the German Federal Health Education Centre, BZgA, and the European Network of the International Planned Parenthood Federation, IPPF EN.

Purposes: 1) to assess what comprehensive SE (CSE) means in practice in this region, and 2) to assess to what extent CSE correlates with core indicators of adolescent sexual and reproductive health (SRH).

Materials and methods: Written interviews with 25 representatives of (SRH) NGOs and 17 staff members of Ministries of Education or Health. Two countries were excluded from this analysis.

Results: Nine out of 23 countries have comprehensive SE programmes; 10 have non-comprehensive ones and 4 don't have SE programmes. Countries with comprehensive programmes have (much) better scores on adolescent SRH indicators.

Discussion: CSE programmes include, compared to other ones, a wider range of teaching subjects, that are not only medical-technical. Students of CSE programmes are much more satisfied than other students.

CONSES 14-03

The science and art of sexual counselling

Johannes Bitzer

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Sexual health is an important component of a person's health and wellbeing. There is an important interaction between the different dimensions of health: Physical, mental and sexual health impact on each other in a large variety of ways in each individual at different times during the life course. Many women and men have however difficulties to talk about sexuality and sexual problems.

Sexual Counselling:

To provide help and support health care professionals need:

- a) Knowledge of the biological, psychological and social factors impacting sexual health in the context of a life course approach and knowledge about medical and psychosocial therapeutic options
- b) Specific communication skills which help patients to feel accepted, respected and get emotional relief one side and increase their knowledge and understanding of themselves and their problem on the other side. These include active listening, reflecting, emotional response and summarizing on the attending side and patient centered information and education skills on the active side. Where necessary a combined medical and psychosocial assessment is then the basis for therapeutic options which can be discussed with the patient(s) including eventually referral to a sexologist.

CONSES 15: The biology of sexuality (part B) - What should contraception counsellors know about sexual functioning?

CONSES 15-01

Provoked vulvar vestibulodynia: epidemiology in Europe, physio-pathology, consensus for first-line treatment and evaluation of second-line treatments

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Provoked vulvar vestibulodynia (PVD) is essentially triggered by contact, sexual intercourses, gynecological examination, the introduction of a tampon, but without any vulvar lesions specific to the clinical examination. The principal complaint is the dyspareunia of intromission, named orificial. The pain is triggered by the contact of the cotton tip (Q-tip test) of the vulvar vestibule during the clinical examination. The vulvar vestibule is a specific entity, with its embryological particularity, resulting from the uro-genital and histological sinus, conferring on it a richness in nerve endings. All experts agree to involve two physiopathological mechanisms:

- an anatomical entity, the vulvar vestibule particularly rich in nerve endings, unlike other vulvar tissues or the vagina.
 - Hyperalgesia phenomena with central and peripheral sensitization.
- The Italian registry Progetto Vu-net confirms that PVD accounts for 72.6% of all vulvar pain. It affects women of all ages with a peak frequency between 20 and 29 years (29%)
- the prevalence can be estimated between 10 and 16% of women

Consensus for first-line treatment :

1 / Treatment of local hyperalgesia of the vulvar vestibule by bi-daily application in the long term, of local anesthetics (Lidocaine 2 -10%). Local treatment can also be used before sex. Alternatively a topical Amitriptyline or Gabapentin may be proposed.

Possible combination with the use of a pelvic sensitization treatment: Amitriptyline first-line, then Pregabalin or Gabapentin in case of comorbidities.

2 / Perineal rehabilitation: perineal and global external rehabilitation and progressive manual endo-cavitary muscle relaxation, negative biofeedback, recovery technique of the perineal function.

Overall treatment of perineal hypertonia.

Reappropriation of the body diagram and rehabilitation of vesical and recto-sphincter dysnergies.

3 / Cognitive-behavioral therapeutics: cognitive psychotherapy, psychosexual and trauma therapies, central therapies such as EMDR or Hypnosis.

The initial therapeutic protocol, here summarized, benefits, in addition to the expert consensus, from a high level of proof of effectiveness, as confirmed by the levels of scientific evidence found in the literature, with grade A and B levels, for each of the three items.

In the event of failure of the first-line therapeutic protocol, numerous therapeutic options have been described, without being able to confirm their true interest and their precise indication, in the light of the results reported in the literature.

Here we report these techniques, which are currently being validated when they are indicated and remain in the domain of centers of expertise:

- Vaginal vestibular infiltrations
 - Other topicals in the treatment of hyperalgesia of the vulvar vestibule
 - Botulinum toxin injections
 - TENS devices
 - CO2 Laser
 - Therapies and phototherapies by LED lamps
 - Lipofilling
 - Infiltration of the impar ganglion
 - Surgical Vestibulectomy: represents, among the therapeutic options that we have placed in the second line, the technique which benefits from the greatest number of publications in the literature and since the greatest number of years, with a grade B of levels of proof and incontestably a large number of healings
- As a result, vestibulectomy appears to be widely used by centers of expertise, particularly in North America

CONSES 15-02

Sexuality education for young people with disabilities in Europe: meeting the needs, reducing the barriers

Johanna Marquardt

Federal Centre for Health Education (BZgA), Task Planning, Strategy, Knowledge Transfer, International Relations, Cologne, Germany

The Self-determination of the own body – the decision if, when, with whom and how many children someone wants and if, how and with whom to express sexuality - is one of the most essential human rights. The international community has made progress in strengthening its commitment to safeguard and promote the human rights of persons with disabilities within the last years. And yet, political, societal and individual barriers persist which hinder persons with disabilities across their life span and in various spheres of life, including education and health care, to exercise the full range of their rights and to access equal opportunities.

The sexual development is part of everybody's life and includes components on different levels as physical, cognitive, mental, social, relational, ethical, religious and cultural. Comprehensive sexuality education (CSE) enables and supports during this progress as well as body positivity, empowerment and a responsible behaviour related to sexuality.

Providing comprehensive sexuality education for children and young people with disabilities is a very important but often neglected topic. Taboos persist in many communities and access to comprehensive sexuality education for this target group remains inconsistent and insufficient. In this regard, the needs of children and young people with disabilities related to sexual and reproductive health are of particular concern.

The WHO Regional Office for Europe highlights CSE for children and young people with disabilities as crucial intervention to promote the health and well-being. But yet we observe a shortage of access to CSE and a lack of empowerment and knowledge of sexuality, reproduction and STIs; as well as a lack of studies and data about CSE for children and young people with disabilities.

While sexuality education can support children and young people with disabilities in their sexual development and contribute to their wellbeing, challenges to its provision exist. The input gives an overview of the current scientific evidence on barriers to CSE for this specific group, derived from the results of a scoping review based on scientific literature research from 2006 up to 2020. The Review identifies seven barriers to sexuality education for children and young people with disabilities on various levels. Further, recommendations to overcome these barriers in different settings and countries will be presented to support and ensure the access of CSE for children and young people with disabilities.

CONSES 15-03

Which contraceptives improve, or decrease, sexual function?

Brigitte Frey Tirri

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Contraceptives are for over 60 years an important possibility to allow sexuality without fear getting pregnant. Women in Europe are using different kind of contraceptives as tablets, ring, patch, implants, intrauterine devices and injection. There is a difference not only in the application form, but also in the concentration and the composition of the contraceptives. These influence the sexual function differently as studies have shown. But there are other factors influencing the sexual function. These factors are not explicable by the composition of the chosen contraceptive method and make the answer to the question of my topic difficult. In this speech these aspects will be discussed.

CONSES 16: How to maintain and promote sexual health (part B) - The pandemic of sexual violence

CONSES 16-01

Care for victims of sexual violence: evaluation of setting up sexual assault care centers in Belgium

Ines Keygnaert, Saar Baert, Elizaveta Fomenko

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Introduction: Research of 2021 demonstrated that 42% of women and 19% of men already experienced hands-on sexual victimization in Belgium. Only 7% of the victims sought formal help and 4% reported to the police. For decades, victims had to report to the police prior to getting a forensic examination within 72 hours upon their victimization and no guarantee for subsequent care. However since 2017, Belgium has been moving from a perpetrator-focused judicial approach to patient-driven holistic care for victims of sexual violence (SV) with the development, piloting, scientific evaluation and subsequent gradual roll-out of Sexual Assault Care Centres (SACC).

Method & sample: During the piloting, between November 2017 and October 2018, 930 victims of recent SV admitted to the 3 SACC. Through registration data we evaluated the violence, the victims, and the care provided, and triangulated this with data from interviews and focus groups on acceptability and outcome with patients, support figures, forensic nurses, doctors, police and justice involved. Subsequently we continued the monitoring and registration of 5 SACCs, resulting in a sample of more than 4750 unique victims of SV that sought care in the Belgian SACC by the end of December 2021.

Findings: SACCs provide 24/7 free holistic (=psychosocial, medical and embedded forensic) care to victims of recent SV. Of the victims 69% admits within a week (64% upon rape, 4% upon an attempt of rape and 12% upon physical SV without penetration), enabling full holistic care uptake. The acute care is provided by forensic nurses being supported by specialists.

Together with sexual trauma psychologists the nurses foresee in long term follow-up care and case management. Upon their care, and within the SACC, victims can file a complaint to specifically trained vice inspectors or do this later as forensic samples can be stored for 6 months: 66% of the victims eventually do so. Victims and their support figures evaluate the SACC as very supportive, non-judgmental and re-enabling. Police and justice state that the SACC lead to more focused police interviews, more efficient investigations, and a broadened agency. Finally, DNA-labs applaud how the embedded forensic approach leads to focused inquiries on a broader range of traces compared to before.

Discussion: Given this positive evaluation, the Belgian governments decided to install a SACC in every Belgian judicial district by 2023. Can patient-centeredness still be improved or will law enforcement eventually prevail over health care and victims needs again?

CONSES 16-02

Prevention of sexual abuse of children

Marc Graf, Tanya Kochuparackal

University Psychiatric Hospitals, Forensic Department, Basel, Switzerland

Child abuse causes a lot of suffering: for the victims as well as, as paradoxical as it may sound, for the perpetrators (prosecution, stigmatisation, etc.). Prevention services for people with paedosexual preference disorder such as the network “Kein Täter werden” offer counselling and treatment to affected persons. The aim of treatment is to stabilise and compensate for the disorder as far as possible, so that those affected can live again with more inner freedom and thus reduce the likelihood of a sexual assault. The lecture will give an overview of existing and planned prevention services in Europe and beyond, treatment approaches and studies on effectiveness.

CONSES 16-03

Trauma informed care following sexual assault

Nicola Smithson

Chalmers Centre, Edinburgh, United Kingdom

Sexual assault can be a deeply traumatic experience. The brain responds to trauma in certain ways, both in the short and longer term. Understanding these response mechanisms and the effect they have on someone who has been sexually assaulted can help improve the care they receive. Sexual assault may trigger an immediate response which can involve some or all of the following, depending on the perceived threat - negotiation, fight/flight, submission, freezing and dissociation. Following the assault the trauma response can include flashbacks, nightmares, dissociation and mood swings. Suicidal thoughts are not uncommon and PTSD can occur. There are huge variations in how quickly an individual may recover from a traumatic experience and these may be influenced by factors including the nature of the trauma, their age and resilience, whether the threat is perceived as ongoing or whether they have experienced previous trauma. Trauma informed care involves treating a person in a holistic manner, taking into account past trauma and the resulting coping mechanisms when attempting to understand their behaviours and planning treatment or care. In this talk I aim to discuss how trauma informed care is vital following a sexual assault in order to understand what the individual has experienced, minimise the risk of triggering further trauma, provide person centred care and to recognise when a person needs specialist intervention.

Other sessions

Pop-up Opening Session: From the emerging specialists to the voice of experience

POP-UP01

Medical gynecology: archaism or modernity?

Anne Gompel

Professor Emeritus of University Paris Cité, Paris, France

Medical gynecology is a specialty which exists actually only in France. There is a different training for obgyn and medical gynecologists. It was suppressed in 1984-86 at the time of implementation of a new system for specialization. A national fight from women (and men) took place between 1997 and 2003 to restore the training and the specialty. It is now expanding and about 800 new specialists have been trained and graduated. The role of this specialty was particularly important at the time of the fight for legalization of contraception since the French family planning was in majority developed (in the 60s) by medical gynecologists before the law which authorized promotion and prescription of contraception (1967). The practice of medical gynecology is far beyond that and encompasses all the management of hormonal disorders, non-surgical treatments for gynecological and breast diseases, fertility preservation etc.... One of the consequences of this medical management is the lower rate of hysterectomy among the western countries. The history of medical gynecology, its original training and the potential benefits will be presented.

POP-UP02

PCOS: On the constant strive for optimal medical intervention

Sven O. Skouby

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Context: Polycystic ovary syndrome (PCOS) is a complex and heterogeneous disease that involves reproductive and metabolic elements. The Rotterdam PCOS criteria are not valid for CVD prediction and there should probably be two names for the PCOS phenotypes: one for those with primarily reproductive consequences, and one those with important metabolic consequences. These comprise a range of disorders, such as dyslipidemia, hypertension, insulin resistance (IR), compensatory hyperinsulinemia, gestational, and type 2 diabetes, all associated to increased risk of cardiovascular morbidity.

Objective: A specific phenotyping was performed based on a) body fat mass, b) insulin sensitivity and c) refined measurement of follicular morphology which translates well to the individual proinflammatory/thrombogenic potential i.e. thrombophilia in PCOS women.

Interventions: Glucagon-like peptide-1 (GLP-1) analogues facilitate weight loss and ameliorate metabolic dysfunction in overweight women with PCOS, but their effect on ovarian dysfunction is scarcely reported. In a double-blind, randomized trial, we allocated women with PCOS to intervention with the GLP-1 analogue (liraglutide) or placebo.

Results: Liraglutide caused weight loss and bleeding pattern improved. Also, SHBG increased and free testosterone decreased. HbA1C, fasting glucose, and leptin were reduced.

Discussion: The metabolic disorders and increased BMI associated with PCOS frequently brings up the debate regarding risks versus benefits of (Combined Oral Contraceptives) COCs. Our results with liraglutide mimics those reported with COCs. As with other intervention possibilities the biological effects of COCs will depend on the individual PCOS phenotype and type of COC administered. The literature still does not suggest one specific COC formulation over another.

Conclusions: Promising clinical results exist for beneficial use of GLP-1 analogues with COCs as intervention add back, in addition to lifestyle education efforts. The lack of large-scale studies evaluating the risks with varying doses of ethinyl estradiol, types of progestins, and presence of confounding factors such as obesity and smoking is a significant limitation in these considerations.

OTHER 01: WebLibraries

WebLibraries on Sexuality Education and Abortion

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This session will be interactive. The presenters will demonstrate how to use the WebLibraries in real time. They will invite participants to explain how they use the internet, what topics they are searching for and how they would like to see the WebLibraries develop.

The WebLibraries were set up by the relevant Expert Groups. The WebLibrary on Sexuality Education was set up in 2009 and was expanded in 2017; the WebLibrary on Abortion followed in 2018. The Libraries can be found on the ESC website at:

<https://escrh.eu/education/web-library-on-sexuality-education/>

<https://escrh.eu/education/web-library-on-abortion/>

Both WebLibraries can easily be updated. The WebLibrary on Sexuality Education has an online form for suggested additions.

In terms of impact, the ESC wants the WebLibraries to contribute to helping people in Europe and around the world to make informed healthy decisions freely and responsibly. The ESC wants to help others find best international practices, evidence-based practices and different studies relevant to designing national, regional and local programmes and projects. In doing so, the ESC will be contributing to generating new global change in understanding what should be implemented and what should be avoided in the context of comprehensive sexuality education (CSE), sexual and reproductive health protection and ability to access abortion. Target groups include healthcare providers, teachers, students, advocates, policymakers and programme designers. Links, PDFs and tools are provided; those for the WebLibrary on Sexuality Education are in more than 40 languages.

In the future, the newly installed Scientific Education Committee (SEC) of the ESC will oversee and help to organise and stimulate the WebLibraries.

OTHER 02: ESC granted projects

OTHER 02-01

New approach to pain relief during IUD insertion - Intrauterine Mepivacaine Instillation significantly improve the overall experience

Niklas Envall (1), Helena Graflund Lagercrantz (2), Jessica Sunesson (3), Helena Kopp Kallner (2, 4)

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Objective: To evaluate whether intrauterine mepivacaine instillation before intrauterine device (IUD) insertion decreases pain compared to placebo.

Method: Double-blind, randomized, controlled trial comparing mepivacaine 1% 10 mL versus 0.9% NaCl intrauterine instillation using a hydrosopy catheter 5 min before IUD insertion in nulliparous women 18 years of age or older. Participants completed a series of 10-cm visual analogue scales (VAS) to report pain during the procedure. The primary outcome was the difference in VAS scores with IUD insertion between intervention group and placebo. Secondary outcomes included VAS at intrauterine instillation, analgesia method acceptability and procedure experience.

Results: We randomized 86 women in a 1:1 ratio. The primary outcome, median VAS with IUD insertion, was 4.8 cm in the intervention group (interquartile range [IQR]=3.1–5.8) and 5.9 cm in the placebo group (IQR=3.3–7.5, $p=.062$). In a per-protocol analysis, the median VAS with IUD insertion was 4.8 cm (IQR=3.1–5.5) in the intervention group and 6.0 cm (IQR=3.4–7.6) in the placebo group ($p=.033$). More women in the intervention group reported the procedure as easier than expected ($n=26$, 63.4% vs. $n=15$, 37.5%), and fewer reported it as worse than expected ($n=3$, 7.3% vs. $n=14$, 35%, $p=.006$).

Conclusion: In the intention to treat analysis, intrauterine mepivacaine instillation modestly reduced pain

during IUD insertion, yet in a per protocol analysis it significantly reduced pain compared to placebo. Women receiving mepivacaine had a better procedure experience compared to placebo, hence the effect size may be clinically significant.

Implications: While the reduction in VAS pain scores did not meet our a priori difference of 1.3 points for clinical significance, participants' favorable subjective reaction merits further studies with increased dosage and separated by the size of the inserter.

OTHER 02-02

Menstrual inequity and menstrual health in Spain: a mixed methods study

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Introduction: Menstrual health and menstrual inequity have been neglected in social, economic, healthcare and political spheres. Even though available evidence is scarce, it already suggests a link between menstrual inequity and (menstrual) health outcomes. The aim of this study was to assess and explore experiences of menstrual inequity and health among women and people who menstruate aged 18-55 in Spain.

Methods: A mixed-methods study was conducted, including a cross-sectional study (N=22,823), and a qualitative study (N=34).

Results: Initial findings indicate that experiences of menstrual inequity are widespread based on the lack of access to menstrual learnings, healthcare services for menstrual-related consultations, menstrual management facilities and menstrual products. Our findings suggest that menstrual poverty has affected 20-40% of women and people who menstruate in Spain. Besides, we have identified work and school absenteeism, together with a lack of social participation and experiences of taboo, stigma and discrimination linked to menstruating. The impact of menstrual inequity differs based on age, gender identification, country of birth, administrative and employment situation, completed education, financial constraints. Furthermore, self-reported data indicate that 39.4% experienced menstrual alterations during the COVID19 pandemic. Reported menstrual alterations were higher among participants with a history of COVID19 (38.7%-44.2%), especially long COVID19 (45.2%-50.0%). The risk for reporting menstrual alterations was significantly higher among long COVID19 participants. Other factors that significantly increased the odds for reporting menstrual alterations were: age <25, poorer self-perceived health, financial issues and gynaecological diagnoses. More than 2 in 10 participants had experienced issues accessing menstrual products during the pandemic, mainly due to mobility restrictions and in more rural areas. At the same time, menstrual management was considered easier during lockdown for some participants, as they did not have to manage menstruation in public spaces. Among participants indicating menstrual alterations, 5.1% could not access healthcare services as appointments were not available. Based on our research, we have developed definitions for menstrual inequity and menstrual poverty.

Conclusions: Overall, our findings suggest that menstrual inequity in Spain is far-reaching and may have a negative impact on women's and people who menstruate's health and wellbeing. Menstrual health and menstrual inequity may have been further compromised during the COVID19 pandemic. Multidimensional structural policies to address menstrual inequity and promote menstrual health. These need to be inclusive of vulnerable populations and non-binary and trans people who menstruate.

OTHER 02-04

Women's opinions and experience of undergoing an ultrasound scan for gestational age before early medical abortion

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Background: Prior to the COVID-19 pandemic, it was the standard of care in Britain that an ultrasound for gestational age determination was a routine part of a pre-abortion assessment. Since the pandemic, national guidance has advocated for abortion to be provided with a scan only if indicated, such as when the gestation cannot be estimated by the last menstrual period. Widespread implementation of this pathway has secured access to abortion care for large proportions of women during the pandemic. However, little is known about the experiences and opinions of those undergoing abortions about having or omitting an ultrasound during the care pathway. This project aims to examine this question through in-depth interviews with participants who have undergone abortion in the 'scan as indicated' model.

Primary objective: To understand the experiences and opinions of women who have undergone telemedical abortion without a pre-procedure ultrasound.

Secondary objectives: 1) To compare the experiences of having an abortion without an ultrasound to prior experiences of abortion or pregnancy when an ultrasound was performed as part of the care pathway. 2) To explore women's perspectives on the routine or selective use of ultrasound as a reflection of quality in abortion care.

Study Design: Participants who had an early medical abortion at British Pregnancy Advisory Service which did not include the use of routine ultrasound and a prior abortion or pregnancy where a scan was undertaken will be invited to take part in qualitative interviews. We aim to enroll 20-24 participants for an interview by phone, video call, or in-person. We anticipate that interviews will take approximately 60 minutes. Interviews will be recorded for analysis of codes and themes.

This presentation will share the findings from the thematic analysis.

OTHER 02-05

Efficacy of Very Early Medical Abortion – a randomized controlled non-inferiority trial

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Background

The introduction of medical abortion and highly sensitive pregnancy tests have led to the possibility to perform an abortion at a very early gestation before an intrauterine pregnancy (IUP) can be detected on ultrasound. Very early medical abortion (VEMA) may be of particular benefit for women not only on a psychological level but also to reduce pain and bleeding. However, previous few studies (all non-randomized) have shown conflicting results concerning efficacy of VEMA.

Objective

The aim of this study is to expand access to medical abortion by evaluating the treatment in very early gestation and thereby providing data for development of evidence-based guidelines. To investigate complete abortion rate without ongoing pregnancy or surgical intervention for incomplete abortion in both treatment groups: Very Early Medical Abortion (VEMA) and delayed medical abortion at confirmed IUP.

Study design

Multicenter, multinational non-inferiority RCT where VEMA is compared with delayed treatment when an IUP can be confirmed on ultrasound. The study population (n=1500) consists of women seeking medical abortion in early gestation (<6+0 weeks) and with non-confirmed IUP on ultrasound at gynecological outpatient departments of Finnish (1), Norwegian (1), Swedish (8) and Scottish (1) central university hospitals/affiliated clinics and large abortion clinics in Nepal (4), New Zealand (1) and Australia (1), total 17 study sites.

Participants are randomized to either: immediate start (intervention) of medical abortion and assessment of treatment with s-hCG before and 7 days after abortion or delayed start (control) with assessment of baseline s-hCG and renewed ultrasound and new s-hCG one week later. Assessment of treatment in the control group according to clinical routine.

Results

Ongoing trial. Study start Q1 2019, planned recruitment period 4 years (Q4 2023). About 550 women were recruited (November 2021) of the total 1500 that are planned. An interim analysis has shown that adverse events (AE) and a serious AE (SAE) rates are low, but we need to increase the recruitment rate. To increase the recruitment rate new sites were added in 2021: New sites in Nepal (4), New Zealand (1) and Australia (1) in 2021.

OTHER 02-06

Post-abortion contraception: Nexplanon quick start in medical abortion.

A randomised controlled trial

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The etonogestrel releasing subdermal implant is one of the most effective long acting reversible contraceptive methods. There is a theoretical concern that an interaction between the progesterone receptor antagonist, mifepristone, and the progestin released by the implant could affect the efficacy of medical abortion if inserted at the same visit as mifepristone. We investigated the efficacy of medical abortion followed by either immediate versus delayed (routine) insertion of an implant and the impact on subsequent unintended pregnancy and abortion.

This was a randomised-controlled, equivalence trial carried out in six clinics, with recruitment between October 13 2013 and October 17 2015 including 551 women aged 18 years and older requesting medical abortion up to 63 days of gestation and opted for an etonogestrel releasing contraceptive implant. Women were randomised to insertion one hour after mifepristone intake (immediate) or at follow up two to three weeks later (routine). The primary outcome was the percentage of women with complete abortion not requiring surgical intervention within 6 months. Secondary outcomes included insertion rates, pregnancy and repeat abortion rates during 6 months follow up. Analysis was per protocol and by intention to treat. This trial is registered with the ClinicalTrials registry, number NCT01920022.

Efficacy of medical abortion was 259/275 (94.2%) in the immediate insertion group and 239/249 (96%) in the routine insertion group with a risk difference of 1.8% (95% CI -0.4% to 4.1%), which was within the $\pm 5\%$ margin of equivalence. Insertion rate was 275/277 (99.3%) in the immediate group compared to 187/261 (71.6%) women in the routine group ($p < 0.001$). At 6 months follow 2/277 (0.8%) women in the immediate group had become pregnant compared to 10/261 (3.8%) in the routine group, $p = 0.018$.

Interpretation A progestin releasing contraceptive implant inserted on the day of mifepristone maintains efficacy and safety of the medical abortion equivalent to routine insertion, while increasing insertion rates, and reducing repeat unintended pregnancy and abortion.

Society sessions

SOCSES 01: I-SHARE symposium - Sexual and Reproductive Health prior to and during the COVID-19 pandemic: findings from the I-SHARE cross-sectional multi-country study

SOCSES 01-01

Sexual and Reproductive Health prior to and during the COVID-19 pandemic: findings from the I-SHARE cross-sectional multi-country study

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Objectives: The COVID-19 pandemic forced people to shelter in place and threatened already precarious health services. However, there is limited evidence to date about changes to sexual and reproductive health (SRH) during the initial wave of COVID-19 disease. To address this gap, a multi-country, cross-sectional online survey was set up with the objective of studying the impact of COVID-19 on three primary outcomes: sexual behavior, reproductive health – including access to reproductive health commodities and services –, and intimate partner violence. **Methods:** Consortium research teams conducted online surveys in 30 countries (Argentina, Australia, Botswana, Canada, China, Colombia, Czech Republic, Denmark, Egypt, France, Germany, Italy, Kenya, Latvia, Lebanon, Luxembourg, Malaysia, Mexico, Moldova, Mozambique, Nigeria, Panama, Portugal, Singapore, South Africa, Sweden, Spain, Uganda, United States, and Uruguay). Sampling methods included convenience, online panels, and population-representative. Data was collected between July 2020 and February 2021. We compared three months prior to and three months after policy measures to mitigate COVID-19. We used established indicators and analyses pre-specified in our protocol. We conducted meta-analyses for primary outcomes and graded the certainty of the evidence using Cochrane methods. Descriptive analyses included 22,724 individuals in 25 countries. Five additional countries with sample sizes <200 were included in descriptive meta-analyses. The study obtained ethical approval in all participating countries. **Results:** Detailed results per key outcome will be discussed in subsequent abstracts. Here we present some general findings. Respondents had a mean age of 34 years and most identified as women (66.7%), cis-gender (86.6%) and heterosexual (77.9%). Among 4546 respondents with casual partners, condom use stayed the same for 74.4% people and 14.1% reported a decline. Fewer respondents reported physical or sexual partner violence during COVID-19 measures (7.0%) compared to the period before COVID-19 measures (9.3%). COVID-19 measures impeded access to condoms for 8.7%, contraceptives for 7.5% and HIV/STI testing for 30.7% for respondents who needed access to these commodities and services. **Conclusion:** The study has several limitations, including selection bias because of the online nature of data collection, and the retrospective nature of the study which may have caused recall bias. Nevertheless, the study shows that the initial COVID-19 wave impacted SRH behaviors and access to services across diverse global settings.

SOCSES 01-02

Sexual satisfaction and sexual problems prior to and during COVID-19, results from the I-SHARE-study

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Objective: Sexual health and wellbeing is core to general health and hence to public health.

The COVID-19 measures, including shelter in place, may have altered partner and sexual relationships.

This analysis studies changes in sexual satisfaction and sexual problems since COVID-19.

Methods: This analysis focuses on a sub-set of 23 countries. Random intercept mixed effects ordinal regression were done to study changes in sexual satisfaction and sexual problems. Respondents self-reported change (decrease, no change, increase) in the frequency of these measures pre COVID-19 and since COVID-19. Models included age, sex, gender, sexual identity, relationship status, education level, employment change, income level, income change, family composition, children at home, mental health, COVID negativity, alcohol and cannabis use and country level indicators.

Results: Overall, respondents reported a decrease in sexual satisfaction. Women (0.82 [0.77 - 0.88]), those reporting a better financial situation since COVID-19 (0.92 [0.87 - 0.97]), those reporting better mental health (0.68 [0.66 - 0.71]), higher COVID-19 negativity (0.89 [0.85 - 0.94]), increased alcohol use (0.91 [0.86 - 0.95]), increased cannabis use (0.91 [0.86 - 0.95]) and those who were in a relationship/not living together/living with a partner/widowed, divorced, separated/other (compared those who never had a partner) reported lower odds of increased sexual satisfaction. There was a higher odds of sexual satisfactions for those with stable employment (1.11 [1.02 - 1.20]) and higher income level (1.03 [1.01 - 1.05]). Countries with a higher score on the Oxford Stringency Index, the Human Development Index and the Palma Ratio reported higher odds of increased sexual satisfaction.

In general, 18.5% of respondents reported increase in sexual problems. Several measures were significantly associated with decrease in sexual problems: improvement in economic situation 0.79 (0.72 - 0.86), better mental health (0.83 [0.79 - 0.88]), more COVID-19 negativity (0.86 [0.79 - 0.94]). Changes in family composition did increase the odds of sexual problems (1.15 [1.01 - 1.31]).

Conclusion: Overall, respondents report less sexual satisfaction and more sexual problems since COVID-19. A number of socio-demographic and socio-economic characteristics are associated with this.

SOCSES 01-03

Intimate partner violence prior to and during COVID-19 measures in 30 countries: A global cross-sectional study from the I-SHARE consortium

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Background: Intimate partner violence (IPV) causes substantial physical and psychological trauma. Measures introduced in response to the COVID-19 pandemic, including lockdowns and movement restrictions, may exacerbate IPV risk and reduce access to IPV support services. This cross-sectional study examines IPV prior to and during the implementation of COVID-19 measures, correlates of IPV during COVID measures, and IPV disclosure.

Methods: The International Sexual Health and REproductive Health (I-SHARE) study collected data on sexual and reproductive health during COVID-19 measures from 20th July 2020 to 15th February 2021. Participants (≥ 18 years old) were recruited online. IPV was a primary outcome measured using items adapted from the WHO multi-country survey. Participant experiences of physical and sexual violence in the three months prior to COVID-19 measures were compared to IPV after the introduction of measures. Mixed effects modelling was used to determine IPV correlates, including key country-level variables such as lockdown stringency index.

Results: The total sample included 23,067 participants in 30 countries. 15,336 participants answered IPV items on physical and sexual violence. A total of 1,486/15,336 (9.2%) participants stated that they had experienced either physical or sexual partner violence before COVID-19 measures, which decreased to 1,070 (7.0%) after COVID-19 measures. There were higher odds of experiencing physical and sexual violence since the implementation of COVID-19 measures for participants who identified as gay (aOR 2.44, 95% CI 1.25, 4.77) compared to those who identified as heterosexual. There were higher odds of physical violence for those who lived with a partner during all of the COVID-19 measures (aOR 2.52 95% CI 1.25, 5.11). At the country-level, participants living in countries with more stringent COVID-19 measures had lower odds of intimate partner sexual coercion during COVID-19 (aOR 0.94, 95% CI 0.90, 0.97). A total of 164/802 (20.5%) participants officially reported IPV during COVID-19 to authorities and 509/1070 (47.6%) disclosed IPV to friends or relatives.

The main findings were robust when sensitivity analyses were performed based on sampling strategy, study population, and geographic region.

Conclusion: The I-SHARE data suggests a substantial burden of IPV during COVID-19 measures. However, COVID-19 measures may have prevented IPV in some settings. Informal social support networks were important for IPV disclosure. There is a need for investing in specific support systems for survivors of IPV during the implementation of measures designed to contain infectious disease outbreaks.

SOCSES 01-04

Reproductive health prior to and during COVID-19

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Objectives: During the first weeks of the COVID-19 pandemic, many articles projected the potential detrimental effects of the COVID-19 pandemic on reproductive health (RH), emphasizing the importance to continuously address this health area. The two WHO pulse surveys showed substantial disruptions in sexual and reproductive health (SRH) services around the world. The I-SHARE study presents the impact of the COVID-19 pandemic on key RH indicators: fertility intentions, contraceptive use and related barriers, and antenatal care. Methods: See information on the general I-SHARE methodology in the previous abstract.

This overview focuses on a sub-sample of the population, i.e. women aged 18-49 years, in 24 countries.

Descriptive data is presented per following regions: Sub-Saharan Africa (SSA), Latin America and the Caribbean (LAC), North America (NA), Europe and Central Asia (ECA), East Asia and the Pacific (EAP).

Results: The total sample of women in analysis was 13,405, with most coming from ECA (7,223) and LAC (3,962). The mean age of respondents was 30 years and over 96% reported to be cis-gender. The majority lived in (semi-)urban areas (81%) and had some/completed higher education (77%). Accessing contraceptives during COVID-19 was most difficult for women in East Asia and the Pacific (EAP) (11.4%) and LAC (10.6%). The ECA region reported the lowest proportion of women having problems accessing contraceptives (5.6%). Eighty-five per cent of women reported not changing their fertility intentions due to the pandemic. A total of 10.4% (n=1101) said they postponed their fertility desire (26% of respondents from SSA), while 4.3% (n=450) reported having decided to have a child sooner. Data from LAC and ECA regarding pregnancy indicated that 50.8% of the pregnant respondents from LAC and over 80.9% from ECA reported being happy with their pregnancy. A substantial proportion had not planned to get pregnant (50% in LAC and 30% in ECA). Over 40% of respondents from LAC reported that their pregnancy had something to do with COVID-19 (e.g., reduced access to contraceptives or increased idling around in the communities), while this was 15.8% in ECA. Pregnant women reported substantial anxiety and depression because of COVID-19 (71.7% in LAC and 60.5% in ECA). A substantial proportion of pregnant women reported missing pregnancy care appointments during COVID-19 (83.8%) and not being satisfied with pregnancy health care during COVID-19 (34.7%).

Conclusion: The study demonstrates an overall impact of COVID-19 on fertility intentions, contraceptive access and use, and routine maternal health care services.

SOCSES 01-05

Lessons learnt from a large-scale multi-country research project in challenging times

Fiorella Farje De La Torre

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Objectives: The move from in-person to online work necessitated by COVID-19 has created new opportunities for international research collaboration, facilitating knowledge sharing and capacity building. Further, the COVID-19 pandemic catalyzed researchers to use online methods for collecting data. While this comes with important challenges, it also allows recruiting large groups of people. The objective of this presentation is to reflect on the lessons learnt from a global online research project in two ways: 1) collaboration and equity and 2) methodological.

Methods: 1) experiences of 24 early-career researchers working on I-SHARE across six continents were collected; 2) a brief survey among data collection methods and their strengths and weaknesses was completed by all participating countries (30).

Results: 1) The lessons learned from this initiative are many and varied. On the one hand, the experience of working with more than 100 researchers, both senior and junior, in 30 countries, has been an important learning experience in terms of communication, coordination and leadership. For many junior researchers, the consortium has been an opportunity to participate for the first time in a global study, to be involved in all research processes and, in other cases, to develop new skills. However, while this represents an effort to develop and strengthen an international research network, inequities have not always been overcome. Some young researchers found connecting with colleagues more challenging without usual body-language cues, reporting that digital platforms made it easier to attend meetings but harder to contribute. Low confidence can pose a barrier to speaking up in meetings with senior academics. In contrast, others felt power hierarchies were less substantial online, with all attendees presented in identical windows. Some early-career researchers—particularly those in low and middle-income countries (LMICs)—found their participation in online meetings was hindered by limited internet and electricity access. 2) Methodologically it has allowed us to reflect on recruitment and dissemination strategies, sampling and bias, but also on the (limited) access to technologies and academic infrastructure especially for researchers in LMIC.

Conclusion: We need to be aware of who is excluded from international research, through limited access to academic infrastructure or technology. Research projects must reach out to these groups throughout the research process, particularly in conversations about access. Shifting more of the governance of international projects like I-SHARE to institutions in LMICs may increase the opportunities available to local early-career researchers.

SOCSES 02: Joint FHI 360/USAID session

From pipeline to reality: development of new contraceptive products for worldwide impact

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Research efforts are currently underway to develop novel longer-acting reversible female contraceptive methods that would broaden choice, improve use, and increase access to effective, acceptable, affordable and safe family planning options worldwide. This 45-minute session will provide a funders' perspective on identifying priorities in contraceptive R&D and advancing technologies through donor coordination and leveraging of investments. It will also describe the process of developing and managing a contraceptive R&D portfolio based on priorities identified by funders. Importantly, the session will provide examples of major research initiatives in various stages of product development that have been launched by FHI 360 within the last decade through grants from US Agency for International Development (USAID) and Bill and Melinda Gates Foundation (BMGF).

A longer-acting injectable contraceptive would be a valuable addition to the method mix and ideal for women who are interested in spacing births, and/or are uncertain about their future reproductive plans. In addition to advantages for users, these methods would reduce the burden of participant load on clinical facilities and community-based programs. The session will focus on the recent advances of several 6-month injectable products that FHI360 is advancing through various stages of drug development in collaboration with research and commercial partners.

A biodegradable implant (BDI) would not require removal, thus reducing the burden for users and clinics, limiting challenges associated with access to removal, and potentially contributing to lower healthcare costs, an important advantage in resource-constrained settings. The session will describe collaborative efforts led by FHI360 to develop two BDIs with a targeted contraceptive effectiveness of 18 months.

The final selection of the projects to be presented at the conference will be determined by project's status and availability of results. A detailed description of each specific drug delivery technology, as well as the status of each project will be included in the presentation.

SOCSES 03: ICMC (International Consortium for Male Contraception) - Male contraception: moving forward

SOCSES 03-01

Why we need more methods for male contraception

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Birth rates and life expectancy are increasing worldwide, especially in Sub-Saharan Africa and South Asia, resulting in ever increasing world population growth. Since 1950 the world population has quadrupled and the current 7.7 billion inhabitants are predicted to reach 11 billion by 2100. Overpopulation and increasing standards of living for all threaten the existence of mankind by contributing to climate change and damaging the environment. Would new methods of male contraception be a game changer in population growth? Before the “pill” and other modern female methods, men were fully in charge of contraception by using condoms, withdrawal and vasectomy and even today 25% of contraceptive use consists of male methods. From these facts it can be concluded that men would be ready to use new male contraceptives if they would be reversible, free of serious side effects and affordable. Several opinion polls conducted on men participating in clinical trials for male contraception have shown high approval rates. A study performed in 9 countries extrapolated that 44 million men in these countries would use the tested male hormonal contraceptive. New male methods would also help to reduce the unplanned and undesired conceptions, estimated to amount to about half of the 1 million daily conceptions worldwide. However, these methods are not yet available and intensive research by the pharma industry would be necessary. Existential economic and social threats to livelihood and family life caused by the current pandemic may increase pressure for new male methods. The green activists have to recognize the link between overpopulation and climatic effects. Governmental financing might be necessary. Education and family planning programs should not only address women, but include males, especially adolescents. Finally, male contraception needs politicians and celebrities as protagonists. Altogether, this might bring about the desired game change.

SOCSES 03-02

Non-hormonal approaches to male contraception

Richard Anderson

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The absence of modern, effective methods of contraception for men is striking and indeed an obvious opportunity for improvements in the choices available to both men and couples. The dependence of spermatogenesis on gonadotrophin stimulation makes the hormonal approach both attractive and tractable with long-available steroidal combinations, but issues remain around both the universality of adequate suppression and non-reproductive side-effects, reflecting the ubiquity of androgen actions in many physiological systems. The non-hormonal approach offers the potential for specific effects within the reproductive system that will not interfere with testosterone production, thus theoretically minimising off-target effects. Our current understanding of spermatogenesis already offers numerous potential targets, including meiosis, interactions with Sertoli cells, epididymal maturation and sperm motility, with the latter, including interactions with cervical mucous, also being approaches that could potentially be used by women. There is a wealth of literature on these many approaches, but all remain firmly in animal models or the laboratory, with the very few that have progressed to clinical testing proving disappointing. Current promising leads include inhibition of the retinoic acid pathway that drives meiosis, where there is clinical data of effectiveness but with side-effects that require novel drug development. The field is also hampered by limited basic ability to assess spermatogenesis and male fertility, with much of the effort focussed on assisted conception and, as with contraception, the main effort being treatment of the female partner. High-throughput drug screening of compounds with effects on sperm motility may equally identify potential contraceptives as pro-fertility agents. The potential absence of systemic side effects continues to provide encouragement for the non-hormonal approach, and the possibility of an effective contraceptive that could be taken by either the male or female partner adds a further stimulus.

SOCSES 04: Session of the Academic Network for Sexual and Reproductive Rights Policy (ANSER) and the International Centre for Reproductive Health and Rights (ICRH)

SOCSES 04-01

Reproductive Rights Under Pressure

Olivier Degomme

Ghent University, Department of Public Health and Primary Care, Ghent; International Centre for Reproductive Health, Ghent, Belgium

Shifting health priorities, fake news and increasing mistrust between academics and politicians are jeopardizing sexual and Reproductive Health and Rights (SRHR). During this session, the speakers will point out the opposition SRHR experiences today and at the same time provide tools on how to overcome these barriers and ensure sexual and reproductive health and rights for women and girls globally. The session will be moderated by Prof. Olivier Degomme (International Centre for Reproductive Health, Ghent University).

SOCSES 04-02

Promises to keep: Meeting the Nairobi Summit commitments

Tamar Komasuridze

UNFPA, EECA, Istanbul, Turkey

In November 2019, the Nairobi Summit on ICPD25 aimed to mobilize the political will and financial commitments needed to fully implement the ICPD Programme of Action (1994). Over 25 years important gains have been made (e.g. 40% decrease in maternal mortality and 22% increase of use of modern contraceptives) but the numbers remain too high and even risk a backlash due to the current COVID pandemic. Where SRHR services were seen as 'non-essential' during lockdowns and COVID-19 containment measures, this hindered access to HIV/STI testing, increased physical or sexual violence and decreased condom use. Dr. Khomasuridze will explain why it's so important to bend these shifting health priorities, put SRHR back on the political agenda and realize the Nairobi commitments.

SOCSES 04-03

Sexual and Reproductive Health and Rights in times of fake news disseminated through social media

Joyce Omwoha

Technical University of Kenya, Nairobi, Kenya

Fake news has been a growing problem in the recent years. News and information are no longer monopolized by legacy media and new stories on social media attract a large audience. Also opponents of SRHR distribute materials bearing misinformation on SRHR via online platforms. Dr Omwoha will provide tools on how to fight this misinformation, how to use these newly preferred social media channels to spread SRHR evidence and how to convince the general public and policy makers not to rely on social media as reliable information resource.

SOCSES 04-04

What do academics have to offer to SRHR policy making?

Emilie Peeters

Academic Network for Reproductive Health and Rights Policy, Ghent, Belgium

Sound SRHR policy making necessitates an evidence base to ensure effectiveness. But too often scientists and politicians speak a different language, making effective collaboration difficult. The academic looks for nuance and the complexity of things. The policy maker wants a quick and efficient solutions for societal challenges. This leads to misunderstanding and even mistrust. Mrs. Peeters will go into detail why it is so important to recognize that both, politicians and academics, have a different but equally important role to play and that collaboration between all stakeholders is crucial to move effectively from evidence to policy and ensure impact.

SOCSES 05: Session of the European Medicines Agency (EMA)

SOCSES 05-01

Impact of European medicines regulation in contraception and reproductive health: 3 case studies (ulipristal, combined oral contraceptives, valproate)

Heidi Janssen

European Medicines Agency, Amsterdam, The Netherlands

In 2009 Ellaone (ulipristal), an emergency contraceptive, was approved via the centralised procedure. The centralised procedure through the European Medicines Agency (EMA) is one of the routes for authorisation of a medicine in Europe. It is based on a single EU-wide assessment and marketing authorisation which is valid throughout the EU. The use of the centrally authorised procedure is compulsory for most innovative medicines but is optional for other medicines if specific criteria are fulfilled. Ellaone came through the optional scope on the basis of containing a new active substance. The majority of medicines authorised in the EU do however not fall within the scope of the centralised procedure but are authorised by national competent authorities in the Member States. This is the case e.g. for most of the contraceptives.

Once a medicine has been authorised for use in the EU, EMA and the EU Member States constantly monitor its safety and take regulatory action if new information indicates that the medicine is no longer as safe and effective as previously thought. EMA has a dedicated committee responsible for assessing and monitoring the safety of medicines, the Pharmacovigilance Risk Assessment Committee (PRAC):

- In February 2013 the PRAC started a review of several combined hormonal contraceptives (CHC) following concerns in France about the risk of venous thromboembolism. The review concluded that the benefits of CHCs in preventing unwanted pregnancies continue to outweigh their risks, and the well-known risk of VTE with all CHCs is small. The product information was updated. The review has reinforced the importance of ensuring that clear and up-to-date information is provided to women who use these medicines and to the healthcare professionals giving advice and clinical care.

- In March 2018 the PRAC and Member States agree on new restrictions and a pregnancy prevention programme to avoid valproate exposure in pregnancy. As part of this safety review EMA hold the first public hearing to learn more directly from the different views and experiences of patients and to obtain views and suggestions on risk minimisation measures.

The presentation will discuss more in detail the different authorisation routes in the EU, the role of EMA in the evaluation of applications for marketing authorisation and the monitoring of the safety of medicines across their life cycle. But also aspects of medicine regulation in the EU that do not fall under the remit of EMA will be addressed.

SOCSES 05-02

Mind the bridge: how EMA is bringing clinical practice closer to medicines regulation

Ivana Silva

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The roles of the European Medicines Agency (EMA) and that of the European Society of Contraception and Reproductive Health (ESC) represent two ends of the same bridge. The work of the EMA constitutes the first step to medicines following a sound and safe scientific evaluation process. ESC and its healthcare professionals work with patients on healthcare's front line, being the first port of call for sick or concerned citizens.

EMA has been interacting with European doctors, nurses, pharmacists and their representative organisations in various areas since it was founded in 1995. As prescribers and handlers of the medicines that the Agency evaluates, healthcare professionals have key insights to offer and EMA is committed to strengthening this working relationship.

Healthcare professionals provide independent expertise acquired in their day-to-day clinical practice. They contribute their real-world experience to the development, approval and monitoring of medicines. They also contribute to a more efficient, targeted communication, ensuring that reliable information reaches the patients and citizens of Europe in order to promote safe and optimal use of medicines.

EMA has three major challenges: the need to explain the development and approval processes on the basis of available data as medicines are developed, the need to communicate timely about newly developing scientific evidence and the need to contextualise and manage uncertainty. EMA is doing so through its own

channels, but these messages also need to come through healthcare professionals. They are the ones who receive individuals' questions, speak to patients daily, address their concerns and reassure them. EMA's role in the approval and monitoring of medicines, and that of healthcare professionals in informing, prescribing and handling those medicines to their patients are responsibilities that must be aligned to reinforce the trust placed on us. For that, EMA and healthcare professionals' organisations need to work together, improving collaboration and supporting each other's roles. The presentation will address how EMA is working together with such organisations to bring the views of healthcare professionals into the regulation of medicines.

Pop-up Opening Session: From the emerging specialists to the voice of experience

FC

The effect of counseling and peer education given to young people diagnosed with dysmenorrhea and menstrual migraine on quality of life and pain level: Randomized Controlled Trial

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Objectives: Our study aimed to examine the effects of counseling and peer education given to young people with dysmenorrhea and menstrual migraine who applied to the YFC on their quality of life and pain level.

Method: This research is a Randomized Controlled Trial study. The Intervention/Experimental group consisted of n=350 students enrolled in the peer education course, and the control group consisted of n=550 students who were not enrolled in this course. As data collection tools, personal information form and Quality of Life Scale (WHOQOL-BRIEF), Premenstrual Symptoms Screening Tool (PSST), Visual Analogue Scale (VAS), and Dysmenorrhea Follow-up Form (DFF) were used. Among the students who applied to Eskisehir Osmangazi University YFC for painful menstrual process management, those aged 18-19, diagnosed with 'dysmenorrhea and menstrual migraine' were selected, for a 6-month painful menstrual process management program. The program includes vocational counseling, education (peer and professional), and social support practices (peer and professional) based on these two approaches. Programs for all these health promotion practices were coordinated by the principal investigator.

The Intervention/Experimental group includes peer education and practices in small closed groups of 16 people by the researchers and their teams, to increase the utilization of health services and health-promoting behaviors of young people with dysmenorrhea and menstrual migraine. The intervention group consisted of students who applied to YFC for painful menstrual process management, requested peer education, and met the peer education criteria.

Results: Among the young people with dysmenorrhea and menstrual migraine who applied to the YFC, the quality of life scores of the participants in the experimental group were higher than the control group ($p>0.05$). However, the VAS scores, Premenstrual Symptoms Screening Tool (PSST) scores, and dysmenorrhea symptoms of the participants in the experimental group were lower than the participants in the control group ($p>0.05$).

Conclusion: Peer education integrated into the painful menstrual process management program has been effective in reducing PMS symptoms, dysmenorrhea symptoms and pain, while improving the quality of life of young people with dysmenorrhea and menstrual migraine. Such an approach is also thought to be complementary to pharmacological methods.

FC

High acceptability of the bleeding pattern of the Drospirenone-4mg-only pill

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Objective: Progestin-only oral pills (POP) are increasingly appreciated due to their beneficial risk profile compared to combined hormonal contraceptives (CHC). However, usage of POP can be associated with bleeding disorders that may result in poor compliance or discontinuation. A novel POP with 4 mg drospirenone (DRSP) in a 24/4 intake regimen with a contraceptive efficacy comparable to CHC and a good cardiovascular safety profile has been marketed. Here, the acceptability of the bleeding pattern compared to a "traditional" 75 µg desogestrel (DSG)- POP was evaluated during a randomized, double-blind, double-

dummy clinical trial with 1190 participants. Analysis included the assessment of the bleeding pattern, the frequency of bleeding-related adverse events and associated discontinuation rates as a measure for patients' satisfaction with the bleeding profiles.

Design & Methods: Prospective, randomized, double-blind, double-dummy, multicentric clinical phase 3 trial over 9 treatment cycles. Women (18-45 years) were randomized to either use DRSP 4 mg in a 24/4 regimen (n=858) or DSG 75 µg (n=332). Number of bleeding/spotting days; proportion of subjects with unscheduled bleeding/spotting, incidence of bleeding-related adverse events (AE) and frequency of discontinuation due to bleeding disorders were evaluated.

Results: Mean number [SD] of days with unscheduled bleeding and/or spotting days was significantly lower in the DRSP-group compared to the DSG-group during cycle (21.5 days [22.86] vs 34.7 [33.73]) during cycles 2-9; p=0.0003). The mean number of days with bleeding or spotting days in total was significantly lower in the DRSP-group during the initial cycles 2-4 (13.1 [13.05] vs 16.9 [19.93]; p=0.0149). Episodes of prolonged bleeding occurred significantly less frequent in the DRSP-group. Bleeding-related AE were reported by 9.3 % of the DSG-users, but only 5.4 % of the women using DRSP. Likewise, only 3.3 % of DRSP-users, but 6.6% in the DSG-group withdrew from the study due to bleeding-related AE. Using the Kaplan-Meier Curve estimates and the AUC for bleeding as a discontinuation reason, the difference between DRSP and DSG was 55.7% in favour of DRSP. The discontinuation rate was 3.7% for DRSP and 7.3% for DSG users. **Conclusions:** The acceptability of and hence patients' satisfaction with the bleeding pattern with 4 mg DRSP was higher compared to 75 µg DSG as can be derived from the lower discontinuation rate due to bleeding-related adverse events.

EudraCT: 2011-002396-42.

Conflict details: Mayr, Mueller are employees of Exeltis Germany GmbH, Regidor is employee of Exeltis Europe, Colli is employee of Exeltis Health Care.

FC

General practitioner perspectives and experiences in delivering early medical abortion services to women from culturally and linguistically diverse backgrounds

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OBJECTIVES: Women from culturally and linguistically diverse (CALD) backgrounds have higher unintended pregnancy rates than Australian-born women and underutilise sexual and reproductive health services. Women commonly seek the counsel of general practitioners (GPs) for sexual and reproductive health concerns, making GPs ideally placed to deliver early medical abortion services. However, little is known about how GPs should best deliver this care to women from CALD backgrounds. Our aim was to explore GP perspectives and experiences in relation to providing early medical abortion services to women from CALD backgrounds and how to improve the delivery of such care.

METHOD: We undertook a qualitative study involving semi-structured, audio-recorded telephone interviews with 18 GPs across Australia who provide early medical abortion to women from CALD backgrounds in the general practice setting. GPs were purposively sampled using three strategies: email invitations to publicly listed GP medical abortion providers, social media posts on a special interest Facebook group, and participant referral. Following verbatim transcription, data were managed in NVivo software. Reflexive thematic analysis by two coders was used to develop themes and subthemes, categorised according to the Capability-Opportunity-Motivation Behaviour (COM-B) model.

RESULTS: GPs experienced challenges in communication and cultural competency as a result of insufficient training, lack of multilingual resources, and organisational constraints in effectively using interpreter services. Additionally, inadequate government reimbursement for early medical abortion consultations, which contributes to high out-of-pocket costs for women, was identified as a financial impediment to care because women from CALD backgrounds tend to be more socioeconomically disadvantaged than the general population. Despite these challenges, GPs believed they were ideally positioned to provide early medical abortion to women from CALD backgrounds since their embeddedness within CALD communities facilitates the building of trusting relationships with their patients.

CONCLUSIONS: Up-skilling of GPs in the provision of culturally competent care and cross-cultural communication, multilingual early medical abortion patient education resources, and efficient systems for interpreter use are required to optimise early medical abortion delivery to women from CALD backgrounds. Further exploration of incentivising service provision is required to offset financial barriers to patients.

FC

Metalipidomic parameters of women with PCOS. An explanation for the chronic inflammation and high VTE risk?

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Objectives: Apart from its endocrinologic and metabolic symptoms, PCOS represents a state of chronic low-grade inflammation as can be deduced from elevated levels of inflammatory markers. Inflammatory processes are activated by chemokines and pro-inflammatory eicosanoid lipid mediators, that are derived from the omega-6-poly-unsaturated fatty acid (PUFA) arachidonic acid (AA) and include prostaglandins (PG), leukotrienes (LT) and thromboxanes (TX). For resolution of inflammation, however, four families of so-called “specialized pro-resolving lipid mediators” (SPMs) are crucial: the resolvins (Rv), protectins (Pt), maresins (Mar) and lipoxins (LT). They are synthesized from omega-3-PUFAs DHA (docosahexaenoic acid), DPA (docosapentaenoic acid) and EPA (eicosapentaenoic acid). Several chronic inflammatory diseases have been attributed to insufficient resolution of inflammation and a dysbalance of pro-inflammatory and pro-resolutive mediators. We hypothesized, that such a dysbalance might also contribute to the pathology of PCOS. Therefore, the pilot study presented here was designed.

Design and Methods: 14 female patients (18-45 years) with a diagnosed PCOS according to Rotterdam criteria and 5 healthy women were recruited in one study centre in Germany. Blood samples were taken, separated into plasma and serum and analyzed by HPLC/MS-QQQ to establish the metalipidome. For that, the abundance of AA and the pro-inflammatory lipid mediators (PG, LT, TX) was determined and, on the other hand, the omega-3-PUFAs DPA, DHA, EPA, the intermediates (18-HEPE, 17-HDHA, 14-HDHA) and the SPMs (Rv, Mar, Pd, Lt) were measured.

Results: The level of pro-inflammatory parameters in serum was significantly higher in PCOS-affected women. The ratio [(sum of pro-inflammatory molecules) / (sum of SPMs plus hydroxylated intermediates)] reflecting the inflammatory state was significantly lower in the group of healthy women. The level of thromboxane TXB2 was significantly elevated in PCOS patients.

Conclusion: The metalipidome of PCOS patients was shifted towards the pro-inflammatory lipid mediators, hinting at a dysbalance that may contribute to the chronic inflammation observed in PCOS. TX induce the activation of platelets, and the elevated levels observed in the present study may contribute to the increased VTE risk observed with PCOS. Further research will clarify whether a supplementation with SPMs or their precursors may improve this state.

Conflict details: A Mueller, M Sailer, PA Regidor are employees of Exeltis. JM Rizo is employee of the Chemogroup.

FC01

Patient experiences viewing expulsions during medication abortion in the later first trimester

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OBJECTIVES: To understand what medication abortion (MA) users with 9-11 week pregnancies saw on expulsion, their feelings about what they saw and the effect of viewing pregnancy tissue on satisfaction to inform pre-abortion messaging for users.

METHODS: This secondary analysis combines findings from two prospective, open-label mifepristone-misoprostol clinical studies among pregnancies of 9-11 weeks of gestation (57-77 days). Following abortion completion and prior to discharge from care, participants were individually interviewed about overall satisfaction and acceptability, and experiences with products of conception (POC). Pearson chi-square tests were used to determine associations for categorical variables. T-tests and ANOVA tests were performed to compare means. Odds ratios and confidence intervals were calculated for all dichotomous variables.

RESULTS: Of 800 analyzable participants, 318 (39.5%) were enrolled at 9 weeks, 390 (50%) at 10 weeks, and 92 (11.5%) at 11 weeks. The 67% (n=537) of participants that saw POC most commonly reported

seeing blood or blood clots (50%), followed by the fetus or recognizable parts (20.5%). The proportion of participants that reported seeing POC and fetal parts increased by gestational week (15%, 23%, and 29%, respectively, $p=0.02$). Approximately half of all respondents reported feelings about seeing POC that investigators classified as “negative,” and negative feelings were more consistently reported than neutral or positive feelings across gestational age groups. Nevertheless, seeing POC was associated with greater overall satisfaction with the abortion compared to not seeing POC (90% vs 84%, $p=0.02$, OR 0.59, 95%CI 0.39-0.91). Participants in the 10th and 11th weeks of pregnancy in one study were offered to view standardized images of fetal development and MA expulsion during pre-abortion information sessions. Forty seven of 185 participants opted to view images, with those in the 11th week of pregnancy 2.5 times more likely to view the images (95% CI 1.2, 5.1). In this analysis, participants who viewed images were not statistically significantly more likely to feel more prepared for what they observed than were those who did not view images.

CONCLUSIONS: Patient satisfaction with outpatient MA procedures using mifepristone and misoprostol was high despite any negative feelings about viewing POC. These study findings have been used to inform subsequent MA research procedures and clinic practices around pre-abortion conversations with patients. Pre-abortion information sessions should address what patients might see on expulsion so they are better prepared. The option to view images may be useful for some.

FC02

Doctors as abortion advocates: A framework for training physicians in medical-expert advocacy

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Objectives. To develop a theory of change framework from an evaluation of a physician training program on advocacy for abortion and contraception care in the United States. Such a framework would ideally inform subsequent implementation of the program as well as the larger field of training medical experts to engage in sexual and reproductive health-related advocacy activities.

Methods. We conducted a mixed-methods evaluation of a nine-month physician advocacy training program intended to support trainees' active engagement in policy, media, and medical education/professional organizational advocacy for abortion and contraception. The study design included a survey ($n=231$) and in-depth interviews (IDIs, $n=36$) with program alumni, and surveys ($n=56$) and IDIs ($n=10$) with current trainees and controls. Outcome measures focused on experiences with the program; assessment of curricular components; skills training, initiation, and changes in engagement across advocacy activities; and, facilitators/barriers to engagement. Findings from data analysis were used in a parallel process, in collaboration with the program developers, to create a theory of change framework. First, we reviewed six advocacy and policy change frameworks, identifying relevant elements for a preliminary model. Next, we gathered information on program curricular activities, learning objectives, and expected outcomes, categorizing them according to a pedagogical taxonomy covering the spectrum, from understanding/describing to applying/creating. These training outcome categories were mapped to the framework, underwent a series of iterations, and were further refined when validated against the evaluation results.

Results. A theory of change framework (Figure) for *Physician Advocacy for Abortion and Related Topics (PAART)* emerged comprising two levels: 1. the curriculum with its advocacy-related goals (skills training; media/policy opportunities to apply skills) and 2. the program's delivery mode/context (multiple trainings; group/networking settings). The relationship between these components is such that the context/environment level (components A, B, and C, in Figure) fosters the activities in the training level (components I and II). The in-person trainings cultivate relationships among abortion providers (and other physician advocates) and foster a strong network and sense of community. This *context* level facilitates trainees' advocacy skills and engagement.

Conclusions: Findings from the program evaluation component of this project support the theory of change model that emerged, which highlighted the importance of a supportive community context for abortion-provider advocates to be able to learn policy, media, and organizational advocacy skills, and ultimately apply them. The PAART framework can be especially useful in supporting such physician advocates to succeed in the widespread hostile environments of abortion care.

Satisfaction and effects of structured contraceptive counselling on long-acting reversible contraception among non-migrant, foreign-born migrant and second-generation migrant women: Evidence from a cluster randomised controlled trial (the LOWE trial), Sweden

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Objectives: Lower contraceptive use and higher abortion rates among migrants compared to non-migrants have been reported in European studies. Results from the Swedish LOWE trial showed that structured contraceptive counselling led to higher uptake of long-acting reversible contraception (LARC) compared to standard contraceptive counselling. We aimed to evaluate secondary outcomes from the LOWE trial among non-migrants, foreign-born migrants and second-generation migrants. We analysed the effects of structured contraceptive counselling on LARC choice, initiation and use, and satisfaction with the counselling material among the three participant groups.

Design & Methods: Between 2017 and 2019 a cluster randomised controlled trial (the LOWE trial) was performed at abortion, youth, and maternal health clinics in Stockholm, Sweden. The structured contraceptive counselling material consisted of an educational video, an effectiveness chart, four key questions and a box with contraceptive models. We analysed data from 1295 participants using descriptive statistics and binary logistic regression.

Results: When adjusted for non-migrants, foreign-born migrants and second-generation migrants we found that participants who had received the structured contraceptive counselling chose LARC to a higher extent (adjusted odds ratio [aOR] 1.59, 95% confidence interval [CI] 1.27-2.00), had higher LARC initiation rates (aOR 1.71, 95% CI 1.31 to 2.22), and higher LARC use within the 12 months follow-up period (aOR 1.52, 95% CI 1.15-2.00) compared to those who had received standard contraceptive counselling.

The majority of the non-migrants, foreign-born migrants and second-generation migrants found all parts in the structured contraceptive counselling material satisfactorily. However, a higher proportion of foreign-born migrants (58/84, 69%) and second-generation migrants (40/54, 74.1%) found the effectiveness chart to be supportive in contraceptive choice compared to non-migrants (259/434, 59.7%) ($p = 0.048$).

Conclusions: Structured contraceptive counselling increases LARC choice, initiation and use also when adjusted for migration background. A higher proportion of foreign-born migrants and second-generation migrants found the effectiveness chart to be supportive in contraceptive choice. Our results may contribute to limit inequities in SRHR among vulnerable groups such as migrants.

Conflict details: The authors declare no support from any organization for the submitted work. Outside the submitted work, NE reports personal fees from Bayer AG, KEI reports non-financial support from Bayer AG and RemovAid AS, KGD reports other support from RemovAid, personal fees and other support from MSD/Merck, Bayer AG, Gedeon Richter, Mithra, Exeltis, HRA-Pharma, Exelgyn, Campus Pharma, Circle, Natural Cycles, MedinCell and Myovant, HKK reports personal fees and other support from Bayer, personal fees from MSD, Exeltis, Mithra, Natural Cycles, Gedeon Richter and Preglem. EL and IB declares no conflicts of interest.

FC04

Weight change among women using intramuscular depot medroxyprogesterone acetate or norethisterone enanthate for contraception: Findings from a randomised, open-label trial

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Objectives:- We conducted a secondary analysis of weight data collected, to describe and compare changes in weight and body mass index (BMI) between women randomised to two progestin-only hormonal contraceptives:- Depot medroxyprogesterone acetate (DMPA-IM) 150 mg intramuscular 12-weekly versus Norethisterone enanthate (NET-EN) 200 mg intramuscular 8-weekly.

Design and Methods: The WHICH study was an open label parallel randomized trial conducted at hospital and community sites in East London and Durban, South Africa. Consenting HIV-negative women aged 18 to 40 years who had requested injectable progestogen contraception were enrolled. Weight (kgs) was measured at baseline and study exit (25 weeks). Analysis was performed as intention-to-treat (ITT). The secondary outcome was weight change from study enrolment to the final visit. Weight and height were measured according to a standardised protocol and body mass index (BMI) was calculated (kg/m^2). Participants were allocated by an online randomization service to DMPA-IM 150 mg intramuscular 12-weekly or NET-EN 200 mg intramuscular 8-weekly. Only data collected from the Durban site were included in the analysis.

Results : A total of 188 women were enrolled at the Durban site. Women were randomly assigned to DMPA-IM (n=95) or NET-EN (n=94). Mean age was 24.8 (SD=4.2) and no significant differences were found between the two contraceptive method groups for any sociodemographic characteristics. The ITT population included 157 women:- DMPA-IM (n=79) and NET-EN (n=78) who were not lost to follow-up, pregnant on study, or missing weight data. Baseline BMI indicated that two-thirds of both groups (DMPA-IM 63.3% and NET-EN 61.6%) were in the pre-obese or higher obesity categories. The mean weight increased in both groups over 25 weeks by 1.39 Kgs but was not significantly different in magnitude between NET-EN compared to DMPA-IM. Baseline BMI categorised as either underweight, normal or pre-obesity ($<30\text{kg/m}^2$) compared to those in the obesity categories ($\geq 30\text{kg/m}^2$) had no significant impact on the effects of the contraceptive methods on weight change. Similarly, prior DMPA use at baseline or age (<25 years vs $25+$ years) showed no effect on weight change.

Conclusion: Weight gain at six months occurred in both groups NET-EN and DMPA. Women using these methods should be counselled about this potential side-effect when choosing a contraceptive method.

FC05

ReLARC: Reversible safe hysteroscopic approach for long acting contraception and an alternative to laparoscopic and hysteroscopic sterilization.

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AIM: To demonstrate a novel hysteroscopic insertion technique with direct visualization of a frameless, anchored intrauterine contraceptive device (ReLARC) with a duration of action of 3 or 10 years.

Methods: Patients requesting hormone free contraception, or who presented IUD problems, were evaluated by hysteroscopy and fitted with a ReLARC intrauterine copper device (3 or 10 years duration of action). Ultrasound was performed before and immediately following insertion and at 4-8 weeks follow up to measure the position of the anchor (fixation). A minimum fundus thickness of 11 mm is required for a safe insertion.

Results: From 2014 to 2021, 568 patients received a ReLARC. Ultrasound evaluation at follow up confirmed correct positioning in 99 % of all cases. Reinsertions were done in 6 cases (1%) where anchor fixation may have been insufficient. 2 expulsions (0,3 %) have been reported. There were no early removal requests due to side effects.

Conclusion: ReLARC is 2.5 mm wide and its flexible design ensures compatibility with individual variations in uterine cavity size or shape. In contrast to most other IUD's it can be used in patients with several uterine abnormalities. This geometric compatibility and the fact that it is placed under direct sight results in fewer side effects such as displacement, perforation or expulsion. Following insertion, the anchor will remain fixed at 5-8 mm depth in the fundal myometrium. If the knot is observed to be in the same position during the ultrasound control, there is 0,3% risk of expulsion. ReLARC can be inserted in an office setting using a 5 mm hysteroscope. Full anesthesia is recommended if other intrauterine procedures are necessary or occasionally on patient request.

Conflict details: Disclosure: Dr. Thomas Hasskamp: No financial or commercial relationship to disclose. Dr. Hasskamp received technical support from KARL STORZ SE & Co. KG and Contrel Europe nv. Author: Dr. med. Thomas Hasskamp GYNMUENSTER, Klinik für Operative Gynäkologie, Münster, Germany. thomas.hasskamp@web.de Co-author: Prof. Dr. Steven Weyers, Vrouwenkliniek, UZ Gent, Belgium steven.weyers@uzgent.be

FC06

Systemic hormonal contraception and risk of venous thromboembolism

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Objectives. To assess the associations between the patterns of use of different systemic hormonal contraceptives (HC), and the risk of venous thromboembolism (VTE) during 2017-2019.

Design and Methods. Data were obtained from the following Finnish registers: the Prescription Centre, Care Register of Health Care, Finnish Cancer Registry and Statistics Finland. First, a total of 587 559 women, aged 15-49 years (approximately 50% of the Finnish female population of that age range), using and not using HC in 2017 were included in the initial cohort study aimed at examining the incidence rate ratio (IRR) of VTE in HC users and non-users. Second, in a prospective nested case-control design, we examined all incident VTE cases during 2018-2019, and their 4:1 age-matched controls to assess the associations of the use (starting, stopping, continuous vs. no-use) of different HC types with VTE.

Results. Altogether 1334 VTE cases occurred during the follow-up period (incidence rate: 1.14 per 1000 person-years, 95% CI 1.08–1.20), with an IRR of HC vs. no-HC use of 1.42 (1.27–1.58). Compared to non-use, starting the use of gestodene and ethinylestradiol (adjusted OR 2.87, 95% CI 1.68–4.91), drospirenone and ethinylestradiol (1.59, 1.06–2.38), desogestrel and ethinylestradiol (1.90, 1.01–3.56), and transdermal patch releasing norelgestromin and ethinylestradiol (5.27, 1.16–23.88), as well as continuing the use of gestodene and ethinylestradiol (2.35, 1.51–3.68), drospirenone and ethinylestradiol (1.48, 1.00–2.18), cyproterone-acetate and estrogen/ethinylestradiol (1.88, 1.20–2.71), and vaginal ring releasing etonogestrel and ethinylestradiol (3.12, 1.94–5.04), were associated with VTE risk. Regarding the type of estrogen, the highest risk was associated with current use (vs. non-use in the previous 180 days) of ethinylestradiol-containing preparations (2.20, 1.82–2.65), followed by estradiol-containing preparations (1.39, 1.04–1.87) with no risk for progestin-only HC.

Conclusions. An increased risk of VTE is associated with ethinylestradiol containing combined preparations. The use of estradiol-containing combined preparations confers only a slightly increased risk, while the use of progestin-only contraception is not associated with VTE.

FC07

Provision of copper intrauterine device types more acceptable to younger aged women based on outcomes at 1 year.

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Background: Younger aged copper intrauterine contraception (IUD) users tend to experience higher rates of unwanted effects and discontinuation compared to their older counterparts. Among the many types of IUDs currently available in Europe none have been shown to best suit younger women.

The European Active Surveillance Study for Intrauterine Devices (EURAS-IUD study) was a multinational, prospective, cohort study involving 61,448 new users of intrauterine contraception. More than 30 different brands of IUDs were used in 5796 participants aged under 30. Interrogating this data in addition to local experience would provide real life information on IUD outcomes in this age group of women. In combination with existing evidence, this information could identify which IUDs are most acceptable to younger aged women.

Objectives: To identify which IUD types are most acceptable to younger women following review of the scientific literature, a local three-year period case review and a secondary analysis of EURAS-IUD study data on women under the age of 30.

Methods: A systematic review of relevant publications, a local three-year period case review and a secondary analysis of EURAS-IUD study data involving women under 30 was undertaken. Information obtained included age, gravidity, parity, IUD type, reported unwanted and adverse effects, additional healthcare visits and IUD removal rates at one year. Descriptive and comparative analyses based on IUD type were performed. An IUD choice decision-making tool was developed based on these findings.

Results: There was limited published evidence investigating the acceptance of different IUD types in younger aged women. Single-centre studies, including the local case review and a randomised trial, reported greater significant differences in continuation and unwanted effects based on IUD width compared to large multi-centre studies. The EURAS-IUD study data showed higher continuation, fewer unwanted effects and lesser costs as a consequence associated with IUDs with lower copper content (<300mm²), shorter widths (18mm-<30mm) and flexible IUD arms. The decision-making tool developed for use in intrauterine contraception provision was based on these findings and suggested shorter width (18mm-<30mm) and more flexible framed IUDs better suit younger women.

Conclusions: This research showed that continuation, unwanted effects and cost consequences at one year could be improved with smaller width and more flexible-IUDs being provided to younger women. These findings have been incorporated in an IUD decision-making tool to support service provision and more acceptable contraceptive choice for younger aged women.

FC08

A new approach to intrauterine contraception: is Ball better than a T? Effect on pain at placement, bleeding patterns and satisfaction with treatment. A clinical randomized, single blind trial.

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Objectives: The SCu300 IUB™ is a copper intrauterine device which upon insertion in the uterus takes a three-dimensional spherical form. The IUB, with its new design, has been conceived with the expectation of obtaining improvements in the performance of the device compared to that of traditional IUDs, in particular in relation to pain at insertion, during the first months of use and bleeding patterns. Our study is the first clinical trial which compares the performance of IUB with Nova T 380.

Method: This is a clinical randomized, single blind, monocentric trial conducted on 60 women who request the use of IUD for contraception in the service of Contraception of Policlinico University Hospital of Modena (Italy). The recruitment started on December 16th 2019 and it will finish by the end of 2021. The included women were randomized to IUB (n=30) vs. Nova T 380 (n=30). Follow-up includes the first visit one month after insertion of the IUD, a visit at one year. The primary outcomes assessed was the pain during the insertion of the IUD and during the first month of use (VAS range 0-10). The secondary outcomes were difficulty in the insertion of the IUD for the operator; bleeding pattern in the first year of use (evaluated with menstrual diary), patient's quality of life and of sexual life (evaluated with SF 36 and FSFI questionnaires), satisfaction with contraceptive method (a range 0-10 points).

Results: Thirty women were randomized in IUB group and 30 in Nova T group. At placement there were no difference between groups (p=0.87) in relation to perceived pain by the patients, in contrast the operator reported statistically lower pain in IUB group (for IUB 1.5 ± 0.9 points vs. for Nova T 380 2.3 ± 1.0 , p=0.0015). The satisfaction with treatment after one year was very high with a mean of 8.3 ± 2.5 and similar between groups (8.5 ± 1.5 points for IUB vs. 8.1 ± 3.1 points for Nova T 380; p=0.75). During the first month the pelvic pain was similar between groups and not statistically significant instead of the bleeding intensity, that resulted higher in IUB group (for IUB 26.3 ± 7.7 vs. for Nova T 380 20.6 ± 9.3 ; p=0.03). Both in the bleeding pattern and pelvic pain, there was no significant difference between groups after one year use (p>0.05). In both groups, there were no significant changes in quality of life and of sexual life after one month and one year of use.

Conclusions: Although with IUB there is an apparent reduction of pain during the insertion procedure reported by the operator, at the same time, compared with Nova T 380, its use is associated with a more intense bleeding.

The performance of the two devices seems overall comparable and the new IUB can be considered an acceptable alternative to the currently available copper IUDs. Participants' high satisfaction further supports its acceptance as a safe and effective method. Longer follow up data will enable to further describe the device's performance and evaluate its acceptability.

FC09

Adolescents' knowledge on sexual matters - including gender identity, sugar dating and nude photos sharing

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Objective: To reveal sexual practice with knowledge about sexual matters in an unselected population of adolescents. The study was performed in a non-intervention setting to minimize information bias.

Design & Methods: A cross-sectional questionnaire was electronically handed out without prior notice to all ninth grade pupils in the Municipality of Tønder, Denmark, in 2020 and 2021.

Results: In total, 335 answered the questionnaire. The adolescents with sexual debut stick to a few partners, most have had intercourse more than 4 times. At their debut, 25 % were drunk, but this without any regrets. The use of contraception was 70% at debut for both genders and similar at the last intercourse. Only 50% of the ninth graders indicate using contraception each time. Condoms and birth control pills are the preferred choice. The majority of young people feel like the gender they have from birth, but 4% of the adolescents do not feel completely or partially like the assigned gender from birth. Eighty percent of all identified themselves as heterosexual. The majority of young people, especially girls, know the concept of sugar-dating and 10%, regardless of gender, stated that they have done something sexual in order to achieve benefits. Most had received nude photos on tablets and mobile phones. By whom and how is not clarified, but virtually no one chooses to forward the images and, thus, break the law. Eight percent of the adolescents state that they have sent nude pictures themselves. Girls seek their knowledge of sex more by other persons and streaming, while boys overall are more self-seeking in the form of porn, internet and forums. Overall, young people want more education and girls more often than gender-segregated education. **Conclusion:** Overall, the proportion of debutants corresponds to previous studies. Adolescents favor to talk to their friends about sex. Boys are more self-seeking, while girls more often prefer friends, mother, teachers and their doctor. However, many girls get their knowledge from streaming.

Nude photo sharing is a relevant topic for sex education, as it may have consequences for the young person in the future. The notion on differences in gender identity and sexuality is known by most of the adolescents

FC10

Safety and effectiveness of a misoprostol-alone medication abortion using a hybrid tele-medicine & pharmacy pick-up model in the United States

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Objectives: To evaluate self-reported outcomes and adverse events following a self-managed medication abortion using misoprostol-alone.

Methods: We retrospectively examined the outcomes of people who self-managed an abortion between June 1st and June 30th, 2020 using misoprostol obtained using Aid Access, an online telemedicine organization serving U.S. residents. After an online consultation individuals received a prescription for misoprostol from Aid Access physicians and filled the prescription at a local pharmacy. People are provided with detailed instructions for self-managing an abortion, information on potential signs of complication or adverse events, and have access to a 24/7 online helpdesk for support. Four weeks after the prescription is sent, people are sent an email invitation to report their outcomes using an online follow-up consultation or direct email to the helpdesk. The main outcomes were the proportion of people who reported ending their pregnancy without surgical intervention and the proportion who received treatment for serious adverse events.

Results: After eligibility was established, medication was mailed to 1,016 people. Follow-up information was obtained from 610 (60%), of whom 568 confirmed use of the medication and 42 confirmed non-use of medication due to miscarriage or obtaining an in-clinic abortion.

When taking the medication, 94% were at 10 weeks or fewer pregnant, and 5.9% were over 10 weeks pregnant. Overall, 87.7% (95% CI: 84.6-90.2) reported successfully ending their pregnancy without surgical intervention. Five people reported receiving oral or IV administered antibiotics (0.88%, 0.32-2.16), three received a blood transfusion (0.52%, 0.13-1.67) and there were no known deaths. Thirty people (5.3%, 3.65-7.54) reported experiencing a symptom for which medical attention was advised.

Conclusions: Self-managed medication abortion using a misoprostol-alone regimen from an online telemedicine service can be effective and have low rates of serious adverse events. The outcomes in this study compare favorably to other service models using misoprostol-alone. As mifepristone continues to be unnecessarily regulated and clinical abortion care increasingly legally restricted, a misoprostol-alone regimen delivered using online telemedicine is a promising option for self-management in the United States.

FC11

A new approach to intrauterine contraception: is Ball better than a T? Effect on placement stability and continuation rates. A clinical randomized, single blind trial.

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Objectives: The SCu300 IUB™ is a copper intrauterine device 15 mm diameter which upon insertion in the uterus takes a three-dimensional spherical form. The IUB has been conceived with the expectation of obtaining improvements in the performance compared to that of traditional IUDs. Clinical trials and observational studies concerning initial safety, effectiveness and acceptability of IUB are already available in the literature; our study is the first clinical trial which compares the performance of IUB with Nova T 380.

Method: This is a clinical randomized, single blind, monocentric trial conducted on 60 women who request the use of IUD for contraception in the service of Contraception of Policlinico University Hospital of Modena (Italy). The included women were randomized to IUB (n=30) vs. Nova T 380 (n=30). Follow-up includes the first visit one month after insertion of the IUD, a visit at one year, and annual telephone contact for the five years of the device's effectiveness. Outcomes include adverse events (spontaneous expulsion, malpositioning, perforation, infections) and continuation rate at 12 months.

Results: Thirty women were randomized in IUB group and 30 in Nova T group. Three/60 patients (5%) were lost to follow up. Preliminary analysis showed 47/57 (82.5%) patients still using IUD: it was well positioned in 76.7% in IUB group vs. 88.9% in Nova T 380 group (p=0.22) with a mean follow up of 7.7 months. A total of 10/60 IUD (16.7%) were removed or expelled (6 IUB and 3 Nova T 380 removed; 1 IUB expelled). The rate of expulsion and severe dislocation requiring removal was not statistically significant different between groups (p=0.18), as well as the overall removal rate (17.2% for IUB vs. 7.4% for Nova T 380; p=0.27). Women with IUB removed for dislocation or spontaneously expelled had a higher uterine volume in comparison to ongoing women (p=0.014). A slight migration of the device from the uterine fundus was recorded for both groups after one month of use and it was directly related with the uterine volume (coefficient: 0.359, p= 0.04); tendency of major migration occurred in IUB group though not significant (p= 0.41).

Conclusions: The use of IUB 15 mm is associated with a non-negligible risk of major intracavitary migration in the first month of use and, consequently, to an increased rate of expulsion or removal due to its smaller diameter. There is a possible correlation between device migration and bigger uterine volume; however, to verify this possible association, more in-depth studies with larger cohorts are needed.

FC12

Free-of-charge contraception and changes in abortion rates in Finnish municipalities in 2010–2019.

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Objective: To evaluate whether there is an association between programs providing contraception free-of-charge and changes in abortions rates at the municipality level.

Design and Methods: We obtained panel data from 2010 to 2019 on the initiation and termination points of free-of-charge contraception programs in the 100 most populated municipalities in Finland, by surveying chief physicians in each municipality by email and phone. These municipalities cover 84% of the total population in Finland. We also obtained data at the municipality level on several covariates for the same time period from the Finnish Institute of Health and Welfare and Statistics Finland.

We used Poisson regression analysis with time and municipality fixed effects to evaluate the association between implementation of free-of-charge contraception and changes in abortion rate series in three age groups: 15–19-year-olds, 20–24-year-olds, and 25–44-year-olds. As covariates, we used the rate of deliveries, the proportion of the population living in households in the lowest income decile, the proportion of women with a high education level, and the rate of unemployment among women, all in each municipality and age group.

In the analysis, we considered four broad categories of free-of-charge contraceptive programs: 1) LARC-age programs, providing long-acting reversible contraception (LARC) to young women, or providing a woman's first LARC method. 2) LARC-conditional programs with various terms for provision. 3) SARC programs, providing short-acting reversible contraception and 4) AGE programs, where women are offered all methods free-of-charge until they reach the age of 20 or 25 years.

Results: All chief physicians answered the survey. In 2010, 32 out of the 100 municipalities offered some kind of free-of-charge program for their residents. In 2019, the number had risen to 74.

The adjusted regression models showed a significant negative association between LARC-age programs and abortion rates in the two youngest age groups: incidence rate ratio (IRR) 0.82, 95% CI 0.70–0.96 among women aged 15–19 and IRR 0.78, 95% CI 0.66–0.91 among women aged 20–24. Among 20–24-year-olds, SARC programs were associated with higher abortion rates: IRR 1.15, 95%CI 1.04–1.28. In the oldest age group, no significant associations were found.

Conclusions: Providing free-of-charge LARC methods to young women is associated with lower rates of abortion, even on the municipality level, while SARC-only programs are associated with higher rates of abortions. LARC methods are the most effective reversible contraceptive methods, and this can also be seen on the municipality level.

FC13

Clotting Parameters after medical Abortion – The C-PLAN study: a preliminary analysis

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Objectives: Venous thromboembolism (VTE) is a leading cause of maternal death. Clotting parameters can take up to 6 weeks to normalise following term deliveries. To mitigate risk of VTE, pharmacological prophylaxis with low molecular weight heparin (LMWH) is often used.

However, there is an absence of information on clotting parameters at different gestations and changes following abortion. As such, guidelines for VTE prevention after abortion are based solely on expert opinion and recommend durations of LMWH prophylaxis from 7 days to 6 weeks following abortion.

Data are needed to inform an evidence-based approach to VTE prophylaxis after abortion.

Our objectives were to determine whether clotting parameters in the first trimester of pregnancy differ from non-pregnant controls and if so, whether they normalise at 10-14 days following medical abortion using: traditional laboratory measures (fibrinogen concentration, prothrombin time [PT], activated partial thromboplastin time [APTT], platelet count)

ClotPro viscoelastic haemostatic assay, in particular Maximum Clot Firmness (MCF) in EX-test (extrinsic coagulation activation), IN-test (intrinsic coagulation activation) and FIB-test (fibrinogen and fibrin polymerisation)

Methods: We conducted a single centre exploratory study in a sexual and reproductive health clinic in Edinburgh, UK. We recruited women requesting medical abortion (<12 weeks' gestation based on ultrasound) and non-pregnant women (controls) who were healthy, non-smokers and not taking medications that affect coagulation. Blood samples were taken prior to medical abortion and then 10-14 days after treatment. Non-pregnant women provided a single sample. In this preliminary analysis we conducted two comparisons:

- (1) pre-abortion tests versus controls – to determine whether clotting parameters were changed with pregnancy
- (2) post-abortion tests versus controls – to determine whether clotting parameters were normal by 10-14 days post-abortion.

Results: We recruited 45 women (24 pregnant, 21 non-pregnant) between March to July 2021.

Plasma fibrinogen was significantly elevated pre-abortion compared to controls but there were no other significant differences in traditional laboratory measures. ClotPro MCF was elevated in EX-test, IN-test and FIB-test pre-abortion compared to controls.

There were no significant differences in laboratory measures between post-abortion and control groups. ClotPro MCF remained slightly elevated for the EX-test in the post-abortion group but was no longer significantly elevated in the IN-test and FIB-test.

Coagulation Variable	Control Mean (SD)	Pre-abortion Mean (SD)	Independent t-test (p) Pre-abortion vs control	Post-abortion Mean (SD)	Independent t-test (p) Post-abortion vs control
Fibrinogen [g/L]	2.81 (0.444)	3.44 (0.628)	<0.001	2.82 (0.470)	0.461
PT [seconds]	12.2 (0.644)	12.0 (0.659)	0.216	11.9 (0.910)	0.065
APTT [seconds]	28.7 (2.41)	28.2 (1.75)	0.116	28.7 (1.68)	0.482
Platelets [x10 ⁹ /L]	290 (57.1)	291 (45.5)	0.458	316 (49.1)	0.060
MCF (EX-test) [mm]	59.9 (2.97)	62.5 (3.19)	0.003	61.9 (2.98)	0.016
MCF (IN-test) [mm]	57.6 (2.84)	59.8 (2.67)	0.004	58.8 (2.93)	0.086
MCF (FIB-test) [mm]	15.3 (2.95)	18.9 (3.87)	<0.001	16.6 (2.89)	0.081

Conclusions: Laboratory measures of coagulation normalise by 10-14 days after first trimester medical abortion. Most viscoelastic measures of MCF also normalise by this point; however, the clinical importance of any difference requires further study.

FC14

Improving holistic care for migrant victims of sexual violence: validation of a 'checklist' for identification of sexually victimized applicants for international protection

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Applicants for international protection (AIP) are at high risk of sexual victimization prior to, during and after their arrival in Europe. Despite the high prevalence of sexual violence in this population, sexual violence is rarely disclosed and/or reported, specifically in the setting of asylum reception and accommodation initiatives. In order to meet the unique needs of AIP victims by providing initial care and eventually referring them to holistic services, professionals working in asylum reception and accommodation initiatives should be supported to adapt their approaches, build knowledge and refine their skills. Therefore, the INHeRE project (2019-2021) developed and scientifically evaluated a 'checklist' to assist and guide professionals in recognizing behaviors and situations that are potentially indicative of sexual victimization.

In order to maximize the fitness for practice, the 'checklist' was validated, informed and refined through a two-round Delphi procedure involving 'informed individuals' (i.e. experts) on the topic of sexual violence in a migration context.

Two sequential questionnaires, interspersed with controlled feedback and adaptation of the survey, aimed to build consensus (>66% of participants agree) on the content of the checklist by gauging the experts' (dis) agreement with statements regarding the ideal identification, care and referral process for AIP victims and the checklist's applicability in practice. 42 experts, including trauma-psychologists, staff working in the asylum sector, police officers, NGO representatives etc. completed the first survey whereas 31 experts completed the second survey. The data was thematically analysed.

We considered consensus to be reached when 66% (2/3) of the expert panel either agreed or disagreed with a statement. With the dispersion of participants' view lessening with each round, consensus has been reached on 41 statements (66.1% of the questions) in the first Delphi-round and on 25 statements (83.3% of the questions) in the second Delphi-round.

In the first round, the expert panel agreed on the need for a checklist and the necessity to supplement the checklist with a training. They disagreed on the concept of a 'checklist' as it presumes a ticking box exercise and on the inclusion of questions professionals can ask when presuming sexual victimization. In the second round, disagreement remained mainly on whether to include indicators on physical, sexual and reproductive health that could solely be assessed by a medical professional, on the exclusive reliance upon certified interpreters and the use of case vignettes in the checklist.

A more detailed overview of the findings and recommendations made by the expert panel as well as the final version of the checklist will be presented.

FC15

Is ultrasound examination no longer required before medical abortion?

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Objectives: The Covid pandemic has changed practice for assessment of people seeking abortion care in the UK, particularly those seeking early medical abortion. Medical abortion can now be offered without ultrasound examination. This retrospective study was designed to examine if the current practice of not scanning patients is safe and the correct way forward in the future.

Methods: 4051 patients presenting for termination of pregnancy between 2006 and 2010 underwent ultrasound examination prior to the abortion procedure at a tertiary University Hospital. Pregnancy outcomes were reviewed in all these patients.

Results: 4439 scan results on 4051 patients and 4276 different pregnancies were reviewed. Within the data set there were 188 patients who presented more than once for abortion of different pregnancies. 4026 (91%) scans showed a viable intrauterine pregnancy (VIUP) and 413 showed a non-VIUP. Of the non-VIUPs, 43% (179) were miscarriages, 12% (49) were pregnancies of unknown location (PUL) and 43% were early IUPs of uncertain viability. There were three ectopic and five molar pregnancies identified on primary scan and 1 further ectopic pregnancy identified in the PUL group. 275 (6.4%) of these scan outcomes resulted in a referral to the early pregnancy assessment unit (EPAU) for further management.

Conclusion: The majority of patients (93%) did not require an ultrasound examination with the current practice. 6.4% of patients seeking abortion were managed in the early pregnancy unit suggesting abortion procedure was not required but they needed management clinically. 4 ectopic pregnancies needed close monitoring and 5 molar pregnancies needed referral to specialist trophoblastic unit for monitoring.

The authors feel a prospective study is needed to determine if this is acceptable in the future. While this is undertaken, a triage system is needed to identify high risk patients and perform ultrasound examination prior to treatment. All patients should undergo urine hCG examination after medical termination and if levels remain positive the molar pregnancy should be considered appropriate monitoring arranged.

6.4% were referred to the EPAU for further management. We should consider routine provision of contraception services within the EPAU setting to prevent repeat abortion incidence.

FC16

A retrospective observational cohort study of women having more than one abortion before and during the COVID-19 pandemic in Glasgow

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Objective: Abortion via telemedicine has been accessible in Scotland since April 2020, with legislation introduced increasing the upper gestation limit from 10 to 12 weeks and permitting home use of both mifepristone and misoprostol, a model demonstrated to be safe and effective¹. Since the onset of the pandemic there has been no provision for surgical abortions.

This project aimed to compare rates of women having more than one abortion since COVID and the introduction of telemedicine with a pre-COVID cohort.

Methods: A retrospective observational cohort study comparing women having more than one abortion via Sandyford, Glasgow, between 1st April 2019 and 1st March 2020 (pre-telemedicine) and 1st April 2020 and 1st March 2021 (delivered via telemedicine) whose first abortion was within the first 6 months for each cohort. Data collected from the National Sexual Health System included demographics, gestation at presentation, pre- and post-abortion method of contraception and type of abortion.

Results: Comparing the same time periods there were a total of 1631 and 1777 total abortions respectively. Of these, 2.33% (n=38, first cohort) had a subsequent abortion within the study dates, compared with 6.44% (n=113, second cohort) having at least one subsequent abortion. For women having more than one abortion, pre-COVID 55.26% (n=21) opted for an early medical abortion (EMAH) for their first, increasing to 63.16% (n=24) for the second compared with 90.26% (n=102) of women who had an EMAH following the change in legislation, rising to 93.8% (n=106) for the subsequent. Most women in both cohorts presented <10 weeks gestation (pre-COVID 89.47% and post-COVID 94.69%).

Conclusion: There was a three-fold increase in the number of women presenting for more than one abortion following the introduction of telemedicine and the COVID pandemic. It is not possible to identify reasons for this from this study but it is likely that there are several contributory factors, including socioeconomic factors, access to or perceived access to contraception and LARC provision. The accessibility and acceptability of the telemedicine model for women seeking abortion is also highlighted.

FC17

Sexual and Reproductive Health and LGBTQIA+ patients: results of a national survey

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OBJECTIVES: To understand the perspective of health professionals in Portugal in providing Sexual and Reproductive Health (SRH) care to LGBTQIA+ patients, assessing the clinical experience, the level of knowledge and the training needs of interns and specialists in Gynaecology/Obstetrics (GO) and General Practice (GP).

METHOD: An online questionnaire was designed for GO and GP interns and specialists, which was conducted in order to ensure the participants' anonymity and confidentiality. Data collection took place between the 15th of August and the 25th of September 2021. Statistical analysis was performed using the IBM SPSS® v22.0 platform, and a descriptive analysis was carried out.

RESULTS: 222 responses were obtained. The overwhelming majority of respondents (91.4%) stated that SRH represents one of their areas of interest. However, approximately 29.0% of respondents do not feel comfortable dealing with issues related to sexuality and gender identity and approximately 25% do not know the meaning of the acronym LGBTQIA+. The data collected shows that most of the health professionals surveyed (71.6%) only sporadically address the sexual orientation of their clients in their clinical practice. Similarly, more than half (58.1%) of the participants sporadically address their sexual behaviour. The majority of respondents (89.2%) have already had contact with LGBTQIA+ patients in their clinical practice, however only about 20% of health professionals consider their level of preparation to provide family planning consultations to this community as 'very good' or 'good'. The main difficulties experienced in providing SRH care to LGBTQIA+ patients are centred on their own inexperience (63.5%), the lack of information in the area (55.4%) and the difficulty in addressing sexual orientation/behaviour (50.9%).

Nevertheless, the access of LGBTQIA+ patients to SRH care, namely to family planning consultations, may be hindered by the existence of numerous barriers, including fear of stigmatization, lack of training, negative previous experiences and the use of heteronormative language, which were pointed out by 84.7%, 70.3%, 61.7% and 47.3% of the respondents, respectively. Although the answer to this question was not consensual, more than half of the participants (53.2%) mentioned that it would be important to have a specific SRH consultation for LGBTQIA+ patients.

The lack of training was evident, and there was a consensus (96.4%) on the importance of training for

health professionals in the provision of SRH care to LGBTQIA+ patients.

CONCLUSIONS: SRH represents one of the areas of interest for most of the health professionals surveyed and they considered themselves comfortable to address issues related to sexuality and gender identity. However, the majority expressed inexperience in relation to providing care to LGBTQIA+ patients. The lack of information and training in the area, as well as the fear of stigmatization, were the main barriers faced by these patients, and may represent important and interesting focus point for action.

FC18

Contraception and VTE risk in the context of COVID-19 illness

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1. Objectives: Moderate and severe COVID-19 illness are associated with increased rates of venous thromboembolism (VTE). Both pregnancy and use of combined hormonal contraceptives also increase rates of VTE from baseline. In Canada, around 500,000 reproductive aged women (15-44yo) have had a COVID-19 illness since the start of the pandemic. This population would benefit from standardized, evidence-based guidance on management of contraception use during COVID-19 illness and there was an identified gap in published guidelines on this topic. This study aimed to establish guidelines on management of contraception with concurrent COVID-19 illness in reproductive aged women based on current data on VTE rates associated with COVID-19 illness, contraceptive use, and pregnancy.

2. Method: A review was undertaken to identify the most up to date published literature on VTE rates with COVID-19 illness, stratified by illness severity. This was contextualized against published rates of VTE with all available methods of contraception in Canada. Based on this data and expert opinion from the authors, medical eligibility criteria and summary guidelines were created for initiation and continuation of all available methods of contraception in the context of COVID-19 illness, stratified by illness severity.

3. Results: There is currently no available evidence associating asymptomatic and mild COVID-19 illnesses not requiring hospitalization with an increased VTE risk. In this population, any method of contraception can be initiated or continued.

Moderate and severe COVID-19 illnesses requiring hospitalization are associated with an increased VTE risk, up to 17% incidence of any VTE. Baseline risk of VTE in reproductive age women not using combined hormonal contraceptives (CHCs) is 4-5/10,000-woman years, combined hormonal contraceptives (COCs) are associated with a 2- to 3- fold increase in VTE risk from baseline, with the highest risk within the first year of use. This is in comparison to the relative risk of 6.7 of VTE in pregnancy and 115.1 in the postpartum period. Other progesterone only and non-hormonal contraceptives are not associated with an increase in VTE rates. In pregnant women with a COVID-19 illness, current data show a 7-10% rate of ICU admission, 3.4% rate of mechanical ventilation and 1% maternal mortality rate. The rate of VTE in pregnant women with COVID-19 is not established yet, with only a handful of case reports so far. In this context, continued use of CHCs (pill, patch or ring) in women with moderate to severe COVID-19 illness requiring hospitalization represents a balanced harm reduction approach.

4. Conclusions: Women who are positive for COVID-19 infection can continue any form of contraception that has already been initiated, including combined hormonal contraceptives, regardless of illness severity. Women who are positive for COVID-19 illness with asymptomatic or mild illness can initiate any form of contraception, including combined hormonal contraceptives. Women who are positive for COVID-19 illness with moderate or severe illness requiring hospitalization can initiate non-hormonal or progesterone-only methods of contraception, with a transition to combined hormonal contraceptives (pill, patch, ring) at time of discharge, if desired.

FC19

Impact of COVID-19 pandemic on contraceptive options after abortion on request

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1. Objectives: Analysis of the contraceptive choices of women who underwent abortion on request (AR), with regards to the impact of COVID-19 pandemic in this setting.

2. Method: Retrospective and comparative study on the contraceptive choices of women who underwent AR in a Portuguese tertiary centre, between 1st January 2018 and 15th March 2020 (Group 1), and 16th March 2020 and 31st March 2021 (Group 2), the latter during restrictive measures due to COVID-19 pandemic.

Statistical analysis was performed using SPSS®. Comparative analysis was made with X² test and independent samples t-test. The threshold of statistical significance considered was a p-value <0.05.

3. Results: We registered 679 AR in Group 1 and 237 AR in Group 2. The groups were identical in what concerns to maternal age, gestational age on first appointment, parity, history of previous AR, nationality, civil state, and level of education.

The prevalence of a prior family planning consultation was different among groups, with a lower attendance in Group 2 (22.8% (n=152) vs 11.0% (n=26), p<0.001).

The number of waiting days to initiate AR process was higher in Group 2 (3.3±0.1 vs 4.2±0.2 days, p<0.001). However, the interval between the first and second appointments was significantly lower in Group 2 (4.4±0.1 days vs 3.7±0.2, p<0.001).

The use of contraceptive method before AR did not differ between groups nor the use of emergency contraception.

During third consultation (after AR) and with discussion of possible contraceptive methods suitable for each patient, we stated a lower option for Intrauterine Devices in Group 2 (26.2% (n=175) vs 16.0% (n=38), p<0.001), for subcutaneous implant (19.3% (n=129) vs 12.7% (n=30), p<0.001) and tubal ligation/removal (0.6% (n=4) vs 0.0% (n=0), p<0.001), and a higher proportion of choice of oral contraceptive pill/vaginal ring (30.8% (n=206) vs 42.6% (n=101), p<0.001) and barrier method (17.3% (n=41) vs 13.8% (n=92), p<0.001).

4. Conclusion: The COVID-19 pandemic had negative impact in family planning clinical activity, even though the absolute number of AR was not significantly different during this period. There was an impact on the contraceptive choices of women after AR with lower options for Long-Acting Reversible Contraception and Definitive Contraception, and a higher choice for user dependent options such as contraceptive pill and barrier methods. With the continuous adjustment of healthcare services to the pandemic situation, we expect continuous improvement of our family planning and AR care.

FC20

The fertility paradox: What is the need for contraception after IVF?

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Objectives: To better understand the contraceptive needs of women after successful In Vitro Fertilisation (IVF) pregnancy in order to improve delivery of services and prevent unplanned and rapid-repeat pregnancies in this group.

Method: A qualitative study of the views of women who have had spontaneous pregnancies after successful IVF was conducted in September 2020. A qualitative approach of in-depth interviews was chosen to allow exploration of different, complex and unexpected individual experiences in an area not much studied previously. Participants were recruited using purposive sampling methods. The sample consisted of 21 interviewees from around the UK, having a wide range of spontaneous pregnancy outcomes after successful IVF, including single and multiple livebirths, miscarriage, ectopic pregnancy and termination of pregnancy. The framework method was used for analysis using NVivo12 software.

Results: Contraceptive choices were subject to a complex and dynamic interaction of influencing factors including i) beliefs regarding their own subfertility, ii) desire for more children and iii) their views on contraception. After IVF pregnancy, the majority of women (16) used no contraception or ineffective methods (inconsistent condom use or withdrawal) before their next pregnancy with only two women using hormonal methods (progesterone-only pill). Spontaneous pregnancy was not universally welcomed in this group and the inter-pregnancy intervals were often short (16, less than 18 months) or very short (7, less than 12 months). After subsequent spontaneous pregnancy, use of contraception and the most effective (long-acting reversible) methods remained low. Women evidenced firmly held and persistent beliefs regarding their subfertility despite subsequent spontaneous pregnancy (or pregnancies). Common factors associated with a sense of failure or disappointment despite an ultimately "successful" IVF outcome may contribute or reinforce these beliefs.

Other specific barriers to contraception use, in women having IVF, were identified including lack of knowledge of the likelihood of spontaneous pregnancy, lack of contraceptive experience and inherent incentives towards shorter inter-pregnancy intervals.

Conclusions: The contraceptive needs of women having IVF pregnancies are real and being overlooked. Fertility services should provide accurate information on the risks of subsequent spontaneous pregnancy in this population and further research is required to better estimate this risk. Maternity and community health-care professionals must address women's perceptions of their fertility to engage them in contraception counselling.

FC21

Follow up after medical termination of pregnancy, GA up to 8+6 weeks: self-test of urine human chorionic gonadotropin after 4 weeks as a safe alternative to serum human chorionic gonadotropin

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Objective: Women prefer to terminate pregnancy quickly with as few visits to the clinic as possible. Follow-up with a self-test of human chorionic gonadotropin (hCG) in urine is thus advantageous, but should be reliable and safe. We compared measurement of hCG in serum and self-assessment of hCG in urine in terms of capture of failed procedure (ongoing pregnancy).

Design & Methods: A total of, 1004 women participated in this retrospective study of all first trimester medical terminations performed at the Hospital of Southern Jutland in Denmark in the period 2014-2017. We introduced follow up with urine hCG in 2016. Before 2016, follow-up consisted of measurement of serum hCG 8 days after drug administration. In case of a decrease in the serum hCG level of less than 50%, the woman was contacted for a re-examination. After 2016, follow-up consisted of self-test of urine hCG 4 weeks after drug administration. In case of a positive urine hCG value, the woman contacted the hospital for a re-examination. The hospital assay (plasma β -hCG NPU 19579) was used to measure serum hCG level. After 2016, we administered a urine hCG self-test kit with a detection limit >25IU/l. These kits are widely available at a low cost. We had 486 women followed up with serum hCG, and 518 women followed up with urine hCG. We followed standard procedures for medical termination of pregnancy including vaginal ultrasonography, measurement of hCG in serum, pelvic examination, and a regime of oral mifepristone 200 mg and vaginal misoprostol 0.8 mg after 48 hours.

Results: By both methods, we found an ongoing pregnancy rate of 0.8 %, which is similar to reports by others. The ongoing pregnancies (n=8, GA 8+2 weeks-12+4 weeks) were subsequently terminated by uncomplicated evacuation. We captured all ongoing pregnancies.

Conclusions: Our study supports that follow up with self-test of urine hCG at 4 weeks, threshold >25U/L, is a safe and reliable. The method is very useful during a pandemic, where hospital visits should be minimized.

FC22

Could a New Contraceptive Diaphragm Fill a Market Gap? Continuation, Acceptability, and Programmatic Considerations from a Mixed Methods Study in Niamey, Niger

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1. Objectives: Diaphragms have never been widely available in West Africa, a region with very low contraceptive use due in part to health system constraints and low demand for other modern methods of contraception. Research has demonstrated the single-size Caya® contoured diaphragm to be a safe and effective barrier method of non-hormonal, self-care contraception, offering features that improve upon the design of traditional diaphragms. No studies have measured continuation of Caya. In Niamey, Niger, this pilot introduction study explored Caya acceptability, continuation, and programmatic considerations.

2. Method: Women in Niger participated in surveys (n=150) and in-depth interviews (n=25) 6 months after adopting Caya. In-depth interviews were also conducted with men in the community (n=15) and family planning providers (n=15). We conducted descriptive analysis of method continuation at 6 months and women's reasons for discontinuation among women who completed the 6-month follow-up survey. We used deductive thematic analysis of in-depth interview data from women, men, and providers to understand program elements and other factors associated with acceptability.

3. Results: Community health workers and facility-based providers in the public and private sectors successfully added the Caya diaphragm to their offering and found this new self-care contraceptive method of interest to many clients, including women who had never used modern contraception. Six months after initiation, 83.9% (95% CI: 0.78-0.90) of 137 survey respondents included in the analysis reported continued use of Caya. Top reasons for use included: Caya causes no side effects, works on demand, and is reusable for up to 2 years. Roughly 1 quarter of women interviewed reported inconsistent use. Some men supported their partner's use; in other cases, women used Caya without informing or involving their partners. Providers described Caya as compatible with the needs of many women and credited pelvic models with enabling effective counseling.

4. Conclusions: The Caya diaphragm has the potential to be a valuable addition to the range of contraceptive options in at least some markets. In settings where health systems are overstretched and opposition to hormonal methods of contraception is high, national stakeholders and their partners should consider adding the Caya diaphragm to the range of contraceptive options offered by community health workers and facility-based family planning providers. Introduction efforts should begin on a small scale with close monitoring to determine whether to further expand access.

FC23

Risk Factors for and Outcomes of Expulsions with a One Year Contraceptive Vaginal System

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Objectives: Annovera®, a newly FDA-approved Nestorone®/ethinyl estradiol contraceptive vaginal system (CVS) is inserted and removed under a woman's control for a 21 day in/7 day out regimen for up to 13 cycles of use. We aimed to describe patterns of expulsion over time, identify potential predictors of expulsion and evaluate the impact of expulsions on method discontinuation and pregnancy risk.

Method: Using data from 2064 participants in two multinational Phase 3 trials of Annovera, we examined data from participants' daily diaries for documentation of complete CVS expulsions. We modeled the odds of expulsions over time, adjusting for various background and demographic characteristics, using mixed logistic regression models with random intercepts. We compared probability of continuation between those who did and did not experience expulsions in the first cycle of use using survival analysis and hazards modeling. To determine if expulsions during the first cycle of use affected risk of pregnancy, we calculated Pearl Indices (PI).

Results: Most women (75%) experienced no expulsions during any cycle of use, ranging from 91-97% for any one cycle. The odds of not experiencing an expulsion increased by 70% in cycle 2 vs cycle 1 (95% CI 1.31-2.17) and by over two-fold by cycle 6 vs cycle 1 (2.38 95% CI 1.75-3.22). Of those who did experience expulsions, most (62-84%) experienced ≤2 expulsions per cycle. Being Hispanic vs non-Hispanic increased the odds of not experiencing an expulsion (OR 1.32, 95% CI 1.04-1.68). Similarly, study sites in Latin America vs U.S. had higher odds of not experiencing an expulsion (OR 1.69, 95% CI 1.23-2.33). Women with more education had higher odds of experiencing an expulsion. Notably, parity, age and BMI were not associated with expulsion.

Women not experiencing expulsions in cycle 1 were less likely to discontinue (HR 0.59, 95% CI 0.52-0.68) compared to women who had an expulsion. The PI for women who had expulsions during cycle 1 was 3.99 (95% CI: 1.29-9.31), higher, however not significantly, than among women who reported no expulsions (PI 2.39, 95% CI: 1.61-3.41).

Conclusions: Expulsions were infrequent overall, decreased with subsequent cycles of use and was not associated with BMI or parity. Pregnancy risk appeared higher and early discontinuation of product use was higher among women who did experience an expulsion during cycle 1. Early recognition of expulsions among users may identify those at higher risk for discontinuation and pregnancy, where enhanced counseling may be advantageous.

Mental Health and Domestic Violence in Households with Children during Lockdown Measures in Belgium

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Background: To contain for the COVID-19 pandemic, governments worldwide restricted social and physical contact by issuing lockdown and social-distancing measures. Yet, lockdown measures may induce mental health problems and increase the occurrence of domestic violence (psychological, physical and sexual violence). Households with children (minors) are known to be even more vulnerable. Besides, studies from the first months of the COVID-19-pandemic showed that only 6% reached out for help during the first lockdown measures in Belgium, Germany and Portugal. We will therefore examine the relationship between risk factors of domestic violence and domestic violence itself, focusing on domestic violence on children.

Method: In this cross-sectional study, an online self-report questionnaire on relationships, stress and aggression was administered to a non-probabilistic sample of participants living in Belgium between January and March 2021. Participants were sampled through national media, social media, and snowballing procedures.

Results: 870 participants living with a minor were included in the analysis of which 134 (15.4%) reported that their child had been a victim of domestic violence during the second lockdown phase in Belgium (between November and March 2021). Parents of victimized children reported significantly higher levels of stress and a bigger household size. Besides, the odds of having a victimized child were 3.4 times higher for parents that were victimized themselves before the COVID-19 pandemic and 1.8 times higher during the COVID-19 pandemic compared to parents that were never victimized.

Conclusions: Domestic violence appears to be common in households with minors, linked with COVID-19 lockdown measures, and associated with adverse mental health outcomes. These findings highlight the need for public health measures lowering the barriers to seeking help after domestic violence and increasing access to mental health care. Recommendation will be made concerning the screening and how to reach out to victims of domestic violence.

Advanced provision of medication abortion for early (overtime) treatment; cases and implications

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1 Objectives: Many aspects of self-managed medical abortions have been acknowledged and well-researched, in particular the ability to safely manage the abortion at home with good information and instructions, with low rates of serious complications. Access to the abortion pills could therefore safely exist before they are needed to make sure the medicines are available right after the pregnancy is discovered. Receiving the medicines in advance for future use could therefore result in people accessing care faster and enable people to become active agents of their own health and making them feel secure and protected in their reproductive lives.

2 Method: By the end of 2021, Women on Web telemedicine abortion service will start piloting advance provision of medical abortion medicines in selected countries. In this presentation a preliminary analysis of data, collected during the first quarter of 2022, will be shared and selected cases will be discussed for whom advance provision of medical abortion appears to be “an ideal scenario”.

3 Results: Advance provision will be examined in a broader context of assisting pregnant women in contexts where abortions are illegal or highly restricted, as well as in countries where abortions are legal, but access barriers persist, and providing for those who have contraindications to use contraceptive methods. The presentation will also explore the possibilities of medical doctors prescribing medical abortions in advance within their respective legal frameworks.

4 Conclusions: Women on Web already receives requests to obtain medical abortion medicines in advance from women who are at risk of unwanted pregnancies, with little or no access to local abortion services. Advance provision via Women on Web is expected to improve the quality of the service and facilitate earlier and safe abortions.

The new service will also protect the termination process from disruptions in mailing services and supply chains. After this first exploratory study, we hope to share more results in a follow-up study.

FC26

Transfer to breast milk of drospirenone

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Objective: The primary objective of this trial was to assess the transfer of drospirenone to breast milk after daily administration of an oral test preparation containing 4 mg of drospirenone at the steady state.

The secondary objective of the trial was to assess safety based on clinical and laboratory measurements and reporting of adverse events and/or adverse drug reactions.

Patients and Methods: This was an open label, non-comparative single center study. Drospirenone 4mg per day was the first postpartum contraceptive for the study participants who were no longer breastfeeding yet were still lactating. It was administered for 7 (seven) days to achieve steady-state concentration. All participants were volunteers who planned to use oral contraceptives as their family planning method in the future.

Results: Twelve volunteers completed the trial according to the protocol and the samples of all 12 study completers were analyzed. The average concentration-time curve of drospirenone in plasma 24 h after the administration of the last dose (AUC(0-24h)) was 635.33 ng*h/mL and 120 h after the single repeat dose administration (AUC(0-120h)) was 1180.57 ng*h/mL, respectively. The average C_{max} was 48.64 ng/mL. The average concentration-time curve of drospirenone in milk 24 h after the administration of the last dose (AUC(0-24h)) was 134.35 ng*h/mL and 120 h after the single repeat dose administration (AUC(0-120h)) was 227.17 ng*h/mL respectively. The average C_{max} was 10.34 ng/mL.

Conclusion: On average 18.13% of plasma drospirenone made it to breast milk and the highest concentration of drospirenone in breast milk was 17.55% of that in plasma. The total quantity of drospirenone passing to breast milk is on average 4478 ng during a 24 h period representing 0.11% of the maternal daily dose. Thus, at the recommended doses, no effects on breastfed newborns/infants are anticipated with drospirenone 4 mg.

FC27

DOES THE TIMING OF IUD INSERTION MAKE A DIFFERENCE IN REDUCING PAIN?

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Objectives: The prevalence of IUD use among women in Indonesia is only 7.35%, comparatively low to the worldwide use which is around 17%. Concern about pain during insertion might be a barrier to IUD use. Many women pursue IUD insertion during their menstrual period to reduce pain. Although it gives the advantage for providers as reassurance that the woman is not pregnant, it is still unclear if the IUD insertion during menstruation will reduce the pain significantly. The study aims to find out whether timing IUD insertion was related to the reduction in pain at insertion.

Method: This was a cross-sectional study. We enrolled 184 participants who came for IUD insertion during 2018 in our outpatient clinic. The primary outcome was pain during IUD insertion, measured on a 0-10 Visual Analog Score (VAS). We compared the VAS between groups of IUD insertion during and outside the menstrual period. T-test with bootstrap 2000x and multivariate linear regression analysis was used in this study.

Results: The average age and parity of the participants were 32.07 years old and 1.72. Almost all participants reported mild pain at insertion, regardless of menstrual period, mode of previous delivery, the position of the uterus, and type of users (new or had history of using IUD). Only 7.6% of the participants needed analgetic drugs after IUD insertion. The mean VAS was 2.44±1.23 for IUD insertion at the time of menstruation group compared with 2.91±1.36 for outside menstruation group with p=0.017. Multivariate linear regression analysis showed that type of delivery (previous vaginal delivery) and IUD insertion during menstruation reduced pain level at insertion with p=0.000 and p=0.041.

Conclusion: IUD insertion during menstruation is associated with lower pain scoring. This data can be used in contraceptive counseling for women who have willing to use IUD.

Hormonal IUDs and risk of ectopic pregnancy- a hospital-based cohort study.

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OBJECTIVE: To assess the Pearl Index (PI) for ectopic pregnancy (EP) in women using the Levonorgestrel intrauterine system (LNG-IUS) with hormonal reservoir of 13.5 mg, 19.5 mg or 52 mg.

METHODS: This was a retrospective cohort study. Women diagnosed with an EP in Stockholm County, Sweden, between 1st January 2014 and 31st December 2019 were identified through the electronic medical record system. The final analysis included 2252 cases of EP. Information on age, reproductive and medical history, as well as current use of contraception was retrieved. Time of intrauterine device (IUD) insertion prior to EP and the numbers of sold LNG-IUS during the study period were used to calculate the incidence rate for ectopic pregnancy during use per 100 women-years (Pearl Index).

RESULTS: Among women with an EP diagnosis, 96 presented with a hormonal IUD in-situ of which 94 were included in the calculations of PI. The estimated PI for EP was 0.136 (95% Confidence Interval [CI] 0.106-0.176) for the LNG-IUS 13.5 mg, 0.037 (95% CI 0.021-0.067) for the LNG-IUS 19.5 mg, and 0.009 (95% CI 0.006-0.014) for the LNG-IUS 52 mg. With the 52 mg LNG-IUS as referent, the relative risk for EP was higher during the first year for LNG 13.5 mg (RR 20.59, 95%CI 12.04-35.21), and for both 13.5 mg (RR 14.49, 95%CI 9.01-23.3) and 19.5 mg (RR 4.44, 95%CI 1.64-12.00) during the total study period.

CONCLUSION: The absolute risk of EP during the use of LNG-IUS at any doses was low and confirms the contraceptive effect of all hormonal IUDs. The results show that the lower the dose of the IUD, the higher the risk of an EP. Results indicate that higher dosed LNG-IUS should be considered when giving contraceptive counselling to a woman with known risk factors for EP when opting for a hormonal IUD.

Conflict details

NE has received personal fees from Bayer Pharma AG for educational activities, outside the submitted work. HKK has received honoraria for consultancy work performed for Bayer Pharma AG. Bayer Pharma has had no influence on study design, interpretation of results, or manuscript writing. HKK and NE have not received any compensation for participating in the writing of this manuscript.

Access to contraception and abortion services during the COVID-19 pandemic in Iran, Bangladesh, and the Netherlands: A mix method study

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Background & Objectives: COVID-19 has affected the provision of Sexual and Reproductive Health services. The main aim of this study was to clarify barriers and challenges which service providers and women of reproductive age faced in the provision of and access to contraception and safe abortion services during the COVID-19 pandemic in three different countries: Iran, Bangladesh, and the Netherlands. Furthermore, this study gave insight into the measures taken by service providers to continue service provision and mitigate challenges.

Methods: This mixed-method study involved quantitative surveys and qualitative interviews. IN total 542 women of reproductive age and 189 service providers participated in this study, of whom 614 respondents were in the quantitative and 117 were in the qualitative part. Convenience sampling at the clinic level and online recruitment by Survey Monkey was used. Quantitative data and qualitative data were analyzed using SPSS version 18 and by thematic method, respectively.

Findings: The findings showed that service provision has been affected to differing degrees in the three countries. The most notable barriers were reduced client flow, staff shortages, closure of health facilities, the shift from face-to-face consultation to telephone and online consulting, irregular supplies of contraceptives in Iran, and transport problems in Bangladesh. Also, the shortage of PPE was the main challenge for service providers. Abortion services remained open in Iran and the Netherlands during the COVID-19 pandemic despite staff shortages and reduced client demand. However, in the Netherlands women mentioned difficult access to abortion care due to COVID-19 infection, the fear of contracting COVID-19, and the fact that women had to visit the clinic alone. In Bangladesh, the opening hours of abortion clinics were adjusted or clinics were closed.

To improve access to care, providers of both contraception and abortion services implemented online and phone consultation, rotational duties, door-to-door services as well as information provision for service users via (social) media to improve access.

Conclusion: COVID-19 has had an impact on access to contraception and abortion care. Since universal access to sexual and reproductive health services remains an essential step in the achievement of Sustainable Development Goal 3, Stakeholders should learn from their experiences during the COVID-19 pandemic, which could be a catalyst for improved understanding of the realities of ensuring equitable access to sexual and reproductive health for all.

Acknowledgment: The Share-Net small grant supported this study.

FC30

Use of intrauterine contraception six months after medical abortion. An open-label, randomized multicenter study on immediate versus delayed insertion.

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Objectives: To study use, safety and patient acceptability of immediate (intervention) vs. delayed (control) insertion of intrauterine contraception (IUD) after medical abortion. The primary outcome was difference in IUD use at 6 months follow-up. Secondary outcomes included insertion visit attendance, failed insertions, expulsion rates, ease of and pain at insertion, and patients' preference for time of insertion.

Method: An open-label, randomized multicenter study at 5 hospitals providing abortion services in Sweden. Eligibility criteria were being ≥ 18 years, requesting medical abortion with gestation ≤ 9 weeks, and opting for post abortion IUD. Patients received oral and written information prior to signing informed consent. Participants were randomised (1:1) to have their preferred type of IUD (hormonal or copper) inserted either within 48 hours or after 2-4 weeks from completion of abortion. IUDs were provided and inserted at the same clinic at no cost.

Results: We could not show superiority in use of IUD at 6 months follow-up in the intervention group (91/111, 82%) compared to the control group (87/112, 77.7%, $p=0.51$). Insertion visit attendance was (108/117, 92.3%) in the intervention group vs. (103/118, 87.3%) in the control group ($p=0.13$). There was one failed insertion in the intervention group and three in the control group. At 6 months follow-up, the IUD expulsion rate was low and did not differ between groups. The ease of insertion score did not differ between the groups. However, VAS pain scores at IUD insertion were lower in the intervention group (mean pain score VAS 32.3, SD 29) compared to the control group (mean pain score VAS 43.4, SD 27.9, $p=0.002$). A significantly higher proportion of women preferred their allocated time of insertion in the intervention group (83/111, 74.8%), compared to 70/114 (61.4%), in the control group ($p=0.03$).

Conclusions: Insertion of IUD within 48 hours compared to 2-4 weeks after completed medical abortion did not lead to higher rates of IUD use at 6 months after abortion. However, women having an IUD insertion within 48 hours experienced less pain at insertion and a larger proportion of women in that group preferred their allocated time of insertion.

Developing and evaluating a training programme in immediate postpartum intrauterine device insertion for midwives

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Objectives: Improving access to effective contraceptive methods after childbirth can reduce unintended pregnancies and short inter-pregnancy intervals. Provision of contraception in maternity services can also overcome barriers to accessing this in the community, which have been exacerbated by the COVID-19 pandemic. Midwives are highly skilled practitioners who are well-placed to counsel and provide postpartum contraception, however access to training in practical skills such as immediate postpartum intrauterine device insertion (PPIUD) is limited. Our aim was to design and evaluate a targeted training programme in PPIUD insertion for midwifery staff in a large public maternity service in Lothian (Edinburgh and surrounding areas).

Methods: Prior to introduction of an immediate vaginal PPIUD service across Lothian maternity hospitals, midwifery staff working within labour and postnatal areas were invited to attend 'opt in' training in PPIUD insertion. The training was modelled on the RCOG programme and included attendance at a half-day theoretical and practical workshop, including model simulation of the Kellys forceps insertion technique on a postpartum uterus model (Mama-U). This was followed by supervised clinical practice until a minimum number of successful 'live' insertions was achieved. Those who met the local requirements could later choose to become PPIUD 'trainers'. Following completion of initial training, midwives were invited to complete an anonymous, paper-based mixed methods survey of their experience. Thematic analysis was used to identify facilitators and barriers to training. Information about successful procedures was obtained from the routinely-collected insertion log.

Results: A total of 63 labour ward midwives attended training during an 18-month period and 17 are now PPIUD trainers. 100% of those who completed training rated the complexity level as 'easy' or 'about right'. Of 379 vaginal PPIUD insertions performed during the study period, 240 were performed by midwives (63%) and 93% of these were successful. From the survey responses, identified facilitators to training included: support from senior staff to attend, knowledgeable trainers and availability of the postpartum uterus model to practice the technique. Barriers included: lack of immediate access to an 'on the job' supervisor and time to access training.

Conclusion: Midwives were interested to receive training and most completed this successfully despite no previous experience of the technique. Senior support and available resources were identified as important facilitators to successful training. Development of PPIUD 'trainers' is also essential to ensure support and sustainability of practical training. Utilising novel training modalities e.g. e-learning may further improve access to training for midwifery staff.

Safety, influence on the endometrium, sonographic changes, and bleeding profile after 13 cycles with the a drospirenone only pill (DOP) for contraception

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1. Objectives: The primary objective of the present trial was to assess the endometrial safety of a new oral contraceptive containing 4 mg drospirenone for a total duration of 13 cycles of 28 days each: 24 days of active treatment followed by four days placebo treatment per treatment cycle.

2. Method: Single-center, open-label, multiple-dose study on healthy female subjects at risk of pregnancy. 21 (=safety population set) pre-menopausal female Caucasian subjects started treatment with the study medication. The mean age was 29.0 years (range 19.0 - 36.0 years). Four subjects terminated the trial prematurely for the following reasons: on subject's request (n=2), due to adverse event (n=1), due to loss of contact (n=1).

Seventeen subjects completed the planned duration of 13 cycles of open treatment with the test product (each cycle of 28 days).

3. Results: At visit 1 (pre-treatment), the biopsy result in the safety population set was proliferative in 14 cases and secretory in 7 cases. At visit seven, four cases showed an inadequate result (insufficient tissue for diagnosis), 12 as proliferative, and three as secretory. The number of biopsies with proliferative and secretory results reduced under treatment (safety population). The pre-post treatment changes in the endometrial biopsy results in the treatment completers set (n=17) showed almost no differences. At visit 1 (pre-treatment), the biopsy result was proliferative in 12 cases and secretory in 5 cases. At visit 7 (after 13 cycles of 28 days), four cases showed an inadequate result (insufficient tissue for diagnosis), 11 as proliferative, and two as secretory.

The mean endometrial thickness in the safety population was reduced from 8.3 mm at visit 1 to 6.0 mm at visit 7. When comparing the endometrial thickness in the 21 subjects (safety population), the endometrial thickness showed a pre-post difference of 2.1 mm, whereas the endometrial thickness in the 17 study completers showed a pre-post difference of 2.5 mm (8.2 mm at visit 1 to 5.6 mm at visit 7).

4. Conclusions: Drospirenone 4 mg film-coated tablet in a dosage regime of 24/4 days is, regarding endometrial histology, a safe drug.

Trial registration: EudraCT Register number: 2013-002300-13

Conflict details: Medical Director of Exeltis Healthcare

FC33

NOMAC-E2 compares to LNG combined oral contraceptives in women over forty: real-world PRO-E2 study

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Objective: To investigate the safety, effectiveness and perimenopausal symptom management in NOMAC-E2 users and levonorgestrel-containing COC (COC_{LNG}) users over 40 years in clinical practice.

Design and Methods: This large, prospective, observational study followed new users[1] of NOMAC-E2 and COC_{LNG}. Women were recruited in 12 countries in Europe, Australia, and Latin America and followed-up via questionnaires for up to two years. We used a non-inferiority design to assess the risk of venous thromboembolism (VTE; specifically deep venous thrombosis of the lower extremities and pulmonary embolism). Unintended pregnancy was measured by the Pearl Index (PI; number of contraceptive failures per 100 women-years [WY]). We evaluated mood with mood-related questions as part of the baseline and follow-up questionnaires. Weight change was defined as the mean change in percentage of body weight. We compared the values obtained at the end of follow-up with those at baseline. We analyzed a subpopulation of participants over 40 years to specifically investigate NOMAC-E2 safety and effectiveness in perimenopausal women, who often seek a COC with a less negative impact on mood and weight change.

Results: Of the total 101,498 participants followed up, 7,762 NOMAC-E2 users and 6,059 COC_{LNG} users were over 40 years old. NOMAC-E2 showed no increased risk of VTE when compared to COC_{LNG}; confirmed events: 5 in NOMAC-E2 users (5.9/10,000 WY; 95% CI, 1.9-13.7) vs 4 in COC_{LNG} users (5.9/10,000 WY; 95% CI, 1.6-15.1). As expected in this age category, unintended pregnancy rates were low and did not differ substantially between cohorts; confirmed events: 4 in NOMAC-E2 users (PI 0.05; 95% CI, 0.01-0.13) vs 5 in COC_{LNG} users (PI 0.08; 95% CI, 0.03-0.18). No adverse effect on mood and weight was observed in both cohorts over time: change from baseline to 24 months follow-up was 5.2 (±19.68) and 3.2 (±19.51) for mood score and 1.7 (±9.97) and 1.9 (±11.33) for weight in NOMAC-E2 and COC_{LNG} users, respectively.

Conclusions: Although the overall number of events was low, the presented data indicates no substantial differences between women using NOMAC-E2 or COC_{LNG} in VTE risk, contraceptive effectiveness and symptom management in women transitioning to menopause. Thus, NOMAC-E2 can be considered a valid alternative to the gold standard in this population.

[1] First-ever users of an eligible COC or restarting with an eligible COC (same COC as before or a new COC) after a break of at least 2 months.

Show case of Educational tools for Adolescent Sexuality - A work in Progress at Geneva University and Hospitals

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Objectives and Methods: There are many myths, misconception and taboos around sex gender and sexuality. These can have a negative impact on sexual health and well-being of adolescents. The Geneva University, Hospitals and Swiss Sexual Health together with the ministry of education of the province of Geneva and local associations have launched since 2017 an educational project Science Sex and identity (SSI) aiming at overcoming sexual illiteracy. (<https://www.unige.ch/ssi/>). Using interdisciplinary, evidence-based science, we have developed and shared sex-positive and inclusive trainings along with pedagogical tools for educators and health professionals, as well as the general public, so to improve knowledge and skills of target audiences in order to promote sexual health and gender equality. In addition, we aim to change attitudes and behaviors that lead to sexist and sexual, homo-, bi- and transphobic discrimination, as well as inequalities in access to healthcare.

Results: We have produced:

- **My genitalia and I** - a sex positive, inclusive and free, illustrated booklet on genital anatomy, its diversity and physiology of the sexual response and consent.
- A series of **10 short videos** deconstructing myths and taboos **on genitalia** and their impact on practices of genital modifications, whether consented or not.
- **E-learning course** for biology teachers, medical professionals, sex educators on primary and secondary sexual development, variation of sexual development, genital diversity whether morphological or caused by modification practices, puberty and development of gender identity, from interdisciplinary perspectives, including gender studies.
- **3-Dimension inclusive in vivo-based models** of the male and female pelvis and genital organs based on embryological analogies.
- Scientific interactive **workshop** for biology teachers and their students **on sex development and variations of sex development**
- An **interdisciplinary course** (history, biology and medicine) for medical students on the history of research and medical practices **around genitalia and another on sexual and gender diversity**.
- A **Webapp on the vulva, Female Genital Mutilations** (FGM/C) and their care.

Conclusions: We have touched so far more than 30K people directly and have the potential to touch thousands more via our social media representation (>1 million followers when pooling all partners). We believe that dissemination of evidence-based sex-positive and inclusive knowledge at a young age can prevent sexual illiteracy. Thanks to on line access, free to all, dedicated courses with development of appropriate tools can help mitigate sexual risk behavior and empower young people to live their sexuality to the fullest and improve their general well-being.

Nurse practitioner reported barriers and enablers provision of medication abortion in Canada

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Objectives: Since 2017, nurse practitioners (NPs) are authorized prescribers of mifepristone/misoprostol for medication abortion (MA) in Canada. Canadian physicians reported confusion about changing MA policy and regulations as well as lack of proximity to emergency services as barriers to MA provision. Our objective was to identify the barriers and enablers to NP provision of MA in Canada.

Methods : We fielded a national quantitative survey informed by Roger's Theory of the Diffusion of Innovation to identify determinants for NP provision of MA. We recruited NPs who provided or did not provide MA from August 2020 to February 2021 through provincial/territorial NP associations, the Canadian Abortion Providers Support platform, and co-investigator networks. We analyzed for descriptive statistics, and used bivariate analyses to compare MA providers and non-providers.

Results: Overall 181 NP respondents included 36% who provided MA. More NPs practiced in urban areas (53%) compared to rural (47%). The majority (81%) worked in primary care or family practice settings and were women (92%). Multiple barriers to MA provision for NPs were reported. Policy or procedural restrictions within NPs place of employment were significantly more impactful on non-providers than providers ($p=0.03$). Non-providers perceived the time required to provide and follow up with MA patients to be significantly greater than providers ($p=0.01$). Most (91%) non-providers were unsure or did not have any pharmacists in their community that dispensed mifepristone/misoprostol vs 14% of providers ($p<0.001$). Most (64%) non-providers stated that they would like to have the support of a mentor experienced in MA, as did 48% of NP providers ($p<0.001$). Most (59%) non-providers had a surgical management option (e.g., suction evacuation) available for a failed MA in their community, although this was fewer than among providers (65%, $p=0.02$). Access to ultrasound was not a significantly different barrier for NP providers compared to non-providers.

Conclusion: Our findings suggest that several barriers continue to impact NP uptake of MA provision in Canada. Key barriers included policy or procedural restrictions within respondents' place of employment, proximity to surgical management care, and the perceived time required to offer MA. Connection to a dispensing pharmacy and the support of a mentor appears to enable NPs to provide MA. Our results provide important information to guide implementation for NP provision of medication abortion in Canada with potential relevance for settings around the world.

FC36

Acceptability of ethyl chloride as pain relief for subdermal implant procedures in a sexual health clinic

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1. Objectives: The vapo-coolant ethyl chloride (EC) has been described as a possible alternative to local anaesthetic injections (LA) as pain relief for subdermal implant procedures. We introduced this option in our sexual health service in February 2020 and undertook a study to assess the acceptability to our users.

2. Method: Patients requesting implant procedures were informed during their telephone consultations that an injectable or a 'no-needle' spray would be offered for pain management during procedures. Individuals attending for an implant procedure were given a questionnaire about their experience at reception over the 2 weeks of the study, with three professionals offering the service and approximately 60 appointments available. 53 marked questionnaires were returned via a dropbox at reception, of which 51 contained sufficient information (12 insertion only, 9 removal and re-insertion, 19 removal only and 11 with no information on the type of procedure). Ethyl chloride was offered to all as primary choice and injection of 1% lidocaine was given to the ten individuals that preferred this option. Half of the individuals accepting the spray did so due to staff recommendation, the other 20 because they did not like needles ($n=11$), because they thought the other option would hurt more ($n=5$) and 4 gave other reasons. Pain experience with (a) the application of the spray or injection and (b) the procedure was expressed via visual analogue and 'Faces' scales.

3. Results: Of the ten individuals choosing injection five marked 0/no hurt as scores for injection and procedure. Nobody went beyond 1 on the VAS or 2 on the Faces scale. The application of ethyl chloride (6-7 1 second bursts) was given a zero-pain rating by 24 respondents, a 1/hurts little bit by 8 and a 2 by 2. The perception of the procedure was given a zero-pain rating by 26 individuals, a 1 rating by 10 and a 2 by five (two = insertion only and 3 = removal and refit) Only one of the ethyl chloride group would not use the method again, one maybe and one did not answer the question. Two would not recommend it to a friend.

4. Conclusion: Additional comments by both acceptors of the spray and staff contributed to the conclusion that ethyl chloride spray for implant procedures is easy and quick to use, highly acceptable and associated with minimal discomfort, particularly for implant removal.

FC37

Estetrol: a native estrogen whose effect on the liver does not need to be counterbalanced by progestins

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Objectives: Estetrol (E4), the first native estrogen with selective tissue activity (NEST), has been approved by several regulatory bodies for oral contraception. It is also currently investigated for alleviating vasomotor symptoms (VMS) in postmenopausal women. Thanks to its unique pharmacodynamic profile, E4 has the potential of being less thrombogenic than EE.

Design and methods: Two phase-2 studies evaluated E4 15mg in combination with drospirenone (DRSP) and alone for contraception and for alleviating symptoms of menopause, respectively. The impact of treatments on hemostasis was assessed using the ETP-based APC resistance assay, a marker of global thrombogenicity. Results were expressed as normalized APC sensitivity ratio (nAPCsr). The change in nAPCsr from baseline to Cycle 6 (for contraception) or week 12 (for symptoms of menopause) was reported as absolute and relative changes and compared to the respective comparators, i.e. EE 30µg/LNG 150µg and EE 20µg/DRSP 3mg, and placebo.

Results: The absolute changes from baseline of nAPCsr were 0.46 (+30%) and 1.09 (+42%) for E4 15mg/DRSP 3mg and E4 15mg. This was statistically lower than the changes of 1.91 (+165%) and 3.06 (+219%) observed for EE 30µg/LNG 150µg and EE 20µg/DRSP 3mg, respectively. The placebo did not generate APC resistance. As nAPCsr scales from 0 to 10, the absolute increase values observed for EE-containing products were close and even higher than the upper limit of the normal range (normal range in healthy population not on COC: 0.00 to 2.08). Estetrol alone or in combination with DRSP showed minimal changes in nAPCsr and exhibits a safer hemostatic profile regarding resistance towards APC. The association of E4 with DRSP did not seem to modulate its impact on nAPCsr contrary to EE.

Conclusion: These results compare the effect of E4 alone or in association with DRSP with EE-containing pills on the ETP-based APC resistance assay. The results confirm that E4 has less impact than EE on APC resistance, especially when comparing these two estrogens with the same progestin i.e. DRSP. In addition, these data revealed that the influence of E4 does not seem to be changed by the presence of DRSP. On the contrary, EE, once associated with DRSP, and to a lesser extent to LNG, showed an important effect of APC resistance. The results confirm the observations that this is the estrogen that modulates the impact on hemostasis and that the bad press behind DRSP originates from its association with EE.

Conflict details: J. Douxfils is the CEO of QUALIblood s.a. and provided consulting services for Mithra Pharmaceuticals. U. Gaspard and J.M Foidart are senior consultant of Mithra Pharmaceuticals.

FC38

Providing contraceptive care to transgender people

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Objective(s): To evaluate contraceptive acceptability and healthcare experiences of adult transgender, non-binary and gender non-conforming Canadians born with a uterus.

Design & Methods: Eligible participants were invited to complete a quantitative Qualtrics survey at TRH-study.com from May to October 2020. 268 participants were recruited through social media, community agencies and health clinics.

Responses to questions about prior contraceptive and emergency contraceptive use, decision-making, and experience accessing contraception were evaluated using descriptive and inferential statistical analyses.

Results: 82.7% of respondents had used contraception, with 56.0% reporting using it for pregnancy prevention. 30.0% had used emergency contraceptive pills at least once.

Most frequently used methods were: condoms (56.0%); oral contraceptive pills (53.1%); withdrawal (28.9%) and hormonal IUDs (10.6%). Highest levels of satisfaction were reported with hormonal IUDs (87%), hysterectomy (79.2%) and oral contraceptive pills (65.2%).

Important decision-making factors included: favorable side effect profile (89.8%); ease of use (88.8%); less frequent user interaction (77.7%); and ability to induce oligo/amenorrhea (71.0%).

44.0% of respondents reported that compatibility with testosterone was important, and 41.3% reported that it was important that their contraception did not contain hormones. 38.4% of respondents preferred a method that did not involve a procedure or pelvic examination.

57.9% of respondents reported a negative or neutral experience at their most recent contraception visit.

Less than 20% reported inclusive intake forms and birth control handouts. Favorable healthcare experiences were positively correlated ($p < 0.001$) with inclusive birth control handouts and intake forms, a welcoming clinic environment, and gender affirming providers and clinic staff.

36.0% of respondents reported that providers were aware of their gender identity. They were more likely to report ($p < 0.001$) that the clinic environment was welcoming, that providers were respectful and affirming, and that providers were knowledgeable about birth control options for transgender people.

Conclusions: This is the first comprehensive study of contraceptive acceptability and healthcare experiences of transgender patients, many of whom face challenges accessing appropriate care. Previous research has demonstrated that pregnancy risk is underrecognized in this population.

Providers can tailor counselling by understanding factors important to the individual such as desirability of oligo/amenorrhea, compatibility with testosterone, and hormone preferences.

Highly effective long-acting reversible contraceptives may be underutilized considering the high levels of reported satisfaction, although some individuals may wish to avoid a pelvic procedure.

Use of gender inclusive intake forms and contraception handouts may help create a gender affirming clinic environment and improve the healthcare experience of transgender people.

FC39

Contraceptive technology research & development: a call for inclusion of trans and gender diverse individuals assigned female at birth

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Objective: Increased research efforts over the past decade provide a more in-depth understanding of the diverse fertility desires and family planning needs of trans and gender diverse individuals assigned female at birth (TGD AFAB). Despite this increased understanding and unmet need, global health researchers and contraceptive product developers have yet to include TGD AFAB individuals and considerations of their needs in the product development process, marginalising this historically underrepresented population. The aim of this perspective is to present the case for inclusion of TGD AFAB individuals in contraceptive research.

Main outcomes: This perspective summarises the most recent literature characterising contraceptive access and use within TGD AFAB populations as well as the barriers to use. Furthermore, this perspective offers insight into how novel contraceptive technologies in the research and development pipeline could potentially appeal to TGD AFAB populations and recommends steps product developers can make towards being more inclusive.

Conclusions: With current research efforts in contraceptive product development aimed at expanding the method mix to appeal to a more diverse population of potential users, it behoves product developers to be more inclusive of TGD AFAB individuals in the development process and consider them as stakeholders of an expanded contraceptive method mix.

Experiences of involuntary childlessness during the Covid-19 pandemic

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Objectives: The overall purpose is to investigate how Covid-19 pandemic has affected individuals who have been, or are going through assessment or treatment for involuntary childlessness, and their processes of trying to have children. Previous research on involuntary childlessness in relation to the pandemic has mainly been medical and quantitative, and there has been a lack of qualitative studies that explore the subject area on a more in-depth level.

Method: In this qualitative study, we use semi-structured interviews to collect data. The study includes people who have been or are going through assessment or treatment for involuntary childlessness in Sweden and Denmark during the pandemic. Participants are recruited from public and private care. The interviews address experiences of assessment and treatment of involuntary childlessness during the Covid-19 pandemic in relation to e.g. access to care, socioeconomic factors and intimate relationships. Data collection is still ongoing but will be finalized by the end of 2021.

Results and conclusions: The preliminary results indicate that the pandemic has affected the patients in many ways and often made an already challenging process even more difficult. Obstacles mentioned have for example been longer queues to care and the absence of partners during care visits. Furthermore, the fear of being infected by the corona virus, which could cause the treatment to be postponed, has led to isolation and often a weaker support from family and friends. All in all, the pandemic has placed great demands on couples to emotionally handle the process of assessment/treatment on their own.

The knowledge gained from this study can be of use to researchers, sexologists, midwives, physicians, psychologists and counselors who work with issues of involuntary childlessness and who meet people who are undergoing investigation or treatment.

The study is a subproject in ReproUnion; a comprehensive EU health project where the overall aim is to gain an increased understanding, preventing and improving the treatment of involuntary childlessness by conducting research and coordination of knowledge across national borders in Denmark and Sweden (www.reprounion.eu).

Levonorgestrel-based emergency contraception for individuals with obesity: a randomized trial of 3 mg versus 1.5 mg

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Objective: To determine whether a 'double' dose of levonorgestrel-containing emergency contraception (LNG EC) improves pharmacodynamic outcomes in individuals with obesity.

Methods: Healthy, regularly-cycling reproductive-age individuals with a body mass index (BMI) > 30 kg/m² and a weight of at least 176 lbs were enrolled in this randomized trial. After confirming ovulation (luteal progesterone >3 ng/mL), we monitored participants in the following menstrual cycle with transvaginal ultrasound and blood sampling for progesterone, LH, and estradiol every other day until a dominant follicle measuring ≥15 mm was visualized. At that point, participants received either oral LNG EC 1.5 mg or 3 mg (double dose) and returned for daily monitoring up to 7 days. The study had 80% power to detect a 30% difference in the proportion of cycles with at least a 5-day delay in follicle rupture (50% decrease).

Results: A total of 70 enrolled and completed study procedures. The two groups had similar baseline demographics (mean age 28 years, BMI 38 kg/m²). We found no difference between groups in the proportion of subjects without follicle rupture over 5 days post-LNG dosing [LNG 1.5 mg: 18/35 (51%), LNG 3.0 mg: 24/35 (69%), p=0.14]. Among participants with follicle rupture prior to 5 days, the time to rupture did not differ between groups (day at 75% probability of no rupture is day 2 for both groups).

Conclusion: Doubling the dose of LNG EC from 1.5 to 3 mg did not decrease the risk of ovulation in individuals with a BMI > 30 kg/m² and a weight of at least 176 lbs. Individuals with higher BMI and weight experience a higher failure rate of LNG EC but this simple strategy does not appear to be an effective intervention to improve outcomes.

FC42

The human metabolic profile of estetrol

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Objectives: Estetrol (E4), a native estrogen produced by the fetal human liver, has four hydroxyl-groups, making it structurally distinct from other estrogens. We determined the human metabolic profile of E4, which is recently marketed combined with drospirenone as a novel contraceptive and is currently in development for the relief of menopausal symptoms.

Method: We studied the *in vitro* metabolism of E4 using human hepatocytes, human liver microsomes and recombinant CYP enzymes in reaction phenotyping studies to evaluate the role of human cytochrome P450 enzymes, UDP-glucuronosyltransferases (UGT) and sulfotransferases (SULT). Furthermore, we evaluated the *in vivo* metabolism of E4 in an open-label, non-randomised phase 1 human absorption, distribution, metabolism, and excretion study, in which six healthy postmenopausal participants received a single oral solution containing 15 mg [¹⁴C]-E4. We analysed blood (up to 240h), urine and faecal samples (up to 312h). Metabolite profiling and identification was performed using liquid chromatography with tandem mass spectrometry.

Results: The *in vitro* studies showed that E4 undergoes extensive phase 2 metabolism to form glucuronide and sulphate conjugates. UGT2B7 is the key enzyme catalysing the direct glucuronidation of E4 and SULT1E1 is the dominant sulfotransferase for sulphate conjugation *in vitro*. Unlike for other estrogens, oxidative phase 1 metabolism by P450 enzymes does not play a major role in the metabolism of E4. Following oral administration of E4 to humans, the major metabolites observed in human plasma were E4-16-glucuronide, E4-3-glucuronide and E4-glucuronide-sulfate (respectively 62%, 17% and 9% of radioactivity at the time of maximum plasma concentration [T_{max}]). At T_{max}, unchanged E4 accounts for only 7.5% of plasma radioactivity. Main metabolites quantified in urine during the first 6 hours after administration were E4-16-glucuronide and E4-3-glucuronide (respectively 77.4% and 16.5% of urine radioactivity). Approximately 69% of the total administered radioactivity was recovered in urine and 22% in faeces. Mass spectrometry showed that E4 was not present in urine but was detected in faeces and that E4 is not converted back into one of the other natural estrogens (estriol, estradiol, estrone).

Conclusions: Altogether, these data suggest that E4 has a unique metabolic profile. E4 is a terminal end-product of estrogen metabolism, which is not converted back, *in vivo*, into active metabolites like estriol, estradiol or estrone. Unlike for other estrogens, CYP450 enzymes do not play a major role in the metabolic pathway of E4.

Conflict details

Dan Apter has been an invited speaker on an ad hoc basis for MSD/Merck, Exeltis, Bayer, and Mithra. Céline Gérard, Guillaume Chatel and Maud Jost are employees of Estetra SRL, an affiliate company of Mithra Pharmaceuticals. Fabrice Nollevaux is an employee of PharmaLex Belgium. Ulysse Gaspard is a senior consultant at Mithra Pharmaceuticals. Jean-Michel Foidart is a member of the board at Mithra Pharmaceuticals and received financial support for the supervision of these studies.

Contraception in women aged 40 years and over : the spermicides option ; New vision on an old method

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Objective: Women aged 40 and over represent approximately one fifth of women seen in consultations for contraception. With age, fertility gradually declines while comorbidities (e.g. hypertension, diabetes, cancers) increase. Contraceptives that can be offered to women over 40 should take these specificities into account. Although combined hormonal contraceptives are not contraindicated in healthy and non-smokers women over 40, their risks (particularly cardiovascular risk) increase with age. Furthermore, intrauterine contraception is not always possible. Our hypothesis is that benzalkonium chloride spermicide could represent a suitable alternative for this age group. This was the aim of our study ("BZK40+"), currently under review for publication. The primary endpoint of this study was the Pearl Index (PI) over up to 12 months (typical use) in women aged 40 and over. Secondary endpoints were global satisfaction, acceptability and safety outcomes.

Methods: This phase IV, multicenter, open-label, single-arm study has been conducted in 7 private gynecologist-obstetricians in France and 6 gynecology-obstetrics clinics in Russia in accordance with national and international procedures. 151 fertile women aged ≥ 40 (mean age: 45.9) who had a contraindication or intolerance to other contraceptives or who did not wish to use them were enrolled. They were informed about the risk of an eventual pregnancy at this age. They were instructed to systematically use Pharmatex® cream spermicide before each intercourse. Study visits took place at 2 and 6 months. At the end of the 6-month mandatory study period, participants were given the option to continue the study for an additional 6 months, and a final visit at 12 months was planned for these women.

Results: The typical-use PI over up to 12 months was 0 (no unintended pregnancy) in the FAS (Full analysis set) population ($n=151$, 1249.7 women-months at risk). The upper 95% CI limit (2.88) was well below the hypothesis value of 22 (rate of failure of spermicides in overall population according to the French National Authority for Health). So, for the first time, efficacy of spermicides in women ≥ 40 years has been established. However, these results need to be confirmed. More than 99% of satisfaction ratings were at least good, and 96.1% of women found the lubricating effect of Pharmatex® cream appropriate. No serious treatment-related adverse event was reported.

Conclusions: Benzalkonium chloride spermicide seems an effective, safe and well-accepted alternative contraceptive method in women aged 40 and over according to this study whose main limitation is the absence of control group.

Conflict details: Dr. Serfaty and Prof. Prilepskaya, principal investigators in France and Russia respectively and members of the study scientific committee, declare no financial or non-financial competing interests. Prof. Graesslin and Prof. Benifla, members of the study scientific committee, also declare no competing interests. F. Aubin is an employee of VennLife Sciences, contracted by Laboratoire Innotech International to provide statistical and methodological support for the study. Y. Mas, J. Escola, E. Coatantiec, F. Verrière and F. Carrois are employees of Laboratoire Innotech International, the study sponsor and manufacturer of the spermicide evaluated.

The Effect of the Reproductive Health Course on Sexual Myths, Sexual Attitudes and Gender Perception among University Students

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Objectives: Reproductive health training during undergraduate education are very important since lack of adequate information can lead to a range of negative outcomes for the lifelong of young students. This study aims to investigate the effect of reproductive health course on sexual myths, sexual attitudes and

gender perception of university students.

Method: A quasi-experimental study was conducted with pretest-posttest design. The sample of the research consisted of 222 students who were enrolled reproductive health course in the state university during the spring term of 2020–2021 academic years. The course was given to the students via synchronous distance education over 2 hours per week for 14 weeks (video, pictures, power-point presentation, brainstorming, question-answer etc.). Data were collected using Questionnaire Form, Sexual Myths Scale, Brief Sexual Attitudes Scale and Perception of Gender Scale.

Results: An improvement in sexual attitudes ($p < 0.001$) and a positive effect perception of gender ($p < 0.05$), and a decrease in sexual myth beliefs ($p < 0.001$) was found among the students when the results of the posttest was compared to the results of the pretest. While 24.4% of them had adequate knowledge about SRH before course, 87.9% them obtained adequate knowledge about SRH after course. While a negative relationship between SMS and SABS ($p < 0.05$); SMS and PGS ($p < 0.001$) post-test scores, a positive significant relationship was found between SABS and PGS post-test scores ($p < 0.001$).

Conclusions: These results reveal the importance of the sexual health course in undergraduate education in eliminating the effects of sexual myths, and in developing a positive sexual attitude and gender perception, which are necessary for a healthy life. Courses on reproductive and sexual health should be integrated into the curriculum by the first year of undergraduate university education.

FC45

Comparative study of two different-sized copper intrauterine devices: 12-month results of a single-blind randomized trial in a predominately nulliparous population to measure continuation rates, rates of discontinuation for specific reasons, and product satisfaction

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Objectives: To compare overall continuation rates, discontinuation rates for specific reasons, and product satisfaction with two different-sized copper intrauterine devices (IUDs) in nulliparous women

Design & Methods: We are conducting a three-year USFDA-regulated Phase III single-blind randomized trial at 16 US centers. Participants were randomized (4:1) to the CE-marked Mona Lisa NT Cu380-Mini (24mm x 30mm) or the only copper IUD available in the USA: the TCu380A (32mm x 36mm). We calculated 12-month product continuation probabilities using Kaplan-Meier techniques and used logrank tests to compare products. We also examined discontinuation probabilities for bleeding and/or pain, expulsions, and other events. We used chi-square tests to compare products on satisfaction (highly satisfied, satisfied, dissatisfied, highly dissatisfied) and on whether participants would recommend the IUD to others, at 6-days, 6-weeks, 3-, 6-, and 12-months postinsertion. In a supporting analysis to mitigate potential bias due to attrition, we used last-observation-carried-forward techniques to examine participant satisfaction/recommendations.

Results: We enrolled 1,105 women (Cu380-Mini: $n=886$; TCu380A: $n=219$); 84.0% were nulliparous ($n=928$) and $n=177$ were parous. Among the 928 nulliparous users, 745 were assigned to the Cu380-Mini and 183 to TCu380A. The 12-month continuation probability for the Cu380-Mini was 78.6% (95% CI: 72.8–84.4) versus 70.2% (95% CI: 59.7–80.7) for the TCu380A, $p=0.016$. Probabilities of IUD expulsion (4.9% vs. 8.9%, $p=0.029$) and IUD removal for bleeding and/or pain (8.1% vs. 16.2%, $p=0.001$) were lower for the Cu380-Mini compared to the TCu380A, respectively. Personal satisfaction with the products were equivalent at all times. Participants' recommendations favored Cu380-Mini over the TCu380A at 3-months (96.7% vs. 91.1%) and 12-months (97.5% vs. 90.0%), both $p < 0.05$, but were statistically equivalent at other times. Using last-observation-carried-forward, the results did not deviate from the unadjusted estimates.

Conclusions: The smaller Cu380-Mini appears to offer important benefits for a nulliparous population in the first twelve months.

Previous research comparing other devices in a nulliparous population has not provided clear and consistent evidence of any smaller European product out-performing the global standard-bearer (TCu380A) on these endpoints. This first ever head-to-head trial provides valuable information to potential users and their health care providers. For nulliparous users who try a smaller copper IUD for the first time, the advantages of fewer side effects and early removals may be of lasting importance; those with positive experiences might have longer use patterns, better protection from unintended pregnancy, and will likely consider using a copper IUD in subsequent life stages.

FC46

Association between menstrual cycle length and COVID-19 Vaccination: a Global Cohort

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Objective: To determine if COVID-19 vaccination is associated with menstrual cycle changes compared with an unvaccinated cohort.

Methods: We analyzed prospectively collected menstrual cycle data via the app, "Natural Cycles". We included individuals 18-45 years with normal cycle lengths (24-38 days), not using hormonal contraception or recently pregnant, with consecutive data at least three cycles pre- and one cycle post-COVID-19 vaccination and for the unvaccinated, a minimum of four consecutive cycles over a similar time. We calculated the mean within-subject change for cycle and menses length, from the three pre-vaccination cycle average to the first and second dose vaccination cycles and the cycle following the second dose. We assigned cycles 4 and 5 as 'vaccination' cycles for the unvaccinated individuals. We developed longitudinal mixed effects models to estimate the difference in the change in cycle or menses length before and after vaccination, by vaccination status and adjusted for age, BMI, education, parity, relationship status, and global region.

Results: Our sample included 19,622 individuals (vaccinated 14,936; unvaccinated 4,686). The majority were under the age of 35 (75%) from UK (32%), US and Canada (29%), and Europe (34%). Half the vaccinated cohort received the Pfizer-BioNTech Covid-19 vaccine (51%, Moderna 13%, Astrazeneca 7%, Johnson & Johnson 1.4%). Vaccinated individuals experienced a <1 day adjusted increase in the length of their first and second vaccine cycles, compared to the unvaccinated cohort [first dose: 0.71 day increase (99.3% CI 0.47, 0.96); second dose: 0.56 day increase (99.3% CI 0.28, 0.84)]. By vaccination status, there was no difference in post-vaccination cycle length [-0.11 day change (99.3% CI -0.11, 0.10)]. When stratified by number of doses received in a single cycle, the adjusted difference was larger among those who received 2 doses [1 dose/cycle first dose: 0.64 day increase (99.3% CI 0.53, 0.76), second dose: 0.50 day increase (99.3% CI 0.36, 0.64); 2 doses/cycle 3.91 days increase (99.3% CI 2.53, 5.28)]. Compared to the unvaccinated cohort, 2 dose/cycle recipients experienced a small adjusted increase in cycle length post vaccine [0.85 day increase (99.3% CI 0.24, 1.46)] and 1 dose/cycle recipients were not different [0.02 day change (99.3% CI -0.10, 0.14)]. The length of menses was unaffected by vaccination.

Conclusion: Vaccinated individuals experience small temporary cycle length changes; this change appears driven by those receiving 2 vaccine doses in a single cycle, and the change is attenuated in the post-vaccine cycle. COVID-19 vaccination is not associated with changes in menses length.

FC47

Uterine volume, menstrual patterns, and contraceptive outcomes in users of the levonorgestrel-releasing intrauterine device

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Objective: To assess the effects of the LNG-IUD on uterine volume, bleeding patterns, and LNG-IUD-related outcomes among women using it to treat abnormal uterine bleeding (AUB) caused by fibroids, adenomyosis, heavy menstrual bleeding without structural cause (HMB), or for contraception. **Methods:** This

5-year prospective cohort included 147 women, who were allocated to four groups: a) contraception (n = 37); b) fibroids (n = 44); c) adenomyosis (n = 32); d) HMB (n = 34). The visits for clinical and ultrasound evaluations were made at baseline and at 3, 6, 12, 24, 36, 48, and 60 months postinsertion. **Results:** Along the 60 months of follow-up, uterine volume slightly decreased ($p < .001$, Friedman's ANOVA) in the groups of HMB (baseline: $98.4 \pm 35.3 \text{ cm}^3$; 12 months: $82.0 \pm 23.3 \text{ cm}^3$; 60 months: $78.5 \pm 28.9 \text{ cm}^3$), adenomyosis (baseline: $144.6 \pm 35.6 \text{ cm}^3$; 12 months: $109.1 \pm 38.2 \text{ cm}^3$; 60 months: $91.2 \pm 36.5 \text{ cm}^3$), and fibroids (baseline: $152.8 \pm 52.8 \text{ cm}^3$; 12 months: $126.2 \pm 52.4 \text{ cm}^3$; 60 months: $123.4 \pm 84.9 \text{ cm}^3$), but not in the contraception group (baseline: $74.3 \pm 28.6 \text{ cm}^3$; 12 months: $65.6 \pm 20.7 \text{ cm}^3$; 60 months: $74.2 \pm 28.5 \text{ cm}^3$). However, the isolated volume of fibroids remained unchanged (baseline: $11.9 \pm 9.2 \text{ cm}^3$; 12 months: $12.2 \pm 11.7 \text{ cm}^3$; 60 months: $13.6 \pm 16.9 \text{ cm}^3$). Unfavorable bleeding pattern was low in all groups (frequency varied between 3.8 and 16.7% across different groups along the time), and it seemed to be more frequent in the fibroids group. Continuation rates at 60 months among LNG-IUD users were high for all groups: contraception 67.6%, HMB 79.4%, adenomyosis 81.3% and fibroids 72.7%. Expulsion was rare among all groups: contraception 2.9%, HMB 3.2%, adenomyosis 6.9%, fibroids 11.9%. After LNG-IUD insertion, 3.2% of women with HMB, 6.9% of women with adenomyosis and 21.4% of women with fibroids underwent a hysterectomy. Uterine volume $\geq 200 \text{ cm}^3$ was a good predictor of hysterectomy or IUD expulsion in both adenomyosis and fibroid groups. **Conclusion:** The LNG-IUD may control uterine menstrual bleeding as well as uterine volume in adenomyosis, fibroids, and HMB. An initial uterine volume smaller than 200 cm^3 is an important predictor of adherence to treatment and better outcomes.

FC48

Fertility awareness and parenthood intentions among medical students in three European countries.

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Objectives: Numerous studies on fertility awareness in the general population report a lack of knowledge on the impact of age and other lifestyle factors on fertility. Likewise, fertility awareness has also been assessed in medical students and health professionals in a number of countries (e.g. Austria, Saudi Arabia and Ukraine). Most of these studies disclose that also in these populations, fertility awareness is insufficient. In some countries, parenthood intentions among medical students are low as well. The aim of this study is to investigate fertility awareness and parenthood intentions in three European countries: Sweden, Belgium and Greece.

Design & Methods: An adapted version of the fertility awareness questionnaire (Lampic 2006) was submitted to graduating medical students in Sweden, Belgium and Greece between April 2017 and May 2018. The questionnaire was filled out either digitally or on a printed version (during college).

Results: In total 656 students participated (279 from Sweden, 275 from Belgium and 102 from Greece); more women (62%) than men (38%) participated. Approximately 95% of graduating medical students wants to have children in the future. They preferably want to start a family at age 29 and have their last child at age 35. Three out of four participants (427/629) knows that women are most fertile at 20-25 years of age and more than 90% of respondents are aware that fertility significantly decreases before the age of 35. Not all students were aware of social freezing (27.7% never heard of it); more than half of students (57.5%) would not consider social freezing for themselves.

Conclusions: In contrast to studies on the general population and some former studies on medical students, knowledge about fertility among graduating medical students in Sweden, Belgium and Greece was satisfactory. Moreover, most students are prepared to discuss family planning with their patients in the future. These results are promising for the quality of care future patients in these countries will receive with regards to fertility related information.

Reasons for rejecting hormonal contraception in Western countries: A systematic review

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BACKGROUND: Over the past decade, women in Western countries have taken to various social media platforms to share their dissatisfactory experiences with hormonal contraception, which may be pills, patches, rings, injectables, implants or hormonal intrauterine devices (IUDs). These online testimonials have been denounced as spreading “hormonophobia”, i.e. an excessive fear of hormones based on irrational causes such as an overestimation of health risks associated with their use, that was already aroused by the recurring media controversies over hormonal contraception.

OBJECTIVES: The aim of this article is to study the arguments that women and men (as partners of female users) recently put forward against hormonal contraception to see whether they are related to hormonophobia.

METHODS: We conducted a systematic review of the recent scientific literature in order to construct an evidence-based typology of reasons for rejecting hormonal contraception, in a continuum perspective from complaints to choosing not to use it, cited by women and men in Western countries in a recent time. The published literature was systematically searched using PubMed and the database from the French National Institute for Demographic Studies (Ined).

RESULTS: A total of 42 articles were included for full-text analysis. Eight main categories emerged as reasons for rejecting hormonal contraception: problems related to physical side effects; altered mental health; negative impact on sexuality; concerns about future fertility; invocation of nature; concerns about menstruation; fears and anxiety; and the delegitimization of the side effects of hormonal contraceptives.

CONCLUSION: Arguments against hormonal contraception appeared complex and multifactorial, in little related to a hormophobia. Future research should examine the provider-patient relationship, the gender bias of hormonal contraception and demands for naturalness in order to understand how birth control could better meet the needs and expectations of women and men in Western countries today.

ePoster presentations

PP01

First trimester medical abortion delivered by telemedicine: effectiveness, acceptability, treatment adherence and side effect profile in a prospective cohort in Scotland

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Objectives: In response to COVID-19, legislation and guidance changed in Scotland allowing medical abortion at home by telemedicine for pregnancies less than 12 weeks' gestation. Following these changes, we adapted our service to deliver telemedicine abortion care.

Patients received a telephone consultation. Routine ultrasound was not performed. For those choosing medical abortion, patients received a treatment pack containing medications (mifepristone, misoprostol, antiemetics, antibiotics) and a low-sensitivity pregnancy test to confirm treatment success.

Our objectives were to: Evaluate the effectiveness, safety and acceptability of the telemedicine abortion service. Determine adherence to drug regimens and prevalence of side-effects when abortion medications are self-administered at home

Methods: We conducted a prospective cohort study of 663 patients choosing medical abortion at home via telemedicine at an NHS abortion service in Edinburgh, Scotland between 1st April and 9th July 2020. Interviewer-administered questionnaires were completed by telephone 4- and 14-days following treatment. Regional hospital databases were reviewed to verify abortion outcomes and complications within 6 weeks. Primary outcome measures included effectiveness, complications, acceptability and preparedness for treatment. Secondary outcome measures included medication use; induction-expulsion interval; antiemetics, antibiotics, analgesia use; pain scores; rates of side-effects and bleeding.

Results: Nearly all patients (652/663, 98%) answered at least one questionnaire and most were less than 10 weeks' pregnant (642/663, 98.2%). For 522/663 (78.7%), gestation was determined using last menstrual period alone. High numbers (650/663, 98%) had a complete abortion. No one was treated inadvertently beyond 12 weeks' gestation. There were two cases of haemorrhage and no severe infections. Some 123 (18.5%) patients sought advice by telephone for a concern related to the abortion, of whom 56 (8.4%) attended a clinic for review. Most (628, 95%) women rated their care as acceptable and 554/663, (84%) felt prepared for their treatment by their teleconsultation.

Abortion medications were used as directed by 594/663 patients (89%). The mean (SD) induction-expulsion interval was 4.3 (4.3) hours. Antiemetics were used by 611/663 (92%); 383/599 (64%) completed the course of prophylactic antibiotics; and 616/663 (93%) used analgesia, with mean (SD) worst-pain scores of 6.7/10 (2.2). Regarding side-effects, 510/663 (77%) experienced either nausea, vomiting, diarrhoea or headache and 510/663 (77%) experienced bleeding that was heavier than a period.

Conclusion: This model of telemedicine abortion without routine ultrasound is safe, has high effectiveness and high acceptability among patients. Patients can correctly self-administer abortion medications following a telemedicine consultation.

P02

A qualitative case study of health experiences of participants and non-participants in the Mother Child Program in Canadian federal prisons designated for women.

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Objectives: The population of people incarcerated in federal prisons for women in Canada increases every year. Incarcerated women experience barriers to sexual and reproductive health care and evidence shows they experience poorer health outcomes such as increased rates of unplanned pregnancy, unmet contraceptive needs, and higher rates of sexually transmitted infections and gynecological cancers. Launched in 2001, the Institutional Mother Child Program aims to improve the experiences of pregnant people and new parents. The program has been the subject of little research or evaluation since inception. The aim of the study was to understand how pregnant people and new parents experience health and health services while incarcerated in federal prisons designated for women with respect to participation – or not- in the institutional Mother Child Program.

Methods: The study is based on a theoretical framework of prison abolition, critiquing the taken-for-grantedness of incarceration as a solution to social processes of criminalization. The study uses a qualitative case study design. Semi-structured interviews were conducted in person or by phone with 23 participants. Participants including people who experienced federal incarceration during pregnancy or the early parenting years and community advocates. The sample included people who did and did not participate in the institutional Mother Child Program and from each of the six federal prisons designated for women in the country.

Results: The major themes in the analysis include: 1) Reasons why- and why not- to participate in the Mother Child Program and subthemes “The lucky few”, “I couldn’t”, “I wouldn’t”, and “I made arrangements”; 2) Mothering from inside, with subthemes including “Trauma”, “Surveillance not support” and “Contact with children: phone and visits”; 3) Health care, with subthemes including “Better care in pregnancy”, “Care denied”, “Punishment” and “Pill pushing”; and 4) Strategies and survival, including subthemes “Self and peer advocacy” and “Supports”. This study is the first to explore the health experiences of federally incarcerated mothers with respect to participation- or not- in the institutional Mother Child Program. Participants describe multiple reasons for choosing not to participate or being ineligible for the program. They experience separation as traumatic and are denied postpartum care. Reproductive mental health concerns were met with punishment and prioritization of pharmacological treatment over counselling. Study participants navigated challenges in the prison environment through advocacy and supports.

Conclusion: Mother child programs in prison fail to address the health harms of maternal incarceration. Alternatives to incarceration are recommended.

P03

Supporting financially vulnerable women with free-of-charge LARCs after termination of pregnancy in the Netherlands in 2020: an observational retrospective study.

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Objectives: Yearly 31.000 terminations of pregnancy (TOP) are performed in the Netherlands. National surveys show that more than a third of TOPs is recurring. To reduce repeat TOPs, a new governmental regulation enables abortion clinics to offer financially vulnerable women a LARC following a TOP free-of-charge, after a TOP. The LARCs available were four types of Cu-IUDs (T-Safe®, Multi-Safe®, IUB Ballerine® and Flexi-T®), two types of LNG-IUDs (Mirena® and Kyleena®) and the ENG-implant (Implanon NXT®). The objective of the study was to identify which type of LARC women chose after TOP, including financially vulnerable women, and their characteristics.

Design & Methods: The observational retrospective study was performed in Vrouwen Medisch Centrum (VMC), an abortion clinic in the Netherlands. Women were carefully counseled on contraceptive choice. If women were considered financially vulnerable, a LARC was offered free-of-charge. The LARC was inserted either immediately after a surgical TOP or 4-6 weeks after a medical TOP. Immediately after insertion, the position of the IUDs was verified by ultrasound. After 6 weeks women were invited for another ultrasound check-up. Collected data include: age, type of TOP, parity, repeat TOP, financial status, type of LARC chosen and adverse events.

Results: Of the 1603 women who had a TOP, 455 women chose to have a LARC inserted. They were included in this study. The mean age of these women was 29 years old and over half was nulliparous (51,6%). A quarter of women had a repeat TOP (26,2%). Most LARCs were inserted after a surgical TOP (70,3%). Women most often chose the new hormonal IUD Kyleena (31%) or the new copper IUB Ballerine (30,8%). Approximately one in ten women chose the implant IMPLANON NXT (9,5%).

Of the total cohort, 48 women were considered financially vulnerable and were offered a LARC free of charge. Almost half of these women had a repeat TOP (47,5%), illustrating the need for a reliable form of contraception. Interestingly, they chose the implant (20,8%) twice as often as compared to the total cohort. 77,1% of the LARCs were inserted after a surgical TOP.

In the total cohort of 455 women, 13 expulsions and 4 pregnancies were reported. No statistical differences were found in expulsions or pregnancies reported with the use of the different IUDs, including the newly marketed IUB Ballerine®.

Conclusions: Removing (financial) barriers with the intention of reducing repeat TOPs, improves women's access to long-acting reversible forms of contraception, contributing to their sexual reproductive health.

PP04

Contraception Policy Atlas Europe - tracking government policies on access to contraceptive supplies, FP, counselling and the provision of online information

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Objectives: The Contraception Atlas is an online interactive map that scores 46 countries across geographical Europe on their policies in Access to Modern Contraception. The Atlas focuses on:

Access to Supplies

Access to Counselling

Availability of Online Information

The Atlas does not reflect the contraceptive prevalence rate. Atlas aims to provide a living document which introduces a common baseline on Access to Modern Contraception in Europe and spark the debate among the stakeholders.

Method: We scored 46 European countries based on 2 headings, 5 criteria and 16 sub-criteria using the Analytic Hierarchy Process (AHP). AHP method is about setting a general, overall goal and further breaking it down the headings, criteria and sub-criteria, resembling the “tree and the branches”. Each final “branch”, the smallest sub-criteria has its specific weight and based on the answer will receive a percentage score. Finally the scores for each sub-criteria are added up to the total score of each country.

Results: France and UK catch up with Belgium and share 1st place, 6 countries introduced policies improving access to contraception in 2021. Governments are increasing the age of contraceptive coverage for young people and include LARCs. No progress in Eastern Europe. EU MS Slovakia, Greece, Croatia, Hungary and Poland among worst performing

Details: Most countries that cover LARCs provide several options: hormonal or copper IUD and implants 41% cover contraception to adult population in their national health system (19 countries). 41% cover LARCs in their national health system, including for young people and vulnerable groups (19 countries)

Most countries which cover contraception for young people, do so until 25 or older. 28% countries cover supplies for young people up to 25 and higher (some until 30) (13 countries) and 4 countries up to 19-20 years. No new governmental websites were created since 2020. 39% of countries provide governmental websites (18 countries/16 good websites), including social media, online chat, hotline or decision aid

Conclusions: Overall a positive progression across most of Europe. However governmental are still lagging behind in providing information on contraception. Access to modern, effective and affordable contraception remains a European challenge.

Links: Press release: <https://www.epfweb.org/node/895>

Map: https://www.epfweb.org/sites/default/files/2022-02/CConceptionInfoA3_EN%202022%20v10.pdf

PP05

The influence of an extended postnatal program on contraceptive use postpartum – a randomized controlled trial

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Objective: Low contraceptive use during the postpartum period is associated with an increased number of unplanned pregnancies. Offering newly delivered women contraception before the return of fertility is a means of adapting health care to women's needs. The objective of this randomized controlled trial (RCT) was to investigate if earlier and repeated visits (3 and 7 weeks) to a midwife postpartum has an impact on women's decision to start and use contraception.

Method: This multicentre RCT at 6 midwifery clinics in Gothenburg, Sweden included a total of 1159 women at pregnancy week 37 (recruitment 11 January 2019 -1 June 2020). The women were enrolled and randomized into an intervention (n= 554) or a control group (n=605). The intervention group were given two pre-booked appointments for postpartum care visits at week 3 and 7 and the control group received one traditional visit at 7 weeks postpartum. The participants completed questionnaires about contraceptive use, method choice and reproductive health at each visit. For categorical variables n (%) is presented. Fisher's Exact test was used for comparison between groups.

Results: Contraceptive use at 7 weeks postpartum was higher in the intervention group 247/442 (55.9%) compared to the control group 248/511 (48.5%) a difference of 7.4% (95% CI 0.8-13.9) (p= 0.028). The use of long-acting reversible contraceptives (LARC), implants and intrauterine devices was more common in the

intervention group 142/442 (57.5%) compared to the control group 119/511(48%) a difference of 9.5% (95% CI 0.3-18.7) (p=0.042). When separating the contraceptive user group into Swedish born women and women born abroad a lower use was seen in the group of women born abroad and this independent of 2 visits 49/116 (42.2%) or 1 visit 46/106 (43.4%). The contraceptive use in the Swedish born group was higher in the intervention group compared to the control group 198/326 (60.7%) and 202/405 (49.9%) respectively a difference of 10.9% (95% CI 3.4-18.3) (p= 0.004).

Conclusion: These results indicate the importance of earlier and additional postnatal care visits to increase early start-up of contraception and use of effective LARC methods to reduce unplanned pregnancies close to delivery. Women born abroad need more support to increase their contraceptive use postpartum.

PP06

Contraceptive Values and Preferences of Pregnant women, Postpartum Women, Women Seeking Emergency Contraceptives, and Women Seeking Abortion Services

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Objectives: We sought to systematically review the literature on contraceptive values and preferences of pregnant women, postpartum women, women seeking emergency contraception, and women seeking abortion services, globally.

Method: We searched ten electronic databases for articles from January 1, 2005 through July 27, 2020 regarding users' values and preferences for contraception. Results were divided into four sub-groups.

Results: Twenty-three studies from 10 countries met the inclusion criteria. Values and preferences across all four sub-groups were influenced by method effectiveness, access, availability, convenience, cost, side effects, previous experience, partner approval, and societal norms. Similarities and differences were evident across sub-groups, especially concerning contraceptive benefits and side effects. No contraceptive method had all the features users deemed important. Many studies emphasized values and preferences surrounding long-acting reversible contraception (LARC), including convenience of accessing LARCs and concerns about side effect profiles.

Conclusions: Individuals must have access to a full range of safe and effective modern contraceptive options, allowing people to make decisions based on evolving contraceptive preferences over time. Future contraception guideline development, policy, and programmatic implementation should continue considering the added influence of these specific reproductive experiences on contraceptive values and preferences of users to improve access, counseling, and method choice.

PP07

An investigation into women's experiences of pressure regarding contraceptive choice.

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Objectives: This study investigates Appalachian women's experiences of pressure around contraceptive choices, which is a type of reproductive coercion. Appalachia is a large, understudied, mountainous geographic region in the Eastern United States that spans 13 states and is known to share a common, place-based culture and regional health disparities.

Design & Methods: In this study, a sample of women ages 18-49 (N=632), residing in an Appalachian zip code, were recruited using targeted advertisements via the Facebook social media platform, to complete a survey on reproductive health that included questions about experiences and perceptions of contraceptive pressure. Analysis of the data was conducted using SPSS and included descriptive statistics, odds ratios, and stepwise binomial logistic regression.

Results: Approximately half of all respondents (51.6%) reported perceived pressure regarding contraceptive choices. The most common pressure reported was the pressure to use birth control (35.6%), followed by pressure not to use birth control (22.5%), and pressure to become sterilized (22.3%). Almost one fourth of all respondents (23.3%) reported experiencing two or three types of unwanted pressure.

Of those who reported feeling pressured to use birth control, 67.4% of respondents reported pressure from healthcare providers, 57.8% reported feeling pressured by family, 51.1% reported feeling pressured by their partner, and 14.2% reported pressure from their religious community. Of those who reported feeling pressured *not* to use birth control, 51.1% of respondents reported pressure from their partner, 44.7% reported feeling pressured by their religious community, 37.9% reported feeling pressured by family, and 27% reported pressure from their healthcare provider.

Conclusions: The results of this study help illuminate the high levels of contraceptive pressure perceived by this sample, which is an understudied type of reproductive coercion, particularly in Appalachian samples. These high levels of reported contraceptive pressure highlight a need for practice and policy responses that promote reproductive autonomy in this region.

PP08

Menstrual bleeding attitudes and preferences in hormonal and non-hormonal birth control users

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Objectives: Menstrual bleeding preferences can be an important factor in contraceptive decision-making as many methods can impact bleeding patterns. This study investigated how menstrual bleeding attitudes and preferences compared between hormonal birth control (HBC) and non-hormonal birth control (non-HBC) users.

Methods: Questionnaires were completed by users (aged 18+) of the Clue period tracking app who were located in the United States (n= 10244), South Africa (n=752), or India (n=1107). Analytical samples were based on respondents' current contraceptive method and stated willingness or unwillingness to use a hormonal method.

Results: In all countries, non-HBC users were more likely not to want to change their natural menstrual cycles (US: 22% of HBC users vs. 70% of non-HBC users; S Africa: 48% vs. 82%; India: 61% vs. 86%), while HBC users were more likely to want to take a break from their periods (US: 76% of HBC users vs. 53% of non-HBC users; S Africa: 65% vs. 56%; India: 56% vs. 43%). There were also important cross-cultural differences. As compared to non-HBC users, HBC users in the US and India were more likely to indicate that periods were only good for signaling pregnancy status, while the difference between HBC users and non-users was much less in South Africa (US: 53% of HBC users vs. 31% of non-HBC users; S Africa: 38% vs. 32%; India: 61% vs. 37%). Of all groups in the three countries, HBC users in the US were least likely to associate periods with overall health and fertility and the most likely to agree with the statement "my life is worse when I'm on my period", which may contribute to their greater willingness to use methods that modulate menstrual bleeding.

Conclusions: Non-HBC users exhibited a greater preference for contraceptive methods that do not interfere with natural menstrual cycling. In contrast, HBC users expressed greater ambivalence towards their periods and were more likely to desire reduced menstrual bleeding or even amenorrhea. Cross-cultural comparisons demonstrated a greater tolerance, or even desire for, contraceptive methods that modify menstrual bleeding patterns in the US as compared to India and South Africa, likely linked to differences in attitudes towards menstruation. These results support the incorporation of individual circumstances and beliefs into the process of contraceptive counseling. Attention to these factors will likely improve the determination of which methods best meet an individual's needs.

Conflict details

All authors were either freelance or fulltime employees of Clue by BioWink GmbH, the period tracking app used to distribute the questionnaires. The work was funded by the Bill and Melinda Gates Foundation.

Effects of melatonin alone or associated with acyclovir on the suppressive treatment of recurrent genital herpes: a double-blind randomized clinical trial.

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Objective: To evaluate the action of melatonin alone and in association with acyclovir as suppressive treatment in women with recurrent genital herpes. **Methods:** Double-blind, randomized clinical trial with 56 women between 15 and 49 years of age with a clinical diagnosis of recurrent genital herpes, not pregnant, without cancer or immunosuppression, divided into three groups: a) melatonin 3 mg at night (n=19); b) acyclovir 400 mg twice daily (n=15); c) melatonin 3 mg at night with acyclovir 400 mg twice daily (n=22). The duration of treatment was six months. Patients were evaluated before and during treatment through clinical visits, laboratory tests and questionnaires (QSF-36, Beck, Epworth, VAS and LANNS). The study was approved by the Ethics Committee of HC-FMUSP (CAAE: 40862215.0.0000.0068, opinion: 1,215,208) and the protocol was registered in clinicaltrials.gov, under number NCT03831165. **Results:** Among the groups investigated, the recurrence of genital herpes at 30 days was observed in 10.5%, 31.8% and 13.3% patients, respectively, in the melatonin alone, acyclovir with melatonin and acyclovir alone groups. Regarding the 60-day period, recurrence was observed in 15.8%, 36.4% and 33.3% in the melatonin alone, acyclovir with melatonin and acyclovir alone groups. Nevertheless, all groups presented similar performance in relation to recurrence at 30 days (p=0.228) and 60 days (p=0.369). In the quality-of-life questionnaire there was only improvement of the item related limitations in the melatonin alone group. **Conclusion:** Melatonin is as effective as acyclovir to decrease recurrence in women with genital herpes.

Conflict details

None

Outcomes among adolescent and adult patients who had the IUD inserted in the immediate postpartum period.

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Study Objective: Compare the expulsion rates, continuation, and satisfaction, associated with post-placental intrauterine device insertion (PPIUDI) in Brazilian adolescents and adult women.

METHODS. This prospective cohort study assessed 543 women giving birth by vaginal delivery or cesarean section in a single hospital who received a TCu380 IUD in the post-partum period. The IUD was inserted using standard technique within the first 10 minutes after placental delivery. All participants were scheduled for a follow-up visit 6 weeks after discharge (for a pelvic exam, a transvaginal sonogram and to assess satisfaction) and after 12 months.. All participants signed an informed consent form; the study was approved by the IRB.

Results: During the study period accepted PPIUDI there were 91 adolescents and 312 adult women who completed the 12 months follow-up. The total incidence of expulsions in the first 12 months after insertion of the IUD in the immediate postpartum period was significantly higher among adolescents than among adults (28.6% vs 12.0% respectively, p=0.0001). The risk of expulsion was about 2.4 times higher among adolescents than among adults (RR= 2.40, 95% CI 1.59 to 3.60). In both groups, the incidence of expulsions was higher in the first 6 weeks after delivery than in any other period, but it was significantly higher among adolescents (15.4% versus 5.8% respectively, P=0.0033, RR = 2.68, 95% CI 1.45 to 4.92). Between 6 weeks and 6 months after insertion and between 6-12 months after delivery, the incidence of expulsion was higher in adolescents than in adults, but this difference was not statistically significant.

The continuity rate was greater than 80% in the assessment carried out at 6 weeks, greater than 70% at 6 months and about 69% at 12 months, with no significant difference between adolescents and adults. The proportion of women satisfied with the method at 12 months was higher among adolescents than among adults, but this difference did not reach statistical significance (85.7% versus 74.7%, p=0.072).

CONCLUSION – The expulsion rate was higher in adolescent patients compared to adult patients, however, there were the same rates of continuity for the period from 6 weeks to 6 months and 12 months and satisfaction was higher in adolescents, although without statistical significance.

PP11

Post-partum IUD insertion in Brazilian Women: Follow-up 12 months rate.

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INTRODUCTION: In Brazil, only 3% of reproductive age women use intrauterine devices (IUDs), a highly effective long-acting reversible contraceptive method. The insertion of IUDs in the post-partum period is a form of reducing unintended repeat pregnancies in adolescents.

OBJECTIVES – Assess the continuation rate of IUDs inserted in the post-partum period of Brazilian women. **METHODS.** This prospective cohort study assessed 1.718 women managed in a single hospital who received a TCU380 IUD in the post-partum period. The IUD was inserted using standard technique within the first 10 minutes after placental delivery. All participants were scheduled for a follow-up visit 6 weeks after discharge (for a pelvic exam, a transvaginal sonogram and to assess satisfaction). All women signed an informed consent form; the study was approved by the ethics and research committee.

RESULTS. Most participants were multiparous (72.5%), 20-34 years old (68.9%), white and brown race (96,3%), lived with their partners (71,1%) and had ≥ 8 years of education (73.7%). The IUD was inserted after a vaginal delivery (n=249, 45,85%) and after cesarean delivery (n= 294, 54,14%). The (n= 543, 31,55%) women were examined 6 weeks after delivery and followed for 12 months. Eighty participants (14,7%) expelled the IUD, half of the expulsions (40/80) occurred in the first six weeks after insertion. Thirty one women (7,7%) decided to remove it because they were unsatisfied with the method, or due to bleeding or pain. Two women got pregnant, with the IUD in place, 6 months after vaginal delivery, 01 perforation after vaginal delivery and no infection. At 12 months, the continuation rate was 69,1%. **CONCLUSION** - The immediate post-partum period is an excellent opportunity for women to insert an IUD. After 12 months, we have 69,1% of the IUDs are in place and over 70% of the women are satisfied with the method.

PP12

INFLUENCE OF ABORTION ON WOMEN'S CONTRACEPTIVE USE: A QUANTITATIVE STUDY OF FRENCH PATIENTS CONSULTING FOR AN INDUCED ABORTION

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Introduction: In France, there are about 220,000 abortions every year since 3 decades. Conversely, France has an increasing contraceptive coverage: 92% of women of childbearing age declared using a contraception in 2016. Despite improvements in access to contraception over time, recourse to induced abortion in France is not declining. In this context, this study intends to show whether contraceptive counselling at the time of abortion is appropriate for initiating new contraceptive methods more adapted to the patient.

1.Objectives

- Comparison of contraceptive methods used before and after an induced abortion to check if an abortion changes women's contraceptive practices.
- Understanding women's choice of post-abortion contraception.

Hypotheses:

- Women change their contraception after an induced abortion
- Women are more likely to use long-acting methods post-abortion
- An induced abortion procedure is a good opportunity to start using contraception if none was used before.

2.Method

This is a descriptive, cross-sectional and preliminary study.

This quantitative study was conducted in 3 family planning and abortion centers in France.

Data were collected via an anonymous self-administered paper-based questionnaire given to women during the pre-abortion consultation by the doctors/midwives.

Inclusion criteria:

- French-speaking woman who volunteered and consented to participate

-Woman of reproductive age and fertile

-Patient requesting an induced abortion

167 questionnaires were collected during 3 months in 2021 but only 158 questionnaires were retained for our study (9 were excluded because of missing answers).

3.Results

The use of IUDs increased from 3.2% (pre-abortion) to 45.5% (post-abortion).

The rate of women not using any contraception dropped drastically from 22.8% pre-abortion to 4.2% post-abortion.

84.2% of the patients decided to change their contraceptive method to one more suited to their lifestyle.

Persistence of prescription pattern in which young women under 20 years of age predominantly use the pill or condoms (58.8%), while women over 25 years of age increasingly use an IUD or a contraceptive implant (62.9%).

81.6% of women are very satisfied with the information given by the medical team about contraception.

94.3% of women said they took an active part in the decision to use contraception.

4.Conclusions

Contraceptive counselling at the time of induced abortion enables new contraception more adapted to patients, and possibly enhances their compliance due to their active involvement in the choice of the prescribed contraception.

By prescribing contraception adapted to the woman and her lifestyle, the effectiveness of contraceptive methods will increase, which could lead to a decrease in the number of abortions in the years to come.

PP13

One-year follow up on immediate postpartum copper intrauterine device insertion: the continuation and satisfaction rates

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Objectives: Expanding access to postpartum intrauterine contraception (PPIUC) can reduce unintended pregnancies and short inter-pregnancy intervals; however, few studies have evaluated the long-term results of this practice in public maternities. Our aim was to determine the continuation and satisfaction rates of the copper intrauterine device (IUD) inserted in the immediate postpartum in a Brazilian public University Hospital.

Method: In this one-year cohort study, 352 women (aged 15-45 years) who received immediate postpartum TCu380A IUD at vaginal delivery (53.4%) or cesarean section (46.6%) were enrolled from March 2018 to December 2019. Adherence to the IUD was voluntary and preceded by a thorough explanation of the method. The exclusion criteria: chorioamnionitis/fever; premature rupture of membranes; gestational age <32weeks; postpartum hemorrhage/uterine atony; coagulation disorders or immunosuppression. In the immediate vaginal postpartum, the IUD was inserted with long forceps, up to the contracted fundus of the uterus presented by the external hand; and at cesarean, inserted manually with direct view of the uterine fundus. The continuation and satisfaction rates were assessed after 12-months postpartum using data from electronic medical records and telephone contact. For statistical analysis, the chi-square test and logistic regression (odds ratio, OR) were used.

Results: After one-year, information was obtained from 66.5% women (234/352), and among these, 73.4% continued using the IUD. Among the women who discontinued IUD, in 13.3% the IUD was removed for partial expulsion, in 48.4% the IUD was expelled in the puerperal period and in 20.0% after the puerperium (mean 4.4 ± 1.9 months); and in 18.3% the IUD was removed for heavy bleeding/pain. Among the 174 women who continued IUD, 76.4% reported being satisfied with the IUD. The reasons for satisfaction were effectiveness (40.6%), practicality (39.8%), few side effects (13.5%), and contraindication (6.1%) for using the pill. A higher percentage of satisfied women received information about the PPIUC during prenatal care when compared to not satisfied women (30.6% vs. 16.3% respectively, $p=0.047$). In the risk analysis, adjusted for age, having regular bleeding (OR 0.30; 95% CI 0.09-0.93, $p=0.038$), not bleeding with clots (OR 0.21; 95% CI 0.01-0.27, $p=0.001$), and not using medication to relieve dysmenorrhea (OR 0.06; 95% CI 0.01-0.25, $p<.0001$) were factors associated with IUD satisfaction.

Conclusions: In the present study, the long-term continuation of PPIUC was high and with a good satisfaction rate, indicating that it is a useful intervention to prevent unwanted pregnancies and to reduce short interval birth.

Sao Paulo Research Foundation (FAPESP) (grant number 2019/01351-8).

PP14

Use of emergency contraception in South Korea

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Objectives: Since various medical and social environments can affect the use of emergency contraception, use of emergency contraception may differ across countries. However, population-based data on emergency contraception is still scarce in the Asian population. This study was conducted to gain information about emergency contraception in South Korean women of reproductive age.

Methods: This study utilized a population-based, cross-sectional online survey using a self-completed questionnaire. Data were collected in April 2019. Women aged 20-44 years who had visited a clinic in the last 6 months for contraception counseling and who used contraceptives were randomly recruited and weighted to reflect the South Korean census estimates. Finally, 1011 women were included for analysis. A sampling error was $\pm 3.08\%$ with 95% confidence.

Results: Among the respondents, 45.6% had experienced emergency contraception. Compared to non-users, users of emergency contraception were younger. The proportion of women who had experienced childbirth was lower (44.7% vs. 51.5%), whereas that of women who had a history of contraceptive failure was higher (33.0% vs. 24.5%) in users than non-users of emergency contraception. Most important source of information about contraception did not differ.

Reason for use, feeling worried, and counseling for further contraception at the time of emergency contraception were analyzed according to age, history of childbirth and contraceptive failure: As women were younger, the proportions of women who used emergency contraception due to inadequate contraception and who had worried so much were higher. Women in the 20s were less likely to get counseling for further contraception. For a history of childbirth, the proportions of women who used emergency contraception due to no contraception during sexual intercourse and who had worried so much were higher in women who had a history of childbirth. However, the proportion of women who used other contraceptives after counseling was similar. In addition, women who had a history of contraceptive failure worried less at the time of using emergency contraception.

Satisfaction rate for contraception counseling was similar between non-users and users of emergency contraception.

Conclusions: This study provides information about the use of emergency contraception in South Korea. Our assessment can help improve medical services to the users of emergency contraception.

Conflict details

Dong-Yun Lee and DooSeok Choi declare that they worked as advisor for, and received honoraria from Bayer HealthCare

PP15

Knowledge, attitude and use of effective contraception by women living with HIV in Latvia

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Objectives. Choice of effective contraception plays a major role in achieving the reproductive goal of every woman living with HIV (WLHIV), avoiding unwanted, unintended pregnancies and planning a pregnancy with minimal risks for mother-to-child transmission of HIV. The latest RH national survey (2011) confirmed low effective contraception prevalence in the general population, no data were available about WLHIV.

Latvia has one of the highest numbers of new HIV cases in EU. Numerous studies from other countries demonstrated low uptake of highly effective contraception among this group. This study assessed knowledge about effective contraception and contraceptive method preferences among WLHIV in Latvia.

Design and Methods.

This study was conducted by Riga Stradins University (RSU) the Institute of Public Health and funded by the European Society of Contraception and Reproductive Health grant. A cross-sectional survey of WLHIV aged 18 to 49 years, who reported being sexually active within the previous 12 months, took place in the non-governmental organizations (AGIHAS, DIA+LOGS) from March 2019 until October 2020. The research tool was an anonymous questionnaire filled in by interviewers. Statistical data were processed and analysed with IBM SPSS 22.0. The study was approved by the Research Ethics Committee of RSU.

Results. 80 sexually active WLHIV participated in the study. 92.5% (n=74) were aware about condom use, 70% (n=56) were aware about at least one other effective contraception method. 61% (n=47) considered COCs, 55.8% (n=43) non-hormonal IUDs and 50.6% (n=39) hormonal IUDs being effective methods of contraception. 87.2% (n=68) women were currently using contraceptives. The most used method was male condoms (76.3%, n=61), followed by COCs (15%, n=12). A total 17.5% (n=14) of the users reported dual contraception. 52.5% (n=41) believed that COCs have a negative impact on women's health. Some misconceptions that were expressed by women were that hormonal contraception may cause infertility (16.7%, n=13), weight gain (62.8%, n=49), hormonal contraception has a negative effect on HIV infection (14.1%, n=11) and increases the risk of oncological diseases (16.5%, n=13).

Conclusions. The majority of the WLHIV were knowledgeable about methods of effective contraception. Despite the availability of different effective methods of contraception in Latvia, WLHIV preferred to use male condoms. The use of hormonal contraception by WLHIV was low. To improve family planning services and to achieve the reproductive needs of HIV-positive women, contraception counselling and access to a broad range of effective methods should be promoted by health care providers and policymakers.

PP16

How do young women experience their first contraception consultation?

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Objectives: The main research questions of this study were: How do young women (aged 16-25) experience their first contraception consultation with the general practitioner (GP) in the Netherlands? And what factors influence their satisfaction of this consultation. The aim was to provide GPs with insights and tools to improve the quality of contraception counselling for young girls.

Method: We used a mixed methods approach with (a) a quantitative online survey among 516 young women (aged 16-25) who had their first contraception consultation with the GP over the last two years, and (b) 14 qualitative in-depth interviews with young women about their expectations, needs and wishes regarding their first contraception consultation.

Results: On average, young women rated their first contraception consultation with a 7.1. This overall satisfaction was significantly influenced if women did not feel comfortable, respected or being given enough time. If their expectations regarding information on reliability, usage and/or side effects of the contraception method(s) were very different then their actual experience, this too affected the general satisfaction significantly. Although most women (58%) preferred shared decision making, only 18% of the women experienced this counselling method. However, this did not significantly influence the overall satisfaction, if women were content with the aforementioned factors.

In-depth qualitative interviews showed that some young girls expected elaborate information during the consultation about different contraception methods and the fit to their individual needs. Other girls only wanted a prescription for the method that they already decided on. However, in hindsight, these girls too would have liked to receive more information.

Both qualitative and quantitative results showed girls would appreciate if GPs would follow-up on their contraceptive choice after three months. Girls who were satisfied with their consultation were more likely to continue with the chosen method.

Conclusions: Young girls' satisfaction on their first contraception consultation with the GP appears to be related to longer-term use of the chosen contraceptive method. Strikingly, some women seem to have changing information needs over time. They are not open to information before and during the consultation, but afterwards they do want to be well informed. This poses a challenge for GPs to provide the right information at the right time. Therefore, it is strongly recommended to GPs to organize a follow-up after three months, to evaluate satisfaction with their chosen method and to respond to the limited knowledge and needs of young women starting with contraception.

Knowledge, attitudes, and meanings about contraceptive methods and sexual education in eight Colombian schools in 2020-2021: Mixed methods research.

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Objective: To evaluate the knowledge and attitudes towards contraceptive methods in high school students, determine their associated factors and the experiences of students and parents about sexual education.

Methodology: Mixed methods research, the quantitative stage was an analytical cross-sectional study. At convenience, ninth, tenth, and eleventh-grade students were included, who filled out a questionnaire with sociodemographic variables, a survey about knowledge, and another about attitudes towards contraception. According to the score, adequate or inadequate knowledge and attitudes of acceptance or rejection towards contraceptives were determined. With a bivariate analysis, the association between knowledge or attitudes about contraceptives (dependent variables) with the rest of the variables (independent) was estimated. The best model was selected with the Akaike and Bayesian criteria. To verify the goodness of fit Hosmer-Lemeshow test was used. The qualitative part was a phenomenological hermeneutical study, including students and parents. Through focus groups and guiding questions, their experiences on sexual education were investigated. The saturation of the information determined the sample size.

Results: 827 students from eight Colombian schools were surveyed, median age 16 years, 11.4% bisexual, 2.7% homosexual, 52.3% had adequate knowledge, and 80.1% attitudes of acceptance towards contraceptives. 65.5% had communication with their parents about sexuality issues, and 83.8% had received training in sexual education (classes, workshops, courses). Communication with parents about sex education was associated with adequate knowledge (OR 1.47 95%CI 1.1-1.9) and attitudes of acceptance (OR 1.87 95%CI 1.3-2.6). Training in sexuality and being in the eleventh grade were associated with adequate knowledge. In the multivariate analysis, communication with parents maintained its statistical association with both outcomes. The possibility of adequate knowledge and attitudes of acceptance was lower in students from public schools, in men, and displaced students ($P < 0.05$). The students described the sexual education received as scarce, and they consider that it should be an obligatory and integral subject in school, including all topics about sexual education and not just a few of them. Some of the barriers at home are lack of trust, ignorance of parents, taboos, and fear. Parents think that teaching about contraception can accelerate sexual life; they recommend that it be the last topic to be addressed.

Conclusions: Dialogue with parents about sexuality and training in sexual education were factors associated with adequate knowledge and attitudes of acceptance towards contraceptives. The sexual education received is insufficient due to multiple barriers, emphasizing the need for high-quality and integral sexual education.

Staff's experiences of the SEXual health Identification Tool (SEXIT)

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In 2016 SEXIT, an evidence-informed the toolkit, was developed and pilot-implemented at three Swedish youth clinics. Swedish youth clinics are highly accessible and focused primarily on concerns related to sexual and reproductive health and mental health among young persons aged 13-25 years. The SEXual health Identification Tool (SEXIT) was developed to facilitate identification of young people exposed to, or at risk of, sexual ill health in terms of sexually transmitted infections, unintended pregnancy, transactional sex, or sexual violence. The tool includes three components; (1) staff training, (2) a questionnaire for visitors, and (3) a written guide for staff to support the dialogue and risk assessment.

Previous results demonstrated promising results; a high response rate from visitors (86%), few missing answers, and youth clinic visitors reporting factors associated with sexual ill health. Interviews demonstrated that youth clinic visitors appreciated structured questions in a written format as a basis for dialogue and found SEXIT appropriate for addressing sensitive topics.

Objectives: To explore the youth clinic staff's experiences of using SEXIT systematically with all visitors, with a focus on usefulness, implementation determinants, and feasibility of implementing SEXIT at Swedish youth clinics.

Method: Four focus group discussions with youth clinic staff who participated in the pilot implementation. The clinics had used SEXIT systematically with all visitors for one month. Data were analysed using qualitative analysis designed for focus groups.

Results: Most participants experienced that the SEXIT routines were well functioning and that using SEXIT gave a comprehensive picture of the visitor and resulted in more concrete answers, which facilitated the risk assessment. Youth clinic staff experienced that SEXIT advanced their knowledge and the midwives experienced that they identified more youth at risk with SEXIT, while the psychosocial staff were less convinced on how SEXIT best should be applied. Existing challenges related to the routines at the clinics and heavy workload during drop-in hours. Further, the staff were concerned about the continued care of vulnerable, and hard-to-reach youth clinic visitors that sometimes do not attend the scheduled revisits.

Conclusions: Staff experience SEXIT as useful for identifying young people exposed to or at risk of sexual ill health. Systematic use ensures consistency and quality in assessing the visitors, which may facilitate implementation. The use of SEXIT is challenged by heavy workload, conflicting routines, and the experience that some visitors identified through SEXIT decline further care. Implementation of SEXIT in Swedish youth clinics is considered feasible.

PP19

ABORTION AND PREVENTION OF FIRST BIRTHS AMONG ADOLESCENTS: ANALYSIS OF 10 YEARS EXPERIENCES OF MEXICO CITY'S PUBLIC ABORTION PROGRAMME

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BACKGROUND AND OBJECTIVE: Mexico City decriminalized first-trimester abortion in 2007 and immediately integrated Legal Termination of Pregnancy (ILE in Spanish) services into the public sector. Earlier estimates in Mexico suggested women primarily used abortion to limit family size; less was known about the role of abortion in delaying or preventing first births, especially among adolescents. The purpose of this study was to describe parity and age among women seeking ILE in the public sector programme in Mexico City.

METHODS: We analyzed medical charts of 47,462 women who had ILE between 2007 and 2016. Age was grouped into five unequal categories (12–17, 18–24, 25–29, 30–39, ≤40 years), to focus on adolescents and young women; sociodemographic characteristics included education and occupation. Our outcome was a binary indicator of whether the abortion served to prevent a first birth (to nulliparous women) or limit births (to parous women). We used bivariate statistics to test for differences in preventing/delaying versus limiting births, and logistic regression to identify the associated sociodemographic factors. We calculated multivariate marginal effects and absolute probabilities of our key covariates (age and occupation) to better interpret our results.

RESULTS: Overall, 41% of abortions were in nulliparous women seeking to prevent a first birth, and 59% were in women who already had one or more children. Women who had an abortion to prevent a first birth were more educated (46% in high school and 29% in university vs 34% and 9% among parous women) and more likely to be in school (39% nulliparous vs 19% parous). Women preventing first births were also younger: 17% were aged 12–17 years and 64% were aged 18–24 years compared with 2% and 36% among parous women. In our multivariable model, adolescents (12–17 years) who were students or employed had nearly 90% adjusted probability of using abortion to prevent a first birth (students: 88.55%, 95% CI 82.97 - 94.12; employed: 87.83%, 95%CI 82.90 - 92.76). At all ages, employed women and students had higher probabilities of using abortion to prevent a first birth compared with unemployed women.

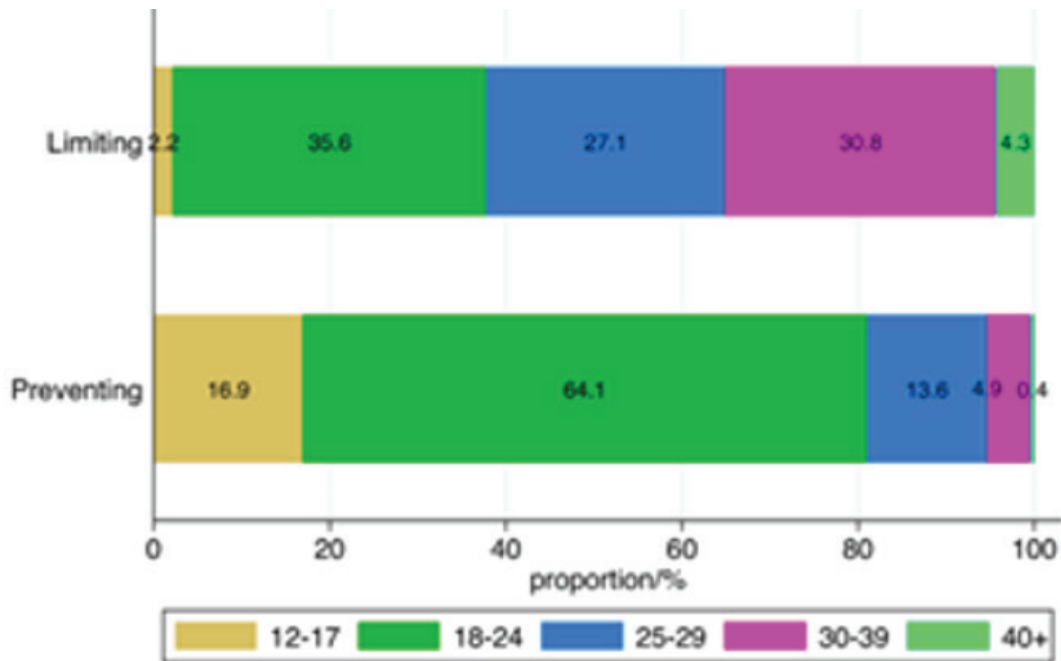
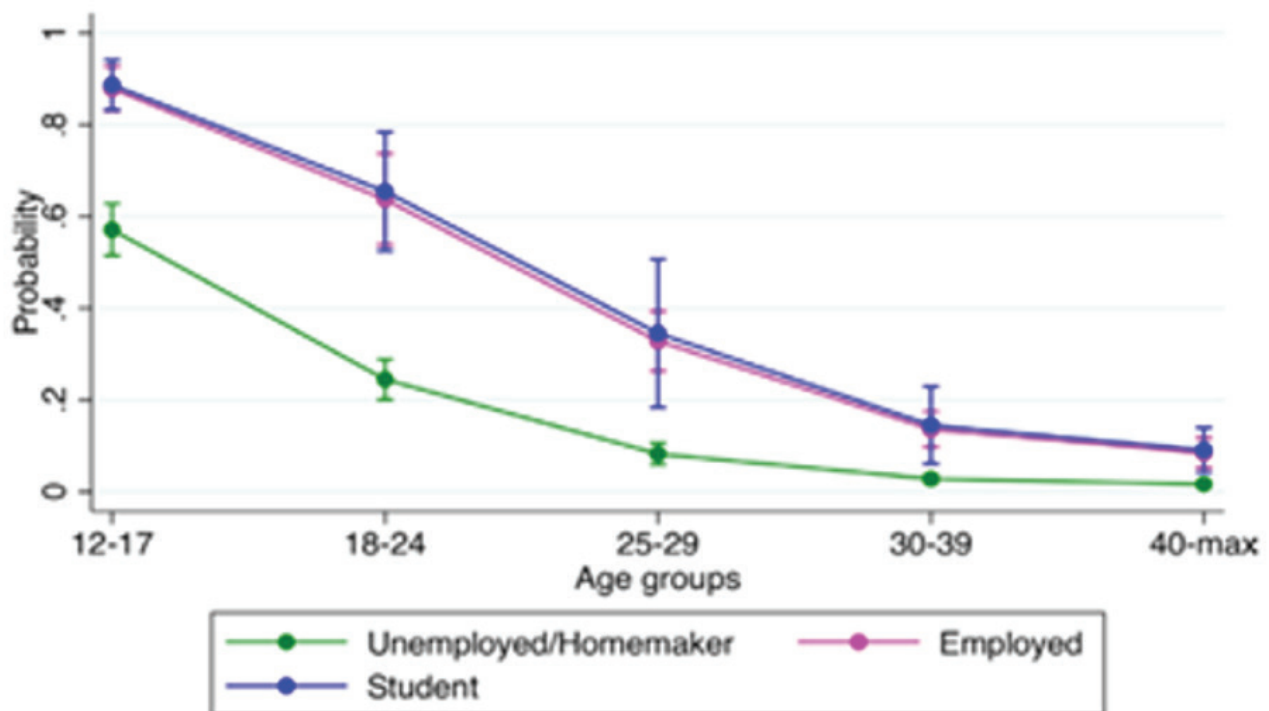


Figure 1 Preventing first births (nulliparous women) or limiting births (parous women) by age group. Mexico ILE programme, n=47 398; p<0.001 (excluding 64 women whose age was missing).

Figure 2. Adjusted probabilities of using abortion to prevent (vs limit) a birth by age group and occupation. Mexico ILE programme, n=46 526.



CONCLUSION: Legal first-trimester abortion in Mexico plays an important role in preventing/delaying first births among students and economically active adolescents. Current policies should include access to ILE in addition to access to effective contraception, to reduce adolescents' high birth rates and allow them to accomplish their reproductive and human rights.

Impact of Covid-lockdown on abortion management at a family planning in Brussels

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1. Objectives: In response to the covid-19 lockdown, we developed a new abortion protocol in a family planning in Brussels. This study evaluated the effects of the lockdown on the management of abortions and its impact on patients' characteristics.

2. Methods: A retrospective study compared the characteristics and management of patients who terminated their pregnancies at the same family planning (CHU Saint-Pierre Brussels) between March 14 and May 6, 2020 and during the same time period in 2019.

3. Results: Patients having an abortion in 2020 (n=87) were in average two years older than in 2019 (n=93) (31 years + 13 vs 29 years + 13 p<0.011), the number of abortions was similar to previous years, and the characteristics of the population were identical. The management of abortions has changed significantly as patients terminate their pregnancies earlier in 2020 than in 2019 (7W and 1 day + 3 days versus 8W and 5 days + 3 days p<0.01), mostly with medication and at home (61.4% versus 2% p<0.001), but with similar effectiveness.

4. Conclusion: Due to the confinement, we have accelerated the time required to obtain an appointment and shortened the delay between the abortion request and the pregnancy termination, permitting an earlier management mainly through the use of medical- and at home abortion. Given the satisfactory results, we consider now to implement this new protocol beyond the confinement period.

Trapped in transition: A multi-methods assessment of sexual and reproductive health education in Albania

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Objective(s): Despite gendered differences in patterns of median age at first sexual intercourse, youth in Albania are initiating sexual activity at a younger age. Indeed, in 2018 more than a quarter of young women and nearly half of young men reported having intercourse before the age of 18. However, contraceptive prevalence among Albanians is relatively low (4%) and abortion remains the mainstay of family planning in the country. Furthermore, nearly one in three young women reported having had a sexually transmitted infection (STI) or STI-related symptoms in 2018. Studies on youth's sexual and reproductive health (SRH) education are practically nonexistent. Through this project we sought to review the sexual health education policies, programs, and practices targeting youth in Albania and explore youth's knowledge of and experiences with accessing information and education related to SRH.

Design and methods: In 2021, we conducted a multi-method qualitative study with youth and key informants in Albania. We invited youth to report their knowledge of and experiences with accessing SRH information and education in an online survey and through in-depth semi-structured interviews. 270 respondents completed the survey and 14 youth participated in interviews. Additionally, we conducted in-depth semi-structured interviews with 17 key informants at the national and local levels. We also reviewed the national sexual health education program, as well all sex-ed textbooks and training materials available for youth, teachers and service providers.

Results: Our findings suggest that youth face numerous barriers accessing information related to SRH. Although various SRH education programs and interventions have been implemented in Albania since 2005, the subject is taught sparsely in schools. The country lacks a comprehensive SRH curriculum and only a limited number of topics related to reproductive health and human development are taught in schools. Furthermore, teachers lack adequate training and are often embarrassed or uncomfortable discussing SRH with students. Youth rely on internet and peers to find information related to SRH and thus lack of knowledge, misinformation, and misconceptions about SRH are common.

Conclusions: Albania lacks comprehensive sexual and reproductive health education. Existing programs and interventions are inadequate and ineffective. Development of contextually-relevant SRH education and culturally resonant SRH training materials could play a key role in improving the effectiveness of SRH education.

PP22

Insights from Portuguese gynaecologists/obstetricians about intrauterine contraception in the immediate postpartum: Results from a questionnaire

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1. Objectives: To determine the perception, expectations, and level of acceptance of Portuguese gynaecologists/obstetricians regarding intrauterine contraception devices (IUD) applied during the first 48 hours postpartum (henceforth referred to as immediate postpartum).

2. Method: Descriptive and comparative study based on an online questionnaire conducted for two months, directed at Portuguese obstetricians/gynaecologists.

Statistical analysis was performed using SPSS®. Comparative analysis was made with χ^2 test. The threshold of statistical significance considered was a p-value < 0.05.

3. Results:

We collected 126 responses, accounting for 6.9% of Portuguese gynaecologists/obstetricians. Our sample includes 33.3% (n=41) physicians in tertiary centres and 18.7% (n=23) in secondary centres; 53.2% (n=67) are specialists and 46.8% (n=59) residents.

All subjects agreed that IUD is an effective, safe, and reliable contraceptive option. 77.8% (n=98) of doctors reported being familiar with IUD application in their daily practice (61.2% (n=41) in the specialist's group and 25% (n=15) among residents, p=0.001); 11.1% (n=14) have applied IUD in immediate postpartum, with no differences between specialists and residents.

When asked about the ideal moment to suggest IUD in the immediate postpartum, 59.5% (n=75) replied that such discussion should occur during pregnancy, with 80.2% (n=101) stating that it should be with the attending obstetrician.

96.8% (n=122) of subjects considered contraceptive counselling an important approach in the postpartum period, and 10.3% (n=13) have counselled IUD in this context.

The main advantages reported were the adequacy in women with little access to healthcare (77.8%, n=98) and with low adherence to the oral contraceptive pill (73.8%, n=93). The main disadvantages reported were the higher risk of IUD expulsion (96.0%, n=121) and migration (34.1%, n=43). Insufficient experience in clinical practice was identified as the main cause of the low IUD use rates in the postpartum period by 71.4% (n=90) of subjects. 81% (n=102) deemed IUD to be reasonable or good, and 86.5% (n=109) consider adopting this procedure if clinically appropriate.

4. Conclusions: The application of IUD during the immediate postpartum is limited in Portugal. Most obstetricians/gynaecologists are, however, receptive to a wider use and expect good results.

Promoting IUD application in the immediate postpartum is likely to require improvement and investment in educational strategies and practical simulation.

PP24

One year follow-up on the immediate postpartum contraceptive implant placement in adolescents

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Objective: to evaluate contraceptive efficacy, adverse effects, and continuation rates among adolescents who accept the etonogestrel (ENG)-releasing subdermal implant versus non-acceptors at the immediate postpartum period and follow-up up to one year after placement.

Methods: Non-randomized and open clinical trial, in which adolescents were followed for one year after birth. We included women up to 19 years of age who gave birth at our hospital after appropriate counselling regarding effectiveness, characteristics, and possible side effects for all contraceptive methods used in the postnatal period. All women were invited to participate in the study prior to hospital discharge, and we offered the ENG-implant (Implanon NXT; MSD, Oss, The Netherlands) immediate postpartum or other rou-

tine contraceptive methods, including the copper IUD, depot medroxyprogesterone acetate (DPMA) or the desogestrel progesterone-only-pill (POP), to initiate up to 40 days postpartum. We assessed maintenance of contraceptive use and satisfaction over one year period.

Results: One hundred adolescents were included, 72 opted for the implant. The mean age at the study entrance was 17.1 ± 1.6 years, with 8% of adolescents under 14 years of age. 57% were not in school, and only 20% had completed high school, 74% were single, most pregnancies were unplanned (94%), 51% were using a previous contraceptive method, and 13% were not in their first pregnancy. All patients attended antenatal care. The loss to follow-up was greater among those who did not opt for the implant (31.0% vs 18.3%). After one year, survival analysis showed that the maintenance of implant use was greater than with the other methods ($p=0.0049$). Also, most adolescents (91.4%) were satisfied with the use of the subdermal implant. The main complaint among subdermal implant users was menstrual irregularity (24%), but only 5% discontinued use for this reason.

Conclusion: Offering subdermal implants in the immediate postpartum period for adolescents is an effective, safe option, with greater acceptance and adherence over one year when compared to other methods. Subdermal implants also show a high level of satisfaction among users. Offering a subdermal implant in the immediate postpartum period can reduce unplanned and repeated pregnancies among adolescents.

PP25

CORRELATION BETWEEN ACTIVATED PROTEIN C RESISTANCE AND THE RELATIVE RISK OF VENOUS THROMBOEMBOLISM IN WOMEN USING HORMONAL THERAPY

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Objective: The frequent use of estrogens, alone or associated with progestins, throughout a woman's life, exposes to an increased risk of venous thromboembolism (VTE). Identifying one or several biomarkers to dress the "coagulability status" of patients before and during the course of hormonal therapy would be important to minimize the thrombotic risk. Activated protein C (APC) resistance could be a potential candidate as it is significantly impacted by the use of combined oral contraceptives (COC) and hormone replacement therapy. The aim of this study was to assess the VTE risk prediction capacities of the normalized APC sensitivity ratio (nAPCsr), the score frequently used to express APC resistance.

Method: Two in silico-modeling were computed by combining both the nAPCsr for specific COC preparations with their respective VTE relative risk issued from Danish cohort study of Lidegaard (2011) and the Cochrane network meta-analysis of de Bastos (2014). The nAPCsr values were obtained retrospectively from 147 women's samples of which 41 were non-users, 15 were using ethinylestradiol 20 µg/levonorgestrel 100µg, 33 were using ethinylestradiol 30 µg/levonorgestrel 150µg, 11 were using ethinylestradiol 20 µg/desogestrel 150µg, 5 were using ethinylestradiol 30 µg/desogestrel 150µg, 5 were using 20µg ethinylestradiol/gestodene 75µg, 3 were using 20µg ethinylestradiol/cyproterone acetate 2mg and 34 were using the novel combination estetrol 15mg/drospirenone 3mg.

Results: Exponential growth equations were used to draw the correlations between nAPCsr and the relative risk of VTE depending on the type of COC (either based on the study of Lidegaard or the meta-analysis of de Bastos). R squared of both correlations were above 0.95. Out of 34 women using the new combination estetrol/drospirenone, the mean nAPCsr was 2.28. By interpolation, this new association might express a relative risk (95% CI) of 1.29 (0.61-1.96) based on the meta-analysis of de Bastos or a RR of 1.37 (0.86-1.89) based on the study of Lidegaard. This is in line with data obtained so far in which estetrol associated with drospirenone shows a promising hemostatic profile compared to the other COCs.

Conclusion: These prediction models are only exploratory and further investigations and validation are needed. However, these data support the idea that the nAPCsr could become a universal test to assess the hormone-induced risk of VTE in women during their entire lifetime.

Conflict details: Jean-Michel Foidart is a member of the board at Mithra Pharmaceuticals. Jonathan Doux-fils is CEO and founder of QUALIblood and reports personal fees from Daiichi-Sankyo, Diagnostica Stago, DOASense, Gedeon Richter, Mithra Pharmaceuticals, Norgine, Portola, Roche and Roche Diagnostics, outside the submitted work.

PP26

Measuring Potential Interest in a Postpartum Contraceptive Vaginal Ring to Address Unmet Need among Breastfeeding Women in India

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Introduction: Providing access to safe and effective contraception for postpartum women is an important family planning priority in India, where unmet need for contraception in postpartum women remains high. New user-controlled methods that do not require provider insertion or removal could help address unmet need and alleviate access-issues among postpartum women in low-resource settings. In this analysis, we estimate the potential market size in India for the progesterone-releasing vaginal ring (PVR), a user-controlled contraceptive vaginal ring that offers additional contraceptive choice for lactating women. Women can use one PVR continuously for three months and replace with a new ring every three months for up to one year postpartum as long as breastfeeding is maintained.

Methods: We integrated results of a one-year phase-3 multicenter clinical trial for the PVR conducted in India with an analysis of the National Family Health Survey (2015-16) and 2019 United Nations Population Division data to generate three estimates of the potential market size for the PVR among postpartum breastfeeding women in India.

Results: We estimate the potential market size for the PVR ranges from a low estimate of 561,000 women to a high estimate of 1.2 million women, with a separate intermediate estimate of 713,030 women.

Conclusions: Our analysis indicates the PVR has potentially robust market appeal and could play a significant role in addressing unmet need among postpartum women in India, thereby reducing risks to mothers and children associated with short birth intervals, helping to prevent unintended pregnancies, and reducing infrastructure needs for method delivery. Additional research to develop a second-generation progestin-only vaginal lasting a full year could further reduce costs and increase access to this novel delivery system.

PP27

Co-creation and development of a self-managed medication abortion digital tool, Aya Contigo, within a restrictive humanitarian context - a user-centered, community-led co-design process with Venezuelan women and grassroots organizations

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Objectives: Co-design & develop an initial prototype of a digital platform using user-centered design principles based on preferences and experiences of Venezuelan women seeking abortion within a complex humanitarian crisis. Organize local grassroots feminist organizations involved in harm-reduction abortion care to inform the design of the initial prototype. Remote user-testing of initial prototype with Venezuelan women who have had a medication abortion

Methods: We conducted a three-phase study on the development of a user-centered digital platform to facilitate self-managed medication abortion. Here, we present results from the second phase of the project, which included the development and testing of a platform prototype.

We used findings from surveys and key informant interviews (Phase I of this study) to co-create a prototype of the digital platform in collaboration with representatives from Venezuelan grassroots organizations, a UX/UI designer, and an illustrator. We tested the prototype with Venezuelan women who agreed to use the app prototype as they had previously underwent a self-managed medication abortion. We conducted interviews via Skype and used Userlytics to observe women completing tasks on the app both with a guide and on their own. The Allendale Investigational Review Board approved this study.

Results: We co-developed a comprehensive mobile application with offline capability called Aya Contigo, a sexual and reproductive health companion which includes: seven steps to self-manage medical abortions, a person-centered contraception decision tool and access to trusted resources and partner organizations.

Additionally, the tool includes optional WhatsApp notifications and support up to one month after the abortion. Five Venezuelan women completed remote user testing on the initial prototype. Users found Aya easy to use, comprehensive and accessible. Aya Contigo design and content was further refined based on user testing.

Conclusions: This study demonstrated that user-centered design principles is a useful methodology to build programs and interventions to address comprehensive abortion care with those living in complex humanitarian settings.

PP28

NOMAC-E2 shows a better contraceptive effectiveness than LNG combined oral contraceptives and has no adverse effect on mood, acne or weight change in women under 25: real-world PRO-E2 study

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Objective: To investigate the risk of venous thromboembolism (VTE), unintended pregnancy, and changes in mood, acne and weight in NOMAC-E2 users compared to levonorgestrel-containing COC (COC_{LNG}) users under 25 years.

Design and Methods: In this large, prospective, observational study, we recruited new users[1] of NOMAC-E2 and COC_{LNG} in 12 countries in Europe, Australia, and Latin America. Women were followed-up via questionnaires for up to 2 years and we captured self-reported outcomes of interest. We used a non-inferiority design to assess the risk of VTE (deep venous thrombosis of the lower extremities and pulmonary embolism). Unintended pregnancy was measured by the Pearl Index (PI; number of contraceptive failures per 100 women-years [WY]). Mood and acne change were defined as the mean change of score (derived from mood- or acne-related questions) over time compared to baseline. Weight change was defined as the mean change in percentage of body weight compared to baseline. To specifically investigate contraceptive effectiveness and changes in acne, weight, and mood in younger users, in whom these issues may be more relevant, we performed a sub-population analysis limited to participants under 25 years.

Results: A total of 101,498 women were followed up. Of these, 12,829 NOMAC-E2 users and 17,095 COC_{LNG} users were under 25 years old. NOMAC-E2 showed no increased risk of VTE when compared to COC_{LNG}; confirmed events: 2 in NOMAC-E2 users (1.4/10,000 WY; 95% CI, 0.18-5.2) vs 5 in COC_{LNG} users (2.5/10,000 WY; 95% CI, 0.8-5.8). The risk of unintended pregnancy was statistically significantly lower in the NOMAC-E2 cohort; confirmed events: 30 in NOMAC-E2 users (PI 0.24; 95% CI, 0.16-0.35) vs 94 in COC_{LNG} users (PI 0.51; 95% CI, 0.41-0.62). Both cohorts showed no adverse effect on mood, acne, and weight: change from baseline to 24 months follow-up was 3.3 (±19.20) and 1.9 (±18.54) for acne score, 2.5 (±21.15) and 3.9 (±21.24) for mood score and 1.8 (±10.40) and 2.9 (±10.11) for weight in NOMAC-E2 and COC_{LNG} users, respectively.

Conclusions: NOMAC-E2 shows a favourable profile in young women, with a significantly better contraceptive effectiveness than the gold-standard COC_{LNG} and without an association with negative changes in mood, acne and weight over time.

[1] First-ever users of an eligible COC or restarting with an eligible COC (same COC as before or a new COC) after a break of at least 2 months.

PP29

UNMET NEED FOR CONTRACEPTION AMONG ADOLESCENT IN DEVELOPING COUNTRIES: SCOOPING REVIEW

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Objectives: In developing countries only 25% of women have used a contraceptive method by the age of 19. A number of adolescents experience negative health consequences of early sexual intercourse such as

unwanted pregnancy, unsafe abortion, pregnancy-related mortality and morbidity, sexually transmitted diseases and its social and economic costs. Sexually active adolescents (both married and unmarried) need contraception. All adolescents in developing countries (especially unmarried ones) face a number of barriers in obtaining contraception and in using them correctly and consistently. This study to analyze the barriers causing the incidence of unmet need for contraception among adolescents in the developing countries

Method: A scoping review was conducted using the Population-Concept-Context (PCC) framework by the Joanna Briggs Institute. We performed on five electronic databases for published articles. Comprehensive literature searches and study selection were conducted by two authors, data extraction were finalized by discussion and agreement between authors. This review is still ongoing as we are currently conducting the second author. Inclusion and exclusion criteria by peer-reviewed journal papers were included if they were: published between the period of 2011–2021, written in English, involved human participants and described all barriers unmet need contraception among adolescent and conducted in developing countries

Results: We obtained 219 articles to be include in the review and as a results there were 10 articles that met our inclusion criteria. The country origin represents the developing countries from throughout the world covering the continents of Asia and Africa. The article consist 6 qualitative studies and 4 combined quantitative-qualitative studies. Contraception awareness among adolescent in developing countries were generally associated with socio economic status, education level, woman's age, contact with reproductive healthcare providers, later age of marriage, and greater autonomy or decision making power and the women's age the biggest causative factor with a percentage of 70 percent. Later age of marriage, woman's age, knowledge of contraception, higher education, higher income, authority and the religion were associated the decrease of unmet need contraception. Major determinant unmet need contraception adolescent were knowledge of contraception and authority of the decision maker with a percentage of 60 percent. Meanwhile, the causative factors of unmet need contraception community level were rural residence, cultural norm, stigma/myth and socioeconomic status. All barrier were positively associated with total unmet need for contraception, except socioeconomic status. Major determinant unmet need contraception community level was rural residence with a percentage of 50 percent. The obstacles to reach the health service especially for acces contraception information were observed of 60 % of study population.

Conclusions: Major barriers to the occurrence among adolescents in developing countries the low regarding contraception, decision-making authority, living in the rural area and low access contraceptive information. Therefore, an effective program might needed to meet the needs of contraception adolescents at the individual, community and health system levels in the developing countrie

Keywords: unmet need, contraception, adolescent, developing countries

PP31

Interventions for pain relief during intrauterine contraception insertion - a survey of UK clinicians

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Objectives: The Faculty of Sexual & Reproductive Healthcare (FSRH) is the largest UK multidisciplinary membership organisation, representing more than 15,000 doctors, nurses, midwives and other healthcare professionals. The FSRH Clinical Effectiveness Unit (CEU) conducted a survey of members' experiences with interventions for pain during intrauterine contraception (IUC) insertion to gain a better understanding of what was being offered, when and by whom.

Method: The survey was developed by the FSRH CEU team and asked questions relating to respondent's demographics, places of work, interventions offered by them specifically and by others in their service, and referral processes for alternative analgesia. The survey was advertised in the FSRH Members newsletter and was open for 3 weeks.

Results: A total of 204 respondents completed the survey. The majority of respondents worked in sexual and reproductive health (SRH) services (52.5%) or General Practice (44.1%). Two-thirds of respondents (68.1%) were Doctors, almost one third were Nurses (30.9%) and two were Midwives (1%).

The most common interventions offered were: simple analgesia (eg paracetamol and/or ibuprofen) prior to procedure (95.1%); instillagel (64%); intracervical block (39%) and lidocaine spray (32%).

Simple analgesia and instillagel were commonly offered regardless of service type. In contrast, respondents from gynaecology services, SRH services, and abortion services (62%, 60%, 50% respectively) were more likely to report that cervical block was available as an intervention than those respondents working in General Practice (10%). Lidocaine spray was uncommon in gynaecology services (only reported as being available by 15% of respondents), but was more commonly available in abortion services, SRH services and General Practice (75%, 36% and 26% respectively). Interventions such as general anaesthetic and conscious sedation were not available in SRH services or General Practice.

Respondents that were able to offer simple analgesia, instillagel and lidocaine spray, most commonly offered this for all IUC insertions. Cervical blocks and cervical priming were more likely to be offered to specific groups, rather than routinely offered, and general anaesthetic and conscious sedation were offered only if requested by the patient.

Almost all (94.4%) of respondents reported that if an individual requested an intervention that they were unable to provide, they were able to refer them to another provider. Most commonly, this was a referral to gynaecology (47%) or a sexual health service (36%).

Conclusion: Almost all respondents were able to offer interventions for pain during IUC insertion. The type and frequency of intervention varied depending on the clinical setting.

Abortion - all aspects

P001

After abortion: what does women prefer for contraception?

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1.Objectives: The aim was to understand the trends on women preferences on contraception after abortion, in a central hospital.

2.Method: The authors analyzed clinical records of abortion visits from 2016 to 2021 in CHUA – Unit of Faro. Contraceptive choices after abortion were collected and trends in women preferences were analyzed using Excel®

3.Results: A total of 3345 abortions were analyzed. Overall, we found high post-abortion contraceptive adherence of 97.6% (n=3264), only 2.4% (n=81) of women refused any contraceptive option. In 0.7% (n=25) of cases there was missing data concerning to contraceptive choice. Oral contraception were the choice of 44.9% of women (n=1504), whereas 36% (n=1208) choosed a long-acting reversible contraception (13.8% of the cases (n=464) an intra-uterine device (IUD) and 22.2% of the cases (n=744) an implant); Finally, 13.7% of cases (n=460) chosed other methods (ex. condom); finally, sterilization was an option only in 2.3% of cases (n=78).

4.Conclusions: Integrating contraceptive counselling into the abortion visit helps women prevent unintended pregnancies and contributes to their reproductive health, as we can understand by the overall adherence to contraception in this context. Although the long-acting reversible contraception, intra-uterine device (IUD) and implant, are frequent options as the efficacy is not dependent on compliance, the oral contraception keeps being the main choice of many women.

P002

Risk factors for endometrial deaths in the third trimester of pregnancy. A holistic approach.

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Objectives: There is a plethora of references in the international bibliography regarding correlation of various risk factors and endometrial death in the third trimester, such as gestational diabetes mellitus, preeclampsia, endometrial infections as well as endometrial growth restriction. The purpose of the present study is to analyse demographic and socio-economic factors to draw conclusions on improving health services for pregnant women.

Method: 41 cases of endometrial deaths, after 28 weeks of pregnancy, were studied retrospectively from the archives of the 1st Department of Obstetrics and Gynecology “Alexandra” Hospital, during a 3 year period (2015-2018). The risk factors assessed, were the age, the race (White/Caucasian, Ethnic, Asian and Black), the socio-economic status, smoking, body mass index (BMI), educational level, gestational age, monitoring (or lack) of the pregnancy, and pathology observed during the pregnancy though.

Results: The average age of women was 31 years old, the average of the body mass index (BMI) was 27.4, while most of them were White-Caucasian. The majority of women had a low educational and socio-economic level, 14/41 were smokers, and the mean age of gestation was the 32 week of pregnancy. The gestational preeclampsia was found to be the most important factor for endometrial death as well.

Conclusions: Interpretation of the results showed that low educational level and low socio-economic level were independent risk factors for endometrial third trimester deaths. On the contrary preeclampsia was the leading cause of death.

A global systematic review and meta-analysis of prevalence of repeat induced abortion and correlated risk factors

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Objectives: As a significant public health problem, repeat induced abortion is a severe challenge to women's sexual and reproductive health and is associated with an increased risk of poor maternal and perinatal outcomes in women's future pregnancies. Despite many international studies in this area, there is a lack of consensus regarding the risk factors for repeat induced abortion. A global systematic review was conducted to analyze the prevalence of repeat induced abortion among women worldwide and determine correlated risk factors.

Method: Three electronic databases including PubMed, Embase, and Web of Science Core Collection were systematically searched. Quantitative studies were included if they reported the prevalence of repeat induced abortion and examined its determinants. Two reviewers screened titles, abstracts, and full-text papers using pre-defined inclusion/exclusion criteria independently. Data on the prevalence of repeat induced abortion and related factors were extracted and pooled using a meta-analysis and narrative approach.

Results: Of 3706 articles retrieved from three databases, 65 were included in the study, which included a total of 535308 participants from 25 countries. The overall pooled prevalence of repeat induced abortion was 31.3% (95% confidence interval 25.7%, 36.9%). Of 57 exposures extracted, 33 factors were significantly correlated with repeat induced abortion, comprising 14 individual demographic factors (i.e., age, education, marriage, employment, residence status, race/ethnicity, economic status, unhealthy lifestyle habit, housing tenure, religion, adverse childhood experience, experience of disruptive event in the past year, abortion history of the closest female friend, and emotional support), three reproductive history-related factors (i.e., parity, age at sexual debut, and time since sexual debut), five contraception-related factors (i.e., contraceptive use at sexual debut, preceding the survey, at the time of conception, and after the index abortion, and attitude towards contraceptive use), four abortion-related factors (i.e., age at the index abortion, previous abortion at the index abortion, perceiving abortion procedure as painful, and payment type at abortion), and seven sexual partner-related factors (i.e., multiple sexual partners, sexual partner's age, education, economic status, attitude towards abortion, and acceptance of woman's contraceptive preference, and intimate partner violence).

Conclusions: As the first systematic review in this area from the global perspective, the study findings highlight the problem of repeat induced abortion worldwide and suggest the need for government and civil society in each country to increase efforts to reduce the alarming risk of repeat induced abortion among women and improve their sexual and reproductive health.

“Push and Pull”: The Rocky Road to the Legalization of Abortion in Uruguay

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Objectives: This paper critically examines the discussion process that led to the legalization of abortion in Uruguay, the lights and shadows in the implementation of the new law, and the lessons that can be drawn from this experience. We account for the country's political culture regarding how conflicts are dealt in the Uruguayan public opinion and political party system as well as the role of the different actors who participated in the construction of the agenda.

Method: We draw on the accumulated body of research about the process of abortion decriminalization in Uruguay and the implementation of the law in force. We have reviewed scientific and popular articles published between 2012 and 2020. We consulted official government sources, refereed scientific journal data-

bases, websites of feminist and other social organizations at the national level, academic databases, public opinion surveys, and data from empirical studies we have conducted in recent years. The chapter includes a critical description of the discursive turns, actors, and milestones in the process leading to the adoption of the abortion law, which can be understood as a “push and pull. We discuss how this push and pull—characteristic of Uruguay’s democratic conversations—coexist in the current system.

Results: We show how the decriminalization of abortion first appeared as a demand of the feminist movement to later turn into a wider citizen demand driven by diverse actors and framed in connection to democracy. This shift from feminist demand to citizen’s demand is one of the keys to understanding the complex process of building a political agenda in defense of sexual and reproductive rights, with strong social support, which took place early on relative to other countries in the region.

The argumentative construction of women’s right to abortion as a matter of democracy, equity, and social justice, a public health issue, and a central axis of human rights, was the result of a coalition of actors who united forces to sustain the debate and promote relevant normative and social transformations in this regard. We show that throughout the long and complex process of liberalization of abortion, the pushes were rapidly faced by pulls.

Conclusions: After 15 years of government by the Frente Amplio (coalition of left-wing and center-left parties), a new political era has begun in Uruguay. In this new national and global scenario, it is difficult to predict what will happen to the country’s human rights agenda. However, some current developments allow us to try out hypothetical scenarios. In March 2020, a new coalition of right and center-right parties (Coalition for Change) took office for the period 2020-2025. This happened just a few days before the global pandemic of COVID-19 landed its first case in the country. The emergency created by this new global health scenario—and its consequences at the social and economic level—has generated substantial changes in people’s lives, exposing and worsening pre-existing social inequalities and generating uncertainty about the future.

P005

Changing mifepristone to a normal prescription: effect on abortion rate, method and workforce

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Objective: In Canada, mifepristone became available January 2017. Previously all abortions were provided by physicians, mainly in urban areas, and >96% were surgical. By November 2017 restrictive regulations were removed so that mifepristone could be provided as a regular prescription by physicians and nurse-practitioners (NPs), dispensed by pharmacists, without observed dosing. We investigated trends for abortion rate, method, and workforce, examining all most responsible professionals (MRP) providing abortion in the province with 40% of Canada’s population.

Methods: We defined all medication and surgical abortion events from January 1, 2012 to March 15, 2020, by examining Ontario government linked health administrative data, including practitioner visits, hospital, emergency and ambulatory care admissions, and dispensed pharmaceuticals. For each abortion we identified one MRP. We examined temporal trends and rates for the number and characteristics of MRP, including age, sex, specialty, rural vs urban practice, and abortion method.

Results: Among all 315,447 abortions we identified a MRP for 311,742 (98.3%). The abortion rate remained approximately 11 per 1000 female residents aged 15-49 throughout the study period, while the proportion of all abortions provided by medication increased from 2.2% to 31.4%. In the pre-mifepristone period (2012-2016), the number of providers of abortion each quarter was relatively stable and under 330, with 20.6% providing only medication abortion (‘medication-only’). The number of providers increased rapidly once mifepristone could be prescribed as a normal prescription, reaching 1104 by the end of the study period, with 877 (79.5%) providing ‘medication-only’. By 2020, MRPs were mostly general practitioners (66.5%) with obstetrician gynecologists (O&G) and NPs as 23.2% and 9.1%, of the workforce respectively. For each discipline, the proportion of members providing abortion rose (GPs 0.5% to 1.9%; O&G 11.2% to 15.6%;

NPs 0% to 2.5%). The number of abortion providers working in rural areas rose from 9 to 111 after restrictions were lifted, representing a 12-fold increase, while the proportion of all physicians working in rural areas remained unchanged. Providers' mean age fell 6.9 years. The proportion of female providers rose from 39.5% to 63.4% overall, increasing among 'medication-only' (53.5% to 65.2%) and 'surgical-only' providers (27.1% to 42.6%).

Conclusions: Mifepristone availability without restrictions on distribution, prescribing and dispensing was associated with a rapid increase in rural provision of services. We observed a tripling of the overall number of most-responsible-professionals offering abortion care, while the abortion rate remained stable. New abortion providers were predominantly younger, female, general practitioners.

P006

Analysis on the perception of abortion in Western Romania

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Objectives: To obtain a point of view from the general population regarding abortion on request and the circumstances people believe it represents a good option to prevent an unwanted pregnancy. Our teams working hypothesis was that the general population perceive abortion negative, while those using it have high chances of being stigmatized.

Method: Our prospective questionnaire based investigation used an online questionnaire that was applied to 1642 persons in the period 13.08.2020-04.02.2021. The inclusion criteria was that participants replied to all of the questions. A statistical analysis was performed on the Excel2016 obtained data using Epilnfo7.

Results: From the 1642 included questionnaires, 1438 responders were female (87.6%), 83.6% were in the age groups (20-39 years of age), 1039 (63.3%) were living in an urban environment and 53.5% had university studies, 56% (919) were employed, 79.4% declaring themselves as attending the orthodox church. The repliers expressed their disapproval with abortion- 66% (1082), considering it a crime- 66.8% (1095) and not willing to offer support to a person undergoing abortion- 62.5% (1024). The majority of the repliers declared to know both medical complications- 81.4% (1334) and psychological ones- 75.2% (1232) and believe that the father should be involved in the decision- 55.1% (903), as he might be psychologically affected as well- 70.5% (1156), although he would pass over the consequences easier- 57.6% (944). Regarding the effects on the couple's life, 82.6% thought that the abortion could affect it and can lead to break-up. 42.3% (694) were in favor in interdicting the abortion, while only 38.7% (634) sustained that women could appeal to abortion if needed. 19.5% (319) would undergo abortion for an unwanted pregnancy, while 60% (982) would not; 73.6% (1206) would not perform abortion due to the low incomes, while 55.4% (908) would not request abortion for an underage person. In case of sexual abuse, only 40.6% (665) would agree with abortion. Even if the pregnancy could be dangerous for the mother, only 58.6% (960) would agree with the medical abortion. 83.2% of the repliers (1364) would want better information (video information) about the abortion before the procedure. Feeling ashamed because of the abortion was present in 26.5% (435) of the responders, while considering it a sin- 72.4% (1187). In case of a spontaneous abortion 67.9% (1113), people will not feel any guilt, as for fetal severe malformations, they would appeal to abortion in 38.3% (628) of the cases. Psychotherapy would be consider by 81.8% (1341) after an abortion, while 94.7% (1552) would be in favor for better educational campaigns to reduce abortions amongst teenagers.

Conclusions: Our study offers a very good image of how people perceive abortion and related topics in Western Romania. Although responders are against abortions in most of the situations, our country has the highest number of abortion in the European Union.

P007

Experiences seeking, sourcing, and using abortion pills at home in the United States through an online telemedicine service

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1. Objectives: A growing number of people in the United States seek to self-manage their abortions by self-sourcing abortion medications online. Prior research focuses on people's motivations for seeking self-management of abortion and experiences trying to obtain medications. However, little is known about the experiences of people in the U.S. who actually complete a self-managed abortion using medications they self-sourced online.
2. Method: Between May 2019 and August 2019, we conducted anonymous in-depth interviews with a unique sample of 80 U.S.-based individuals who sourced abortion medications online using Aid Access, the only online telemedicine service that provides abortion medications in all 50 U.S. states. Participants were asked about their experiences of searching online for abortion medications for self-management, using those medications at home, and the post-abortion experience. All interviewees provided verbal informed consent to participate in an audio-recorded interview. Transcripts were coded and analyzed according to the principles of grounded theory.
3. Results: Five key themes emerged from our analysis: 1) In the midst of limited options, participants viewed Aid Access as a "godsend"; 2) ordering pills online was often a "nerve-racking" experience; 3) a "personal touch" calmed fears and fostered trust in Aid Access; 4) participants were worried about the "what ifs" of the self-managed abortion experience, but most were a part of any medication abortion experience; and 5) overall, participants felt that online telemedicine met their important needs.
4. Conclusions: Before the launch of Aid Access, U.S. residents had no options for accessing abortion medications through online telemedicine. Our findings demonstrate that online telemedicine provided by Aid Access not only fills a critical gap in abortion access in the U.S. by providing a supported method of self-managed medication abortion (SMMA) in lieu of costly in-clinic care and ineffective or unsafe methods, but also offered care that participants deemed trustworthy and high-quality. We are still a long way from equitable access to abortion, however. Several important needs remain, including widespread information about the option of SMMA through online telemedicine, affordability, safety from criminalization, destigmatization, and supportive engagement from the formal healthcare setting.

P008

The economic context of choosing online medication abortion in the United States

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Objectives: Access to in-clinic abortion has become increasingly restricted in the U.S. and for many, the high cost of care is a significant barrier. However, little is known about how financial circumstances shape the alternate pathways to abortion care people seek when the clinic is out of reach.

Methods: In a unique sample of people who used medication abortion pills from Aid Access, a non-profit online telemedicine service, we examine the impact of economic circumstances on abortion care pathway decision-making and experiences seeking care. Between June and August 2019, we conducted 80 anonymous, semi-structured in-depth interviews with U.S. residents who self-managed their own abortions using medication abortion pills (mifepristone and misoprostol) from Aid Access. Participants were asked about their experiences seeking abortion, and their motivations for using the service. We coded interviews using an iteratively developed coding guide and performed thematic analyses to identify key themes.

Results: The unaffordable cost of in-clinic abortion was a key reason why participants sought care using online telemedicine. Experiences of personal financial hardship exacerbated by restrictive policies impacted participants' ability to access the clinic. For participants with children, their financial decisions were further guided by the concerns of providing economic stability for their family. Although telemedicine was considered more affordable than in-clinic care, for some, the suggested donation of \$90 still posed a financial burden and accessing pills at no cost or a reduced cost was necessary.

Conclusions: These results illuminate the need for interventions increasing equitable access to both telemedicine and in-clinic abortion care. In 2021 alone, ninety abortion restrictions have been enacted in state legislatures across the United States, including an unconstitutional 6-week abortion ban in the state of Texas. Given this increasingly restrictive policy climate in the U.S., it is likely people will continue to turn to online telemedicine services for medication abortion, and it is key that this option is affordable. Reducing the cost of broad spectrum sexual and reproductive healthcare can alleviate the financial burden of having an ultrasound or seeking after care for those using telemedicine services. Additionally, policy interventions

addressing Medicaid and insurance coverage for abortion would significantly reduce the cost for those seeking in-clinic abortion care. With United States Supreme Court set to hear a direct challenge to *Roe v. Wade*, it is critical that researchers continue to study these models of abortion care, and policymakers work to legislatively protect and expand access.

P009

Medical abortion in Italy: an update

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In 2020, during the COVID-19 pandemic, the Italian Minister of Health approved the new guidelines concerning early medical abortion, authorizing the procedure also in outpatient regime and extending the limit from 7 weeks gestation to 9 weeks. Lazio was the only region that implemented these new indications. The purpose of the study is to analyze the application of the new procedures and to highlight the major difficulties.

P010

Permeability of abortion care in the Netherlands: a qualitative analysis of women's experiences, health professional perspectives, and the internet resource of Women on Web

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1 Objectives: Despite a relatively tolerant abortion law, women in the Netherlands encounter difficulties in accessing abortion care. Little is known about their experiences. This study explores women's experiences with (online) abortion services and the experiences of relevant health professionals delivering care, with the goal of identifying the main barriers encountered by abortion-seekers in the Netherlands.

2 Method: An exploratory qualitative research design with a constructivist approach and an grounded theory method was used. Interviews were conducted with 20 women who had an abortion and 14 health professionals who provide abortion care. 200 emails of women seeking abortion care through the non-governmental organization Women on Web, were analyzed. Open, axial and selective encoding of the data generated themes.

3 Results: Abortion-seekers faced barriers including: (i) burden of taboo, (ii) vulnerability (emotional, financial, and social), (iii) evaluation by health professional and (iv) disempowerment and fear. The overarching theme was women's lack of autonomy in accessing abortion care.

4 Conclusions: The key barriers to abortion access in the Netherlands are the institutionalization of taboo in abortion law and care, complex candidacy regulations, lack of accessibility for certain marginalized groups, and the inability of women to speak openly about abortion. To increase the accessibility of abortion care, and thereby women's autonomy, legislators and policy-makers must trust women to make their own reproductive decisions and avoid actions that stigmatize abortion and hinder access to care, while actively developing systemic support for vulnerable groups.

P013

Navigating the Minefield: Women's Experiences of Abortion in a Country with a Conscience Clause—The Case of Croatia

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Objectives: Many countries around the world have a conscience clause allowing physicians and health care providers to opt-out of performing abortions. This practice of conscientious objection to abortion care affects both healthcare providers and women's access to abortion care. In Croatia, a conscience clause was introduced in 2003. Nonetheless, women's experiences of abortion after the introduction have not been previously studied. The aim of our study was to explore women's experiences of abortion and conscientious

objection in a country with a conscience clause.

Method: The study has a qualitative inductive and explorative design. In depth interviews were performed with seven (7) women in Croatia with experience of an unwanted pregnancy or abortion. The interviews were analyzed using thematic content analysis.

Results: Our findings revealed one overarching theme: 'Navigating the minefield—women's experiences of abortion in a country with a conscience clause' and three categories: 'Experiencing abortion—to endure a vulnerable situation,' 'The conscientious objection in practice—causing obstacles and stigma,' and 'Views on abortion—socio-cultural and religious influence'. The women perceived the abortion decision as being difficult and expressed feelings of shame, guilt, and fears of being judged in line with the general attitude toward abortion in society. They described the conscientious objection as having consequences in public healthcare limiting their access to abortion care and affecting treatment in terms of i.e. derogatory comments, limited or lacking information about the abortion procedure and/or absent contraceptive counseling post abortion. According to the women, a shift towards more conservative ideas towards abortion seem to have taken place in the Croatian society. The conscientious objection was believed to reinforce a moralizing view of sexuality, where the women's decisions regarding abortion became a collective concern causing stigma and involuntary social alienation.

Conclusions: The conscientious clause made the women feel they had to navigate a 'minefield,' where their dependency situation and vulnerability in the abortion situation were reinforced by social stigma.

P014

General practitioner perspectives and experiences in delivering early medical abortion services to women from culturally and linguistically diverse backgrounds

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OBJECTIVES: Women from culturally and linguistically diverse (CALD) backgrounds have higher unintended pregnancy rates than Australian-born women and underutilise sexual and reproductive health services. Women commonly seek the counsel of general practitioners (GPs) for sexual and reproductive health concerns, making GPs ideally placed to deliver early medical abortion services. However, little is known about how GPs should best deliver this care to women from CALD backgrounds. Our aim was to explore GP perspectives and experiences in relation to providing early medical abortion services to women from CALD backgrounds and how to improve the delivery of such care.

METHOD: We undertook a qualitative study involving semi-structured, audio-recorded telephone interviews with 18 GPs across Australia who provide early medical abortion to women from CALD backgrounds in the general practice setting. GPs were purposively sampled using three strategies: email invitations to publicly listed GP medical abortion providers, social media posts on a special interest Facebook group, and participant referral. Following verbatim transcription, data were managed in NVivo software. Reflexive thematic analysis by two coders was used to develop themes and subthemes, categorised according to the Capability-Opportunity-Motivation Behaviour (COM-B) model.

RESULTS: GPs experienced challenges in communication and cultural competency as a result of insufficient training, lack of multilingual resources, and organisational constraints in effectively using interpreter services. Additionally, inadequate government reimbursement for early medical abortion consultations, which contributes to high out-of-pocket costs for women, was identified as a financial impediment to care because women from CALD backgrounds tend to be more socioeconomically disadvantaged than the general population. Despite these challenges, GPs believed they were ideally positioned to provide early medical abortion to women from CALD backgrounds since their embeddedness within CALD communities facilitates the building of trusting relationships with their patients.

CONCLUSIONS: Up-skilling of GPs in the provision of culturally competent care and cross-cultural communication, multilingual early medical abortion patient education resources, and efficient systems for interpreter use are required to optimise early medical abortion delivery to women from CALD backgrounds. Further exploration of incentivising service provision is required to offset financial barriers to patients.

P015

Curriculum development and teaching of abortion care in German medical schools: a situational study

Kristin Marquart, Céline Miani

1. Objectives: In a challenging legal and cultural context, access to abortion services is increasingly difficult in Germany. One of the barriers to access is the declining provision of abortion services, with fewer providers each year available to perform abortions, and even fewer able to offer a range of abortion methods (e.g. surgical and medical abortion). Part of this shortage may be due to the way abortion care is taught (or not taught) in medical schools, and to how societal factors influence curriculum development.

2. Method: We conducted semi-structured telephone expert interviews with 6 persons involved in the design or the teaching of the curriculum in German medical schools. We used situational analysis to map the actors and interpret discourses, and content analysis to describe the interview data.

3. Results: The interviewees were a mix of curriculum and teaching professionals (gynaecologists). It was obvious that abortion care has not been seen as an important topic for teaching in medical schools in recent years. Our data clearly showed that the development of the curriculum is highly dependent on the people in charge and on the interests of the teaching staff. The presence or absence of abortion care teaching is influenced by the debate surrounding abortion in the society. Legal constraints and social stigma are hurdles that future providers have to deal with. Only an emphasis on comprehensive teaching can equip them with the tools to do it with confidence – something that is missing at the moment, because abortion care is only marginally taught. Suggestions included teaching abortion care through different dimensions, from ethics and legislation down to counselling for unplanned pregnancies and the range of abortion methods. All interviewees thought that abortion care basics should be taught as part of the general curriculum. To support independent decision-making and dealing with abortion care with confidence, almost all saw the need to teach it extensively.

4. Conclusions: This study exposed clear shortcomings in the teaching of abortion care in Germany and re-situated the question of curriculum development and teaching within the wider societal debate on abortion. There is a missed opportunity for medical schools to ensure future supply of abortion care.

P016

Understanding the Experiences of women and pregnant people in Europe who travel outside of their home country for abortion care

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Objectives: Evidence suggests that cross-country travel to access abortion care is a necessity in Europe, even for those living in countries with relatively liberal abortion laws. Research on the topic of abortion travel in Europe has primarily focused on those who travel from countries with restrictive abortion laws, and little is known about the experiences of women and pregnant people who travel from countries with more liberal laws (France, Germany, Italy, etc.). This abstract describes the experiences of those who travel to the UK, the Netherlands, and Spain for abortion care from countries with relatively liberal abortion laws.

Methods: Respondents were recruited to participate in a study about their current pregnancy, care seeking, and travel experiences. Participants completed an electronic survey and/or participated in an in-depth interview at clinic sites in the Netherlands, the UK, and Spain. As data collection in Spain is on-going, surveys collected at clinic sites there are not analyzed in this paper.

Results: 204 women and/or pregnant people who traveled for abortion care to the UK and the Netherlands from EU countries with relatively liberal laws participated in our study. Participants traveled from Germany (56.4 %), France (23 %), Italy (7.8 %), Belgium (6.4%), Austria (3.4%), Denmark (2%), Bulgaria (0.5%), and Luxemburg (0.5%). On average, participants confirmed their pregnancy at 13-weeks gestation, and presented for care at 17.9-weeks gestation. Eighty percent of participants reported their main reason for travel was because it was too late for them to have an abortion in their home country. Participants traveled an average of 6 hours (one-way) to the clinic where they obtained their abortion. Fifty-nine percent of participants indicated that their trip required an overnight stay, and 35% reported difficulty meeting the trip's cost. On average, participants spent €262 on transportation costs, €324 on accommodations, and €898 on the abortion procedure. Sixty-six-percent of participants reported difficulty covering the cost of their treatment, and 43% reported difficulty covering the cost of travel.

Conclusions: Despite relatively liberal abortion laws in countries like Italy and France, legal, social and procedural barriers compel women and pregnant people to seek abortion services outside their home country. The main barrier that participants identified to accessing abortion services in their home country was gestational age limits. The time and cost associated with abortion travel are substantial, and represent a significant burden to women who must leave their home country in order to access abortion services.

Contraception – all aspects

P019

Perspective of General and Family Medicine doctors on contraception in adolescence

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Objectives Adolescents are a priority intervention group in reproductive health. Family planning appointments should address sexuality in an integrated manner, in a private and confidential environment, capable of promoting free and informed choice. Age alone does not constitute a contraindication for the use of any contraceptive method, all of which are eligible in healthy adolescents. The objective of this essay is to identify the preferences, opinions and difficulties that General and Family Medicine doctors face in contraceptive counselling in adolescence.

Method Descriptive prospective study based on an online questionnaire carried out by General and Family Medicine doctors. Statistical analysis through Microsoft Excel.

Results Preliminary results (n=47) reveal that the majority of the participants are female (70%), aged between 25 and 34 (94%) and with less than 5 years of experience (70%).

Regarding the number of hours per month dedicated to Family Planning, 40% dedicate less than 5 hours, 40% between 5 and 10 hours and 20% more than 10 hours. The vast majority (>90%) of the practitioners places an average of less than 5 subcutaneous implants or intrauterine devices per consultation period.

As for contraceptive counselling in adolescence, the majority (>70%) of participants refer feeling comfortable addressing the issue, approaching all contraceptive methods including long-acting reversible contraception (LARCs), addressing non-contraceptive beneficial effects and also sexually transmitted infections and the importance of dual protection; however, more than 20% of participants consider that their knowledge is not up to date regarding contraception in adolescence.

As for LARCs, 72% reported technical capacity for subcutaneous implant placement, while only 57% considered themselves able to place intrauterine devices. As for the appropriate methods for adolescents, 11% mention natural methods, 92% barrier methods, 94% combined hormonal contraception, 55% oral progestin alone, 28% injectable oral progestin, 94% subcutaneous implant, and 47% intrauterine devices.

As for the concerns in this age group, the fear of adverse effects and low adherence with combined oral contraception and progestin alone as well as low adherence with barrier methods should be highlighted. Also important mention that intrauterine devices are considered inadequate in this age group by more than 20% of participants.

Conclusions The adolescent population continues to be a challenge when choosing a contraceptive method, sometimes at the expense of some misconceptions associated with long-term methods and hormonal contraception at young ages. In this sense, it is crucial to update knowledge and demystify false concepts by all professionals involved in contraceptive counselling in adolescence.

P020

Management of unscheduled or irregular bleeding in etonogestrel implant users: the gynecologist perception

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1. Introduction and Objectives: The most common side effect of the etonogestrel implant is unscheduled or irregular, uterine bleeding, reported by approximately 11% of users in the initial safety trial. This is the primary reason for discontinuation, with a rate of 14.8% in Europe.

Treatment of unscheduled bleeding is not necessary, but since bleeding disturbances are the principal cause of discontinuation, several approaches to their treatment have been used. There are no comparisons of the efficacy of the different treatment options for unscheduled bleeding, so the optimal treatment strategy is not known.

Our study aims to identify which therapeutic strategies are used by gynecologists to treat abnormal or unscheduled bleeding in etonogestrel implant users and assess its perception of efficacy.

2. Methods: Prospective descriptive study based on analysis of data collected from an online inquiry to Gynecologist concerning therapeutic options in irregular or unscheduled bleeding in etonogestrel implant users. The analyzed variables include sociodemographic from practitioners, therapeutic strategies used in these situations, perception of its efficacy and acceptance as well as discontinuation of the method. Statistical analysis through Microsoft Excel.

3. Results: Preliminary results (n= 64) show that the majority of the practitioners enquired were female (81.3%). Most of them were specialists in Gynecology and Obstetrics (21.9% for less than 5 years, 15.6% between 5 and 10 years, 40.6% for more than 10 years) and work in Lisbon (93.8%).

The most used strategy is expectant management (78.1%) followed by combined oral contraception (76.6%), ibuprofen (54.7%) and oral estrogens (32.8%). Therapies like tamoxifen and mifepristone have never been used. The most effective strategies according to the perception of the gynecologists are expectant management and combined oral contraception. Most of the methods used are fairly accepted by the patients. Nevertheless, only 25% of the practitioners think that less than 10% of the users discontinue etonogestrel subcutaneous implant use.

4. Conclusions: Although there are a lot of strategies that can be used to control unscheduled or irregular bleeding in etonogestrel implant users, there seems to have still a lack of efficacy (perceived by the practitioners) which affects the continuation of the method.

P021

Postpartum contraception: women's motivation and concerns - results of a survey.

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Objective: To determine women's motivation for or against contraception and their concerns in the postpartum period.

Method: Descriptive study based on an online questionnaire implemented at the Bissaya Barreto Maternity Unit, Coimbra University Centre, six weeks after delivery. The main outcomes were the initiation of sexual intercourse after delivery, breastfeeding status, current contraceptive method and concerns about the introduction of a contraceptive method in the postpartum period. Statistical analysis was conducted using SPSS v26.

Results: A total of 45 women were included in the study and completed an original questionnaire. 60% (n=27) of the women had already started sexual intercourse in the first six weeks after delivery. The main reason for not starting sexual activity was that they were waiting for a postpartum appointment (50%) or were afraid of sexual intercourse (22%). 60% were exclusively breastfeeding and 24.4% were bottle feeding. The majority (71.1%) were taking an oral, isolated progestogen as a contraceptive method. Most started it about 2 to 3 weeks after birth (85.3%) and only one woman started the method immediately after birth. 15.6% (n=7) had no contraceptive method, mainly because they had not yet had sexual intercourse (36.4%). The biggest concern about contraception in the postpartum period was whether it was safe for breastfeeding and the newborn (54.1%), followed by the effectiveness of contraception (21.6%). 82.2% of women were counselled about postpartum contraception at the postpartum medical examination before discharge from hospital. Only 6.6% were advised on contraception during antenatal care.

Conclusions: Most of these women were counselled on contraception in the postpartum period and began having sexual intercourse before the postpartum appointment. Postpartum contraception with isolated progestogens could be initiated immediately after delivery, but most obstetricians recommended it 2 or 3 weeks after delivery. It is important to emphasize that antenatal visits provide an opportunity to make an informed decision about postpartum contraception by health care providers.

P022

Women refuse hormones, what should we do?

Anne Verougstraete

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In our daily practice, we see a growing group of young women refusing all hormonal contraception. They refuse to “intoxicate themselves” with hormones, are persuaded that hormones ruin their libido, flatten their emotional life and in the end will cause infertility, cancer and thrombotic disease. Trendsetting feminist journalists encourage women to feel the effect of their own hormones on their bodies, the natural mood changes during the cycle with their sky-high ups and deep-downs.

They choose healthy lifestyles, eat organic or vegan food, and hormones just don't fit in that picture.

They refuse to “intoxicate the planet” with hormonal pollution that causes feminization of fish.

They want natural contraception!

The most effective and easiest choice is Copper IUD (several small types exist for nullipara, GyneFix is also an option for women who expelled IUD's).

Another option is condom use, but consequent and consistent condom use is difficult!

Some just start to use Apps found on the internet, but most of these Apps give bad advice and end up with an unwanted pregnancy! Some Apps have better results (and some are validated by the FDA with a Pearl Index:7). A symptothermal method that needs coaching during several cycles exists with good results for highly motivated couples (Pearl Index: 1,8).

Women have the right to choose a less effective method and have an abortion if that method fails.

Doctors and Family Planning Centers are reluctant to discuss these methods, but women are using them! so should we not be able to explain and coach natural family planning, so that these methods have the best possible efficacy?

P023

Complex feelings: Attitudes towards pregnancy in adolescent and young adult contraceptive implant users.

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1. Objectives: to describe attitudes towards pregnancy in young (19-24) and very young (≤ 18) users of contraceptive implant users.

2. Method: Adolescents and young adults visiting participating clinics for contraceptive services who selected the Nexplanon implant as their method of choice were eligible to enroll in the study. Participants were provided with a free device, participated in a baseline survey, and were followed for surveys at 1-, 3-, 6-, and 12-months post baseline. Participants received compensation for each survey they provided. The present study uses enrollment data from 192 participants. We use descriptive statistics, and multivariate regression analyses to (1) describe pregnancy timing intentions and (2) attitudes towards a hypothetical pregnancy in the near future.

3. Results: Average age of participants was 19.75, ranging from 15 to 25. 29 % of AYA stated they did not plan on getting pregnant at any point in the future, 19% would like to get pregnant in the next 2-5 years, and 39% would like to get pregnant in the next 6-10 years. 14% do not know if or when they would like to get pregnant. Among the 189 participants who responded to the feeling thermometer of how they would feel about getting pregnant in the next month, the mean (on a scale of 0 (worst feeling) to 100 (best feeling) was 18.7 (sd. 21.1). We find significant differences ($p < 0.5$) in the confidence intervals across pregnancy intention category, race/ethnicity education, sexuality, and religiosity. In multivariate regressions, where we account for these covariates, we find that net of race, education, sexuality, and religiosity, those who desire a pregnancy in the next 2-5 years feel significantly more positive towards a hypothetical pregnancy in the next month. While there are no significant differences by sexuality, religion, or educational level, we find that compared to LatinX participants, white users of the contraceptive implant felt more negatively towards a hypothetical pregnancy.

4. Conclusions: Among young and very young users of contraceptive implants, we find that only race and participants' pregnancy timing intentions were associated with feelings about a hypothetical pregnancy in the near future. Our findings show that among young and very young LARC users, there is a great diversity of pregnancy intentions and attitudes towards pregnancy.

Conflict details: Merck provided funding for contraceptive implants and participant compensation. RG, SE and AG receive compensation for their work on the study (grant # 60340). CG has no conflict of interest.

P024

Does low income impact contraceptive use in a context of full health insurance coverage for precarious women?

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Background: To promote their sexual and reproductive health and rights, women need full access to contraception and choice of contraceptive method. Precarious women may have difficulties in accessing contraception even in developed countries with widespread health insurance coverage. It is difficult to explore this issue through national surveys that often include too few precarious women. We aimed to compare contraceptive use among precarious and non-precarious women based on the exhaustive French health insurance database.

Methods: The French health insurance database covers 98% of the population living in France and includes all healthcare reimbursements. Contraceptives are partly reimbursed by the national health insurance. For people in a precarious situation, they are fully reimbursed by a specific system called universal health coverage. We selected all women aged 15–49 years living in metropolitan France in 2019. We compared the prevalence of use of each contraceptive method: pill, hormonal intra-uterine device (IUD), copper IUD and implant, between precarious and non-precarious women.

Results: Among the study population of 14 million women, 11% were in a precarious situation. Fewer precarious women used contraceptives (31%) than non-precarious women (44%, $p < 0.001$). When using a contraceptive, precarious women used a different method than non-precarious women: under the age of 30 years, they used the pill much less and implants more often; above 35 years, they used hormonal IUDs less often and the pill and implants more often.

Conclusions: Although in France contraceptives are fully reimbursed for precarious women, they used fewer and different contraceptives than non-precarious women. Social inequalities may exist even in such a favorable national context. Further research should explore barriers that precarious women may encounter in accessing and choosing their contraception.

P025

Effect of a short course of combined oral contraceptive pill on ovarian reserve markers

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Objectives: There have been contrasting data on the effect of hormonal contraceptives on ovarian reserve markers such as serum anti-Müllerian hormone (AMH) level or antral follicle count (AFC), although some of those reports were from cross-sectional studies or cohorts with small sample size. This study evaluated the effect of a one-month course of combined oral contraceptives (COC) on serum AMH level and AFC by longitudinal comparison.

Methods: This is a secondary analysis of a previous randomised trial comparing the performance of AMH and AFC in predicting ovarian response in women undergoing in vitro fertilisation (IVF) treatment. There were 196 women who received a one-month course of COC (comprising ethinyl-estradiol 30 microgram and levonorgestrel 150 microgram) after a baseline assessment of serum AMH and AFC in the month preceding IVF treatment; both measurements were repeated on the day of commencing ovarian stimulation. The COC was used mainly for the purpose of cycle scheduling. Serum AMH was measured by an automated chemiluminescence immunoassay (Access AMH assay, Beckman-Coulter). Data were presented as median (25–75th percentile) and compared by Wilcoxon signed-rank test.

Results: Overall, there was a significant reduction in AMH from 2.56 (1.40 – 4.08) ng/ml to 2.09 (1.35 – 3.50) ng/ml ($p < 0.001$), and in AFC from 11 (7–15) to 10 (6–14) ($p = 0.007$), after COC treatment.

After sub-categorisation according to their pre-COC AMH level (group 1: ≤ 1.0 ng/ml; group 2: 1.0 – 3.3 ng/ml; group 3: > 3.3 ng/ml), a significant reduction in AMH was evident only in group 2 [2.15 (1.56 – 2.61) ng/ml vs 1.74 (1.35 – 2.20) ng/ml; $p < 0.001$] and group 3 [4.84 (3.81 – 6.48) ng/ml vs 4.04 (3.01 – 4.80) ng/ml; $p < 0.001$] but not group 1 [0.55 (0.26 – 0.71) ng/ml vs 0.55 (0.34 – 1.08) ng/ml; $p = 0.061$]. After sub-categorisation according to their pre-COC AFC (group 1: ≤ 5 ; group 2: 6-15; group 3: > 15), a significant reduction in AFC was observed only in group 3 [19 (17-23) vs 17 (14-21); $p = 0.002$] but not in group 1 [4 (3-5) vs 4 (3-5); 0.306] nor group 2 [10 (8-13) vs 9 (7-13); $p = 0.163$].

Conclusions: Even a short course of COC for a month may significantly influence AMH and AFC measurements, although the effect is mainly affecting those with normal or high ovarian reserve. Hence, measurement of AMH or AFC should preferably not be conducted while the woman is using COC.

P026

The renaissance of barrier contraception (based on the data from an international clinical trial)

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In recent years, interest in the use of barrier methods of contraception has increased, since many women prefer them in connection with the change in the epidemiological situation associated with COVID-19. In addition, these methods of contraception are preferred for breastfeeding mothers and pre- and postmenopausal women. Studies of the efficacy of spermicidal agents in late reproductive age women have not previously been carried out, although their use in this population is of particular interest, since these agents do not have a systemic effect and, if used correctly, can prevent unwanted pregnancies.

Aim. Assessment of the contraceptive efficacy, safety and acceptability of a cream containing benzalkonium chloride in women over 40 years of age.

Materials and methods. The study included non-pregnant women aged 40 and over who had at least 1 menstrual period in the past 3 months and who would like to use spermicides as contraception for at least 6 months. After a 6-month period of mandatory use of spermicide, patients could, if desired, continue to use it for the next 6 months. All women were given Pharmatex (1.2%), a vaginal cream containing benzalkonium chloride (1.2 g per 100 g of cream) as the active ingredient, 1 standard dose before each intercourse. The primary endpoint was the Pearl Index. The acceptability of the method after each use of the cream, the moisturizing effect, and the woman's and researcher's overall satisfaction with this method of contraception were also assessed. Safety was assessed using adverse event monitoring. Results. An analysis of efficacy of the study drug showed that during study, pregnancy did not occur in any of the women. Pearl Index for 12 months was 0. Over the mandatory 6-month period, the use of Pharmatex cream was assessed by patients as acceptable (to some extent acceptable, acceptable, completely acceptable) in 98% of sexual intercourse, and over the 12-month period – in 98.6% of intercourse. The moisturizing effect of the cream was noted by 96.1% of women. In 6 months of the use of Pharmatex cream, overall satisfaction was rated as quite good, good, or very good by 99.3% of patients and in 12 months – by 100% of patients. Adverse events were noted only in 0.5% of cases. Most of these events were assessed as unrelated to the study drug.

Conclusion. The use of a benzalkonium chloride spermicidal cream can be considered an effective and acceptable method of contraception for women over the age of 40. It is well tolerated, has a moisturizing effect on the vaginal mucosa, and meets the needs and lifestyle of women. The contraceptive with benzalkonium chloride has a favorable safety profile: it does not adversely affect the normal flora of the vagina, can be used during breastfeeding, since it does not penetrate into the vascular bed and doesn't have systemic effects.

Real life data of a Estrogen Free Drospirenone (=DRSP) Pill in the Czech and Slovak Republics.

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Background: Progestin-only pills do not increase the risk of venous thromboembolism, stroke, and myocardial infarction but are associated with poor cycle control, weight gain, development of acne and high dropout rates due to irregular bleedings. A novel estrogen-free pill containing only drospirenone (DRSP) to improve these side effects and the tolerability and reduce discontinuation rates has been introduced into the market.

Objective: The present survey aims to describe the improvement in the acceptability of this estrogen free DRSP pill e.g., regarding the bleeding profile, the reduction in discontinuation rates due to unacceptable bleeding and the evolution in factors like weight, acne, and blood pressure in a representative population in the Czech and Slovak Republics.

Material and Methods: Between 04/2020 – 04/2021 five hundred and fifty (550) (CZ/SK) women received during at least 6 months a contraceptive containing 4 mg DRSP in a 24/4 regimen. They were evaluated before and after the 6-month treatment. Bleeding intensity, weight, acne, blood pressure, dysmenorrhea, discontinuation rates, upon others, were evaluated.

Results: The intensity of bleeding decreased by 50 %. In the 100-point bleeding score a decrease from an average of 43 before use to 21 after six cycles was observed. No weight change (remained at an average of 66 kg) or BMI change (the proportion in each category <25, 25-30 and > 30 kg / m² remained similar) was described. Women with mild acne reported improvement in two - thirds of the cases, with moderate in almost 90 % and severe in 50 %. In women with borderline hypertension a tendency to decrease in blood pressure (from an average value of 132/82 mm Hg to 124/78 mm Hg after six cycles) and no BP change in normotensive women (mean value 115/72 mm Hg) as is described. A significant improvement in dysmenorrhea was observed (before treatment of use 49,5 % of the patients suffered from dysmenorrhea, after six cycles 82.6 % had no dysmenorrhea).

Conclusions: 4 mg DRSP estrogen free pill shows a very high acceptability in real life under women in the Czech and Slovak Republics with high non contraceptive benefits like blood pressure, acne, and dysmenorrhea improvement in combination with a low discontinuation rate of only 22,5 % that is similar or even better then under the use of COC.

Acceptability of different mechanisms of action of contraception in women: a questionnaire survey

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Objectives: The mechanism of action of a contraceptive method is an important consideration in a woman's choice of contraception. For the development of new methods of contraception it is important to understand the acceptability of different contraceptive mechanisms within a population. We conducted the current study to investigate the acceptability of women in Hong Kong to various contraceptive methods with different posited mechanisms of action in the general family planning setting.

Methods: We recruited women attending contraceptive, termination of pregnancy or postnatal care services

in Hong Kong for a questionnaire survey on their acceptability of the different ways in which contraceptive methods prevent pregnancy. Univariable and multivariable analyses were used to establish factors which may predict acceptability of the mechanism of action.

Results: A total of 1448 women completed the survey. The acceptability of contraceptive methods that act by preventing fertilisation ranked highest (78%), followed by those that inhibit ovulation (52%), disrupt implantation (43%) and dislodge an implanted embryo (30%). A history of termination of pregnancy was associated with greater acceptance of all posited contraceptive mechanisms. There was a very low degree of agreement between the declared acceptance of the various contraceptive mechanisms and the ever use of a method with the respective mechanism of action (Cohen's kappa coefficient range 0.017–0.162).

Conclusions: In this population the acceptability of contraceptive methods that act by preventing fertilisation ranked highest, followed by those that inhibit ovulation, disrupt implantation and dislodge an implanted embryo. Women who had ever had a termination of pregnancy were more likely to accept all the posited contraceptive mechanisms. There is low degree of agreement between acceptance of a particular contraceptive mechanism and the actual use of methods acting by the respective mechanism.

P029

Cardiovascular Safety of the progestin-only pill containing 4 mg drospirenone in a 24/4 regime

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Pedro-Antonio Regidor

Context: After approval by the FDA and several European authorities, the new progestin-only pill containing 4 mg drospirenone has been marketed on the US market in fall 2019 and in the first European countries in spring 2020. During the clinical development of the pill, the safety profile with a special focus on the cardiovascular risk profile has been evaluated extensively.

Objective: To develop a new contraceptive method with 4 mg non-micronized drospirenone that combines a high efficacy and a profile with low cardiovascular risk.

Methods: Three Phase III studies has been performed: 2 in Europe and 1 in the US. These studies investigated in over 25,000 cycles the efficacy of drospirenone 4 mg and its possible cardiovascular risk profile.

Patients: Women of child-bearing age (18 to 45 years) were recruited. About 41.9% and 16.6% of the patients displayed at least one risk factor for venous thromboembolism.

Main Outcome Measure: Incidence of venous or arterial thromboembolic events (VTE / ATE), hemostasiological data, blood pressure and ECG data was collected and analyzed.

Results: In all three studies, no single case of VTE was documented. Hemostasiological parameters remained unchanged. In patients with baseline values between 130 and 140 and/or 85 to 90 mm HG a small decrease in RR was observed., while no change was found in normotensive patients. There was no influence on ECG parameter.

Conclusion: The clinical trials document a very high cardiovascular safety profile. Hence, the new estrogen-free oral contraceptive with non-micronized drospirenone in a dose of 4 mg and 24/4 regime expands the options for contraception for women, even for women with cardiovascular risk factors.

Conflict details: Pedro-Antonio Regidor and Enrico Colli are employees of Exeltis

P030

Observational study to assess the acceptability and bleeding profile of Drospirenone 4 mg in a 24/4 contraception use regime (Slinda®, Exeltis HealthCare) after six months of use. EXELINDA Trial.

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Objectives: The primary objective was to assess the acceptability of drospirenone 4 mg after six months of treatment, and the secondary objectives were to describe the bleeding profile and assess the tolerability of the drug.

Method: Observational, retrospective, multicenter study of drospirenone 4 mg (Slinda®) under approved conditions of use and following the usual clinical practice. Inclusion criteria: premenopausal women >18 years of age who started treatment with drospirenone 4 mg at least 6 months before the recruitment visit. Exclusion criteria: severe, acute, or chronic illness, gynecological conditions, hematological diseases, history of thrombo-embolic episodes, use of products inducing microsomal enzymes, or enrollment in another clinical trial. Treatment regime: 24 consecutive days of active pills of drospirenone 4 mg, followed by 4 days of placebo. A single visit was conducted, where demographical data, medical history, bleeding pattern, concomitant medication, vital signs, and adverse reactions were retrospectively collected. Categorical variables are shown by frequencies and percentages and continuous variables by mean and standard deviation.

Results: Of 166 women enrolled in the study, 160 (96.4%) were deemed valid for analysis. 81.2% of the users had previously used some kind of birth control method, 8.2% were in the postpartum period, and 22.8% had associated risk factors. Mean treatment cycles per patient were 10.0 (SD 3.9). Satisfaction with the contraceptive method was very good-good for 87.9% of the patients. As regards bleeding pattern, from the onset of treatment, 72 women (45.9%) visited their doctor for reasons related to their bleeding profile [43 (27%) due to irregular bleeding or spotting and 32 (20%) due to amenorrhea]. In the last complete cycle, 50 women (32.1%) presented with amenorrhea, and 38 women (24.4%) had breakthrough bleeding or spotting. The bleeding pattern from onset of treatment was rated as very good-good by 78.1% of the users.

Conclusions: The 4 mg dose of drospirenone showed good acceptance and assessment by the users, with a positive bleeding pattern, rated as very good-good by most users.

Conflict details

Only MJGS, CSR, MVD, and PAR, Exeltis employees, have a conflict of interest because their company was the study promoter.

P031

Is this going to hurt? An investigation into managing pain for the insertion of intrauterine contraceptives for women in the UK

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The insertion of intrauterine contraceptives (IUCs) can be an invasive and painful procedure for women, and current guidelines by the Faculty of Sexual and Reproductive Health (FSRH), and National Institute of Clinical Excellence (NICE) do not provide recommendations for analgesia as standard. This survey and review demonstrate evidence for the pain experienced by women during insertion of IUCs and summarises literature on pain modulation methods. IUCs are devices which alter the environment of the uterus and cervical mucus to be inhospitable to a fertilised egg, thus avoiding unwanted pregnancy. Some are also licensed for use in treating dysmenorrhea, or painful periods. Primary data was sourced through an online survey on SurveyMonkey.com and shared via social media to 75 anonymous women who had had an IUC inserted. The survey results show the most common pain score on a scale of 0-10 was 8, and 46% participants felt the pain experienced was higher than anticipated. Women who had not had children prior to the procedure (nulliparous) had higher mean pain scores than women with children (multiparous). These findings confirm previous research proving nulliparous women find the procedure more painful than multiparous women. Current literature demonstrates evidence of the efficacy of paracervical lidocaine blocks as pain relief for IUC insertion (IUC-I). The findings from this study provide evidence for a more comprehensive review of protocols for IUC-I in the UK, as currently no analgesia is licensed or recommended, and it can be an unnecessarily painful experience for women.

P032

Bleeding profile of women with cardiovascular risk factors using a drospirenone only pill with 4 mg over nine cycles compared to desogestrel 0.075 mg.

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Pedro-Antonio Regidor

Objective: Progestin-only pills are associated with irregular bleeding patterns, including amenorrhea. Desogestrel (DSG) 75mcg, a pill that inhibits ovulation, shows poor cycle control that may have a negative impact on acceptability and compliance. A Drospirenone (DRSP)-only pill was developed with 24 & 4 days of active & placebo days every 28-day cycle to improve cycle control.

Methods: A phase III study in healthy women aged 18 to 45 years was performed to compare the bleeding profile of women taking a DRSP versus DSG over nine cycles. 249 women were older > 35 years: 173 using drospirenone and 73 desogestrel. 259 women had a BMI > 25 kg/m²: 189 using drospirenone and 70 desogestrel and 340 women were smokers: 237 using drospirenone and 103 desogestrel. The amount of unscheduled bleeding/spotting days was analysed in each of these sub-groups and compared statistically.

Results: Age: During cycles 2-4, the mean number of unscheduled bleeding days and spotting was 8.1 (SD 10.53) for DRSP and 20.1 (19.41) for DSG; p= 0,0089.

BMI > 25kg/m²: During cycles 2-4 the mean number of unscheduled bleeding days and spotting was 7,8 (SD 12,18) for DRSP and 17,7 for DSG (SD 19, 39); p= 0,0001.

Smokers: During cycles 2-4, the mean number of unscheduled bleeding days and spotting was 9,6 (SD 11,69) for DRSP and 17,4 (SD 17, 47); p= 0,0016.

Conclusions: These analyses show the improvement in the bleeding profile of women with specific cardiovascular risk factors using the DRSP only oral contraceptive product compared to DSG.

Conflict details: Pedro Antonio Regidor is Medical Director of Exeltis Europe

P033

How to reduce abortions- a review on the use of mobile apps

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Objectives: Unsafe situations and unwanted pregnancies may stem from women's lack of knowledge on Long-Acting Reversible Contraception (LARC). Furthermore, some physicians find it unsuitable to inform about LARCs. One solution is using applications on mobile phones to inform about contraceptives with that potential of better reaching out to adolescents and young adults. The objectives of this study were to: a) determine whether contraceptive applications could improve knowledge and result in higher interest and use of LARCs, and b) identify what type of information an application should contain, and who could be beneficiaries.

Design & Methods: Publications on the subject of LARC and mobile applications were identified for the study, which was conducted in two parts: one of the efficiency to provide safest contraception, the other to evaluate what type of content an app should contain. Study participants were age 12-45.

Results: Compared to baseline, contraceptive applications had the ability to increase knowledge on the LARCs by a factor of 2.3-4.5. The interest in discussing LARCs increased by a factor of 1.6-1.8, and intention to use LARCs by of 1.4-2.5. Studies confirmed a major priority in easy accessibility and maintaining privacy. Science-based information and facilitation of knowledge on all contraceptives were desired. Some studies suggested that waiting rooms are missed opportunities of providing such information.

Conclusions: Contraceptive applications on mobile phones and tablets are useful in presenting women to validated information supplementing professional advice and supporting informed decision-making. Apps are interactive and provide wide evidence-based information on contraceptives.

Conflict details: Mayr, Mueller are employees auf Exeltis Germany GmbH, Regidor is employee of Exeltis Europe, Colli is employee of Exeltis Health Care.

P035

Metabolic effects of the 4 mg drospirenone-only pill compared to 75 µg desogestrel

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Objective: To assess the impact of a progestin-only pill (POP) with 4 mg drospirenone (DRSP) in a 24/4 regimen on a variety of laboratory parameters including lipid-, carbohydrate-, haematological and bone metabolism parameters as well as coagulation factors compared to the POP containing 0.075 mg desogestrel (DSG).

Design and Methods: Prospective, randomized, double-blind, double dummy, multicentric clinical phase 3 trial over 9 treatment cycles. 1190 women (18–45 years) were randomized to use DRSP 4 mg (24/4) or DSG 75 µg (28 active tablets). The following laboratory parameters were determined before the first and after the last treatment: Cholesterol (total, LDL, HDL), triglyceride levels, fasting glucose, serum insulin, C-peptide, and haematological parameters (haemoglobin, red blood cell count, haematocrit) were determined in all participants. In a subset of 68 subjects, markers of haemostasis (coagulation factors VII, VIII, Protein C activity, ATIII activity, D-Dimer, APC resistance) and bone metabolism markers (bone alkaline phosphatase, CTX) were determined.

Results: All evaluated parameters remained within their respective reference range. Cholesterol (total, LDL and HDL) and triglyceride levels decreased in both groups with a stronger reduction for triglyceride levels in the DSG group (-0.111 mmol/L (DRSP) vs -0.226 mmol/L (DSG); $p = 0.0351$). No relevant changes were observed for albumin, bilirubin, TSH, insulin, plasma fasting glucose or bone remodelling markers. Differences in the changes of haematological parameters were observed (erythrocytes: mean (SD) changes (DRSP/DSG): -0.022 (0.2810) vs 0.046 (0.065); $p = 0.002$; haematocrit: +0.010 (0.0298) vs. 0.015 (0.0303); $p = 0.043$), but not considered relevant. No sign for coagulation induction was observed from the haemostatic parameters.

Conclusions: No relevant impact of DRSP 4 mg on metabolic, haematological or haemostatic parameters was observed, confirming the beneficial safety profile of the novel POP.

EudraCT Number: 2011-002396-42

Conflict details: Dres. Mueller, Sailer and Regidor and E.Colli are employees of Exeltis that is marketing the 4 mg DRSP-onl pill.

P036

Prevalence and practices of contraception use among professional female athletes in Sri Lanka.

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Objectives: Describe the prevalence of contraceptive use among professional female athletes presenting to sports medicine clinic in Colombo, Sri Lanka.

Describe methods of contraception used by the population.

Describe access to contraception counselling.

Method: A descriptive cross-sectional study was conducted among professional female athletes presenting to the sports medicine clinic in Colombo, Sri Lanka from January to August, 2021. An interviewer-administered questionnaire was used to collect data including age, fertility wishes, methods of contraception used, and access to contraception counselling.

Results: A total of 121 female professional athletes aged between 17 to 37 years and engaging in 7 different sports participated in the study. Among them, 29 (24%) had fertility wishes and 31 (25.6%) were sexually inactive. Among sexually active athletes with no fertility wishes ($n=61$), 80.3% ($n=49$) used modern contraceptive methods. They were combined oral contraceptive pill (COCP, $n=27$), male condoms ($n=16$), Cu intrauterine device (CuIUD, $n=4$), and subdermal implants ($n=2$). No participants used DMPA injections or intrauterine system (IUS). Modern contraceptive methods were not used by 19.7% ($n=12$) of sexually active athletes with no fertility wishes. They relied on withdrawal method and emergency contraception. 90.9% ($n=110$) of participants had used COCP at least once to time their menstrual cycles in preparation of competitions. Only 9.1% ($n=11$) of athletes had received contraception counselling from a reproductive health professional while 31 ($n=25.6\%$) had received contraception counselling from the sports medicine clinic. 95.9% ($n=116$) of the population had sought advice on contraception from peers and sports instructors/coaches at least once.

Conclusion: A significant proportion (nearly 20%) of sexually active female professional athletes with no fertility wishes in Sri Lanka do not use a reliable contraceptive method. Most athletes depend on peers or coaches for advice on contraception. Only a small minority have received contraception counselling from a reproductive health professional. There is a significant unmet need for contraception and lack of access to contraception counselling among female professional athletes in Sri Lanka.

P037

Long-acting reversible contraceptives (LARCs) in perimenopause: Still a need for high effective contraception in a Public Health setting in Buenos Aires Argentina .Observational cohort study

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Objetives: This study presents the experience of the use of Long-acting reversible contraception methods LARCs including subdermal etonogestrel releasing implant, Co-IUD, LNG-IUD 52 mg, in perimenopause in a Public Health setting in Argentina.

Methods: Prospective observational single-centre cohort study including medical records' information of low-income women in whom LARCs were offered and placed between February 2015 and July 2021. Follow-up information on side effects, effectiveness, reasons for discontinuation, and patient satisfaction with the method was collected after implant placement.

Results: Within the study period, 41 subdermal contraceptive implants releasing etonogestrel 37 Co-IUD and 29 LNG-IUD 52mg were placed during the mentioned period. The single-rod implant was 100% effective in preventing pregnancy. 75.8% were very satisfied with these contraceptive methods.

Amenorrhea was the most common reported bleeding pattern (47%).

Side effects were documented in 48 women. Unfavourable bleeding patterns included frequent prolonged and heavy was reported in 18 women Weight gain was present in 11 women, headache was reported in 14 cases, arm pain was reported by 3 women and 2 presented mood changes.

. The main reason for discontinuation was prolonged bleeding (n=7).

Conclusions: LARCs are highly effective, with a high satisfaction rate and they are long-term method to reduce unplanned pregnancies. Side effects are rare and usually mild. Main reason for discontinuation is bleeding-pattern change.

Key Words: LARCs, contraceptives, effectiveness, side effects.

P038

Incidence and Evaluation of Complications after Insertion of Intrauterine Contraception in an Integrated Sexual Health Clinic

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Objectives: The aim of this audit is to appraise Intrauterine Contraception (IUC) insertions and any subsequent complications. Long-acting reversible contraception (LARC) is safe, cost-effective with a low failure rate; it is a cornerstone of our Sexual and Reproductive Health (SRH) practice. As we strive to provide LARC consistently, it is key that we are reviewing our practice and comparing our data to ensure safe and high-quality care. The data will be analysed alongside the Faculty of Sexual and Reproductive Health (FSRH) guidelines on expected rates of complication of key associated risks – perforation, expulsion, infection and ectopic pregnancy.

Design & Method: The setting of the study is a Level 3 Integrated Sexual Health Clinic in South East London. The subjects are patients who have had a successful fitting of an intrauterine contraception (IUS or IUD) within the service during the year of 2020; 978 in total. The data will be analysed across several different measures – type of coil, whether used as emergency contraception, sexual history of patient, key complications as stated above and if the coil was removed prematurely, the reason why. The data will be quantitative in nature, extracted from electronic patient notes and anonymised. We will compare our data against national guidance set out in the FSRH document - Intrauterine Contraception - Clinical Effectiveness Unit.

Results: Analysis is ongoing. The current results show that the complication rates are in line with national and expected complications. Provisional results shows the following rates of complication: Perforation: 0.75%, Expulsion: 4.54%, Non-visible threads: 0.75%, Infection: 0%, Ectopic pregnancy: 0%. Of the insertions analysed, the percentage of coils then subsequently being removed prior to expiration date due to side effects stands at 15.15%. As part of our results will touch on case studies that demonstrate learning outcomes for our service and beyond; the benefit of this discussion is that the patient's journey is better understood when addressing complications.

Conclusions: Looking at insertion and complication data when it comes to IUC means that SRH can continue to be safe and transparent in our approach to LARC. This studies aims to highlight complication rates within IUC insertions not for criticism but to evaluate practice, learn through patient's stories and strive for improvement.

P039

A Drug-Drug Interaction Study to Evaluate the Effects of Strong CYP3A Inhibition on the Pharmacokinetics of Segesterone Acetate and Ethinyl Estradiol in a Contraceptive Vaginal System

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Objective: A contraceptive vaginal system (CVS) containing segesterone acetate (SA) and ethinyl estradiol (EE) was approved in the US (2018) for the prevention of pregnancy. The same ring-shaped CVS is used in a 21-days-in/7-days-out regimen for up to 13 cycles. Hormones are metabolized by the cytochrome p450A (CYP3A) system and inhibitors of CYP3A may decrease their metabolism. Physiologically based pharmacokinetic (PK) modeling of SA hepatic clearance predicted that systemic exposure to SA would increase up to 1.6-fold in the presence of a strong CYP3A inhibitor. We evaluated the effect of itraconazole, a strong inhibitor of CYP3A, on the PK of SA and EE in the CVS.

Materials and Methods: This was an open-label, randomized, two-cycle, crossover study of itraconazole with CVS use performed at two Canadian sites. Participants were randomized to sequence (A) itraconazole with CVS/washout/CVS alone, or (B) CVS alone/washout/ itraconazole with CVS. Treatment cycles were 9 days and washouts were ≥ 4 weeks. Participants received itraconazole 200 mg/day orally for 5 days before CVS insertion and through days 8 for continuous CVS use. A new CVS was used for each cycle. Blood was collected at each cycle on day 1 at 0 (prior to CVS insertion), 2, 4, 8, 12, and 16 h, and once daily on days 2 through 9. SA and EE samples were analyzed by gas chromatography–mass spectrometry. Bioequivalence was determined if the 90% confidence interval (CI) of the geometric mean ratio was 0.80–1.25 for maximal concentration (C_{max}) and area under the curve over 24 hours (AUC_{0-24}).

Results: A total of 41 women were included in the PK analysis, 19 for sequence A and 22 for sequence B. Women had a mean age of 30.1 years, most were white (85%), not Hispanic (83%), and most had never smoked (71%). PK parameters are shown in the Table. Bioequivalence was observed with itraconazole on SA and EE PK parameters, as observed by the 90% CI of the C_{max} and AUC_{0-24} geometric mean ratios.

Conclusion: Levels of both SA and EE were bioequivalent with concomitant use of the strong CYP3A inhibitor, itraconazole, and the CVS compared with use of the CVS alone. Use of drugs that inhibit CYP3A in women using the CVS would likely not increase levels of either SA or EE, and thus, would not be expected to pose any additional safety issues with SA and EE during CVS use.

Table. PK parameters of SA and EE with and without itraconazole on day 1

Treatment	Sequence	Segesterone Acetate		Ethinyl Estradiol	
		C_{max} (pmol/L)	AUC_{0-24} (h·nmol/L)	C_{max} (pmol/L)	AUC_{0-24} (h·nmol/L)
Itraconazole + CVS	A	2048.9	35.8	269.6	5.3
	B	1875.9	31.8	279.3	5.3
CVS alone	A	1601.1	27.9	256.4	4.9
	B	1839.8	31.9	273.9	5.4
Ratio (90% CI)		1.14 (1.09–1.19)	1.13 (1.10–1.17)	1.04 (0.98–1.10)	1.04 (0.99–1.08)

Data shown as geometric mean.

Conflict details: several of the authors work for the company that markets the contraceptive vaginal ring discussed

A Drug-Drug Interaction Study to Evaluate the Effects of Strong CYP3A Induction on the Pharmacokinetics of Segesterone Acetate and Ethinyl Estradiol in a Contraceptive Vaginal System

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Objective: A contraceptive vaginal system (CVS) containing segesterone acetate (SA) and ethinyl estradiol (EE) was approved in the US (2018) for preventing pregnancy in women. The same ring-shaped CVS is used in a 21-days-in/7-days-out regimen for 13 cycles. Hormones are metabolized by the cytochrome p450A (CYP3A) system and inducers of CYP3A may increase their metabolism. Physiologically based pharmacokinetic (PK) modeling of SA hepatic clearance predicted that systemic exposure to SA would decrease ~50% in the presence of a strong CYP3A inducer. We evaluated the effect of rifampin, a strong inducer of CYP3A, on the PK of SA and EE in the CVS.

Materials and Methods: This was an open-label, randomized, two-cycle, crossover study of rifampin plus CVS performed at two Canadian sites. Participants were randomized to sequence (A) CVS alone/wash-out/rifampin with CVS, or (B) rifampin with CVS/washout/CVS alone. Treatment cycles were 19 days of CVS use and washouts were ≥4 weeks. Participants received rifampin 600 mg/day orally for 8 days (d4 to d11) during CVS use; a new CVS was used for each cycle. Blood was collected each cycle on day 11 (0 [pre-rifampin dose], 2, 4, 8, 12, and 16 h), and once daily on days 5, 7, 12, 13, 15, 17, and 19. SA and EE samples were analyzed by gas chromatography–mass spectrometry. Bioequivalence was determined if the 90% confidence interval (CI) of the geometric mean ratios was 0.80-1.25 for maximal concentration (C_{max}) and area under the curve over 24h (AUC_{0-24}).

Results: A total of 18 women were included in the PK analysis, 9 for each sequence. Women had a mean age of 29.4 years, were all white (100%), mostly not Hispanic (67%), and most had never smoked (72%). PK parameters are shown in the Table. No drug interaction was observed with rifampin on SA levels, as observed by the 90% CI of the C_{max} and AUC_{0-24} geometric mean ratios. A drug interaction was observed with rifampin on EE based on geometric mean ratios.

Conclusion: Bioequivalence of systemic SA levels was found when rifampin was taken during CVS use, but EE levels decreased by approximately 50% with concomitant rifampin. Use of drugs that induce CYP3A in women using the CVS should not affect contraceptive efficacy given the lack of influence of rifampin on SA levels.

Table. PK parameters of SA and EE with and without rifampin on day 11

Treatment	Sequence	Segesterone Acetate		Ethinyl Estradiol	
		C_{max} (pmol/L)	AUC_{0-24} (h·nmol/L)	C_{max} (pmol/L)	AUC_{0-24} (h·nmol/L)
Rifampin + CVS	A	399.7	8.0	61.8	1.1
	B	427.2	6.8	44.0	0.8
CVS alone	A	386.8	7.5	132.0	2.4
	B	425.6	6.2	103.1	1.8
Ratio (90% CI)		1.02 (0.97–1.07)	1.08 (1.05–1.12)	0.45 (0.39–0.52)	0.44 (0.39–0.50)

Data shown as geometric mean.

Conflict details: Several of the authors work for TherapeuticsMD which distribute the contraceptive ring discussed in this presentation

Practices and attitudes of obstetrician and gynecologist for the provision of contraception

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Objective: Despite numerous contraceptive options available today, about half of pregnancies worldwide are unplanned. We aimed to assess the practices and attitudes of obstetricians and gynecologists (OBGyn) regarding the provision of contraceptives. **Method:** An anonymous online survey was conducted between August-October/2021 with six invitations sent by email and other social media tools. The population-target was 16,000 active members of the Brazilian College of Gynecologists and Obstetrics (FEBRASGO). The instrument was a 13-page, Google Forms questionnaire containing questions regarding age, gender, training time, years of residency graduation and didactic/clinical training on long acting reversible contraception (LARC) methods during and after residency. **Results:** A total of 610 OBGyns responded the survey. Most of respondents presented more than 40 years (72%), were female (78%) and a third of them finished training in gynecology for up to 10 years. The most common practice setting was a general Obstetrics/Gynecology group practice (45%). Most contraceptives methods were offered by the OBGyn; however, 62.6% of the respondents did not offer or rarely offered transdermal patch, 49.8% vaginal ring and 70% emergency contraception. Regarding the LARCs, the majority often or always provided intrauterine devices (IUD) (62%), levonorgestrel intrauterine system (IUS) (75%) and only a quarter (24%) provided contraceptive implants. Regarding the number of insertions, 41% of the respondents provided between 11-50 IUDs/IUSs in the last year. However, 47% of the physicians did not provide contraceptive implants in the last year. Most of the respondents offer IUD or IUS for nulligravida (94.4%) and adolescents (90.2%). However, 46.7% of the gynecologists did not provide or rarely provided these devices after abortion or during immediate postpartum (41%). The majority of gynecologists and obstetrics had a didactic training in IUD (92%), IUS (63.8%) and contraceptive implants (54%). However, there is a higher difference of frequency between ObGyns with practical training in IUD (89%) versus IUS (56%) and implants (39%). Moreover, 77% and 90% of OBGyn inserted only up to 10 IUS and 10 implants during the practical training. **Conclusions:** There is a gap in the practical training of OBGyn in providing LARC, especially contraceptive implants. In addition, there is a lack of prescribing emergency contraception and modern combined contraceptive methods such as patches and rings. The identification of barriers in offering the methods is essential for establishing actions that increase the prescription of contraceptives.

Clinical-demographic characteristics of women with breast cancer in Brazil: a cross-sectional study.

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Objective: To identify clinical and epidemiological characteristics of women with breast cancer, needing contraception, as well as those of the insertion of a non-hormonal IUD. **Methods:** Cross-sectional study, with 84 women with an anatomopathological diagnosis of breast cancer and eligible for the use of an intrauterine device (IUD), approved by the Ethics Committee of the HC-FMUSP (CAAE: 26272819.3.0000.0068, opinion: 4.093.763). Data are presented as mean \pm SD and relative frequency (%). **Results:** Participants were 37.4 ± 5.1 years old, mainly white (42.9%) or brown/black (50.0%) and married (45.2%). First medical appointment for contraception took place 4.9 ± 8.3 months after cancer diagnosis; most (97.6%) had an IUD inserted on the same day. 33.3% were obese, mean BMI was 29.4 ± 6.6 kg/m²; two (2.4%) had a previous diagnosis of another cancer (thyroid and Hodgkin's lymphoma) and one (1.2%) diagnosed cervical cancer after insertion of the IUD. Most had not undergone surgical treatment (73.8%), chemotherapy (56.0%) or radiotherapy (85.7%). Menarche occurred at 12.3 ± 1.6 years, first sexual intercourse at 17.3 ± 3.2 years, 15.5% reported having uterine fibroids and 13.1% had secondary amenorrhea. Among non-amenorrheic women, the IUD was inserted 21.8 ± 20.2 days after the last period, with 39.7% in the first 12 days after the period.

14.3% were nulliparous; among the parypara, there were 1.9 ± 1.1 pregnancies and 1.7 ± 0.8 deliveries; the first birth occurred at 23.5 ± 5.1 years; and they breastfed during 21.4 ± 26.3 months. 40.3% reported that the first pregnancy was unplanned and 41.7% reported that the last pregnancy was unplanned. 81.7% no longer intend to become pregnant. The contraceptive methods previously used were pills (84.5%) and injectables (46.4%); only 4.8% had used an IUD before. Most used emergency contraception once (13.1%) or more than once (47.6%); 58.3% used condoms frequently or always. 73.8% never smoked, 54.8% did not drink alcohol, 92.9% never used illegal drugs and 71.4% did not practice physical activity. 7.1% had a family history of breast cancer and 33.3% of other cancers. The referred pain score (VAS) was, on average, 43.8 ± 21.2 mm; most participants considered pain as mild (26.5%) or moderate (59.0%); vagal reflex occurred in 9.5% of them. Uterine perforation during hysteroscopy occurred in two (2.4%) of them and the IUD was not well-positioned after insertion in only one (1.2%) participant. Conclusion: Young women with breast cancer have contraceptive demand; insertion of an IUD is safe in this population.

P043

The utility of the GyneFix® intrauterine device in recurrent expulsion of levonorgestrel-releasing intrauterine systems: a case report

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Background and objective: Users of the Levonorgestrel-releasing intrauterine system (IUS) with uterine fibroids may have higher expulsion rates than those without fibroids.¹ However, the best possible management of such women is arguable. Our objective is to report the case of one of such women with recurrent expulsion of three IUS and management with GyneFix® 330, a frameless IUD developed to minimize expulsion, bleeding, and pain.

Case presentation: We present the case of a 34-year-old woman who attended for fitting an intrauterine contraceptive device following recurrent expulsion of three IUS, the first being expelled one year after insertion. A second and third IUS were spontaneously expelled 13 months and one month after insertion, respectively. She was unable to use hormonal methods of contraception and was keen to try another IUD. A previous trans-abdominal ultrasound scan had revealed multiple small intramural fibroids but no uterine cavity distortion. We fitted a GyneFix® 330 IUD and performed a transabdominal ultrasound scan immediately post-insertion to confirm the accurate placement of the device. She returned for a replacement IUS 5 years later, but the device got dislodged at a follow-up examination elsewhere and was subsequently expelled. Another GyneFix® 330 was fitted and remains in situ almost four years later.

Conclusion: A GyneFix® 330 intrauterine device, because of its anchoring system, has potential utility in women with spontaneous expulsion of intrauterine devices and systems in the absence of uterine cavity distortion or abnormalities. This case has significant implications for clinical practice or future research.

Reference: 1. Zapata LB, Whiteman MK, Tepper NK, Jamieson DJ, Marchbanks PA, Curtis KM. Intrauterine device use among women with uterine fibroids: a systematic review. *Contraception* 82, 41-55. 2010.

P044

USE OF COMBINED HORMONAL CONTRACEPTIVES IN WOMEN WITH UTERINE FIBROIDS: THE VIEW OF A PRACTITIONER DOCTOR

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Objective. To study the features of the clinical approach of obstetricians-gynecologists' management of uterine fibroids (UF) patients interested in hormonal contraception.

Design and methods. We used the method of voluntary anonymous questioning among obstetricians-gynecologists (random sample) about various aspects of the use of combined hormonal contraceptives (CHC) for contraception in women with UF.

Results. There were 197 respondents 25-74 years old (41.7 ± 0.9 y.o.). Work experience of 59.9% (n=118) doctors was 10 years or more. 86.3% (n=170) of respondents correctly consider it possible to use any CHC in women with UF, however, only every second (48.7% (n=96)) classifies UF as the 1st category of CHC eligibility. 31.5% (n=65) and 6.1% (n=12) of obstetricians-gynecologists wrongly consider that an asymptomatic submucous fibroid (F1-2) or dysmenorrhea in women with UF are contraindications to CHC.

Only 44.2% (n=87) of the participants were informed about the risk reduction of developing UF when using of CHC for 5 or more years. Opinions about the effect of CHC on UF were divided. There were following erroneous opinions about CHC: a) it causes regression of UF – 26.4% (n=52) of doctors; b) in the overwhelming majority of cases, causes the growth of UF – 4.6% (n=9); c) significantly increases the risk of new UF – 2% (n=4). At the same time, 55.3% (n=109) of the participants correctly indicated that CHC, as a rule, do not affect the size of the uterine leiomyoma. Every ninth (11.7%; n=23) doctor could not answer this question. 11.2% (n=22) doctors recommend pausing usage of CHC in connection with UF. Every 5-6th participant (17.8% (n=35)) believes that the presence of UF limits the duration of CHC use for contraception to 1 to 5 years.

Conclusions. In the analyzed cohort of experienced obstetricians-gynecologists, barriers to the use of CHC for contraception in women with uterine fibroids were identified: fear/refusal to prescribe CHC, current insufficient awareness of risk reduction of developing UF when using drugs of this group for 5 or more years and the presence of positive non-contraceptive effects in women with symptomatic uterine myoma.

P045

Acceptability of Postplacental Placement of Intrauterine Devices during the Coronavirus pandemic.

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Objective: During the coronavirus (COVID 19) pandemic most countries reported service disruptions in the family planning services, resulting in a decline in the use of short-term and long-acting reversible contraceptives. The period immediately after childbirth is a great opportunity to provide contraceptive methods and the post placental placement of intrauterine devices (PPIUD) is an excellent option during the COVID 19 pandemic. The objective of this study was to evaluate the acceptability of PPIUD during the COVID 19 pandemic. **Methods:** Cross-sectional study conducted at the Women Hospital of the Universidade de Campinas, Campinas, SP, Brazil, during the two waves of COVID 19 pandemic between August 2020 and 2021. The insertion of PPIUD was offered to women that would go through a cesarean delivery or were admitted in labor at the Women Hospital of the Universidade de Campinas. The exclusion criteria were the presence of any maternal infection or anemia, rupture of membranes for > 18 hours, uterine malformation, or twin pregnancy. Also, the pregnancy had to have been ≥ 37 weeks long and the parturient age had to be between 18 and 43 years old. If the parturient was classified as a candidate, PPIUD was offered. In case of acceptance, the patient received a TCU380A intrauterine device (IUD) until 10 minutes after the placental delivery in case of vaginal delivery or during the cesarean. **Results:** We included 299 women. The mean age was 26.8 ± 6.5 years, 41.8 were Caucasian, almost one-third were primiparous, 155/299 (51.8%) had a vaginal delivery. The acceptability rate was 65.6%. The principal reason for refusal was the desire for another contraceptive method and 18/198 (9.1%) reported feeling insecure with the intrauterine devices. **Conclusion:** The PPIUD had good acceptance during the COVID 19 pandemic and is a good alternative during periods of crisis with difficult access to health services.

P046

Contraceptive use in real life: an Italian survey

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Objective. Contraceptive methods are poorly used in Italy, with only 14% of women using a combined hormonal contraceptive and 19% male condoms. Most of reports of contraceptive use in our Country rely on pharmaceutical companies selling data.

Aim of our study was to analyse real world use of effective contraceptives and reason for not using them. **Methods.** An internet-based anonymous questionnaire has been sent to women willing to fill it in through different social media (Instagram, WhatsApp, Facebook, Twitter) and direct e-mailing. The survey consisted of a combination of open-ended, multiple choice and Likert-scale questions (a five, or seven-point scale aimed at allowing individuals to express how much they agree or disagree with a particular statement). There were a total of 31 queries and a 20 minutes average time for completing it.

Besides positive and negative aspects of period and knowledge about methods to reduce frequency and amount of menstrual flow, the assessment evaluated actual or past use of contraceptive methods, reason for contraception use/non-use, motivations for its use/non-use and reason for stopping utilizing the method(s).

Results. A total of 1072 Italian women aged 18 – 40 years, answered the survey. The level of education of respondent was high with 62% being graduated, and 38% achieved high school education. Some 68% stated that they were in a stable relationship and only 12 women desired a pregnancy. An effective contraceptive method was used by 26% of sample (275 women). Particularly, 78% combined oral contraceptives, 17% ring, 3.6% IUD/IUS and less than 1% patch. Only 46% (367) of those not using a contraceptive answered the question on the reason why, and 66% of these affirmed not needing a contraceptive even though 261 reported a previous use for preventing an unintended pregnancy. Reason for stopping was mostly related to side effects (37%), 10% of women perceived a too long use of the contraceptive pill and 4% were worried about safety.

Conclusion. Our sample reported a good knowledge of contraceptive methods, but the vast majority of women interviewed was not using a contraceptive even if being in a stable relation and not wishing a pregnancy. Analysing motivation for not using a contraceptive the perception of not having a contraceptive need, was the main reason reported, probably due to hidden fears

P048

Pharmacy-based initiatives to reduce unintended pregnancies: A scoping review

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1. Objectives: Community pharmacy contraception services are thought to improve access to contraception, with the potential to reduce unintended pregnancies and sexual and reproductive health inequities. We aimed to identify the range of initiatives provided by community pharmacists in high-income countries to address unintended pregnancy, and examine their feasibility, acceptability and effectiveness.

2. Method: Using the Joanna Briggs Institute Methodology for Scoping Reviews, we searched seven bibliographic databases in August 2019, using combinations of keywords and subject headings related to contraception and community pharmacy. Studies of any design undertaken in high-income countries for reproductive-aged women were eligible provided they evaluated intervention or legislation after the implementation of these initiatives. Included articles were critically appraised and findings summarised narratively.

3. Results: We identified 49 articles, 80% of which involved pharmacist supply of emergency contraception (EC), 14% of regular contraception methods, and 6% involved adjuncts of EC dispensing: counselling (2%) and bridging initiatives to link clients with regular contraception (4%). EC initiatives were perceived as feasible and were facilitated by interdisciplinary partnerships but there are persistent barriers to the provision of initiatives congruous with the retail pharmacy setting. Furthermore, consumers may be reluctant to receive contraceptive counselling from pharmacists but often value the convenience and anonymity pharmacy services offer. Overall, interventions improved access to contraceptive products but did not consistently reduce inequities, and the public health benefits of pharmacy initiatives were either small (EC), or lacking description in the literature (other contraceptive methods and contraceptive counselling).

4. Conclusions: Community pharmacy initiatives may not entirely negate barriers to access or reduce unintended pregnancy rates; however, they are valued by both pharmacists and consumers for improving the convenience and consumers' experiences of contraceptive care. Evidence gaps, including the lack of description of health outcomes of regular contraception provision, contraceptive counselling and the perceived barriers and facilitators of access and provision from end-user perspectives, should be pursued in future research. This evidence may establish the utility and effectiveness of these initiatives and develop momentum for future extended pharmacy-based contraceptive care.

Conflict details: DM has received funding from Bayer. The other authors have no conflicts of interest to declare.

Extend the use evidence-based of LARCs. How much is the financial savings per year/contraceptive?

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1. Objectives: Quantify the economic savings per year/contraceptive in Chile by extending the time of use of LARC based on scientific evidence.
2. Method: Contraceptive methods that have a contraceptive coverage of more than 1 cycle were considered as LARC: Etonogestrel implant, intrauterine devices (with copper and levonorgestrel) and depot medroxyprogesterone acetate (DMPA). The LARC considered for the study are available in Chile and authorized for 3 years the etonogestrel implant, 10 years copper intrauterine device, 5 years levonorgestrel-releasing intrauterine device and 3 months DMPA. The number of women who started using LARC in Chile were obtained from the latest official statistics published by the Ministry of Health of Chile, corresponding to the year 2018. The cost of each contraceptive method was obtained from information published by the National Supply Center of the Ministry of Health of Chile. The total cost per year of contraception was calculated based on the women who started the use of a LARC in the Chilean Public Health System multiplied by the cost of each LARC divided by the years of approved and extended use.
3. Results: The extension of the use of etonogestrel implants from 3 to 4 years represents a decrease of -25% in cost per year of this contraceptive. The extension of the use of levonorgestrel IUDs from 5 to 6 years represents a decrease of -17% in cost per year of this contraceptive. The extension of the use of copper IUDs from 10 to 12 years represents a decrease of -17% in the cost per year of this contraceptive. The extension of the use of DMPA from 3 to 4 months represents a decrease of -38% in cost per year of this contraceptive. Extensions in the use of LARC would represent a decrease of -35% in the cost per year of LARC in Chile, which is equivalent to USD 4,065,176 in LARC cost / year
4. Conclusions: The extension of the use of LARC represents a significant decrease in the cost of these contraceptives in Chile.

A performance study of (opportunistic) salpingectomy

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Objectives: The life time risk for ovarian cancer is up to 1,4%, where the five-year survival is limited to 44%. Ten years ago, STIC lesions (serous tubal intra-epithelial carcinoma) were discovered in the fimbriae of the fallopian tube. These lesions have been proposed as precursor lesions for ovarian cancer. Salpingectomy is labeled opportunistic if we perform this in a patient scheduled for surgery in the pelvic area for benign disease or as a sterilization technique.

Oncological recommendations have been made to perform opportunistic salpingectomy as primary prevention for ovarian cancer in post-reproductive women. However, in our knowledge only three studies investigated the quality of the performance of salpingectomy.

In 2017, Ayres et al investigated twenty samples after adnexectomy in BRCA mutation carriers where microscopically fimbrial tissue still could be found on the ovarian surface in 15% of the specimens. In the same year, Manchanda et al demonstrated residual fimbrial tissue in 9,8% of all specimens (4 out of 41 samples). While in 2019, Wong et al investigated 107 specimens in a general population, where fimbrial tissue could be found in only 5% of all samples.

This aim of this study is to examine the integrity of the salpingectomy in a larger population in multicenter setting and taking into account various surgical techniques.

Method: Patients planned for unilateral or bilateral adnexectomy will be counseled to participate in three large hospitals in Flanders: Ghent University hospital, Antwerp University hospital and the ZNA Middelheim hospital in Antwerp. The gynecologist will perform the adnexectomy in two steps in the same surgical episode: first the salpingectomy, then the oophorectomy. The pathologist investigates if fimbrial tissue has been left behind on the ovarian surface microscopically and macroscopically.

If the patient is a known BRCA mutation carrier, analysis of the salpinx will be performed with the SEE FIM protocol and in the general population a modified SEE-FIM protocol, in which the fimbriae will be investigated in total, will be used.

Results: The results of this study are expected in two years' time.

Conclusions: By investigating the integrity of salpingectomy, we want to establish the precision of this procedure nowadays with various surgical techniques. If necessary a guideline could be developed to optimize the surgical technique.

P051

Introducing Caya® diaphragm in Nigeria: a new woman-initiated, nonhormonal, self-care product

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Objectives: Approximately 31 million women in Nigeria have unmet need for contraception; another 400,000 women use traditional contraception methods, which typically have low levels of effectiveness. Contraceptive side effects and infrequent sex often are cited as reasons for non-use of modern methods. A user-initiated method that is nonhormonal, has few side effects, and is easy to use could address the needs of some of these women. The Caya® diaphragm expands women's options for nonhormonal contraception—especially in countries where diaphragms have not been available in recent decades. Objectives of this assessment were to: evaluate user/provider perspectives about Caya; explore acceptability during pilot introduction; explore information channels and messages to reach potential users; and evaluate service delivery pathways.

Methods: We used a multi-step process to explore interest and acceptability of Caya diaphragm. We first explored perspectives among midwives, then expanded to potential consumers, family planning providers, and pharmacists. We launched a 6-month pilot in 13 states. We trained clinic staff and pharmacists and developed a cadre of Caya ambassadors to raise awareness. Due to COVID-19 restrictions, most trainings were held virtually. We identified potential consumer groups through market research and developed targeted messaging. We monitored consumer interest via social media posts, demand on e-commerce platforms and our toll-free consumer call center, as well as distribution/sales data to refine introduction activities.

Results: Midwives, providers, pharmacists, and consumers have confirmed interest in this new method, which is reusable for 2 years. Based on positive results from the pilot, Caya is expanding nationally. Caya is now included in the contraceptive method mix. Women seeking a contraceptive method now are counseled on Caya alongside other methods and they receive Caya immediately when they opt for the method. Women appreciate that Caya is nonhormonal, under their control, and is natural with no side effects. Social media posts raise awareness about Caya, but many women want counseling to confirm how to use it. We trained 160 providers and pharmacists. Caya is being sold at 225 sites via clinics, pharmacies, and online shops.

Conclusions: Caya is a new method that addresses several reasons cited for non-use of contraceptives. Caya gives Nigerian women more choice to plan their families in a way that aligns with their needs and preferences. Challenges included: the retail cost for Caya and Caya gel combined (NGN 8,000—NGN 13,000), which limits the market, and introducing a new method during COVID-19 restrictions.

P053

Models of care for intrauterine device provision in Australian general practice.

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Objectives: To describe the models of care used by Australian general practitioners (GPs) in the provision of intrauterine devices (IUDs).

Method: We conducted a qualitative descriptive study. Australian GP IUD providers were recruited using convenience and purposive sampling. Twenty GPs participated in semi-structured, audio-recorded telephone interviews. Data were transcribed verbatim then de-identified and uploaded to NVivo for coding.

Reflexive thematic analysis of transcripts was undertaken. A quality framework for Australian general practice guided interview tool development, the conceptualisation of models of care and the evaluation of these models.

Results: Four models of care used by GP IUD providers were identified. 1) The most common model consisted of three to four appointments: one or two pre-insertion consultations, the insertion procedure appointment and one follow-up appointment. 2) Streamlined models comprised of a maximum of two appointments with the GP IUD provider. Patients would be referred to a GP IUD provider for insertion and would either have a follow-up appointment with the inserting GP or the GP that they initially presented to. 3) Same-day insertion had two pathways: (a) a patient had two appointments with the GP in one day (a pre-insertion consultation and the insertion procedure) or (b) the GP delivered the service in one appointment. 4) Task-sharing approaches to IUD services involved many health professionals, such as other GP providers, non-providing GP colleagues and nurses. Tasks shared within these models varied, but the most common approach utilised nurses' assistance throughout the procedure. Some GPs described differences between and adaptations to the four models. Model adaptations and mixing of models, such as no follow-up or additional consultations, were primarily due to the COVID-19 pandemic or patient choice.

Conclusions: Australian GP IUD providers described various models of service provision with few offering same-day insertions. However, there appeared to be adaptability in practice to cater for pandemic related difficulties and patient preferences. The common model was more acceptable for GPs due to the model's suitability to general practice. However, it may not necessarily be the best model for patients. Other models that are safe and adapt to patients' and providers' needs may be of higher quality. Further research is required to support the optimisation of service delivery models in primary care.

P054

“Part of a suite of solutions”: a qualitative study exploring the use of Natural Cycles fertility tracking app in the ‘prevent a pregnancy’ mode.

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Objectives: The past decade has seen a considerable rise in mHealth apps, providing an opportunity to improve health agency, accessibility and autonomy. Fertility tracking apps (FTAs) in particular are widely popular, with over 68 million downloads. Natural Cycles is the first and only FTA to be certified as a contraceptive method by both the US FDA and the European Union. In the context of its recent rise, this qualitative study aims to explore the role of its use as an emerging contraceptive method.

Methods: Recruitment was through the Natural Cycles app and social media, with snowball sampling for male partners. Purposive sampling was undertaken to recruit participants who had used Natural Cycles in both the ‘plan’ and ‘prevent’ pregnancy modes. Thirty in-depth qualitative interviews were conducted (24 women; 6 male partners). Emerging themes were guided and refined by a hybrid of an inductive and deductive approach.

Results: Through a temporal approach, participants explored the role of Natural Cycles in the ‘prevent a pregnancy’ mode. Participants deemed those suitable to use the app were individuals with routine, stability, or those who expressed an element of pregnancy ambivalence. Starting Natural Cycles was often due to a push away from hormones, and a pull towards natural. Natural Cycles itself was seen as a legitimate and scientific contraceptive tool. Participants lamented a paucity of sex education in general, whilst Natural Cycles was perceived to provide education and understanding about one's body. Through using the app, participants expressed a sense of empowerment and control over their fertility. Yet there appeared to be a fine line between the app either validating, or dictating subjective experiences of mood and libido. Through this, the use of Natural Cycles appeared to reinforce gender norms and expectations. Further, feelings of guilt, shame and blame emerged among those experiencing failure of the app to prevent pregnancy.

Conclusions: Fertility tracking apps, such as Natural Cycles, are an emerging field that is reframing contraception and menstrual tracking. FTAs offer a breadth of use outside of preventing or planning pregnancy, and may offer greater understanding of one's body and cycles. Sex education and clinical practice must ensure education and provision of a broad range of contraceptive options suited to individual needs, circumstances and preferences. Despite an acknowledgement of its limitations, Natural Cycles provided another option of contraceptive choice, which may be suitable and acceptable for particular circumstances and preferences.

Conflict details: This project is part of a larger qualitative study, The Freyja Study, which explores use and experience of NC for (pre-) conception. The Freyja Study was funded by Natural Cycles, however Natural cycles has had no involvement in the study design, data collection, analysis or interpretation. The author completed this project as part of a Masters of Reproductive and Sexual Health Research thesis, and received no financial compensation for this project.

P055

Bariatric surgery as an obesity and infertility treatment

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Introduction: The prevalence of obesity has increased dramatically in high-income countries during the past few decades. Obesity is a known factor that decreases fertility and causes complications during pregnancy. When other methods fail, bariatric surgery is an important treatment method in obese women of childbearing age.

Case report: A 38-year old woman dealing with secondary infertility was admitted for bariatric surgery after a 6-month preparation with 16 kg weight loss. Upon admission her weight was 136 kg and her body mass index was 48 kg/m². She underwent Roux-en-Y gastric bypass surgery (RYGB) with biliary limb of 180 cm. There were no intraoperative complications. Standard Enhanced Recovery After Bariatric Surgery (ERABS) protocol was used afterwards: paracetamol and metamizole based analgesia, upper abdominal X-ray at postoperative day 1 to exclude anastomotic leak and post-operative liquid diet with a two-day course of intravenous combined amino acid and saline solution and vitamin formula. Day 7 after surgery she made her regular gynecological visit that confirmed 9 weeks lasting pregnancy.

Results: Based on age, very low radiation exposure dose (0,2 mGy) and medications used after the surgery, the calculated risk for fetal developmental abnormalities was not higher than the risk in the general population (3%). Amniocentesis was performed at 16 weeks of gestation, showing a normal female karyotype. The patient and the fetus had frequent check-ups that showed normal fetal morphometry, normal maternal weight gain and normal mineral and vitamin levels. Nonetheless, after a few hours of uncomfortable sensations in her lower abdomen and absence of fetal movements, intrauterine fetal death occurred in the 18th week of pregnancy. Fetal autopsy was not performed, therefore the exact reason for the occurrence of this event was never clarified. The patient did not try to get pregnant again.

Conclusions: All women of reproductive age should be routinely counselled on the importance of effective birth control before planning bariatric surgery, regardless of the desire to conceive. Since food restriction and malabsorption risk fetal compromise, pregnancy should be avoided at least 12-18 months post-surgery, which may help to reduce the risk of gestational, fetal and/or neonatal complications. Bariatric surgeons and gynecologists should work more closely with these patients to optimize both pre-pregnancy and gestational nutritional status. Pregnancy testing should be part of the routine preparations before embarking on a bariatric journey.

P056

Emergency Contraception - Quantitative Research

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INTRODUCTION: Emergency contraception can be defined as the method used to avoid unwanted pregnancies after unprotected intercourse, where no contraception is used or where said contraception has failed.

OBJECTIVE: To evaluate demand for emergency contraception in a Family Planning Centre.

METHODS: Descriptive study carried out in a Family Planning Centre that provides health coverage to 450.000 inhabitants. This study included women ranging between 14 and 52 years old. We compiled the number of requests for emergency contraception in our Centre during two different periods. During the first term, covering a period of 17 months, 867 women were seen. During the second, 3 years later, 159 women were seen during a span of 16 months.

The following data was collected for this study: age, distribution per month, previous usage, reason for request.

RESULTS: During the first period of this study, 867 women were seen at our Centre, with a higher demand among those between 20 and 24 years old. It is worth noting that August saw the highest number of requests and that a large number of women between 18 to 20 years old were not using any kind of contraception. It is also worth noting that a considerable percentage of 20 years old repeatedly requested the morning after pill. Regarding the reasons for emergency contraception requests, 70% referred to mishaps while using condoms, 20% were due to an incorrect use of a contraceptive method and 10% did not use any kind of method. During the second period, we analysed the reasons for the requests, observing that 55% were due to the incorrect use of hormonal contraceptives and 45% due to failure of the condom.

The highest number of requests occurred during the months from March to June; April, June and July saw an increase in the number of requests from women who had previously had some sort of emergency contraception. Every woman that came to our Centre during both periods received information about the morning after pill, as well as preemptive contraception methods.

CONCLUSIONS: Emergency contraception is not just a resource for teenagers; every woman that has unprotected intercourse should be able to benefit from it. After analysing the data of the second period, it is clear that the usage numbers in our Centre decreased, as emergency contraception became available in pharmacies without prescription.

P057

Vaginally-inserted contraceptives: Are we selling them short?

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Objectives: In low- and middle-income countries (LMICs), 218 million women have an unmet need for family planning (FP). The most commonly cited reasons for not using contraception are side effects, health risks, and infrequent sex. Vaginally-inserted contraceptives are designed to address such concerns: some have no side effects, release hormones locally and steadily, are non-hormonal, and/or can be used on demand. However, supply- and demand-side factors have limited the market for vaginally-inserted contraceptives. Additionally, some experts argue that demand for self-inserted vaginal methods is diminished by reluctance, discomfort, embarrassment, or cultural proscriptions related to women touching their genitals, while others assert that low acceptability is a myth contradicted by the evidence. To distinguish assumptions and myths from the evidence, we conducted a literature review that documented enablers and barriers to women's adoption and continuation of vaginally-inserted contraceptives in LMICs.

Methods: We conducted electronic searches of three databases (PubMed, Embase, and Web of Science) using keywords related to five vaginally-inserted contraceptives (diaphragm, vaginal ring, female condom, copper IUD, hormonal IUD) and terms associated with their adoption and continuation. We also conducted a manual search of eighteen websites selected in consultation with subject matter experts. The searches were limited to resources published between January 2010 and September 2020.

Results: Our search yielded 13,848 articles, with 182 ultimately included in the analysis. Across methods, we found common enablers for method adoption, including quality contraceptive counseling as well as alignment between a woman's preferences and a method's duration of use and side effect profile. Common barriers included a lack of familiarity with the methods and product cost. Notably, vaginal insertion was not a major barrier to adoption in the literature reviewed. For some women, discomfort with vaginal insertion diminished over time as they gained more experience and confidence.

Conclusions: Vaginally-inserted contraceptives have the potential to fill a gap in FP offerings and expand method choice. Our review did not find vaginal insertion to be a major barrier to method adoption. For women who experienced discomfort, it was mediated over time with quality counseling, support, and practice. To offer women true choice in methods, the FP sector must debunk assumptions and myths about demand for vaginally-inserted contraceptives as well as prioritize quality counseling and strengthen programs to address women's preferences and practical concerns. It is time to stop selling these methods short.

P058

Postpartum contraception – use intrauterine device in patients the University Hospital São Paulo

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Objective: To know the acceptability of IUD in patients admitted to the Obstetric Center and the postpartum copper IUD expulsion rate at a University Hospital in São Paulo, correlating via delivery and parity.

Methods - They were evaluated as patients who agreed to insert IUDs in the immediate postpartum period from December 2017 to March 2021. Patients were followed up 40 days after delivery, where they were evaluated clinically and through ultrasound examination.

Results: Among the 2357 procedures at the Obstetric Center in the reporting period, 512 accepted postpartum IUD insertion, giving an acceptability rate of 21%.

Of these, 269 (52.53%) patients returned for follow-up. The mean age of women in the group that maintained follow-up was 29.53 years, 103 (38,28%) were primiparas and 166 were multiparas (> or equal to two births, considering the current birth).

Among the patients, 117 underwent cesarean section (43.4%) and 152 underwent vaginal deliveries. In evolution, 31 IUDs were expelled, 27 (87%) in patients after vaginal delivery and 4 after cesarean delivery. The expulsion rate was 11.52% of the total number of placements, with 3.41% (4 out of 117) and 17.7% after vaginal delivery (27 out of 152). Of the 31 expelled IUDs, 15 (48.3%) were allocated in primiparas and 16 (51.6%) in multiparas. In the ultrasound evaluation was observed malpositioning in 61 placements (22.67% of users), and of these, 45 (73%) were after vaginal delivery and 16 after cesarean delivery.

Conclusion. The profile of patients who accepted the IUD reiterates the importance of reinforcing this method in this population group, which culminated in young patients and reinforcing family planning. The expulsion rate similar to the literature was higher after vaginal delivery

P059

The contraceptive choice of in the postpartum before and after educational intervention

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Objective: To identify the choice of contraceptive method by women in the immediate postpartum or abortion before and after educational intervention by a health professional.

Method: Cross-sectional, exploratory-descriptive study, developed with 403 women in postpartum or abortion situation attended at a public teaching maternity hospital, located in Fortaleza-Ceará, Brazil. Data collection was through a structured interview and carried out from November 2019 to July 2021. The data were stored and managed in the REDCap electronic tool hosted in the Clinical Research Unit of the Federal University of Ceará.

Results: The study addressed 403 women between 11 and 45 years, with a mean age of 21.4 and median of 19 years. Sexarche occurred on average at 15 years old and most of them were primiparous. Of these, 306 (75.9%) were married, 96 (23.8%) were single, 116 (28.8%) were students, 84 (20.8%) unpaid workers (housewives), 84 (20.8%) had paid work, 64 (15.9%) did not study nor work and 12 (3.0%) were unemployed. The prevalence of unplanned pregnancy was 72.7%. When investigated about the contraceptive method they would like to choose to prevent an upcoming pregnancy, 159 (39.5%) reported injectables contraceptive, 110 (27.3%) Intrauterine Device (IUD), 48 (11.9%) implant, 48 (11.9%) oral contraceptives, 26 (6.5%) tubal sterilization. After educational action about legally accepted contraceptive methods, the correct form to use them and their efficacy, many women changed their choice, 130 (32.3%) expressed a desire for the implant contraceptive as the first option, 144 (35.8%) the IUD, 83 (20.6%), injectables contraceptives, 27 (6.7%) oral contraceptives, 15 (3.7%) the tubal sterilization. Among the 227 adolescents in the study, the outstanding method as the first choice was the implant contraceptive (41.4%), followed by the IUD (35.7%), injectables contraceptives (20.3%) and the oral contraceptive (2.2%). Among the 176 adults, the IUD (37.8%) stood out as the first choice method, followed by injectables contraceptives (21.0%), implant (20.5%), oral contraceptive (12.5%) and tubal sterilization (8.5%).

Conclusions: Reproductive planning is an essential element for conscious choice of contraceptive method by women. Faced with qualified and individualized professional guidance, women are more likely to choose Long-acting reversible methods at all ages.

P060

Unplanned pregnancy: lack of knowledge about contraceptives?

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Objective: to evaluate the association between unplanned pregnancy and women's knowledge about contraceptive practices.

Method: Cross-sectional, exploratory-descriptive study, developed with 403 women in postpartum or abortion situation attended at a public teaching maternity hospital, located in Fortaleza-Ceará, Brazil. Data collection was through a structured interview and carried out from November 2019 to July 2021. The data were stored and managed in the REDCap electronic tool hosted in the Clinical Research Unit of the Federal University of Ceará. The identification of associations was performed using Pearson's chi-square test and the statistical significance was $p < 0.05$. For statistical analysis, we use the JAMOV PROGRAM and Microsoft Excel 2016.

Results: The study addressed 403 women between 11 and 45 years, with a mean age of 21.4 and median of 19 years. Sexarche occurred on average at 15 years old and most were primiparous. Of these, 306 (75.9%) were married, 96 (23.8%) were single, 116 (28.8%) were students, 84 (20.8%) unpaid workers (housewives), 84 (20.8%) had paid work, 64 (15.9%) did not study nor work and 12 (3.0%) were unemployed. The prevalence of unplanned pregnancy was 72.7% (293). However, of the 293 women who did not plan to become pregnant, 129 (44.0%) used some contraceptive method. Among the methods most used by them, they referred oral contraceptives (45.0%), injectable contraceptives (28.7%), male condom (15.5%) and emergency contraception (4.7%). When addressed about which methods they had knowledge and knew the right form to use them, 331 (82.1%) mentioned male condoms, 249 (61.8%) oral contraceptives, 235 (58.3%) emergency contraception and 223 (55.3%) injectable contraceptives. However, after asking specific questions about each method they claimed to know how to use, from the 403 interviewed women, 355 (88.0%) knew how to use at least one contraceptive method correctly, while 48 (12.0%) did not know how to use at least a single method. However, knowledge about the correct use of contraceptive methods did not present statistically significant proportional differences between the two groups regarding the type of pregnancy, whether planned or not planned ($p = 0.468$).

Conclusions: There was no difference in knowledge of the correct use of contraceptive methods between women with planned and unplanned pregnancies. By itself, knowledge about contraceptive methods does not appear to have a significant positive impact on the reduction of this outcome.

P061

Increasing uptake of long-acting reversible contraception with structured contraceptive counselling: cluster randomised controlled trial (the LOWE trial)

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Background: There are no consistent recommendations or models on how to give effective contraceptive counselling involving informed decision making that ends in fewer unintended pregnancies. Today's contraceptive counselling lack structure and contraceptive choice may be affected by provider bias, and subsequent pregnancies may vary between patient groups. Several contraceptive counseling strategies to improve uptake of long-acting reversible contraceptives (LARCs) have failed to result in reduction in unplanned pregnancy especially post abortion.

Objectives: To evaluate the effect of structured contraceptive counselling (SCC) on the uptake of long-acting reversible contraceptives (LARCs) and pregnancy rates.

Methods: A cluster randomised controlled trial was conducted at abortion, youth and maternal health clinics in Stockholm, Sweden. We randomised clinics 1:1. In clinics randomised to intervention, health care providers were trained on how to use a study-specific intervention package designed for SSC. Participants in the

control clinics received routine counselling. Women aged ≥ 18 years without a wish for pregnancy seeking abortion and/or contraceptive counselling were eligible for participation. Primary outcome was choice of LARCs at first visit. Secondary outcomes were LARC initiation at 3 months and pregnancy rates at 3 and 12 months. We used logistic mixed-effects models with random intercept for clinic to account for clustering. Results: From September 2017 to May 2019, 1364 participants were enrolled from 28 randomised clinics. Women receiving SCC chose LARCs to a higher extent than women receiving routine counselling: 267/658 (40.6%) versus 206/680 (30.3%) (OR 2.77, 95% CI 1.99–3.86). SCC lead to higher LARC initiation at three months compared to routine counselling: 213/528 (40.3%) versus 153/531 (28.8%) (OR 1.74, 95% CI 1.22–2.49). Among women counselled at the abortion clinics, pregnancy rate at 12 months differed significantly 13/101 (12.9%) in the intervention group compared to 28/103 (27.2%) in the control group (OR 0.39, 95% CI 0.18–0.88).

Conclusions: Structured contraceptive counselling increased LARC uptake in all clinics and significantly reduced unintended pregnancy rates in abortion clinics at the 12 months follow-up.

P062

“Everything new is a well-forgotten old”: innovative path towards 6-month contraceptive injectable.

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Background: A 6-month injectable contraceptive option would be a valuable addition to the contraceptive method mix. Repurposing the existing 3-month intramuscular Depo-Provera[®] contraceptive injection as a subcutaneous product could rapidly bring a longer-acting injectable to market. We reported on the early stages of this program at the 14th ESC Congress (Halpern et al. Lowering the Dose of Injectable Contraceptive DMPA. Basel, 2016). Here we summarize important milestones and recent developments since 2016.

Objective: To evaluate potential of Depo-Provera[®] (150 mg/mL), injected subcutaneously, to provide 6 months of contraceptive protection.

Design and Methods: We conducted a partially randomized, multicenter, parallel-group Study # 702179 at Oregon Health & Science University (USA) and PROFAMILIA (Dominican Republic). Twenty-four and 9 women of reproductive age with confirmed ovulatory cycle and BMI of 18–35 kg/m² received a single subcutaneous injection of Depo-Provera[®] (150 mg) or two injections of depo-subQ provera 104[®] (registered in Europe as Sayana[®]) three months apart, respectively. We evaluated suppression of ovulation, MPA concentrations and estimated pharmacokinetics parameters. In addition, we performed modeling based on PK/PD data from a total of 101 women in this study and related Study # 834119 who received 45 mg to 300 mg subcutaneous doses of Depo-Provera[®] or depo-subQ provera 104[®] as a reference drug.

Results: No ovulations were observed during 7 months after an injection of 150 mg Depo-Provera[®] in Study # 702179. At 6 months, the geometric mean MPA trough concentration of 150 mg Depo-Provera[®] of 0.32 ng/mL was similar to that of the 3-month trough of depo-subQ provera 104[®] (GMR 0.90; 95% CI: 0.67–1.21). Six months after treatment initiation, only one woman in the 150 mg group had MPA below 0.2 ng/mL (0.181 ng/mL). PK/PD modeling estimated return of ovulation to occur at a median MPA concentration of 0.069 ng/mL (95% CI: 0.057–0.077), and the 90th percentile was 0.103 ng/mL (95% CI: 0.087–0.139). The estimated probability of ovulation within seven months of a subcutaneous 150 mg injection (6 plus a 1-month grace period) was 2.1%.

Conclusion: These data provide proof of concept that 150 mg Depo-Provera[®] (or a generic alternative) may be an effective contraceptive method when injected subcutaneously every 6 months. We plan to initiate a Phase 3 efficacy trial to investigate the pregnancy prevention potential of this approach in Q1 2022 at 5 clinical sites across Europe, Africa and Latin America. We will provide an update on the study at the conference.

Assessment of compatibility of benzalkonium chloride or myristalkonium chloride spermicides (Pharmatex®) and condoms or diaphragms

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1. Objectives: Spermicides are a vaginal non-hormonal contraception which can be used alone or as adjuvant of medical devices such as condoms, diaphragms or caps to increase contraceptive effectiveness. However, to date, studies on potential interactions between spermicides and these barriers methods are rare. Our study aims to assess compatibility of different galenic formulations of benzalkonium chloride or myristalkonium chloride spermicides with condoms and diaphragms.

2. Method: The present studies focused on the compatibility of four galenic forms of benzalkonium chloride spermicides (vaginal cream, pessary, mini-pessary and vaginal capsule) and one galenic form (vaginal tablet) of myristalkonium chloride (similar to benzalkonium chloride) spermicide, with condoms and diaphragms.

Pharmatex® spermicides were evaluated for their ability to damage the condoms made of different materials (latex, polyisoprene or polyurethane), through a bursting test carried out on non-coated and coated condoms. The bursting test is defined in the NF EN ISO 4074 standard (2015). The principle of this test was the inflation of a defined length of a condom. The criteria chosen to reveal a possible degradation of the physical and mechanical properties was the burst pressure: a maximum difference of 20% specified by the standard.

Test for compatibility with diaphragms (silicon) was based on a comparison before and after a prolonged contact between the spermicide and the medical device. The different spermicidal preparations were heated at 37°C for 10 hours (cream form) and 8 hours (other forms). Gas chromatography–mass spectrometry analysis (GC-MS), liquid chromatography coupled to mass spectrometry screening analysis (LC-MS), liquid chromatography coupled to high resolution mass spectrometry (LC-HRMS/QTOF), Fourier Transform infrared spectroscopy (FTIR), inductively coupled plasma atomic emission spectroscopy (ICP-AES), pyrolysis / GC-MS, optical microscopy and scanning electron microscopy were used to assess the stability/degradation of diaphragm towards the different spermicidal formulations.

3. Results : All galenic formulations of benzalkonium chloride or myristalkonium chloride spermicides are compatible with latex and polyisoprene condoms according to these studies. Polyurethane condoms are only compatible with myristalkonium chloride tablets. Regarding silicon diaphragms, all benzalkonium chloride galenic forms are compatible, however myristalkonium tablets do not appear to be compatible for a long-term use because of a potential risk of premature alteration of diaphragms properties.

4. Conclusions: All galenic formulations of benzalkonium chloride spermicides can be used as adjuvant method of contraception with latex or polyisoprene condoms or silicon diaphragms without any risks of interactions.

Conflict details: J. Escola, C. Gendron and F. Carrois are employees of Laboratoire Innotech International, the manufacturer of the spermicide evaluated.

Sociodemographic factors and psychiatric disorders in relation to provision of long-acting reversible contraception at surgical abortion – a cross-sectional nationwide register study

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Objectives: Provision of long-acting reversible contraceptives (LARC) at surgical abortion is safe, practical, and leads to higher user rates compared to delayed provision. This study aimed to explore if provision of any LARC method at the time of a surgical abortion is associated with known risk factors for

subsequent abortions and inconsistent use of contraception, including sociodemographic factors and psychiatric disorders.

Method: A register-based cross-sectional study. From October 2016 to December 2018, we identified 6251 women having a procedure code of surgical abortion in the Swedish National Patient Register. Additional data, including demographic factors, psychiatric disorders, and dispensed LARC methods were retrieved from Statistics Sweden, the National Patient Register and the Swedish Prescribed Drug Register and linked on an individual level. Generalized logit mixed models were used to explore associations of sociodemographic factors and psychiatric disorders with LARC provision, and the results are presented as crude and adjusted odds ratios with 95% confidence intervals.

Results: The proportion of women provided with LARC at the time of the surgical abortion was 40.2% (2515/6251). Younger age and lower level of education were factors associated with a higher likelihood of LARC provision. Among women having a surgical abortion, the proportion having a pre-or post-abortion psychiatric disorder recorded was 42.0% (2624/6251). Having a psychiatric disorder was associated with an increased likelihood of LARC provision compared with women with no such disorders (adjusted odds ratio 1.21, 95% CI 1.08 - 1.34). The highest rates and odds for LARC provision were seen among women with personality-, substance use-, and/or neurodevelopmental disorders and among women with multiple psychiatric disorders.

Conclusions: Risk factors for unwanted pregnancy, such as young age, low educational level, and psychiatric disorders were associated with a higher likelihood of LARC provision at surgical abortion. This indicates that women exposed to high risk of a subsequent unwanted pregnancy are to some extent identified and provided with effective contraception. However, the majority of women undergoing surgical abortion were not provided with LARC, suggesting that contraceptive counseling and LARC utilization at surgical abortion can be improved.

Conflict details: SHogmark reports personal fees from Gedeon Richter and Bayer, outside the submitted work. NE reports personal fees from Bayer, outside the submitted work. AW declares no conflict of interest. CS reports personal fees and other from Shire/Takeda, Nordic Drugs, Evolan, DNE Pharma, Novartis, and UCB Pharma outside the submitted work. HKK reports personal fees and other from Bayer, personal fees from Merck/MSD, Exeltis, Mithra, Natural Cycles, Gedeon Richter, Preglem, and Consilient Health, outside the submitted work. SHesselman reports personal fees from Baxter Medical AB for serving on an advisory board outside the submitted work.

P065

Reproductive future in women after near miss

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Objectives: This project aims to analyze the reproductive future of women who were classified as maternal near miss or who presented criteria for potentially life-threatening conditions. We want to study the strategies used in early and late puerperal care, especially in family planning assistance, to prevent unexpected pregnancies and to avoid a short intrapartum interval.

Methods: Retrospective observational study composed of pregnant and/or postpartum women with criteria for maternal near miss or potentially life-threatening conditions, who were admitted to the obstetrics ward of the Federal University of São Paulo Hospital between January 2016 and June 2021. The selected patients who filled the severity criteria were contacted and invited to answer questions about family planning, contraception and reproductive desire after serious obstetric complications. Such data were analyzed and correlated with the presented pathologies, number of criteria fulfilled and potential recurrence of the pathology.

Results: 196 patients were selected but 32 were excluded because passed through puerperal hysterectomy. Among the remaining 164, 28% had severe pre-eclampsia / eclampsia, 25% met criteria for sepsis or severe systemic infection and 23% had severe postpartum haemorrhage or complications of abortion. 77 patients were able to be contacted and accepted to answer the questionnaire, 16% of them had a new pregnancy after maternal near miss and 12% do not currently use any contraceptive method. Even with a high percentage of individual perception of episode severity (94%), approximately 1/3 of them still have desire to have a new pregnancy in a short term period. However, these who still have reproductive desire, 78% deny having formal information about the repercussions on their health if a new pregnancy occurs.

Among those who use contraceptive methods, the following stand out: permanent contraception - female sterilization 14%, long-acting reversible contraception - the implant (3%) or intra uterine device (IUD - 38%), injectables 19%, combined hormonal contraceptives 2,5%. Even oriented about the low effectiveness of barrier methods isolated use, 12% still prefer it in detriment of highly effective methods.

Conclusion: Even though most patients are aware of their complications seriousness, more than half were not informed about the consequences of a new pregnancy. This alerts to the need of improvement on health education, elucidation on the pathology suffered and the consequences of a new pregnancy. These information must be clear, both at the time of hospital discharge and in subsequent consultations, highlighting the eligible contraceptive methods of high efficacy.

P066

Norms, trust, and backup plans: College women's use of withdrawal with casual and committed romantic partners

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This study integrates research on the prevalence of contraceptive methods including withdrawal and research on how hook-up culture impacts contraceptive use to examine college women's use of withdrawal with sexual partners. Drawing on in-depth interviews with 57 young women at a midwestern U.S. university, we analyze women's explanations for using withdrawal in sexual encounters and frame our study within the research on gender norms, sexual scripts, and power dynamics. Findings show that withdrawal is normalized within collegiate hook-up culture, with most women assuming without discussion that both casual and committed partners will pull out. Across relationship types, participants typically reported using withdrawal as a backup method to pills or condoms or a stop-gap method when switching between more effective contraceptive methods. Women also relied on Plan B if using only withdrawal. With casual partners, women often advocated for themselves in sexual encounters; however, in committed relationships women often acquiesced to use of withdrawal to maintain their relationship and because their partner desired condomless sex. Findings suggest that women in relationships may be disadvantaged by hook-up culture norms suggesting sex is freely available, which puts added pressure on women to acquiesce to the use of withdrawal to maintain their relationship.

P067

Adolescents and adult women have similar expulsion and continuation rates of the levonorgestrel 52mg intrauterine system

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Objective: The use of intrauterine devices (IUDs) for contraception in adolescents remains low. There are several concerns about the use of IUDs in adolescents, including the risk of high expulsion rates. Our objective of the study was to compare the expulsion and continuation rates of the levonorgestrel (LNG) 52 mg intrauterine system (IUS) in a cohort of adolescents and adult women. Methods: We conducted an audit study that included 393 women in whom we placed an LNG-IUS, and the women were monitored for up to five years after device placement. We created two cohorts, one with 131 adolescents (aged between 12 and 19 years old) and the other with 262 women aged >than 20 years old. Each adolescent was paired with an adult woman who had the same parity and who had an LNG-IUS inserted on the same day, just before or after the adolescent. Kaplan-Meier method and the log-rank test were used to compare the survival curves of the two groups. Results: The age of adolescents and adult women were (mean±SD) 18.1 (±1.1) and 31(±6.8) years ($p=0.015$), respectively. Parity was similar in both groups ($p=1$). There was a higher frequency of single women among the adolescents and a higher frequency of participants who living with a partner among the adult women. The number of years of schooling was higher among adult women than in the adolescent women as well as body mass index ($p=0.007$). The uterine length was significantly smaller in the adolescents compared to the adult women (7.6 and 7.9 cm, respectively) ($p=0.002$). By the fifth year of use, the clinical performance was similar between the two groups and the expulsion rates were 8.4/100 and 6/100 women-years (W-Ys) and the continuation rates were 55.6/100 W-Y and 70.3/100 W-Y among nulligravid and parous women, respectively ($p=0.463$ and $p=0.106$, respectively).

We observed 7/131 and 11/262 expulsions among adolescents and adult women, respectively. There were no differences in the cumulative discontinuation rate for any other reason (pain, bleeding, planning pregnancy, infection, other personal) throughout the 5-year use in both groups. The menstrual bleeding pattern was similar in both groups ($p=0.938$). Conclusion: In our study, adolescent and adult women users of the 52 mg LNG-IUS presented similar expulsion and continuation rates up to five years after device placement.

P068

Most common reasons for unplanned pregnancies in a Tertiary Public Maternity Hospital in Sao Paulo

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OBJECTIVES The objectives of this study are to determine the prevalence of unplanned pregnancies (UP) in a public health maternity institution in Sao Paulo (Brazil), to identify the most common reasons that lead to UP, and to investigate women's knowledge on the availability of public family planning clinics in their neighborhood.

METHODS This study was conducted between July 2019 and January 2020 at Tertiary Public Maternity Hospital in Sao Paulo, Brazil. Subjects were asked to complete a survey to collect data on demographics, socioeconomic status, previous use of contraceptive methods, intendedness of current pregnancy and knowledge about public health's family planning clinics in the area. Data were collected at prepartum, postpartum or post abortion care (due to sexual violence). **RESULTS** A total of 311 women completed the study survey. One hundred and ninety six women (63%) had not planned their pregnancy. From those the mean age was 27.3 years (± 6.6), 49.5% were pardo brazilians, 30.6% were white, and 19.4% were black. Participants with complete high school or equivalent degree were 44.9%, while 18.4% reported some high school and 11.2% had some primary or grade school education. The majority of participants reported being in a stable partnership (60.2%), 24% were single, and 15.8% were married. 62.2% gave birth twice or more. 98.5% claimed to have used contraceptive methods in the past, with the most common method being condoms (98%), followed by coitus interruptus (78.6%) and the use of birth control pills (75.5%). The most frequent reasons of UP reported by the participants were taking a break from birth control (30.6%), incorrect use of contraceptive methods (19.4%) and contraceptive failure (17.3%). Only 61 (31.1%) women reported being unfamiliar with public health's family planning clinics in the hospital.

CONCLUSION The prevalence of unplanned pregnancies in this sample is high. Despite the fact that most women reported using contraceptive methods in the past, and being aware of the Family Planning Public Service, most patients did not plan the pregnancy at the time they participated in the study

P069

What are the contraception and family planning practices of persons assigned as female at birth in Malta?

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Objectives: A research study being undertaken as part of the requirements for successful completion of a Masters in Gender Society and Culture within the Department of Gender and Sexualities, Faculty of Social Well Being at the University of Malta.

Malta has the lowest fertility rate in Europe but no recent data on the methods of contraception currently being used and no official family planning policy. This study aims to capture a snapshot of current family planning practices in Malta.

Using an online survey this study will seek to identify the knowledge (or lack thereof) of different artificial and natural contraception methods, the choices available, the methods of contraception used, and barriers to access. It will further measure the extent of pregnancy planning and pregnancy outcomes. It is hoped that this study will provide much needed data for policy makers on family planning practices in Malta.

Method: A quantitative study using an online survey with persons assigned female at birth between the ages of 18 and 49. The survey is adapted from New Zealand's Family Planning Contraception Survey 2020 and the London Measure of Unplanned Pregnancy (LMUP). The study will use a convenience sample and will be distributed via social media channels. It hopes to reach a minimum of 300 respondents.

Results: In progress. Results will be available by February 2022

Conclusions: Will be available in February 2022

P071

Low awareness of the non-contraceptive benefits of some reversible contraceptive methods in a cohort of Brazilian women

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Objectives: There is sufficient evidence that modern contraceptives are safe, so it is time to move from the negative connotation of side effects onto the positive attributes of “side benefits” and the potential lifestyle benefits of contraceptives. Our objective was to assess the awareness of a cohort of Brazilian women about non-contraceptive benefits (or “side benefits”) of some hormonal and non-hormonal contraceptives and compared non-health care providers with physicians and nurses.

Material and methods: We conducted the study at the University of Campinas, Faculty of Medical Sciences, Campinas, SP, Brazil. We sent via social media a questionnaire administered using Google Forms asking women to respond about the awareness of the non-contraceptive benefits of combined oral contraceptives (COCs), injectable depot-medroxyprogesterone acetate (DMPA), levonorgestrel 52 mg intrauterine system (LNG-IUS), etonogestrel (ENG)-implant, copper intrauterine device (Cu-IUD), and male condom.

Results: We received 2,068 completed questionnaires and one-third of the respondents (720; 34.8%) aged ≤ 29 years old, 1,673 (80.9%) reported 13 or more years of schooling, and 236 (11.4%) were self-reported as physicians or nurses. We observed that almost all women (2,063 [99.8%]) were aware that male condom use is protective against HIV acquisition and sexually transmitted infections. Furthermore, only 323 (17.6%) of the respondents were aware that COC use is associated with decreased risks of colorectal cancers; 296 (16.1%) women were aware that the use of DMPA is associated with a decreased risk of endometrial cancer, 253 (13.8%) were aware about that the users of the Cu-IUD present a lower risk of cervical cancer, and 497 (24%) regarding the low risk associated with use of the LNG-IUS and endometrial cancer. We did not identify major differences between non-healthcare providers when compared to physicians or nurses.

Conclusions: The low awareness about some non-contraceptive benefits of contraceptives by women is a concern. It is necessary to reinforce to health care providers that at any medical encounter with users and potential users of contraceptives they pass information about non-contraceptive benefits of contraceptives. This strategy is likely to improve satisfaction and continuation rate. Further, our results reinforce the need to provide more information about the non-contraceptive benefits (“side benefits”) of contraceptives during training provided to medicine and nursing students and health care providers to help them be more proactive when providing guidance about contraceptives to women.

P072

HOW SUBDERMAL CONTRACEPTIVE IMPLANT USE CHANGED IN MEXICO BETWEEN 2009-2018: A POPULATION-BASED STUDY

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OBJECTIVES: We analyzed prevalence of subdermal implants use in Mexico over time (2009–2018) and their contribution to contraceptive method mix; we additionally identified factors associated with use of implants compared with other Long-Term Reversible Contraceptives [LARCs] mainly IUDs, and Short-Acting-Hormonal Contraceptives [SARCs].

METHODS: This is a repeated cross-sectional analysis of 2009, 2014 and 2018 waves of the National Survey of Demographic Dynamics [ENADID in Spanish], a nationally household representative survey applied to a total of 192,517 women (N: 64,362,463), 15–54 yrs. who ever used any modern contraceptive. Primary outcome was contraceptive method use, focused on implants; independent variables were survey year; age, parity, health insurance, education, indigenous and socioeconomic status; state/region and urban/rural residence.

We calculated the proportion of each method users and non-users by age-group and year. We created a heatmap to illustrate implant change at state level over time. We stratified by parity and calculated the implant use as proportion of modern methods by age, parity, and year. Finally, we developed a multivariable multinomial regression model, including all independent variables, to estimate the relative risk ratio [RRR] associated with implant use or other STHCs compared with IUD use. We used Stata 13 for all statistical analyses.

RESULTS: Implant use increased over time in Mexico, from 1.1% of ever-users of contraceptives in 2009 to 4.5% in 2018 ($P < 0.001$); the greatest change was in adolescents (2.5% to 12.2%, $P < 0.001$). However, increase in implant use was associated with a relative decrease in IUDs and SARCs, and 40% of adolescents were not using any modern method at each survey wave. Percentage increase of implant as proportion of modern methods was heterogeneous across Mexico, greater in center and southern states, ranging from 1% to 9%. Overall, the probability of using implants compared with IUDs increased with survey year. The adjusted relative likelihood of using implants compared with IUDs was 34% higher for adolescents compared with women 20–29 yrs. old (RRR 1.34, CI 95% 1.16–1.55; $P < 0.001$), controlling for other factors. Nulliparous were less likely than parous counterparts to use implants, but more likely to use them (RRR 3.62, 95% CI 2.93–4.49; $P < 0.001$) and other SARCs (RRR 10.46, 95% CI 9.06–12.07; $P < 0.001$) compared with IUDs.

CONCLUSIONS: Use of subdermal implants increased significantly over time in Mexico, particularly among adolescents. There is room to further expand access to highly effective LARCs methods in Mexico.

Conflict details: This research has been partially financed by MSD Mexico. The corresponding author has also been a speaker for MSD/Organon in national and international meetings.

P074

Analysis of the effects of levonogestrel intrauterine device as contraceptive in women with kidney transplantation

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Introduction: In face of the national scenario for kidney transplants, Brazil occupies the second position in the world, with around 6,000 kidney transplants per year. Women represents about 47% of organ recipients, and it is estimated that 40% of them are in reproductive age. Therefore, it is necessity studies in contraception in this group, which represents a high-risk pregnancy. **Objectives:** to evaluate the evolution of renal transplant patients using intrauterine hormonal devices, satisfaction, and method efficacy. **Method:** This is a cross-sectional, exploratory, descriptive-analytical study with a quali-quantitative approach. The sample consisted of patients treated at the Family Planning Outpatient department from Hospital of Federal University of São Paulo, between July 2016 to September 2021. Information of age, parity and associated diseases of each patient was analyzed. In addition, to other parameters such as complications related to the method and rejection of transplantation during the use of the method. An invitation was sent via “WhatsApp”, electronic application to the patients, highlighting the objectives and benefits of the research. Those who agreed to participate received a questionnaire from “GoogleForms” platform, and they were warned that, by answering the questions, they were automatically consenting to participate in the study. **Results:** During this period, the total of 44 patients met the criteria, being elected for this study. The mean age of the patients was 34 years. The average time of using SIU-LNG was 36 months. It was not possible to contact 4 patients in the study, so 40 answered the satisfaction questionnaire. It was possible to observe that none of them had complications in the method insertion. Furthermore, none had loss or rejection of the transplant during the use of the method. During this period, four patients evolved to self-expulsion SIU-LNG and seven complained of undesirable side effects (colic and irregular bleeding), of which four requested device removals. The majority, i.e. 87.5% of the patients, said they were satisfied with the method and stated that they would advise for other women. **Conclusion:** In view of the data analyzed, we can conclude that SIU was shown to be a good choice of contraceptive method in women with kidney transplantation, since it proved to be safe and not harmful to their disease, in addition to good contraceptive efficacy.

P075

User satisfaction with an intervention for structured contraceptive counselling. Results from the LOWE trial

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Objectives: Interventions for structured contraceptive counselling leads to increased use of long-acting reversible contraceptives (LARCs) and decreased numbers of unintended pregnancies. However, interventions are rarely evaluated from a user perspective. This study aimed to evaluate both health care providers' and participants' satisfaction with an intervention for structured contraceptive counselling used in a large trial in Sweden.

Methods: A cross-sectional study on the intervention group from a cluster randomised trial conducted at 28 clinics in Stockholm, Sweden. Clinics were randomised (1:1 allocation ratio) to provide either structured contraceptive counselling (intervention) or standard contraceptive counselling (control). The study-specific intervention included 4 parts; an educational video to be seen by the participant prior to contraceptive counselling, key-questions to be asked by the health care provider (HCP), an effectiveness chart, and a box of contraceptive models. Eligibility criteria were ≥ 18 years, sexually active without a wish to conceive, and the main purpose of contraceptive use being pregnancy prevention. HCPs and participants completed an electronic semi-structured survey to evaluate the intervention. This study analyses provider and participant satisfaction with the counselling material used in the intervention and if the intervention was found to be supportive in contraceptive counselling and contraceptive choice.

Results: From Sept 2017 to May 2019, 14 intervention clinics enrolled 658 participants. The response rate among providers was 88.0% (55/62) and among participants 97.1% (639/658). Providers found the intervention to be supportive in their counselling. Each separate part of the intervention package received high ratings from both providers and participants. Participants found the educational video and the effectiveness chart to be more helpful in their contraceptive choice than the box of contraceptive models. Younger participants found the intervention to be supporting contraceptive choice to a higher extent than older participants. Providers reported the time taken to complete the intervention outside the study to be time-neutral to standard counselling, and most providers wished to continue to use all parts of the intervention package.

Conclusions: The intervention of structured contraceptive counselling had high provider and participant satisfaction. The structured counselling package could be used in several clinical settings to improve quality in contraceptive counselling and to enhance informed decision making about use of contraceptive methods.

Conflict details: NE reports personal fees from Bayer AG, outside the submitted work; KEI reports non-financial support from Bayer AG, non-financial support from RemovAid AS, outside the submitted work; KGD reports other from RemovAid; personal fees and other from MSD/Merck, Bayer AG, Gedeon Richter, Mithra, Exeltis, HRA-Pharma, Exelgyn, Campus Pharma, Circle, Natural Cycles, MedinCell, and Myovant, outside the submitted work. HKK reports personal fees and other from Bayer, personal fees from MSD, Exeltis, Mithra, Natural Cycles, Gedeon Richter, Preglem, outside the submitted work. IB declare no conflicts of interest.

P076

Risk of IUDs expulsion in menstrual cup users: systematic review

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Introduction: The use of intrauterine devices and menstrual cups is raising progressively between women and there are few studies that evaluate their concomitant use and the risk of expulsion.

Objective: We aimed to evaluate if the concomitant use of menstrual cup and IUD increases the risk of IUD expulsion.

Methods: this is a systematic review of literature in the following databases: Pubmed/Medline, Embase, Scopus and Web of Science using the keywords “menstrual cup” and “intrauterine device” in June 2021. The eligibility criteria were all type of studies, there was not restriction in age group and studies that did not assess the simultaneous use of IUDs and menstrual cups were excluded.

Results: 404 articles were identified and only three were included. The selected studies presented heterogeneous results, with one randomized clinical trial showing increased risk of IUD expulsion among menstrual cup users (OR 3.81 (95%, CI 2.45-5.92, $p < 0.001$), with a retrospective cohort that did not find any association between the use of menstrual cup and IUD expulsion; and a cross-sectional study with online questionnaire identifying positive association between the use of menstrual cup and raise in the risk of IUD expulsion (OR 2.75 (95%, CI 1.40-5.42, $p = 0.002$).

Conclusion: There is no clear association between menstrual cup and increased risk of IUD expulsion. However, the included studies are heterogeneous. More research is necessary to evaluate this association.

P077

Changes in contraceptive use in times of “pill scare”: a comparison between Belgium, France and Switzerland

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BACKGROUND: In late 2012, a young woman who suffered a stroke that she attributed to the use of her new contraceptive pill filed a complaint against the pharmaceutical company that produced the drug and the French FDA. A French national newspaper reported the news, and in 2013, a media controversy, also called “pill scare”, broke out in France, and rapidly echoed in the French-speaking media in Belgium and in Switzerland. As a result, pill use dropped in France and in Belgium while only a slight decrease was observed in Switzerland. These observations are consistent with the scientific literature revealing that “pill scares” occur each time a new health risk associated with the use of oral contraception is revealed by the media, leading to a decrease in pill use. However, although in France studies showed a reshaping in social inequalities in access to contraceptives available under prescription following the pill scare, no research has been conducted in Belgium and Switzerland even though access to contraceptive methods differs among these three countries.

OBJECTIVES: We aimed to to understand the extent to which changes in contraceptive use in times of pill scare were similar between the three countries

METHODS: We used two sets of data. First, we analyze Internet search trends using Google Trends® in order to estimate the extent to which the media controversies have had a different echo among the population of the three countries. Then, by using 10 cross-sectional surveys conducted in the three countries, we relied on multinomial logistic regressions estimated the trends in pill, IUD and condom use in Belgium, France, and Switzerland according to people’s social background.

RESULTS: Results from Google Trends suggested that the media controversy echoed more in the French and Swiss population than in the Belgian population. Results from the cross-sectional surveys showed that while in Belgium the fall in pill use was attributable to changes in the practices of women with a university degree only, this was not the case in France and in Switzerland where the drop in pill use occurred among well- and less-educated women. Moreover, the switch from the pill to another contraceptive method were different according to women’s social background in the three countries: while in Belgium and in France well educated women were more likely to switch to the IUD, in Switzerland, well-educated women were more likely to switch to condom use.

CONCLUSIONS: The cross-national comparison adopted in this article allowed us to show that changes in contraceptive use in times of pill scare have not been the same in the three countries under study. In Belgium and in France, the switch from the pill to the IUD occurred only among well-educated women, questioning about some difficulties in accessing IUD among less-educated women. In Switzerland, however, the increase in condom use among educated women raises the question of greater ease in sharing contraceptive labor with the male partner.

P078

A US-Based Funding Agency and Advocate for Male Contraception

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1. Objectives: Men have not seen significant advancement in contraception since the vasectomy, a relic of the turn to the 20th century. The second-most recent innovation in male contraception was the condom several centuries before that. In order to address this void in the contraceptive market as well as mitigate the staggering unintended pregnancy rate and increase gender equity, a US-based NGO, Male Contraceptive Initiative (MCI), was developed to advocate for and directly support the development of novel forms of male contraception.

2. Methods: MCI's vision is 'Reproductive Autonomy for All' - an inclusive future where all users are provided with a wide range of contraceptive options that suit their individual needs and lifestyle. By addressing the needs of sperm producers, MCI seeks to provide reproductive autonomy to men and their partners who find the current slate of contraceptive options unsatisfactory.

Outgoing research support from MCI focuses specifically in the area of non-hormonal, reversible male contraceptives. MCI supports academic and private researchers globally with grants and investments in order to drive innovation and progress in male contraceptive development. Eligible research for funding ranges from early discovery stages of contraceptive development through clinical studies, and also has included attitudinal research and trainee support. MCI has also performed market research to assess the attitudes and preferences of users.

3. Results: With over 50 awards made to-date, MCI's research portfolio supports a diverse slate of research on male contraceptive targets, devices, and projects. Many of these awards have seen subsequent support and advancements in the development pipeline.

Advocacy efforts from MCI include addressing the ethics of male contraception as well as regulatory pathways for novel contraceptive products. Additionally, they work with providers, media outlets, and the public through robust communications efforts. Other public and private agencies collaborate with MCI to address the multifaceted challenges of male contraception.

4. Conclusions: Male contraception has the ability to not only address the unintended pregnancy rate, but also increase gender equity and equalize contraceptive responsibility. Additionally, novel forms of male contraception can provide a means of engaging men in a provider setting and create a pathway to address the well-known gender gap in healthcare. A focus from the global contraceptive research community and support from agencies public and private are both needed to drive further contraceptive development and develop appealing products that meet the needs of a diverse range of users.

P079

Use of hormonal intrauterine device in Adolescents with Mental Disorders (MD).

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OBJECTIVE: Offer the hormonal IUD (Levonorgestrel Intrauterine System – IUS-LNG) to adolescents with mental disorders for insertion in an outpatient setting, in a simplified way, in order to promote an improvement in the acceptance and access to the contraceptive method.

METHOD: The study was carried out at ADOLESCENTRO, a reference center for the care of adolescents with mental disorders, in the Federal District/Brazil. All participated in an activity with information and offer of various contraceptive methods (pills, injectables, condoms, copper IUD and the IUS-LNG). Those who chose the use of IUS-LNG participated in the study. All of them were being monitored for their mild and moderate mental disorders, such as depression, anxiety, bipolar mood disorder, ADHD, intellectual disability and schizophrenia, and needed safe contraception. During the study 88% of them were using psychiatric medicine and the rest were undergoing psychotherapy associated with other treatments. They were always attended accompanied by their guardians. The adolescents were previously prepared for insertion with objective and detailed information about the method and procedure. After insertion, pain or discomfort was assessed using a visual pain scale and a 12-month follow-up, with the application of a questionnaire to assess satisfaction.

RESULTS: The insertion of the LNG-IUS was performed by the researcher in 34 adolescents aged 14 to 18 years in the gynecology clinic, without the use of sedation or local anesthesia, according to the manufacturer's technical recommendations.

The device was inserted during menstruation or after certification of non-pregnancy. Adolescents had good tolerance to pain or discomfort and the pain they reported was bearable, with mild to moderate intensity, according to the Visual Pain Scale. In cases of moderate pain, they were medicated with 1 tablet of 600mg of ibuprofen and showed improvement within 10 to 15 minutes, with release to return home and guidance on follow-up. There were no difficulties or complications during or after the procedure. After 12 months, of the 34 who entered the IUS, 26 (76.5%) continued to use it and were quite satisfied, according to a questionnaire applied quarterly during follow-up.

CONCLUSION: Considering the specificities of adolescents with mental disorders and greater difficulty in using forgettable contraceptive methods, we concluded that there was a good rate of continuity and satisfaction in 12 months with the use of the IUS. Most studies describe the procedure with use with sedation and in the operating room, which becomes a complicating factor in our reality. We observed that after careful prior clarification and availability for a good follow-up, it is possible that there is greater acceptance for outpatient insertion of the LNG-IUS, promoting increased access to this excellent method.

P080

Pain, changes in menstrual pattern, satisfaction rates, and discontinuity with two intrauterine levonorgestrel-releasing systems (LNG-IUS 19.5 mg - Kyleena®- and LNG-IUS 52 mg - Mirena®): a systematic review.

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1. Objectives: To assess the following points regarding the two levonorgestrel-releasing intrauterine systems (IUS) available in Brazil, LNG-IUS 19.5 mg (Kyleena®) and LNG-IUS 52 mg (Mirena®): pain during insertion, bleeding pattern, discontinuation rate, and satisfaction.

2. Method: a systematic review of controlled trials, both randomized and not, published between the years of 2015 and 2020 was made on the electronic databases PubMed and EMBASE. We selected studies that included the points mentioned above and included the general population of women of any age.

3. Results:

Administration of 3mg of intravaginal dinoprostone or intracervical blockage with mepivacaine 1% or lidocaine 2% reduced the perception of pain during insertion of both the studied IUS. Biological factors such as nulliparity, previous c-section, and history of dysmenorrhea were associated with the higher perception of pain during insertion. Both IUS showed an increase in the proportion of women with no or few days of bleeding and a decrease in those with prolonged bleeding. The decrease in bleeding was sustained during the 5 years of 19.5 mg IUS. Regarding satisfaction and acceptability, 96% of women using the LNG-IUS 19,5mg were satisfied or partially satisfied with it, and its 3-year-discontinuation rate was 19,1%. There was no data available comparing the discontinuation of both IUS.

4. Conclusions:

There is a lack of studies directly comparing both LNG-IUS 19,5mg and 52mg. The effect on the bleeding pattern seems the same for both IUS. Satisfaction and acceptability were high. Individual patterns of each woman are more important to define pain during insertion than IUS type.

P081

Guilty or not guilty? The role of barium in the adverse local reactions associated with subdermal etonogestrel implants

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Introduction Implanon NXT® (Merck Sharp & Dohme Corp Inc Kenilworth, NJ. USA) was launched in 2011 in Spain. One difference with Implanon® is the rod made of ethylene vinyl acetate copolymer and small amounts of barium sulfate and magnesium stearate. It allows the displaying of non-palpable implant using X-ray.

Since the beginning of the development of implants, some side effects of insertion-removal have been reported. In the last years, some authors have refereed different complications in the replacement of Implanon to Implanon NXT. So, the role of barium in the local reactions may not be excluded.

Objective: A review of adverse local reactions associated with the procedures of insertion and removal of SEI was carried out. Clinical features with iconography, follow up, and treatment were described.

Materials and methods: Between 2012 and 2017, 11 cases of adverse local reactions associated with SEI insertion or extraction procedure were recorded in the Centre for Sexual and Reproductive Health Fuente de San Luis (Valencia, Spain). Two groups were established depending on the procedure: insertion and removal. In the former group, the following cases were described: skin abscess, allergic reaction, painful scar, painful implant due to superficial insertion, partial self-expulsion and foreign body reaction. In the latter group, bent implant, deformed implant due to difficult extraction, and two broken implants were described. **Results:** Among all of the complications observed, the abscess and the allergy to implant is stand out in the insertion group and bent and broken implant in the extraction group. Most complications were resolved with the implant removal.

Conclusions: Most of the adverse local reactions secondary to insertion and extraction of SEI are related to Implanon NXT®. Although the role of barium in adverse reactions remains unclear, possibly the barium is responsible, at least partially.

P082

Immediate insertion of the Cu-IUD after second trimester medical abortion at 17-20 weeks: Implications for service delivery.

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Objectives: A randomized controlled trial (RCT) conducted in South Africa between August 2018 and June 2019 compared immediate to delayed insertion at local clinics 3 weeks post-abortion, of the copper intrauterine device (IUD) after medical abortion at 17-20 weeks gestation. Immediate insertion resulted in higher use at 6 weeks post-abortion, however expulsion rates were higher than interval insertion. This study reports findings that shed light on barriers and facilitators to the implementation of immediate insertion in the real-world service setting.

Design and Methods: Concurrent with the RCT, we reviewed clinical records for fidelity to the trial protocol and conducted in-depth interviews using a semi structured interview guide with 14 staff providing health-care to RCT participants and 24 RCT participants. We explored barriers and facilitators to implementation of immediate IUD insertion, contraceptive decision-making, and the potential impact of context and supplementary trial activities on trial findings. Interviews were recorded, translated into English if needed, and transcribed. We performed a thematic analysis at the level of the transcribed interview text.

Results: In the RCT, there were 8/57 (14%) crossovers from the immediate to the delayed arm: 5 had a clinical contraindication to the IUD post-MA and 3 changed their mind about the IUD. In deviation of the RCT protocol 10/57 (18%) in the delayed arm were given the injectable instead of oral contraceptives. Doctors and nurses were generally in favour of immediate insertion and said it could be incorporated into standard care if women wanted this. This contrasted with the need for interventions by the research team to reinforce adherence by staff to the allocated intervention over the trial duration. For women, convenience, protection from pregnancy and privacy issues were paramount and they expressed preference for engagement with staff who knew their abortion history, and with whom they had an established connection.

Conclusions: Women and staff favour immediate IUD insertion after second trimester medical abortion, but service delivery may require reorganisation of structures to ensure continuity of care for women, communication channels that mitigate loss to follow up and training of staff to ensure competence and adherence to new protocols.

P083

Immediate versus delayed insertion of the copper intrauterine device after medical abortion at 17–20 gestational weeks: a randomised controlled trial.

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Objectives: The risk-benefit of immediate compared to delayed insertion of an intrauterine device (IUD) following medical abortion (MA) at 17-20 weeks gestation is largely unknown. We report findings from a randomized controlled trial comparing use of the IUD following immediate versus delayed insertion following in-hospital MA at this gestational age.

Methods: This 2-arm randomized controlled trial was conducted in Cape Town, South Africa. Women in the immediate arm had an IUD inserted prior to discharge and those in the delayed arm were referred for insertion 3 weeks later at their local primary healthcare facility. Follow-up at 6 weeks involved in-person clinical examination and ultrasound. Those not presenting in-person were contacted by phone. Follow-up at 3 and 6 months was by phone. Participant's electronic medical records were checked for details of facility visits. Primary outcomes were use of the original IUD, as well as use of any IUD, including replacement IUDs, at 6 weeks. "Use" was defined as adequate IUD placement without indication for removal. Secondary outcomes were use of any IUD at 3 and 6 months, rates of complete expulsion, intracervical location, symptomatic malposition at 6 weeks, serious IUD-related complications at 6 weeks, and pregnancy within 6 months preference for immediate or delayed insertion. Comparisons were done using Chi-square tests.

Results: Between August 2018 and June 2019, we consented and randomized 114 women to immediate (n=55) or delayed (n=57) insertion. By ITT, 56% in the immediate (I) and 19% in the delayed (D) arms were using the original IUD at six weeks ($p<0.001$), 76%(I) and 40% (D) were using any IUD ($p<0.001$). At 3 months, use of any IUD was 69% (I) and 37% (D), ($p<0.001$); corresponding figures at 6 months were 55% (I) and 26% (D), ($p=0.003$).

Per protocol, 14% (I) had complete expulsion and 18.5% (I) and one woman (D) had the IUD removed due to malposition at 6 weeks. There were no serious IUD-related complications. Two had an unintended pregnancy within 6 months, both followed the delayed arm protocol. Eighty-seven percent (I) and 61% (D) said they would have preferred immediate insertion, given the choice ($p=0.02$).

Conclusion: Insertion of an IUD immediately after medical abortion at 17-20 GW results in increased use after 6 weeks, 3 months and 6 months compared to delayed insertion. Expulsion rates with immediate insertion are higher than interval insertion and immediate insertion at earlier gestation but similar to immediate insertion after term delivery.

P084

Etonogestrel Implant in the Postpartum Period and its Direct Impact on Lactogenesis II: A Pilot Study

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Wesley Nilsson

Objective: To evaluate if the insertion of the Etonogestrel implant early in the postpartum period will delay the time to lactogenesis stage II as measured by biochemical markers. **Methods:** Women with singleton pregnancies were identified as wanting either no birth control or the Etonogestrel implant in the postpartum period. The primary outcome was a delay in lactogenesis stage II, measured by the biochemical markers: sodium (Na), potassium (K), and a sodium potassium ratio Na/K. Breast milk samples were collected starting at twelve hours after delivery, and then every twelve hours until either discharge or ninety-six hours. **Results:** Fifty-six women were screened as eligible for the study and forty consented. Between the two cohorts there were no statistically significant differences in: delivery type, gestational age, patient BMI or parity. Eight women either withdrew or were excluded from final analysis. In total one hundred and fifty-nine (159) breast milk samples were collected from thirty-two eligible women. The average insertion time of the Etonogestrel implant was seventeen hours after delivery.

There was a difference between groups in sodium levels at two days post-partum: the sodium level was higher by 23.58 mM (95% CI 1.47 to 45.69, $p=0.04$) in the implant group than in the no birth control method group. As in the unadjusted models, there was evidence of a difference in sodium levels at two days post-partum, with the sodium level being higher by 31.48 mM (95% CI 7.25 to 55.71, $p=0.01$) in the implant group than in the no BCM group. In addition, a difference at day two was observed in the ratio (sodium/potassium) levels, with a higher mean ratio in the implant group by 2.77 (95% 0.51 to 5.02, $p=0.02$). For potassium levels, the only difference was observed at day 4, with lower values in the implant group ($p=0.03$). Conclusion: The transition from colostrum to copious milk secretion, otherwise known as lactogenesis stage II, is delayed by the early insertion of the Etonogestrel device. This is evidenced by the delay in biochemical markers normally seen in lactogenesis stage II.

Conflict details: No

P085

Contraceptive practices among women over 40 years presenting to the gynaecology clinic at a tertiary care center in Sri Lanka.

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Objectives: Describe the prevalence of contraceptive use among women over 40 years who present to the gynaecology clinic at Sri Jayawardenepura Hospital. Describe current and past methods of contraception used by the population. Describe access to contraception counselling.

Method: A descriptive cross-sectional study was conducted among women over the age 40 years presenting to the gynaecology clinic of the Sri Jayawardenepura Hospital from January to August, 2020. Women who had undergone menopause or hysterectomy were excluded from the study. An interviewer-administered questionnaire was used to collect data including age, education level, fertility wishes, methods of contraception used, comorbidities, and access to contraception counselling.

Results: A total of 182 women participated in the study. Among them, 4 (2.2%) had fertility wishes and 12 (6.6%) were sexually inactive. Among the sexually active women with no fertility wishes ($n=166$), 56% ($n=93$) used modern contraceptive methods. They were female tubal sterilization (21.2%), CuIUD (10.8%), male condoms (7.2%), COCP (7.2%), subdermal implants (3.6%) DMPA injections (3%) and IUS (2.4%). Modern contraceptive methods were not used by 44% ($n=73$) of sexually active women with no fertility wishes. 34.3% ($n=57$) of them did not use any form of contraception. Withdrawal and calendar methods were used by 7.2% ($n=12$) and 2.4% ($n=4$) respectively. 57.5% ($n=42$) had used a modern method of contraception previously while 8% ($n=6$) had used emergency contraception during the preceding 2 years. Comorbidities among women who were not using modern methods of contraception included diabetes mellitus (28.7%), hypertension (19.1%), and dyslipidaemia (15%).

Only 33.5% ($n=61$) of the population had received contraception counselling during the previous 5 years. Only 2 participants had received contraception counselling while receiving care for comorbid conditions. Among women who were using reversible methods of modern contraception ($n=57$), only 54.4% ($n=31$) were informed of the adverse effects of the contraceptive method. 42.1% ($n=24$) of participants had not been offered alternative methods to choose from during counselling.

The level of education, income and employment status were not associated with the use of modern contraceptives.

Conclusions: Use of modern contraceptives remains low among women over 40 years. Few women in this age group have fertility wishes while a significant proportion have comorbidities which can lead to adverse outcomes during pregnancy. The health system in Sri Lanka has not adequately addressed the contraception needs of women over 40 years with few women receiving information on their vulnerability and contraceptive options from caregivers.

P087

Changes in bleeding pattern with the use of LARCs

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Objectives: To evaluate bleeding patterns with the use of Larcs in Argentina including the etonogestrel-releasing implant, Mirena and the Cu-IUD.

Material and method: This was a descriptive study, conducted at a Public Hospital at Buenos Aires Argentina from December 2014 to December 2018. We practiced 738 procedures: 590 chose subdermal implant ETG, 47 (IUD-LNG) and 101 (Cu-IUD), then we could follow up 258 patients with Implanon, 40 with Mirena and 61 Cu-IUD users. All women in fertile age, from any nationality, willingness to change or start a new contraceptive method., 379 patients were excluded due to inability to follow up. The population studied were mostly patients with one or more children (85%) and low income. All the contraceptives methods were provided free of charge by the Sexual and Reproductive Health Program, we considered the following variables: age, previous contraceptive methods, parity, weight / height, date of last delivery and / or abortion, side effects. Appointments due to follow-up were set at 3.6 and 12 months after placement. Those patients who did not return to the control were surveyed by telephone call, recording the following variables: bleeding pattern, headache, acne, mastalgia, satisfaction, reasons for early removal.

Results: Regarding the use of subdermal implant, amenorrhea was reported in 47%, infrequent bleeding in 18%, frequent bleeding in 9% and prolonged bleeding in 9%. This last pattern was the reason for early removal in 9 cases. This responds to the stated objective of performing a good pre-insertion counseling, explaining adverse effects and changes in the cycle. The percentage of continuation of the method in most countries ranges from 50 to 70%. In our experience the percentage of continuation is higher (n= 258) 91,08 %.

Conclusions: LARCs methods are highly effective, acceptable and decreases Public Health costs. With optimal counseling, we achieve a very good continuity of the method, avoiding premature removal. Subdermal implant was chosen as the first option over the rest of the contraceptive methods offered. Gynecologists must provide good information for the choice of contraceptive method. It should be promoted as the first choice for contraception in Public Health.

P174

Postpartum insertion of intrauterine contraception at time of cesarean section: a 5 year follow up

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Objectives: Postpartum intrauterine contraception (PPIUC) insertion during caesarean section is known to be safe and effective, but is still a relatively new technique in most countries. There is limited evidence that exists about the long-term complications and difficulties associated within the removal of IUC inserted this way. The aim of this study is to assess complications associated with removal of devices inserted during caesarean section.

Methods: This study was a retrospective casenote review conducted in NHS Lothian. This study included 122 women with removal data who had PPIUC (52mg LNG-IUS or Cu-IUD) inserted at the time of caesarean section between June 2015 and August 2016 were included. Local hospital and sexual health electronic health records were reviewed to identify those attending specialist services for removal within 5 years of insertion. Features of the removal procedure were collected and analysed.

Results: In this study 122 women were included that had removal data. The mean timing of removal of the IUC was 26 months. The level of intervention required for removal was: 73% (n=89) required non-specialist removal eg. no additional tools or thread retrievers only; 20.5% (n=25) required additional specialist tools eg. Hartmann forceps, cervical dilatation; 6.6% (n=8) required either outpatient or general anaesthetic hysteroscopy.

Conclusions: The rate of hysteroscopic device removal following caesarean PPIUC insertion is low. Most devices were removed in a clinic setting without the need for specialist tools.

Contraceptive and sexual and reproductive health education and training of healthcare providers, users, family and friends – all aspects

P088

How are midwives trained to provide abortion care, information and support? Findings from a scoping review

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1. Objectives: Midwives provide MVA and support for management of abortion with pills within their skills and scope of work, and are often pregnant people's preferred providers and mechanisms for support. The ICM includes abortion and post abortion care in their global essential competencies. However, it's unclear how midwives are trained to provide abortion and post-abortion care given wide variation between international, national, and institutional level guidelines. The objective of this scoping review was to synthesise literature on midwifery education to identify how midwives learn to provide abortion and post abortion care, information, and support.
2. Method: I conducted a scoping review of peer-reviewed and grey literature in PubMed and Google Scholar. Inclusion criteria were reports and articles published since 2000 in English on midwives' education and training in abortion. I started by searching databases using keywords to retrieve relevant literature, and then adopted a snowballing approach to include referenced studies. Out of 212 identified articles, duplicates (n=33) and those that did not fit the eligibility criteria were removed (n=62). I coded the remaining articles and reports (n=117) into themes inductively.
3. Results: Research on abortion education for midwives is global, with population-specific and universal learning experiences emerging in the literature. Articles and reports identified in this search included populations in Africa (32%), Asia (21%), North America (12%), Europe (10%), South America (7%) and multi-country studies (17%). Key themes were 1) the value of training midwives in MVA and person-centred abortion care for reasons including: financial sustainability, to reduce waiting times, improve awareness of abortion law, reduce provider burnout and experience of stigma, 2) individual factors that affect implementation of abortion education, including attitudes towards abortion, conceptualisation of roles and experience, 3) institutional factors that affect implementation of abortion training, including conscientious objection, 4) policy conditions required for abortion education, and 5) the type of training required include continuous value clarification, clinical placements, and client-centred counselling and referral.
4. Conclusions: Well-trained midwives provide abortion and post-abortion care globally with no difference in safety, effectiveness and acceptability compared with physicians. There is a strong financial and social value to adding abortion to midwives' curricula. In settings affected by unsafe abortion practices, post-abortion care training for midwives reduces morbidity and mortality. More research is needed on the individual, institutional, and policy-level factors that inform the implementation of quality abortion education for midwives.

P089

Adolescent boys and prevention of unintended pregnancy. Cultural appropriateness of a evidence-based intervention into formal and non-formal education settings in Uruguay.

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Unintended pregnancy in adolescents is a relevant issue of human rights and public health. In Uruguay the fertility rate is 32 x 1.000 per adolescents (15-19 years, 2020). This situation particularly affects the most vulnerable adolescent girls who are economically disadvantaged. Public policy of unintended pregnancy in the country has been focused on adolescent women. This project is innovative in seeking to engage adolescent boys from a gender-transformative approach.

Results of the first phase of the "If I Were Jack Project" started in Uruguay in 2020 will be presented. The intervention was developed based on scientific evidences, by the Queen's University of Belfast (NI) for its

implementation in the United Kingdom to identify the psychosocial determinants involved in the attitudes and decision-making in adolescents in the face of a hypothetical pregnancy situation. The main instrument of the project is an interactive video drama (IVD) that presents the situation of an adolescent, Jack, whose girlfriend is pregnant and includes an online self-administered questionnaire on decision-making regarding the hypothetical situation and possible courses of action.

The main purpose of the project is to contribute to the reduction and prevention of adolescent fertility in Uruguay and to promote positive and equal gender and sexual relationships between adolescents.

In the first phase, the main objective was to evaluate the acceptability and validation of the instruments (IVD and self-administered questionnaire) using the QUB-NI version. A qualitative methodology was used by conducting 14 focus groups with secondary school teachers, mothers and fathers of teenagers (boys and girls), health professionals, and female and male adolescents. 120 participants were recruited.

The results show broad acceptability of the intervention, due to its relevance and its sensitivity as an innovative strategy for Sex Education. The involvement of families, the health system and educational institutions is valued positively, in order to offer a comprehensive approach. However, obstacles are pointed out for its incorporation into the educational system as part of Sex Education Programme. Likewise, there was consensus among participants in all groups on the need to adapt the intervention for non-formal educational contexts.

It can be concluded that the adaptation of the project to uruguayan context would allow the development of an innovative and effective comprehensive sex education initiative not available in the country, in both formal and non-formal education settings. Its implementation would make it possible to collect data on adolescents' attitudes towards hypothetical pregnancy, maternity, paternity, abortion, and adoption, as well as the influence of peers, family adult referent, and health professionals in decision-making.

The first phase of the project provided very important inputs for the adaptation of the instruments and the intervention in Uruguay, which have been designed during 2021. The version of the instruments, culturally adapted, could be used by other countries in the Latin American region in their sex education programs.

P090

PUBLIC OPINION POLLING TO INFORM COMMUNICATION CAMPAIGN ON MEDICAL ABORTION IN SENEGAL

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Background: Although in 2004 Senegal ratified article 14 of the Maputo protocol which allows for abortion in cases of sexual assault, rape, incest and risk for the physical and mental health of a pregnant woman, abortion in Senegal is prohibited and criminalised. This situation has caused alarming rates of unsafe abortion and incarceration of women. In response, stakeholders are leading efforts to advocate for a safe abortion law and reforms to allow for progressive reproductive rights for women and girls.

Objective: To establish public opinion of the circumstances they would accept medical abortion as stipulated in article 14 of the Maputo Protocol (sexual assault, rape, incest, and risk for the physical and mental health of a pregnant woman).

Methods: This was a cross-sectional survey conducted among 1,021 adults aged over 18 years in eight regions of Senegal. Face-to-face interviews were conducted using a structured questionnaire and data analysis was done statistical software (SPSS).

Key Findings: Awareness of circumstances for abortion under current law: 18% reported that abortion is not allowed in the current law under any circumstance and 16.4% did not know. 43.2% cited it is allowed if it is a risk to the life of the pregnant woman, 29.5% if it is risk to her physical health, 29.4% in case of rape, and 19.3% if it is a risk to her mental health. Perception towards women's reproductive rights: 41.1% strongly agreed to the statement that a woman has a right to decide the number of children she should have, compared to 49% who strongly disagreed. Similarly, the statement on whether a woman has a right to decide when to be pregnant had 47.2% strongly agreed and 42.6% strongly disagreed.

Perception towards abortion: 75% were most supportive of abortion as an option/ legal if the physical health of the woman was at risk. 57% strongly agreed/agreed to the statement that abortion should be an option/ legal if the mental health of the woman was at risk. 41.8% strongly agreed that abortion should be an option/ legal if a doctor determined that a woman had been raped.

Sources of information: Nearly four in ten (39.6%) respondents had not heard of any information on abortion in the last one year. Sources of information included television (56.7%), radio (54.6%), social media (18.6%) and internet (16.7%).

Media Habits: Television (85.3%) and radio (76.2%) were the most used media. Overall, men were more likely to engage in any media (apart from television which had more female users).

Conclusions and Recommendations: The research findings reveal that there is a significant lack of information about the provisions in the current abortion law and the circumstances under which abortion is an option.

There is a need for a communication campaign to make the public aware of the current law and its limitations, and to advocate for the law to be amended to allow for safe abortion under circumstances such as rape, incest, sexual assault, or when the mental or physical health of the woman, pregnant girl or fetus are threatened.

P091

ZANZU – bridging the gap on virtual resources providing trustworthy and easily accessible multilingual information on sexual and reproductive health and rights for migrants and refugees

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Objectives: Improving the quality of sexuality education and fostering its implementation on the national level is an aim in line with internationally agreed upon strategies and goals, such as the Minsk Declaration on the Life Course Approach and the 2030 Agenda for Sustainable Development. Moreover, in the WHO European Action Plan for Sexual and Reproductive Health, ‘establishing and strengthening formal and informal evidence-informed comprehensive sexuality education’ is highlighted as specific objective.

In order to accomplish these goals, virtual resources need to play a more prominent role in the future. However, professionals have been pointing to this specific gap in the list of means of comprehensive sexuality education for many years. ZANZU, the multilingual website on aspects of sexual and reproductive health and rights, is a convenient tool to bridge this gap – especially in these times of increased online communication and social distancing. The website was developed by the German Federal Centre for Health Education (BZgA) and the Belgian NGO Sensoa in collaboration with an international advisory board. Key objective is to offer scientifically correct and easily accessible information on subject-related issues to migrants who have come to Germany and Belgium and do not speak the respective languages yet.

ZANZU is a comprehensive tool offering information on sexual and reproductive health and country-specific rights in 13 languages as well as other specific features such as a dictionary or an integrated text-to-speech-tool. The website was launched in 2016 and is updated on a regular basis. It addresses both professionals (doctors, counsellors) working with migrants and refugees in Europe as well as migrants themselves. The website was tested with the ultimate target group to ensure acceptability and evaluated among professionals using ZANZU in counselling centres in Germany.

Conclusion: The fact that two European countries invested in a platform to facilitate access to information on sexual and reproductive health in 13 languages led both to broad discussions and international protests. Nonetheless, feedback and evaluation have clearly shown that there is a need of access to neutral, trustworthy and easily accessible information in the field of sexual and reproductive health on the internet, especially for migrants and refugees in European countries. Participants of this session will have the opportunity to get a clear understanding of the opportunities and possibilities of this unique tool and to weigh their options to adapt ZANZU to their country-specific needs.

P092

Capacity Building for Postpartum Intrauterine Contraceptive Device (PPIUD) Services in Nigeria: A Pragmatic Approach

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Background and objective: In Nigeria, at one month postpartum, only 3% of women are using a modern method of contraception, while it is 11% at one year.

In 2017, in collaboration with its partners and the private sector, the Nigerian government pledged to achieve a modern contraceptive prevalence rate (mCPR) of 27% among all women by 2020. This study reports on the strategy for capacity-building of health care workers for postpartum intrauterine contraceptive device (PPIUD) service provision.

Method: A training cascade approach was adopted. Five teaching hospitals across the country's six geo-political zones were selected for Master Trainer (MT) training, emphasizing PPIUD insertion training. The Boko Haram insurgency prevented using a training centre in the sixth zone. Each training center had 15 – 20 participants. The training methodology included training manuals, lectures, videos, role-plays, demonstrations, and the Mama U uterus model. The training was evaluated by Pre- and Post-tests, clinical skills checklists, and an end-of-course questionnaire. Criteria for competent trainee certification included having a minimum of 3 successful insertions on a Mama-U uterus model, two successful supervised insertions, and three successful unsupervised PPIUD insertions in a client.

Results: In 2017, five training centers trained 76 master trainers, including doctors, nurse/midwives, and community health extension workers. Between 2017 and 2019, 2092 PPIUD service providers, who work in rural populations where most of the need for modern contraceptive services abound, had been trained across the country by the Federal Ministry of Health, partnering with development partners cascade training. Kaduna State had the highest number (602) of trained health personnel. These workers then went on to provide PPIUD services and train others across the country. Some peculiar challenges were encountered during the training, such as unsuitable candidates for training sent by some states despite specific training criteria in the invitation letters to the State Ministries of Health. Patients often declined PPIUD because of myths, misconceptions, or religious beliefs.

Conclusion: The modern contraceptive prevalence rate (mCPR) in Nigeria is low, with a high unmet need for PPIUD. One of the practical approaches to reversing this state is capacity building through a cascade training of health workers, in keeping with the Task-Shifting/Task-Sharing Policy for Essential Health Care Services of the Federal Government of Nigeria. Currently, the available evidence is in support of this policy in the provision of PPIUD services.

P093

CAPACITY BUILDING FOR INSTITUTIONALIZATION OF POSTPARTUM FAMILY PLANNING IN SIERRA LEONE.

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Background and objective: Sierra Leone, in West Africa, has one of the highest maternal, newborn, and child mortality rates in the world. The modern contraceptive prevalence rate (mCPR) is 21%, and the total fertility rate is 4.2. There is also a high unmet need for Postpartum Family Planning (PPFP) in the country. Overall, the current Postpartum Family Planning prevalence rate at six months postpartum is 4%. From Sierra Leone Family Planning Costed Implementation Plan, Postpartum Family Planning alone will contribute 51.5% to the expected increase in CPR within five years.

The objective was to assess the strategies adopted for the training of trainers (Master Trainers) and training of service providers on PPFP/PPIUCD in Sierra Leone and the anticipated impact of institutionalizing the services in Public Health facilities in Sierra Leone.

Methods: Using available global materials on PPIUCD, a Facilitator's Guide and a Participant's Reference Manual were developed for the country. Participants were selected for Master Trainers' training course and others selected for training as service providers. Facility-based, competency-focused training using the Mama-U uterus model was carried out using the training manuals. The training was evaluated by Pre- and Post-tests, skills competency assessments using clinical skills checklists, and end-of-posting evaluation forms. Further mentoring was done during the facilitative supervision visit.

Results: Sixty-two service providers (including 25 Master Trainers) were trained on PPFP/PPIUCD. The participants were drawn from the 14 districts in Sierra Leone. Materials for PPIUCD insertion were purchased by UNFPA Sierra Leone and distributed to the various health facilities that had trained health workers across the country for PPIUCD service provision and further training.

Conclusion: Postpartum IUCD remains a viable option for clients who wish to use a long-acting reversible contraceptive method after delivery. It provides a highly effective method for preventing unintended pregnancy, especially for patients who may not return for the postpartum visit, as seen in Sierra Leone. The training of Master trainers for the country will help cascade further training to cover all the districts. Institutionalization of PPIUCD services in the country will help increase the mCPR, thereby working towards achieving the commitment for FP2020 and the Sustainable Development Goals.

P095

Sexuality of women with LARCs

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Objective: Know if the sexuality of women using Larcs changes

Method: A survey of 100 women was conducted about the female sexual function index at the “reina madre” clinic in Toluca Mexico State.

Results: Of contraceptive group, 61 larcs users were. Only 18 responded that they had changes in their sexuality, which 13 responded unfavorable changes in at least one item of female sexual function index.

Conclusion: More studies are needed.

P096

Age-specific care in fertility (preservation) management for adolescents and young adults (AYAs) with cancer.

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Objectives: When diagnosed with cancer, adolescents and young adults (AYA's) experience high levels of unmet service needs and age-specific problems. One of those needs is fertility and fertility preservation in the oncological setting. At our institution, the entire care path for fertility and fertility preservation from oncologic diagnosis, over treatment to follow-up was critically analyzed and optimized to increase the quality of care.

Method: The approach for this optimization started with a literature search on these topics, besides the analysis of our guidelines and qualitative research conducted in our center. Next, satisfaction inquiries with the AYA patients themselves, as well as recurring status meetings with health care providers and focus groups were conducted.

Results: This approach resulted in improved referral pathways, the development of an AYA compass to enable patient participation, modifications in the infrastructure, and an improved care path after fertility preservation. To sustain the changes, focus group meetings are initiated to further improve the fertility (preservation) care and recurrent transmural training is initiated.

Conclusions: This work aims at sharing our experience with the optimization of fertility and fertility preservation management to help others to tailor age-specific care for AYA's.

P097

An Australian first: Sexual and Reproductive Health Care Education for Medical Students delivered over the entirety of MD at The University of Melbourne.

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Objective: An Australian first, The Centre for Excellence in Rural Sexual Health (CERSH) in the Department of Rural Health at The University of Melbourne have developed a subject for the medical students: Sexual Health Across Clinical Contexts.

Method: The University of Melbourne's MD course has been re-designed to allow the students some choice in the subjects they study over the 4-year post-graduate degree. More than 70 subjects were proposed and 8 were chosen for the first year of the course, 2022.

There has been strong evidence in Australia that women living in rural and regional areas are disadvantaged in terms of access to reproductive health services, specifically contraception and termination of pregnancy services and a recent systematic review of the evidence identified the consistent barriers as; long distances to travel to services, limited numbers of available doctors, lack of access to medical termination, privacy and stigma problems, costs, lack of access to accurate information and unbiased counselling, health professionals with conscientious objection and longer waiting times (ref).

Results: To address the needs of the work force CERSH has developed, for currently practicing health professionals, free online practical education under 12 different subjects: Sexual History taking, Long-Acting Reversible Contraception (LARC), MTOP (Medical Termination of Pregnancy), STI, Partner Notification to name some.

CERSH staff have been teaching within the MD for 8 years and have an in-depth knowledge of the core curriculum and the areas that need to be addressed in Sexual and Reproductive Health.

Conclusion: We have developed a subject to be delivered to medical students over the four years of the MD. The students will learn a mixture of knowledge and skills in Sexual and Reproductive Health Care via various media- online, face to face, clinical placement and research. The students will graduate with certification in LARC insertion and will be able to deliver Medical Terminations of Pregnancy once registered as practitioners. Adapting the online modules for asynchronous learning and embedding face to face tutorials within the subject, sound pedagogical foundations are addressed. The course will be evaluated over the coming years.

Ref: de Moel-Mandel C & Shelley JM. The legal and nonlegal barriers to abortion access in Australia: a review of the evidence. The European Journal of Contraception & Reproductive Health Care, 2017: DOI: 10.1080/13625187.2016.1276162

P098

Development of a learning platform on fertility awareness using human centered design.

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Objectives: In Belgium, just like in many other countries, the focus of sexual education in secondary schools is merely on how to avoid unplanned pregnancies and sexual transmitted infections in the future. Numerous studies on fertility awareness report limited knowledge on the impact of age and lifestyle factors on fertility in the general population. As people delay parenthood ever more in Western countries, it can be hypothesized that people do not make an informed decision when postponing parenthood. Recent studies indicate that young people (aged 17-25) are most open for fertility-related information and that people aged > 25 regret not having learned more about fertility in school. The new attainment targets for the third grade in Flemish secondary education indicate that pupils should be aware of the impact of health behavior on male and female fertility. The intention of our project is to create a platform with fertility-related learning material in cooperation with pupils and teachers.

Design & Methods: From January to February 2022 a questionnaire will be submitted to all Belgian pupils from the 2nd and 3rd grade. This questionnaire will assess their knowledge and attitudes regarding fertility and will serve as baseline measurement. In March 2022, focus group discussions will be organized with pupils and teachers (different focus groups for pupils according to their age and educational level) in order to learn about their needs with regards to fertility-related learning material. The learning platform will be designed with integration of the ideas, input and feedback out of the focus groups (human centered design). Results: The study protocol will be presented, as well as preliminary results from the questionnaire and focus group discussions.

Conclusions: Preliminary conclusions of the above described method will be presented.

P100

Assessing a new intrauterine device insertor

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Objectives: Despite the proven benefits, including affordability and efficacy, IUD technology suffer from a lack of innovation since decades. Current insertion procedure is complicated and issues persist, including pain, risk of pelvic infection and uterus damage. Recommendations to improve the procedure fail to meet the expectations of both women and providers, especially for the pain management. There is a true medical need not met by the IUDs currently on the market.

Methods: In a pilot proof of concept study, we performed ex vivo and in vivo to test a new IUD device composed of an innovative insertor allowing the IUD insertion without using a tenaculum. The procedure was tested on extirpated uteri and patients by a trained provider not familiar with the technology and followed immediately by an ultrasound evaluation to assess the location and fundal placement of the IUD. Provider and patients also completed satisfaction surveys.

Results: The results demonstrated the ability of this new device to access and pass easily the cervix without using a tenaculum and to deploy the IUD into the uterine cavity with a correct fundal placement. Provider and patients feedback shown a high acceptability and improvements of the procedure were noticed.

Conclusions: On the strength of these encouraging results, further clinical cases study with a larger panel of providers and patients will be initiated to investigate deeper the impact of this innovative device on the ease of the IUD insertion procedure and the comfort of the patient.

P101

FertiSTAT: A Potential Tool for Adolescent Sexual Health

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Objective: The FertiSTAT (fertility status awareness) tool provides personalized advice on reducing risk factors for infertility and seeking medical advice on the basis of lifestyle and reproductive profile. We wanted to test the FertiSTAT tool in younger patients (14-24 years) and to screen for and evaluate knowledge of risk factors that affect fertility. **Methods:** Patients aged 14-24 years attending consultations at a university hospital received a quantitative questionnaire before consultations. Questions covered lifestyle, gynecological history, perception of fertility, and pregnancy intent. We investigated respondents' beliefs with regard to risk factors for infertility through "true/false" questions. We selected questions relevant to our population from the original FertiSTAT questionnaire to calculate each respondent's FertiSTAT score. Scores ranged from "blue" (low risk, score 1) to "red" (risk of infertility, score 4). **Results:** A total of 279 women aged 14-24 years were included. Nonpregnant patients had overall higher FertiSTAT scores (2.7 ± 0.8). Upon logistic regression analysis, with every additional FertiSTAT point, the odds of being pregnant at the time of survey decreased by 0.48. Risk factors for infertility and knowledge of these risk factors were equally distributed between pregnant and nonpregnant women. **Conclusion:** Our findings suggest FertiSTAT might be a useful tool in the younger population to whom we extended it, and highlight gaps in knowledge on risk factors for infertility. These findings are of interest when considering FertiSTAT as a starting point to discuss contraception and risk factors for infertility at an age at which risk mitigation would prove most effective in preserving future fertility.

Cultural and ethnic diversity in a changing Europe

P102

Access to sexual and reproductive health care: the perspective of women refugees in Switzerland

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1. **Objectives:** Refugees' sexual and reproductive health receives little to no political or societal attention and is not prioritised in the Swiss healthcare agenda. In Switzerland, refugee women in particular face several specific barriers that prevent them from accessing or receiving (high quality) sexual and reproductive healthcare. This problem is particularly pronounced in the case of access to family planning and contraception.

While previous research highlights structural barriers such as the lack of family planning counselling services and insufficient funds for contraceptives, the perspectives of refugee women have not yet been studied and remain unknown. In addition to removing structural barriers, examining refugee women's perspectives is essential in order to develop needs-based solutions. Assessing refugee women's perspectives to better understand access barriers from their point of view is the aim of an ongoing study at Bern University of Applied Sciences.

2. Design & Methods: The aforementioned study «Access to Family Planning and Contraception. The Perspective of Refugee Women in Switzerland» (running from 2021-2023) is a qualitative interview study assessing Arabic-speaking women refugees' knowledge, experiences, and needs in terms of sexual and reproductive health. The principal investigator's Arabic language skills enable access to the target group and help to build trust with interview participants. In addition, a professional intercultural interpreter participates in the interviews to guarantee an ad-verbatim translation. A total of 15 semi-structured interviews are planned, in which participants are asked about their a) concepts of sexual and reproductive health, b) needs regarding family planning and contraceptive issues, and c) experiences of sexual and reproductive healthcare in Switzerland.

3. Results: The study takes both the socio-cultural and political context and refugee women's individual and biographical factors into account that shape their perspectives on sexual and reproductive health. At the conference, the first results from the cyclical-iterative research process will be presented.

4. Conclusions: Effective care concepts for sexual and reproductive healthcare services must be based on the needs of those affected. In the context of flight and migration, this means that the perspectives of refugees, which have not yet been studied, must be taken into consideration. The present research project assesses Arabic-speaking refugee women's perspectives on family planning and contraception and will discuss the implications for the evidence-based development of corresponding services.

P103

Is there an improvement in the sexual and reproductive health of Roma women in Serbia in the last decade?

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Introduction & Objective: Roma people are, according to official data, the largest vulnerable population group in Serbia. Given Europe's political commitment to eliminating discrimination against Roma people in several areas, including sexual and reproductive health (SRH), within the Decade of Roma Inclusion 2005-2015, a number of relevant strategic documents have been adopted in Serbia and a number of projects have been implemented. The question is whether these efforts have resulted in an improvement in the SRH of Roma people?

Design & Methods: The research is based on the relevant findings of Multiple Indicator Cluster Surveys 4 and 6 carried out in Serbia. SRH indicators for women in reproductive age were compared between the Roma living in the Roma settlements and the general population in 2010 and 2019.

Results: In the observed period, the differences between Roma women and those from the general population in Serbia increased in the following SRH indicators: the total fertility rate (+1.0 vs. +1.9); adolescent birth rate (+134.6 vs. +151); having had a live birth before 18 (+28.0% vs. +31.8%). Differences in the modern contraceptive prevalence rate in the period 2010-2019 are slightly reduced, but it should be noted that couples in Serbia rarely use a condom, 'pill' and intrauterine device (IUD). Namely, according to the latest data from 2019, one out of fifteen Roma women use some modern contraceptive, while every fifth woman from general population in Serbia rely on condom, 'pill' or IUD. Traditional contraception is continuously used predominantly in both groups.

An important indicator of SRH health, but also an indicator of discrimination against Roma is the one that refers to percentage of women currently married or in union who have ever consulted on the use of any method to avoid getting pregnant with either a family doctor or gynaecologist. The corresponding data, which exist only for 2019, are 1.4% and 20.1% for Roma women, relative to 9.4% and 53.7% for women from general population.

Conclusion: Although challenges related to the sexual and reproductive health of Roma women in Serbia have been identified, the expected results of the implementation of the undertaken policy measures and other activities have been lacking. In order to achieve considerable improvement, it is necessary to evaluate the adopted measures and the efficiency in their realisation.

P104

RemovAid™ device versus standard technique to remove a one-rod subdermal contraceptive implant: a randomized, open-label, non-inferiority trial in Uganda

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Objectives: Subdermal contraceptive implants are the second most popular contraceptive in Africa (15 million users). Implant removal procedures are generally more difficult than insertions and require scalpel-adept clinicians; this service delivery bottleneck can interfere with on-demand removal. Easy, safe, alternative removal procedures would help ensure barrier-free access. The objectives of this study were to measure implant removal efficacy and safety of a new product in comparison to the standard removal technique and to obtain provider feedback on the device.

Design and Methods: We conducted a 3-arm, open-label randomized trial in Uganda (2019-2021) to measure implant removal efficacy of a newly-developed, hand-held device with built-in incisor (RemovAid™, RemovAid AS, Oslo, Norway). Participants desiring removal of their one-rod contraceptive implant were randomized in a 1:1:1 ratio: standard technique/lidocaine injection, RemovAid device/lidocaine patch, or RemovAid device/lidocaine injection. We defined three RemovAid efficacy endpoints: intact implant removed without additional tools (primary), implant removed allowing rod breakage, but without using tools (secondary), and implant removed allowing rod breakage and non-scalpel tools (tertiary). We also assessed safety and provider feedback on the new device. We used chi-square tests to compare techniques.

Results: We recruited 225 participants and randomly assigned n=75 to each group. Primary efficacy was 100% (standard technique), 84.9% (RemovAid/lidocaine patch), and 72.7% (RemovAid/lidocaine injection) ($p<0.0001$). Secondary efficacy was 91.8% (RemovAid/lidocaine patch) and 79.2% (RemovAid/lidocaine injection) ($p<0.0001$). Tertiary efficacy was 95.9% (RemovAid/lidocaine patch) and 90.9% (RemovAid/lidocaine injection) ($p<0.0001$). Unsuccessful removals with RemovAid did not hinder subsequent implant extractions using standard tools. Lidocaine injection caused subdermal swelling; in some instances, this prevented the device from grasping the implant rods securely for extraction. No differences in safety were observed between the three techniques. In over 90% of the 150 RemovAid procedures, providers agreed or strongly agreed that RemovAid is an acceptable alternative to standard removal technique.

Conclusions: RemovAid is a safe, acceptable, first-line alternative to the standard implant removal technique; removal efficacy was high and best when paired with lidocaine patch. Implant removals performed without scalpels and syringes are arguably safer for clinicians and their clients. In areas of the world where clinicians skilled at scalpel removals are lacking, RemovAid could certainly help improve access to convenient implant removal.

Conflict details: Dr. Marte Bratlie is an employee of the Norwegian company that manufactures the device used in this research

P105

Usability, safety and efficacy of Aspivix™, an atraumatic innovative uterine cervical traction device: a randomized trial

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Objectives: The purpose of this study is to evaluate whether Aspivix™ cervical vacuum tenaculum can be employed to hold and manipulate the cervix during IUD insertion with a similar efficacy and usability, lower patient reported pain and a superior safety (less bleeding) as known for the Comparator single-tooth tenaculum (Pozzi forceps).

Method: 100 participants (50 per arm) from the outpatient clinic presenting for IUD insertion will be randomized and blinded towards the intervention tool, either Aspivix™ cervical vacuum tenaculum or the Pozzi forceps. Tolerability in terms of patients' reported pain and will be recorded on a pain score (100-point VAS) sheet at the following steps of the IUD insertion procedure: Before procedure (Baseline); during speculum placement; Aspivix™ vacuum application or at time of placement of tenaculum (control arm); during application of cervical traction. When inserting the IUD; During Aspivix™ release or removal of the tenaculum (control arm) and 5 minutes after speculum removal. Incidences of tissue lesions will be assessed and compared. All patients will be followed up 3-5 days post IUD insertion with a phone call assessing pain, bleeding and other adverse events. Degree of satisfaction from the procedure will be evaluated.

Results: 70 patients were recruited so far and enrollment will terminate before the end of the year. No intermediary results are available in order to prevent any influence on the insertors which can lead to bias.

Conclusions: Aspivix™ cervical vacuum tenaculum is a new and promising tool which can hold and manipulate the cervix during IUD fitting. This prospective randomized study will evaluate its efficacy, usability and safety profile compared to standard single-tooth tenaculum (Pozzi forceps).

P106

Anti-adhesion Gel versus No gel following Operative Hysteroscopy prior to Subsequent fertility Treatment or timed InterCourse (AGNOHSTIC), a randomised controlled trial: protocol

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Objective: Does the application of anti-adhesion gel, compared to no gel, following operative hysteroscopy to treat intrauterine pathology in women wishing to conceive increase the chance of conception leading to live birth?

Method: This multicenter, parallel group, superiority, blinded and pragmatic randomized controlled trial is being carried out in seven participating centers in Belgium. Recruitment started in April 2019. Women will be randomly allocated to treatment with anti-adhesion gel (intervention group) or no gel (control group). Sterile ultrasound gel will be applied into the vagina as a mock-procedure in both treatment arms. The patient, fertility physician and gynecologist performing the second-look hysteroscopy are unaware of the allocated treatment.

Women of reproductive age (18–47 years), wishing to conceive (spontaneously or by fertility treatment) and scheduled for operative hysteroscopy to treat intrauterine pathology (endometrial polyps, myomas with uterine cavity deformation, uterine septa, IUAs or retained products of conception) are eligible for recruitment. Women may try to conceive from 3 to 6 weeks after receiving allocated treatment with follow-up ending at 30 weeks after treatment. If the woman fails to conceive within this timeframe, a second-look hysteroscopy will be scheduled within 2–6 weeks to check for IUAs. The primary endpoint is conception leading to live birth, measured at 30 weeks after randomization. The secondary endpoints are time to conception, clinical pregnancy, miscarriage and ectopic pregnancy rates, measured at 30 weeks after receiving allocated treatment. The long-term follow-up starts when the patient is pregnant and she will be contacted every trimester. Power analysis, based on a target improvement of 15% in conception leading to live birth using anti-adhesion gel, a power of 85%, a significance level of 5%, and a drop-out rate of 10%, yielded a number of 444 patients to be randomized. The baseline rate of conception leading to live birth in the control group is expected to be 45%.

Results: The trial is ongoing so results are not available yet.

Conclusions: Since trial is ongoing no conclusions can be drawn at this moment.

Conflict details: This work is funded by the Belgian Healthcare Knowledge Centre (KCE). The antiadhesion gel is supplied at no cost by Nordic Pharma and without conditions. Dr. Tomassetti reports grants and non-financial support from Merck SA, non-financial support from Ferring SA, personal fees and non-financial support from Gedeon-Richter, outside the submitted work. None of the other authors have a conflict of interest.

Incremental evaluation of biopolymeric hydrogels for the reversible occlusion of the vasa deferentia

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1. Objectives: The gold standard for non-reversible male contraception is considered to be vasectomy. Such an intervention has a definite and permanent impact. In contrast, the need for a temporary and reversible male contraception is blatantly unmet. Therefore, several new techniques for male contraception have been investigated on in the past. However, up to now no vas deferens occlusion-based methods was introduced in the market. This is presumably due to different disadvantages limiting these methods. Either they do not show sufficient contraceptive efficacy, are invasive or non-reversible. The aim of the present study was to assess the utility of biopolymer-based hydrogels as a male contraceptive for the occlusion of the vasa deferentia. Besides, their possible reversability was assessed.

2. Method: Selected κ -carrageenan and alginate hydrogels were synthesized and characterized for their visco-elastic properties. To determine gels' swelling ability and thereby vasa deferentia occlusion, these gels underwent pre-treatment before they were swollen in a vas deferens fluid mimicking solution. This solution simulates the ionic constitution of the vas deferens fluid. Pre-drying and ethanol exchange were used as pre-treatments. Subsequently, compressions were conducted to evaluate the intra-vasal degradation potential.

3. Results: Hydrogels show expected viscoelastic behavior in relation to the present ionic concentration. Alginate hydrogels weaken due to calcium exchange. Thus, covalent cross-linking is a possible approach to strengthen mechanism these gels. κ -carrageenan gels strengthen by potassium accumulation in vas deferens fluid. By biopolymer concentration alteration, the mechanical properties of the hydrogels can be adjusted. Hydrogel pre-treatment renders these extensively swelling in the vas deferens fluid. The swelling magnitude, of twice its initial volume or more, is estimated sufficient to ensure complete vas deferens occlusion. By compressive forces, hydrogel fractures and de-occluding can be induced, even before extensive tissue damages are introduced. Maximum forces to prevent vessel damage could not be determined.

4. Conclusions: The purpose of the studies was the evaluation of hydrogels for the reversible occlusion of the vasa deferentia. This application is anticipated possible from the swelling and degradation experiments performed. Due to the suppressed immunogenic response in the vasa deferentia, extensive immunologic response is not expected in hydrogel application. Peristaltic and ejaculatory pressures in the vas deferens are insufficient to expel or disintegrate these biopolymer gel plug. There are no known enzymes in humans capable to degrade the investigated biopolymers. It is, therefore reasoned that adapted algae-based hydrogels could act as vas deferens occlusives. Future investigations are biocompatibility and fluid permeation tests.

Medico-legal issues; women's, men's and children's rights; ethics

How to deal with gender-based violence.

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Objectives: Description of some aspects of gender-based violence, the organisation of professional help and pitfalls that occur.

Method: The presentation is based on a selection of relevant literature. Sexual and gender-based violence (GBV) is violence directed against a person because of their gender. Both women and men experience GBV but the majority of victims are women and girls. In the European Union, 1 in 3 women from the age of 15 have experienced physical or sexual violence; 1 in 20 women have been raped. In this presentation, I would like to discuss the organisation of professional help for GBV victims. Different European countries have different legal obligations, relations with the police and different possibilities of referral. We will try to raise awareness in medical professionals related to the occurrence of GBV in their patient population. Several aspects of how to screen and how to deal with sexual and gender-based violence will be discussed, with practical examples of screening questions.

Conclusion: As the WHO recommends: "Violence against women is preventable. The health sector has an important role to play to provide comprehensive health care to women subjected to violence, and as an entry point for referring women to other support services they may need." <https://www.who.int/news-room/fact-sheets/detail/violence-against-women>

P109

A nation divided: the state of sexual + reproductive health access in the U.S.

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Objectives: After this session, participants will be able to: Describe new policies enacted that restrict access to sexual and reproductive health care and how they disproportionately impact individuals with low-incomes, communities of color and rural regions across the U.S. Discuss strategies and innovative policy solutions some states are advancing to protect and expand access; and Share implications for the future of sexual and reproductive health in the U.S.

Methods: Essential Access Health champions and promotes quality sexual and reproductive health care for all. Essential Access achieves its mission through a broad range of programs and services including advocacy and public policy analysis. Essential Access conducts literature and media reviews, and scans of recent studies to assess the status of sexual and reproductive health, freedom, and justice in the United States. In addition, Essential Access leverages data and information collected to identify the administrative, legislative, budgetary, and legal actions needed to protect and expand the rights of all individuals to get the essential health care they want and need across the country.

Results: Literature and media reviews, and scans of recent studies show that over the past year, more restrictions on access to sexual and reproductive health care were passed in states across America than ever before. At the same time, many states are moving forward with policy solutions and innovations to make access to essential health services like birth control, abortion, and STI prevention and treatment more equitable, affordable, and patient-centered. This session will provide an overview of policies enacted, trends on the horizon, and potential implications for the future of sexual and reproductive health care in the U.S.

Conclusions: Access to sexual and reproductive health care in the U.S. largely depends on the state that an individual resides in. The result is a nation divided. Millions live in Republican-controlled states across the South and Midwest of the country facing harmful and unconstitutional restrictions that make obtaining time-sensitive care out of reach. Individuals in Democratic-controlled states particularly on the coasts, are benefiting from state leadership invested in protecting and expanding health access and equity for all regardless of income, region, documentation or coverage status. The extreme policy differences by state call for urgent action at the federal level including administrative and legislative action and a re-balancing of our federal court system.

Psychosexual and mental health aspects of contraception, sexual and reproductive health

P110

From fearing to not caring: The risk perception of contracting COVID-19 among female sex workers in Xi'an, China

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Objectives: To construct a theoretical model that explores the effects and interactions between the risk perception of contracting COVID-19 and its contributing factors among female sex workers (FSWs).

Method: The grounded theory was used to guide the data collection and analysis process. Women who were at least 18 years old and had engaged in sexual services to obtain money in the past 12 months were purposefully selected. A total of 22 FSWs participated in the interview. The selective code of the Six Cs model was used to develop the theory.

Results: The study identified the risk perception of contracting COVID-19 when FSWs went back to sex work as the core category, and the other five categories were arranged around this core category to develop the theory.

The developed model showed that the economic vulnerability caused FSWs to go back to sex work and perceive the risk of contracting COVID-19 during sex work; the anti-pandemic measures in the entertainment venue and FSWs' trust in clients were the conditions for their risk perception of contracting COVID-19; FSWs' coping strategies were moderating factors that moderated the effect of the conditions on the risk perception of contracting COVID-19. As FSWs spend more time performing sex work, the combined effects of the above factors have led to FSWs' risk perceptions of contracting COVID-19 changing from fearing to not caring.

Conclusions: This study developed a theoretical model to explain the effects and interactions of factors on FSWs' risk perception of contracting COVID-19. This study pays particular attention to the time duration of sex work, the contextual conditions, and coping strategies of FSWs, which add new dimensions to understanding FSWs' risk perception of contracting COVID-19. Based on the findings of this study, specific-activities should be carried out to help FSWs take accurate self-risk assessments. As well as taking the anti-pandemic measures in prostitution establishments, the key measures should be the regular and comprehensive disinfection of entertainment venues and health checks for all people.

P111

The experiences of male partners of living with women with endometriosis-associated pelvic pain

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Objective: Since endometriosis is a chronic disease that has an adverse impact on women's lives, mainly those with associated chronic pelvic pain, dyspareunia, and infertility and there scarce information regarding on the experiences of male partners of these women, and the challenges in their everyday lives; the purpose of our study was to assess the experiences of male partners of women with endometriosis-associated pain during and after medical treatment in their everyday lives.

Method: We conducted a qualitative phenomenological study based on semi-structured interviews with 11 male partners of women with endometriosis-associated pelvic pain who were under treatment at the Department of Obstetrics and Gynaecology, University of Campinas Faculty of Medical Sciences, Brazil, between September 2019 and January 2020. Semi-structured interviews were conducted. A thematic analysis of manifest content was performed, a coding frame was drafted, and the main analysis categories were elaborated.

Results: The interviewed men were between 33 and 49 years old and had been in stable relationships for a median length of 14 years. They reported that they did not have information about endometriosis before their partners' diagnosis and that the endometriosis-associated pelvic pain suffered by their partners affected their personal everyday life, marital relationship, sexual relationship, and intimacy, and few referred to concerns regarding the possibility of infertility. Over time, the participants reported a better understanding of the disease, showed better acceptance, and improvements in sexuality and intimacy. They referred to a lack of information from health providers on the impact of endometriosis on a couple's life, and guidance on how men can help.

Conclusion: Male partners of women with endometriosis-associated pain reported that the disease has a profound impact on their lives, causes great distress and has profound effects on their relationship. Our study gave a voice to these men and contributed to an increased understanding of the life experience of men living with women with endometriosis-associated pelvic pain. Our findings may contribute to the development of adequate strategies to include men in the early stages of diagnosis and treatment of endometriosis and encourage health professionals to incorporate strategies for guidance of the couple during treatment.

P112

The opinions of Sexual Health and HIV Health Care Professionals (HCPs) in Brighton, UK, on whether cold water swimming can be recommended as a therapeutic intervention

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Objectives: Cold water swimming, practised by experienced people in good health, appears to bring cardiovascular, endocrine, immunological and mental health benefits (Knechtle, 2020.)

There has been an increase in the practice since Covid 19. Simultaneously, the importance of mental health and wellbeing in the NHS is increasingly recognised. Our objective was to find out how widely it is used by Sexual health and HIV HCPs in Brighton, and whether they recommend it to patients.

Method: An electronic survey was sent to 120 clinical and non-clinical members of the Sexual Health and HIV department in Brighton. This asked about their personal physical and mental health rankings, cold water swimming practices of staff, perceived personal benefits of cold water swimming, whether it is discussed with patients, and reasons why it may and may not be discussed.

Results: 21 members of staff responded to the survey. 19% of staff reported cold water swimming daily/ weekly, 38% partake regularly in the summer and 14% never go. Staff reported a mixture of reasons: physical fitness, mental health benefits, fun, sense of wellbeing, connection with nature, connection with friends/ family, sense of adventure. The majority of staff (61%) felt that cold water swimming may offer both physical and mental health benefits to their patients. 14% of staff had discussed the mental and physical health benefits of cold water swimming with their patients, but 61% had never considered doing so. 90% of staff reported being interested in research about cold water swimming, and 31% felt that there was a lack of information around cold water swimming which had prevented them from discussing it. 10.5% felt worried about advising cold water swimming due to risks. Some staff felt they would not want to recommend one exercise over another and one member did not want to discuss it as they felt people may be frightened of showing their bodies.

Conclusion: Staff who responded may have been particularly interested, and it is likely this has affected their response. However, there is a clear indication that a number of staff surveyed use cold water swimming for health benefits, and are interested in exploring the therapeutic possibilities and safety aspects. We aim to increase knowledge and awareness with presentations, group discussion and dissemination of research findings. We would like to survey particular populations, to understand barriers to cold water swimming, including for women living with HIV, and for our local transpopulation.

Reproductive health pertaining to contraception and sexual health

P113

Sexual life during pregnancy in multiparous and nulliparous women – results of a questionnaire

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Objectives: To determine how postpartum women (48 hours after birth) perceived their sexual life in each trimester of pregnancy and the differences between primiparous and multiparous women.

Design & Methods: Descriptive study based on an original questionnaire administered to postpartum women for six months at Bissaya Barreto Maternity - Coimbra University Hospital Centre about their sexual activity during pregnancy. Statistical analysis was performed using SPSS®. Comparative analysis was performed using the X2 test. A p-value of < 0.05 was considered statistically significant.

Results: A total of 103 responses were analysed. 56.3% (n=58) of the women were primiparous and 43.7% (n=45) were multiparous. When asked about their sexual performance during pregnancy, we found no statistical difference between multiparous and primiparous women in all three trimesters of pregnancy. In the first trimester, 81.5% (n=44) of primiparous and 87.2% (n=34) of multiparous women had had sexual intercourse (p 0.461), while in the third trimester 55.6% (n=30) of primiparous and 66.7% (n=26) of multiparous women had had sexual activity (p 0.28). 6.9% of primiparous women didn't have any kind of sexual intercourse during pregnancy (n=4) while 4.5% (n=2) of multiparous didn't have either (p 0.617). The main reason in both groups was fear of interfering with pregnancy (50%). When asked about the type of sexual intercourse, we found no differences between these groups in terms of oral (p 0.427), anal (p 0.381) or vaginal (p 0.427). The greatest difficulty related to sexual intercourse was lack of sexual desire being reported by 31.4% (n=16) of first-time mothers and 17.1% (n=7) of multiparous (p 0.115). 25.9% (n=15) of primiparous and 37.8% (n=28) of multiparous women felt that physical appearance affected their sexual desire during pregnancy (p=0.195).

Conclusion: Sexuality during pregnancy is rarely discussed between women and obstetricians, even though it is an important part of the couple's well-being.

It is important that healthcare professionals are able to talk about it, educate and normalise sexual activity during pregnancy. Although we did not find differences between primiparous and multiparous women, it is evident that sexual activity in both groups decreases as pregnancy progresses. Physical appearance seems to have an important influence on sexual performance and has an even stronger effect in multiparous women.

P114

Sexual and reproductive health services for women living with HIV: Feasibility and effectiveness at a London HIV clinic

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Women living with HIV (WLHIV) have the same SRH needs as any other women.

Systematic reviews show that WLHIV have high unmet sexual and reproductive health (SRH) needs due to barriers to access SRH services. Effective linkages between the SRH and the HIV services or family planning within HIV programmes are essential to ensuring the reproductive rights of people living with HIV are met. We aimed to assess the feasibility and effectiveness of an SRH-HIV service to cater the needs of women living with HIV.

Methods: A dedicated SRH service for HIV infected women was started at the HIV clinic, where all the women attending to the HIV care were offered contraception, pregnancy planning, postnatal contraception and management of menopausal symptoms. A total of 176 women attended the service from Jan 2019 - Dec 2019. The data were collected by reviewing electronic patient records and analysed by using Microsoft Excel.

Results: Majority, (84%) of the women belonged to black ethnicity and more than a third of women belonged to >45years. Of all the women, 84% had contraceptive needs and 16% attended for menopause management. 18% of them had more complex issues related to co-morbidities or drug interactions related to HIV, requiring specialist input. Of the women who belonged to the reproductive age, 45% accepted a method and of them 45% has accepted a Long acting reversible contraceptive (LARC) method either an intra uterine contraceptive (IUC) method or a subdermal implant. 13.3% of the LARCs were complex procedures such as requiring cervical block or cervical dilatation for IUC procedures or deep implant removals. All the women who required menopause management (16%) were not able to get it from other services and suffering with the symptoms. They were provided with lifestyle or HRT advice after relevant investigations. HRT prescription was done by their general practitioners.

Conclusion: LARC prevalence in this group was 45% indicating the effectiveness in preventing unwanted pregnancies. HIV cohort in general is aging and menopause care is better managed in an integrated SRH-HIV service. Providing SRH care including contraception and management of menopause in WLHIV in HIV services are effective, feasible and beneficial to the patients particularly with complex needs.

P117

Colour, fragrance and size: exploring women's preferences around design characteristics of drug-releasing vaginal rings

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Introduction and objectives: Drug-releasing vaginal rings are widely marketed for contraception and hormone replacement therapy, and a raft of new experimental devices – including an antiretroviral-releasing ring for HIV prevention – have either recently been approved or are undergoing clinical evaluation. Here, as part of efforts to increase user acceptability of ring products – and, in turn enhance adherence and efficacy – we apply the principles of user-centred design to assess women's needs, preferences and expectations around the key design characteristics of silicone elastomer vaginal rings.

Methods: Drug-free silicone elastomer vaginal rings having different sizes, colours and fragrances were manufactured, and women's preferences assessed through three focus group discussions (FGDs) conducted in eThekweni, South Africa. Some, but not all, of the women had previous experience of using vaginal products. Three focus group discussions were held with up to 6 women, who were given the vaginal ring devices to evaluate. They did not use the rings.

Results: A total of 16 women aged 20-34 years participated in the FGDs. Opinions on ring colour were varied, with some women clearly preferring coloured products while for others this was not an important attribute. Similarly, participants had varied preferences for the different fragrances and intensity of fragrance. Concerns about colour and fragrance were linked to perceptions of vaginal health and safety, related to chemical composition. There was more agreement on preferred vaginal ring size; flexibility and width were considered important factors for insertion and comfort with use.

Conclusion: Choice and options in sexual and reproductive health products facilitates increased choice and overall uptake.

P118

Endometrial expression of estrogen and progesterone receptors in women with different thickness of the endometrium

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Objective. To study the endometrial expression of estrogen (ER) and progesterone (PR) receptors in women with different thickness of the endometrium.

Design and methods. There were main (I: 37 women with "thin" (<7 mm) endometrium), comparison (II: 58 patients with the endometrium ≥ 7 mm) (I, II: women with curettage of the uterine cavity in the anamnesis), control (III: 16 healthy women) groups (20-40 y.o.). Following interventions, methods were used: immuno-histochemical investigation of endometrial samples (H-score ER, PR (range 0-300)) (vacuum-aspiration endometrial biopsy on 6-8th day after ovulation); chemiluminescent assessment of estradiol (E_2), progesterone (P) levels in the samples of peripheral blood (a puncture of peripheral vein at the same day).

Results. All women had ovulatory cycle ($P \geq 16,1$ nmol/l); normoestrogenemia (E_2 , pmol/l): 635.5 ± 40.2 (I) vs 752.4 ± 43.8 (II) vs 707.4 ± 66.1 (III) ($p > 0.05$).

In I and II groups respectively in 22% (Ia: n=8) and 45% (IIa: n=26) of women H-score count of endometrial ER, PR was found similar to healthy women (III) ($p > 0.05$ for all compared ER/PR indicators): in the glands – ER 91.2 ± 17.1 (Ia) vs 118.1 ± 6.4 (IIa) vs 113.7 ± 8.3 (III), PR 31.2 ± 16.5 (Ia) vs 25.7 ± 6.1 (IIa) vs 28.1 ± 2.4 (III); in the stroma – ER 118.7 ± 21.7 (Ia) vs 107.3 ± 8.6 (IIa) vs 80.6 ± 8.7 (III), PR – 243.7 ± 22.4 (Ia) vs 265.4 ± 8.6 (IIa) vs 285.1 ± 1.8 (III). 78% (n=29) (Ib) of women with "thin" endometrium and 55% (n=32) (IIb) of women with normal endometrial thickness had inadequate hormone-receptor endometrial status with significant differences ($p < 0.05$) in all indicators of ER/PR H-score in endometrial glands and stroma from those of healthy women (III), but without corresponding differences between subgroups Ib and IIb ($p > 0.05$) regardless of the thickness of the endometrium: in the glands – ER 203.8 ± 13.9 (Ib) vs 225.0 ± 11.7 (IIb), PR 234.5 ± 14.9 (Ib) vs 242.8 ± 13.3 (IIb); in the stroma – ER 162.4 ± 14.5 (Ib) vs 177.5 ± 14.1 (IIb), PR 268.6 ± 4.8 (Ib) vs 275.0 ± 4.5 (IIb).

Conclusions. In women with endometrium <7 mm normal hormone-receptor endometrial status was noted 2 times less often in women with a history of reproductive dysfunctions of unclear reason, compared with women with normal endometrial thickness; at the same time, the "thin" endometrium is not an absolute predictor of disorders of the hormone-receptor response in the endometrium.

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Attitudes toward menstruation: what Italian women want?

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Objective Monthly menstruation may cause just negligible nuisance for some women in contrast being a critical health concern for those who suffer from dysmenorrhea, heavy menstrual bleeding and premenstrual syndrome. Though many women are not aware of the chance, also through contraceptive methods, to alleviate symptoms and reduce or suspend menstrual blood flow. Options range from the extended or continuous use of combined hormonal contraceptives (oral, ring or patch) to progestins only contraceptives (e.g. intrauterine).

Given that acceptability of amenorrhea is culturally conditioned, it is important to investigate attitudes in different cultures and countries. The aim of the study was to evaluate the attitudes of women toward menstrual cycle, knowledge of contraceptive methods and desire for reducing menstrual frequency.

Methods. An internet-based anonymous questionnaire has been sent to women willing to fill it in through different social media (Instagram, WhatsApp, Facebook, Twitter) and direct e-mailing. The survey evaluated, utilizing 31 questions, objective parameters such as number of pads, use of painkillers, duration of period and pain intensity expressed in VAS score. It also analyzed positive and negative aspects of period and knowledge about methods to reduce frequency and amount of menstrual flow

Results. A total of 1069 Italian women aged 18 – 40 years, answered the survey. The level of education of respondent was high with 61.7% being graduated. Only 27.5% of women considered menstrual period positive mainly ensuing a confirmation of their fertility and femininity. Despite the ideal frequency of period preferred was every 3 months (some 45% of women) and the duration regarded as perfect was less than 3 days (64,3%), half of the respondents ignored methods to suppress menstruation. Moreover, 52% of women would not use contraceptive methods because considered as not being “natural”.

Conclusions. In our sample knowledge on contraceptive methods, which could reduce menstrual bleeding, even in graduated women is scarce. Monthly periods are regarded as “physiological and healthy”, assuming that normal equals periodically regular. Even though for most of women the preferred frequency of period reported was every 3 months, regular menstruation are still considered a confirmation of fertility and femininity, at least in our sample, beside the discomfort reported by half of the women interviewed. More studies are needed to evaluate whether our results can be confirmed also in different Countries or cultures.

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Post delivery contraception: An experience from a Greater London University hospital

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Background & Objectives: Unintended pregnancy in the postpartum period is common. One UK study found that at least 1 in 13 women attend for termination of pregnancy within 12 months of childbirth ⁽¹⁾. Inter pregnancy intervals of under a year are associated with adverse pregnancy outcomes ⁽²⁾. Initiation of effective contraception has been shown to reduce the incidence of unintended pregnancy and short interpregnancy intervals, especially when started immediately after delivery. The objective of this study is to assess the uptake and feasibility of immediate post partum contraception provision at Croydon university hospital (CUH). **Methods:** A new service was introduced in CUH in response to COVID-19 to provide immediate post partum contraception. A total of 253 women seen at the maternity ward from June to August 2020 were included in the study. Nurses from sexual health department provided contraception to all women in the post natal ward. The data was collected from electronic case records and analysed using Microsoft Excel and R Studio.

Results: The uptake of any contraception method was 78%. Of the 197 women who have accepted a contraceptive method, 63% opted for progesterone only pill (POP) and 15% were fitted with a contraceptive implant ($P<0.0001$). This indicates POP is significantly popular choice among women soon after delivery. 4 women were under the age of 19 yrs and 3 women were over 45 years. Majority 47% belonged to the 30-34 year age group. 40% were white, 29% Black, and 15% of Asian background. There is no difference between the ethnic origin and choice of contraception method ($P=0.055$) or age and contraceptive choice ($P=0.57$). It was not possible to offer intrauterine contraception (IUC) due to logistic reasons during the study period. The service received positive feedback from providers and the users.

Conclusions: The uptake of immediate post partum contraception is 78% at CUH during the study period. Only long acting method (LARC) offered was an Implant and the LARC rate was 15% in this population. POP is significantly ($P<0.0001$) popular choice of contraception amongst women soon after delivery at CUH. There is high acceptance and is feasible to offer immediate post partum contraception in CUH. The choices need to be expanded to include IUCs.

¹. Cooper, Michelle, and Sharon Cameron. “Successful implementation of immediate postpartum intrauterine contraception services in Edinburgh and framework for wider dissemination.” *International Journal of Gynecology & Obstetrics* 143 (2018): 56-61.

². Heller, Rebecca, et al. “Postpartum contraception: a missed opportunity to prevent unintended pregnancy and short inter-pregnancy intervals.” *Journal of Family Planning and Reproductive Health Care* 42.2 (2016): 93-98.

P121

The impact of the contraceptive implant with etonogestrel in the sexual function of brazilians womens

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Objective: to evaluate the usage of the implant with etonogestrel over women's sexual function

Method: A prospective longitudinal study with women enrolled in the Family Planning service from Universidade Federal de São Paulo. The Female Sexual Function Index questionnaire was applied in 4 moments, before the insertion of the method, and after 1, 3 and 6 months. Literate over-18-year-old women who voluntarily wanted to participate of the study were included, after signing the Informed Consent Form. Those who showed depression or some memory deficit were excluded. Female sexual function data were analyzed considering the aspects of arousal, desire, orgasm, marital satisfaction and dyspareunia in the last four weeks. ANOVA was used to compare the average of scores from the domains of FSFI between the observed times, and the Friedman test was used - when necessary - for the repetitive measures; being considered a level of significance of 5% ($p\text{-value} < 0,05$) Cochran's Q test was used to perform percentage-like comparisons between evaluations.

Results: 70 women were included in the study. The average age was 28.3 years (SD: 8.03), 62.9% of them being single, and when it comes to schooling, 92.9% of them reported having 12 years of study; from the total, 58.6% of them had never become pregnant and almost all – 94.3% - had already used other type of contraceptive method, being the oral hormones the most used (54.3%), followed by preservative (24.3%). When we analyzed the answers obtained by FSFI, we did not observe statistically significant difference when comparing the scores of each domain before and after insertion. However, in a scale from 0 to 6 we could observe a slight increase in the average values between all the basal scores and those from the 6-month research, which kept higher values than the initial one. The "Pain" domain, which evaluates the frequency and intensity, was the one that presented the most expressive raise compared to the basal result, the initial 3,93 (SD 2,29) average raised to 4,04 (SD 2,35) in the sixth month. The "Lubrication" domain, was the one that presented the smallest index between the compared months: 3,50 (SD 1,79) average in the beginning, decreased to 3,43 (SD 1,67) in the sixth month.

Conclusion: During the 6-month evaluated period there was no impact over the sexual function among the users of the etonogestrel implant.

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THE IMPACT OF THE CONTRACEPTIVE IMPLANT WITH ETONOGESTREL IN THE QUALITY OF LIFE OF BRAZILIANS WOMENS

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Objective: To evaluate the quality of life of the contraceptive implant users with etonogestrel. Method: Prospective longitudinal study with women enrolled in the Family Planning service from UNIFESP (Universidade Federal de São Paulo) between August 2017 and October 2018. The World Health Organization of Quality of Life - Brief (WHOQOL - Bref) questionnaire was applied in 4 moments, before the insertion of the method, and after 1, 3 and 6 months. Literate over-18-year-old women who voluntarily wanted to participate of the study were included, after signing the Informed Consent Form. Those who showed depression or some memory deficit were excluded. Data related to the physical domain, psychological domain, social relationships and environment were analyzed. ANOVA was used to compare the average of scores from the domains of WHOQOL - Bref between the observed times, and the Friedman test was used - when necessary - for the repetitive measures; being considered a level of significance of 5% ($p\text{-value} < 0,05$); Cochran's Q test was used to perform percentage-like comparisons between evaluations.

Results: 70 women were included in the study. The average age was 28.3 years (SD: 8.03), 62.9% of them being single, and when it comes to schooling, 92.9% of them reported having 12 years of study; from the total, 58.6% of them had never become pregnant and almost all – 94.3% - had already used other type of contraceptive method, being the oral hormones the most used (54.3%), followed by preservative (24.3%). When we analyzed the answers got from the WHOQOL – Bref test, we verified a significant difference in the scores of Psychological Domains ($p=0.003$), social relations ($p=0.042$) and ambient medium and ($p=0.037$) for all times.

Conclusion: Our study has concluded that the usage of contraceptive implant with etonogestrel can impact over the quality of life of its users in the six first months of usage, more specifically over the psychological part and among their social relationships, and ambient medium and.

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‘Sashakt’ (empowerment): Empowering Marginalized Adolescents and Youth to seek Sexual and Reproductive Health services

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Objective(s): The marginalized and vulnerable within society, especially adolescents and young people, lack access to economic resources, as well as knowledge and access to sexual and reproductive health (SRH) services. This leads them to adopt behaviors that result in increased risks to their sexual and reproductive health. In this context, the Sashakt project was implemented to address the SRH needs of adolescents from the most disadvantaged Mahadalit castes in Bihar. The project aims to (1) improve SRH-related knowledge and attitudes, (2) increase access to family planning (FP) services, and (3) support the government's efforts to deliver SRH services and behavior change programming to Mahadalit adolescents.

Design & Methods: Recognizing this challenge, extensive peer-led educational interventions, interpersonal communication (IPC), and community-based activities were implemented for adolescents and young people from the socially excluded and economically marginalized Mahadalit community, in selected areas of three districts of Bihar in India. Multiple rounds of study that included a mixed qualitative and quantitative baseline, midline, and end-line survey, were conducted to evaluate the impact of interventions.

Results: The baseline survey identified several negative gender and social norms affecting access to and use of SRH services, such as widespread occurrence of child marriage, high fertility in married adolescents, low levels of SRH and contraceptive knowledge in this target group, compounded by provider bias and discrimination linked to caste-based prejudices. Midline qualitative data indicate that the facilitation of the initial SRH and skills training was well-received but can be made more interactive to help build communication and negotiation skills and autonomy of women.

Following two years of engagement with community health-workers and Mahadalit adolescents, the end-line survey showed a favorable attitude, increase in knowledge (19.0 % to 41.7 % points), and intention to use contraceptive across sexes in both married and unmarried adolescents. However, of the 40 % of married adolescents who said that they plan to use contraception in the next 12 months, only 20% used contraceptive. Sensitization of healthcare providers (ASHAs) towards social inclusion coupled with financial incentives helped in increasing access to SRH services, as evidenced by a 60% increase in ASHA's home visits to pregnant married women or those who gave birth within three months.

Conclusions: Overall, it is critical for adolescent SRH programs to consider the specific social and economic conditions and needs of special populations like Mahadalit adolescents. Moreover, it is essential to tailor content to the local context to strengthen the capacity of partner institutions, project staff, and community volunteers working in SRH.

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Interest of Pregnanediol Glucuronide to Prevent Risk of Unwanted Pregnancy: A Literature Review

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Objectives: The present literature survey reviews the scientific relevance of detecting the overrun of the urinary progesterone metabolite, pregnanediol glucuronide (PdG) threshold as a mean to prevent the risk of unwanted pregnancy.

Methods: A thorough literature search was conducted on Pubmed and Science Direct in order to answer the following question: In healthy women of reproductive age and with regular menstrual cycle, can the overrun of a PdG urinary concentration threshold confirm ovulation and could be used to prevent pregnancy? Among the 430 retrieved articles, 54 were considered relevant and included in the review.

Results: This review shows that an increase of PdG urinary secretion is strongly correlated with the start of the luteal phase. It indicates that different methods of measuring PdG lead to different thresholds which

are nevertheless highly correlated between them. Each method allows to identify the begin of luteal phase. Among the reported PdG values, values above 7 µmol/24hr or 5µg/ml indicate that ovulation has taken place at least 24-48 hours earlier. Therefore, this PdG threshold can be used as a marker of the closure of fertile window.

Conclusions: PdG measures constitute a convenient target for detection of the non-fertile phase of the menstrual cycle and therefore can be used for reliable natural contraception methods.

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Women's opinion and behavior on fertility in Turkey's province with the highest fertility rate and affecting factors: mixed methods research

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Objectives: Population growth is an important public health problem with economic, social, cultural and political consequences. Studies show that women with low status cannot actively participate in decisions about their fertility, and that female status and traditional family structure make women passive in the decision to regulate fertility. In this study aimed to determine perspectives for fertility and reproductive behavior of women in Turkey's a city with the highest fertility.

Method: In this study, mixed methods were chosen to reveal more comprehensively the opinion for the fertility of women aged between 15 and 49 in Şanlıurfa province, which has the highest fertility rate in Turkey. The quantitative dimension of this study, which was performed by interviewing face-to-face with the questionnaire form, with 300 women; the qualitative dimension was completed with 14 women by conducting in-depth individual interviews with the semi-structured interview form. In analysis of quantitative data were used descriptive statistics, chi-square among the univariate analyses, t-test and Mann Whitney U test, enter the model and logistic regression analysis for intra-group correlation and multivariate evaluation. In analysis of the qualitative data was used content analysis technique.

Results: The average number of children that the interviewed women have is 3.1 ± 2.3 . The low level of education in women and gender preference are the most important factors for the increase for the number of children. In women with low education level, having 4 or more children is 9.1 times higher than those with other education level and in women having a male child preference is 5.9 times more than those who do not have a male child preference. Value of male child is high in the society. Regarding fertility and having children, their understanding of looking crowded and strong, seeing the child as an assurance in old age, and perceiving curettage as a sin is common. Although there is a moderate consistency between the opinions of married women on fertility and behavior; it should be taken into account that there will be some changes in these results when many of the women are above the fertility age.

Conclusion: It was determined that especially male child preference and low education levels of women are the most important factors that increase the number of children. In the study showed that cultural norms and values significantly affect fertility rates.

Service provision: roles and responsibilities of different health care professionals; new ways of providing services

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The Feasibility of providing immediate postpartum contraception with copper intrauterine devices in Gwagwalada Area Council of the Federal Capital Territory of Nigeria.

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Objectives: To determine the feasibility of providing immediate Postpartum Intrauterine Device (PPIUD) services in Gwagwalada area of Nigeria from existing resources, potential service users', and providers' perspectives.

Methods: A non-randomised, prospective, cohort pilot study, conducted at the University of Abuja Teaching Hospital, Gwagwalada, Nigeria. For this study, we defined immediate postpartum IUD insertion as placement of the IUD within 48 hours of childbirth, as the standard definition is more suited to high-income regions where most births occur in facilities. Convenience samples of pregnant women (potential service users) attending the antenatal clinics and the Obstetric staff (potential service providers) were recruited into the study and completed different structured questionnaires. Women who had immediate PPIUD were scheduled for follow-up at 2 and 6 weeks postpartum. An evaluation of the existing resources (human, equipment, drugs, and ancillary services) conducive or unconducive to establishing a PPIUD service within the institution was completed using a structured questionnaire. All the study participants gave informed written consent. The completed questionnaires were uploaded into bespoke CommCare applications. Data were analysed with Excel Microsoft 365.

Results: The study was conducted between 01 November 2020 and 30 April 2021. The institution serves as a reference Hospital for the FCT and surrounding states. During this period, there were 812 deliveries, of which 526 were vaginal and 286 cesarean sections. Of the 143 potential immediate PPIUD users recruited and counselled about immediate postpartum copper IUD insertion, 54 (38%) declined its use. Thirty-eight women (43%) of those who initially consented to have immediate PPIUD insertion did not have it inserted for various reasons. Of the 51 women who had an immediate PPIUD insertion, 35 (69.6%) attended two follow-up appointments, with the majority complying with the follow-up intervals, 9 (17.6%) attended only one follow-up appointment, while 7 (13.7%) failed to attend any follow-up appointments. Reasons for not attending follow-up appointments included religious obligations. Two IUDs were removed at 10 and 21 days after insertion because of a partner's discomfort from the IUD strings, while the other patient felt the strings outside the vagina and insisted on its removal. Most women who had an immediate PPIUD insertion had a positive experience and would recommend it to others.

Thirty-seven potential service providers (Obstetric staff (25 and 12 midwives)) participated in the study. Twenty-one were trained in IUD insertion, but of the 16 that were not trained, 15 cited a lack of training opportunities as the primary reason for not inserting IUDs. However, most were keen to train to provide the service.

An evaluation of the existing resources (human, equipment, drugs, and ancillary services) conducive or unconducive to establishing a PPIUD service within the institution indicated that it has adequate resources to establish the service but requires appropriate and adequate support from all stakeholders.

Conclusions: The feasibility of providing immediate Postpartum Intrauterine Device (PPIUD) services to women in the Gwagwalada area of Nigeria is apparent but establishing the service on a sound footing requires appropriate and adequate support from all stakeholders. A large randomised controlled study is required to corroborate these findings.

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Priority clinic access or outreach to provide Sexual and Reproductive healthcare for people with mental illness?

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Aims: To compare two sexual and reproductive health (SRH) clinical pathways – a priority appointment at a mainstream SRH clinic and assertive community outreach – and how each improves access to care for people with psychotic mental illness, severe addictions and/or learning disability.

Methods: Observational, descriptive study of two clinical access pathways within SHRINE (Sexual and Reproductive Health Rights, Inclusion and Empowerment), a specialist SRH programme to improve SRH care for severely marginalised people.

The SHRINE programme delivers effective, ethical, accessible and user-centred SRH care for people with severe addiction, serious mental illness and/or learning disability in the deprived boroughs of South London, UK. These individuals often find accessing conventional SRH clinics very difficult. Clients can self-refer but most of them are referred by their health or social worker.

Clients or referrers indicate their preferred pathway: priority appointment at the mainstream clinic or assertive community outreach. The priority appointment pathway at Camberwell Sexual Health Centre (CSHC) is as flexible as possible, with minimal waiting times, reminders, invitation to bring a friend or care worker and active follow-up of non-attenders via key workers.

Assertive community outreach can be in an addiction clinic, postnatal ward, mental health centre, psychiatric in-patient ward, outpatient clinic, homeless hostel or the client's home.

Time allocation for outreach and priority appointment-based care was 8 and 4 hours per week respectively. Care in both pathways was provided by senior doctors. Content of care was similar but facility for provision of gynaecological care including cervical smears and investigations for abnormal uterine bleeding e.g. pelvic ultrasound scans and endometrial biopsies were only available in the mainstream clinic setting at CSHC.

Results: From May 2016 to December 2020 SHRINE received 1367 referrals from 125+ teams. We offered 1591 first or follow up appointments of which 1369 (86%) were attended. A total of 1153 (84%) of our patient contacts occurred in the outreach setting where 93% the appointments were attended. Of the 358 appointments at CSHC 316 (60%) were attended.

Conclusions: Making clinic access as simple and convenient as possible is not a sufficient strategy to meet the SRH needs of marginalised people. To enable them to realise their human right to sexual and reproductive health we need to leave our clinics and meet our clients where they are. A combined model of outreach and priority access clinic pathways is essential for provision of SRH care for people with mental illness.

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Sexual and Reproductive Health Needs Assessment & Interventions in a Female Psychiatric Intensive Care Unit

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Objectives: To assess the sexual and reproductive health (SRH) needs of women admitted to a psychiatric intensive care unit (PICU), and acceptability of delivering specialist SRH assessments/interventions in this setting. Secondary aims were to explore the barriers to access and feasibility of providing SRH assessments and interventions in the PICU.

Method: A retrospective analysis of fifteen months' activity data found only 25 SRH referrals were made across 205 PICU admissions. This low referral rate of 12% likely reflected pathway barriers and was unlikely to represent the actual clinical need in female PICU patients. A bi-monthly SRH in-reach clinic and nurse-led SRH referral pathway were implemented on the PICU over a seven-month period. Within a quality improvement framework, a staff training needs assessment was performed, training delivered, protocol developed, staff attitudes explored, and patient and carer engagement sought.

Results: A quality improvement approach streamlined SRH assessments on the PICU and resulted in 42% of women being assessed and a 3.5-fold increase in uptake. At least 30% of the women in the PICU had unmet SRH needs identified and proceeded to a specialist appointment. This amounts to a minimum 2.5-fold increase in SRH unmet need detection. The most common SRH needs were complex gynaecological issues (i.e. period problems, pelvic pain, vaginal discharge), STI advice/testing and contraception advice/options. 21% of women initiated SRH interventions, and 14% completed all the interventions required for their needs. The most common interventions were in the areas of contraception advice/family planning and STI advice/testing. Staff confidence on assessing SRH topics was identified as a barrier to access with a positive shift noted after bespoke SRH training was implemented and a protocol introduced: on a scale of 0-10 (with 10 being high), 81.3% of staff rated their confidence 8 or above in relation to discussing contraception/sexually transmitted infections (pre-training: 25.0%), and 93.8% in relation to discussing risky behaviours (pre-training: 18.8%). All 11 patient and carer participants felt it was important to have a forum to talk about SRH and 8 (72.7%) agreed it was important in the PICU.

Conclusions: Results identify that SRH needs for PICU admissions are greater than previously realised. Staff highlighted the acceptability and importance of SRH care, if interventions are appropriately timed and the patient's individual risk profile considered. Providing a nurse led referral pathway for an SRH in-reach clinic is acceptable, feasible and beneficial for PICU patients.

The effect of counseling and peer education given to young people diagnosed with dysmenorrhea and menstrual migraine on quality of life and pain level: Randomized Controlled Trial

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Objectives: Our study aimed to examine the effects of counseling and peer education given to young people with dysmenorrhea and menstrual migraine who applied to the YFC on their quality of life and pain level.

Method: This research is a Randomized Controlled Trial study. The Intervention/Experimental group consisted of n=350 students enrolled in the peer education course, and the control group consisted of n=550 students who were not enrolled in this course. As data collection tools, personal information form and Quality of Life Scale (WHOQOL-BRIEF), Premenstrual Symptoms Screening Tool (PSST), Visual Analogue Scale (VAS), and Dysmenorrhea Follow-up Form (DFF) were used. Among the students who applied to Eskisehir Osmangazi University YFC for painful menstrual process management, those aged 18-19, diagnosed with 'dysmenorrhea and menstrual migraine' were selected, for a 6-month painful menstrual process management program. The program includes vocational counseling, education (peer and professional), and social support practices (peer and professional) based on these two approaches. Programs for all these health promotion practices were coordinated by the principal investigator.

The Intervention/Experimental group includes peer education and practices in small closed groups of 16 people by the researchers and their teams, to increase the utilization of health services and health-promoting behaviors of young people with dysmenorrhea and menstrual migraine. The intervention group consisted of students who applied to YFC for painful menstrual process management, requested peer education, and met the peer education criteria.

Results: Among the young people with dysmenorrhea and menstrual migraine who applied to the YFC, the quality of life scores of the participants in the experimental group were higher than the control group ($p>0.05$). However, the VAS scores, Premenstrual Symptoms Screening Tool (PSST) scores, and dysmenorrhea symptoms of the participants in the experimental group were lower than the participants in the control group ($p>0.05$).

Conclusion: Peer education integrated into the painful menstrual process management program has been effective in reducing PMS symptoms, dysmenorrhea symptoms and pain, while improving the quality of life of young people with dysmenorrhea and menstrual migraine. Such an approach is also thought to be complementary to pharmacological methods.

Potential Immediate Postpartum Intrauterine Contraceptive Device Service Providers in Gwagwalada, Nigeria: what do they think and do?

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Background and Objective: In Nigeria, 19% of married women have an unmet need for family planning; 12% want to delay childbearing, while 7% wish to stop childbearing. The unmet need for family planning among presently married women aged 15–49 years in the Federal Capital Territory (FCT) is 19.1%. This study aimed to evaluate the educational background, views, knowledge about PPIUD, training in PPIUD insertion, and the potential to provide the service.

Methods: We conducted a prospective study of a convenience sample of potential PPIUD service providers (Obstetrics/midwifery staff of the University of Abuja Teaching hospital, Gwagwalada, Nigeria) between 01 November 2020 and 28 February 2021, using a self-administered structured questionnaire. The questionnaire was divided into four sections covering basic background information, family planning counseling, knowledge assessment, and service provision by potential PPIUD service providers. All the participants gave informed written consent. We checked the returned questionnaires for completeness, inconsistencies and entered the data into a bespoke CommCare application.

The complete data set was then exported into an Excel Microsoft 365 spreadsheet, cleaned, coded, and analyzed.

Results: Thirty-seven staff members participated in the study, of which 25 were doctors, 12 were midwives, 19 were female, and 18 were male. Most of the participants (23) were between 30 and 58 years old, but 14 participants declined to state their age. Almost half (17) graduated over 20 years ago. Twenty-one were trained in IUD insertion, but of the 16 that were not trained, 15 cited a lack of training opportunities as the primary reason for not being trained. Thirty-two of the participants regularly talked about IUDs when counselling pregnant or postpartum women about family planning. Twenty-nine respondents felt that pregnant or postpartum women make decisions about family planning during the antenatal clinic visits and that this was the best time to counsel them. Thirty-one felt that counselling for PPIUD should start during the antenatal clinic visits. Twenty-eight respondents had not inserted an IUD in the previous 6 months, with a majority (27) citing lack of experience and opportunity. Of the 9 that had inserted IUDs in the last 6 months, only 3 had inserted PPIUDs; one respondent felt that PPIUD was unsafe for postpartum women.

Conclusion: Potential providers of a PPIUD service in Gwagwalada are keen but need support through appropriate and adequate training opportunities.

P131

Swedish midwifery students' education about men's reproductive, perinatal, and sexual health: An empirical study of learning objectives

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Background: Research has found that masculinity norms limit men in seeking health care, and that fewer men than women seek health care for sexual, perinatal, and reproductive reasons. Midwives - the main providers of sexual and reproductive health care in Sweden - experience a lack of knowledge of men's sexual and reproductive health and have different opinions on whether men are a part of their professional responsibility or not.

Objectives: The aim was to explore through what concepts and to what extent men's reproductive, perinatal, and sexual health are included in the learning objectives of Swedish midwifery programs.

Method: This was a qualitative text analysis study. Learning objectives of 105 curricula of 12 Swedish midwifery programs were collected and analysed with manifest and summative content analysis.

Results: Men were included in learning objectives through the concepts men, patients, parents, family members, relatives, partners, individuals, and adolescents. The concept man/men was mentioned explicitly five times. Midwifery students should, according to learning objectives, gain knowledge about the humanistic view of human beings and human rights, men's health during all phases of the reproductive life cycle and how to support and promote good sexual, reproductive, and perinatal health. Further learning objectives described the midwife's preventive work for, among others, parents, the family, relatives, partners, and adolescents reproductive, perinatal, and sexual health. Midwifery students should also learn about parental education for expecting and new parents and parents' need for individual support. Finally, learning objectives included knowledge about family health care, a holistic view of the patient, relatives' autonomy and participation, and the partner's or couples' need for care.

Conclusions: Men are included in learning objectives as men, patients, parents, family members, relatives, partners, individuals, and adolescents. The midwife must be able to meet men throughout the life cycle, which presupposes both knowledge and accessibility. The results implicate a need of clarification and consensus from both the profession, the health care organization and higher education system about men as a target group, to ensure equal reproductive, perinatal, and sexual health care.

P132

Availability of youth clinics and association with health outcomes: a Swedish register-based cross-sectional study

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Background: Adolescence is a period characterized by rapid changes and development,

both regarding sexual, physical, and mental health. Youth clinics in Sweden have a mission to improve and care for the mental and physical health of all youths. However, there are no national guidelines determining how this should be done and each municipality and region are free to choose the kind and extent of service provision.

Objectives: The aim of the study was to map the number and regional distribution of youth clinics in Sweden and analyse its relationship with regional demographic, geographic, and socioeconomic characteristics. The aim was also to explore the association between regional availability to youth clinics on youth's general health, including lifestyle habits, sexual and psychological health.

Method: This register-based cross-sectional study utilized 2019 data from official national registers provided by Statistics Sweden, the National Board of Health and Welfare, the Public Health Agency of Sweden, and The Swedish National Council for Crime Prevention. Descriptive statistics and linear regression analysis were used.

Results: The geographical catchment area per youth clinic varied between 181 and 12234 square kilometres (M: 2446, SD: 3134). The number inhabitants between 12 and 25 years of age ranged between 2696 and 12811 per youth clinic (M: 6357, SD: 2739). Analysis is ongoing and the final results will be presented at the congress.

Conclusions: Despite national as well as international guidelines advocating equal access to health care, availability of Swedish youth clinics differs considerably between regions.

P133

A Nurse-led model of care for long acting reversible contraception and early medical abortion provision in rural family practice in Australia: Outcomes of a codesign process

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Objectives: Compared to those living in urban areas, women living in rural and regional Australia face particular barriers in accessing sexual and reproductive healthcare due to extremely limited local services and high costs and are 1.4 times more likely to experience an unintended pregnancy. Nurse-led models of care for long acting reversible contraception (LARC) and early medical abortion (EMA) provision involving task-sharing and delivered through face-to-face consultations or via telehealth, could address these barriers and improve access to services but have yet to be developed or tested in the family practice context. We aimed to develop a nurse-led model of care for LARC and EMA provision in rural family practice in Australia.

Design & Methods: Using a codesign approach, we conducted an online workshop with nurses, family physicians (FPs), family practice managers, other health professionals, consumers and key stakeholders. The workshop was informed by the 'Experience-Based Co-Design' Toolkit and included discussion of existing task-sharing models in primary care and utilising experiences of these to map the patient journey in the context of LARC (particularly the contraceptive implant) and EMA provision. The workshop was recorded and transcribed, with data analysed

Results: The model of care developed emphasises (a) preparing the practice for service implementation through training receptionists, nurses and FPs, informing local radiology, pathology, and pharmacy services of the start of the service, raising patient awareness of the service and setting up the booking service, (b) identification of the roles of nurses and FPs in the practice and how they will task-share in that practice (c) implementing protocols for booking appointments, patient assessment and counseling, ordering of investigations, follow up of results, referrals, insertion of implants and provision of EMA and patient follow-up and complications (d) peer support and networking through an online community of practice (e) use of resources such as patient information, multilingual resources, consent forms, checklists and local support services concerned with sexual assault and violence.

Conclusion: A co-designed nurse-led model of care suitable for rural family practice was developed. This model which provides practices with guidance to set up and deliver nurse-led EMA and LARC services requires feasibility and acceptability testing prior to implementation.

We anticipate that the model, which will allow nurses to work to their full scope of practice, will increase accessibility of EMA and LARC in rural Australia.

Conflict details: DM has received research funding, travel grants and honorarium from Bayer. DB has attended advisory boards for Organon and Bayer Health care and provided educational updates for Bayer Healthcare as part DBs role at Family Planning NSW. DB has never received personal remuneration for these activities. WVN's research is funded by the Government of Canada's Canadian Institutes of Health Research, the Public Health Agency of Canada, and the Society of Family Planning. WVN was a member of the Board of Directors of the Society of Family Planning from 2016-2021.

P134

The Evaluation of a Free E-learning Course on Inclusive Holistic Care for Refugee and Migrant Victims of Sexual Violence

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Background: Migrants, Applicants for International Protection and Refugees (MAR) are at high risk of sexual victimisation prior to but also upon arrival in Europe. However, the access to holistic care (i.e. encompassing forensic, medical and psychosocial care) for MAR victims is hampered by a broad range of barriers. Health care providers, law enforcement officials and intercultural mediators/interpreters working with MAR victims of sexual violence (SV), often lack the specialist knowledge, (language) skills and tools to provide and/or refer MAR victims to inclusive holistic care. As part of the INHeRE project an online e-learning course was created to improve the skills of frontline workers in identifying and providing care to MAR who have experienced sexual violence.

Method: The e-learning course was validated through a survey which was administered at three different points in time: 1) before the start of the course, 2) directly after the finalization of the course and 3) six months after completion of the course. By measuring the evolution in knowledge and attitude (i.e. rape myth acceptance rates) the effectiveness and accessibility of the curriculum was assessed.

Results: 420 professionals completed the first survey, 177 the second and 63 the third. Both, knowledge and attitude, increased positively between the first two surveys. This positive evolution stayed stable and did not drop after six months, meaning that the knowledge and attitude were increased sustainably. Multiple factors, such as the experience of the participants, their profession, the time needed to achieve the whole course, the strength of their beliefs concerning sexual violence, ..., were added as interacting terms.

However none of them came out as a significant moderator.

Conclusions: An e-learning course can improve the knowledge and attitudes in frontline professionals working with MAR victims of sexual violence. This e-learning course is now available for free in English, Dutch, French and Italian on the official digital learning environment of Ghent University, Belgium.

P136

Obstetrical soft tissue trauma during vaginal delivery in the Romanian adolescent population – multicentric comparative study with the adult population

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Objective: Romania is a country with high rates of adolescent births, associating scarce comprehensive obstetrical management in this specific population. This research aims to assess soft tissue trauma after vaginal birth in teenage mothers compared to their adult counterparts.

Method: A retrospective case-control study was conducted for one year in two hospitals. All vaginal deliveries were considered; the age cut-off value was considered at 20 years old for case and control groups. Lacerations were divided into three subgroups, considering the involved anatomical region: group I: labial and perineal lacerations; group II: vaginal and perineal lacerations; group III: cervical lacerations.

Results: There were 1498 women included in the study: 298 young mothers and 1200 adults.

Teenagers were more likely to have an episiotomy during delivery compared to adult women: 56% versus 26.7% ($p=0.00$, Pearson Chi-Square) and a 1.89 increased risk for developing additional group II lacerations: $p=0.01$, Pearson Chi-square test with Bonferroni correction: $OR=1.89$, 95% $CI:1.18-3.02$. Group II lacerations were the most frequent types of birth trauma in both study groups. Fetal weight $\geq 4000g$ associated a twice higher risk for vaginal and perineal lacerations when age criterion was not considered ($OR=1.98$, 95% $CI:1.13-3.47$, $p=0.01$). The incidence of group I and II lacerations increased with age: from 0% and 9.1% between 10-14 years old to 6% and 26.2% between 18-19 years old.

Conclusions: All groups of lacerations were more often identified in the case group, compared to the adult group. Foetal macrosomia and spontaneously ruptured membranes at admission could not be documented as risk factors for obstetrical injury in young mothers. Episiotomy performed in teenagers was not a protective procedure for group II lacerations.

Sexual health and sexual infections – all aspects

P137

Sexuality in the last trimester of pregnancy

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Objectives: The aim of this study is to assess women's sexual activity in the last trimester of pregnancy and the differences between nulliparas and multiparas.

Method: 103 women who gave birth in 2020 at Maternidade Bissaya Barreto, University Centre Coimbra, Portugal, were given an anonymous questionnaire containing the Female Sexual Function Index (FSFI). Multiple pregnancies and pregnancies at high risk of preterm delivery or with complications from placenta previa were excluded.

Results: The study included 103 women, of whom 55.3% ($n=57$) were nulliparas and 44.7% ($n=46$) were multiparas. In the nulliparas group, 54.4% were single and in the multiparas group, 56.5% were married. The median age in the nulliparas group was 31.18 years (range 19-44) and in the multiparas group 34.67 years (range 25-44). The median duration of the relationship was 6 years in nulliparas and 9 years in multiparas. 80.0% of nulliparas (versus 65.0% in the multiparas group, $p=0.34$) reported a lower frequency of sexual intercourse in the third trimester compared to pre-pregnancy sexual practices.

The FSFI total score varied from 1.20 to 30.90 with a mean score of 23.32. Of all the FSFI domains, the highest mean score was reported for satisfaction (4.95 ± 0.1 points, range: 0.0-6.0) and the lowest for desire (3.55 ± 1.1 points, range: 1.2-6.0). 57.9% had a score below 26.55, which is considered a risk for sexual dysfunction. There were no differences between nulliparas and multiparas on the FSFI score questionnaire.

Conclusions: Sexual health is an important component of women's quality of life.

In this study, the majority of women, especially in the third trimester, had some degree of sexual dysfunction. There were no differences in sexual practice in the third trimester of pregnancy between nulliparas and multiparas. Education and counselling about sexual activity during pregnancy should be discussed by healthcare professionals during antenatal visits.

P138

The prevalence of Chlamydia trachomatis in the endocervical swab specimens of asymptomatic women with breast cancer in a Brazilian Family Planning clinic: a cross-sectional study.

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Objective: To identify the prevalence of Chlamydia trachomatis in the endocervical swab specimens of asymptomatic women with breast cancer, needing contraception, seeking a non-hormonal IUD insertion.

Methods: Cross-sectional study, with 84 women with an anatomopathological diagnosis of breast cancer and eligible for the use of an intrauterine device (IUD), approved by the Ethics Committee of the HC-FMUSP (CAAE: 26272819.3.0000.0068, opinion: 4.093.763). Data are presented as relative frequency (%). Endocervical swab specimens were routinely collected before the IUD insertion to search for Chlamydia trachomatis.

Results: Participants were 37.4 ± 5.1 years old, mainly white (42.9%) or brown/black (50.0%) and married (45.2%). Age at first sexual intercourse was 17.3 ± 3.2 years old; they had 4.1 ± 3.2 sexual partners in their lifetime. Only one woman (1.2%) reported previous sexual intercourse with women. Two women had a positive sample for Chlamydia trachomatis, which represents a prevalence of 2.4%. Conclusion: The prevalence of Chlamydia trachomatis in the endocervical swab specimens of asymptomatic women with breast cancer was low.

Conflict details: None

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Factors associated with sexual disorders in Colombian climacteric women: A cross-sectional Study.

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Objective: to identify factors associated with sexual disorders in Colombian climacteric women using The Female Sexual Function Index, abbreviated version [FSFI-6].

Methods: Cross-sectional study that is part of the CAVIMEC project [Quality of life in menopause and Colombian ethnic groups]. Healthy women, aged between 40-59 years, residing in urban or rural areas of the Colombian Caribbean, were invited to participate and were surveyed in 2019, face to face in their own residences by nursing assistants. They filled out a form that questioned sociodemographic characteristics and applied the FSFI-6 scale to identify sexual dysfunction and disorders of desire, arousal, satisfaction, coital pain, lubrication, and orgasm. The lower the score for each item and the scale, the worse sexuality. Anonymous, confidential and voluntary participation. For data analysis, EPI-INFO 7 was used. Unadjusted logistic regression was performed: dependent variable sexual dysfunction and each of the sexual disorders, independent variables sociodemographic characteristics. a value of $p < 0.05$ was considered significant. Study approved by the ethics committee of the University of Cartagena, Colombia.

Results: 1445 women were studied, mean age 47.5 ± 5.5 years, 39.5% premenopausal, 26.9% in transition to menopause and a third postmenopausal. The IFSF6 scale score was 15.4 ± 9.5 . Dysfunction was identified in 37.7%. The third part presented alteration of lubrication, quarter alteration of orgasm, 21% alteration in desire, a fifth part had alterations in arousal or coital pain and 14% manifested alteration in satisfaction. The age range 55-59 compared to 40-44 was associated with a higher probability of sexual dysfunction and the six sexuality disorders explored by FSFI-6 ($P < 0.001$). The same was observed with daily coffee intake, smoking, postmenopause and lack of a stable sexual partner ($p < 0.001$). The lack of studies was associated with sexual dysfunction OR:1.87[95%CI:1.1-3.0], $p = 0.011$. Overweight and abnormal weight status were associated with a greater presence of desire and lubrication disorders ($p < 0.001$). Performing activity outside the home was associated with a lower frequency of all disorders ($p < 0.01$). Being mestizo with respect to Afro-descendant was associated with a greater presence of all sexual disorders ($p < 0.0001$), except orgasmic disorders.

Conclusion: several factors: educational, ethnic, nutritional, work and habits, were associated with dysfunction or with other disorders of sexuality. It is recommended that, during the climacteric, sexuality disorders be addressed and sociodemographic and personal factors be taken into account.

P140

Prevalence of sexual problems according to perception of loneliness in Colombian climacteric women in the COVID-19 pandemic: A cross-sectional study

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Objective: to estimate the prevalence of sexual problems according to the perception of loneliness in Colombian climacteric women at the beginning of the COVID-19 pandemic.

Method: cross-sectional study that is part of the CAVIMEC+COVID STUDY research project (quality of life in the menopausal and Colombian ethnicities under pandemic conditions). Climacteric women (40-59 y) residing in Colombia participated between June 1 and 5, 2020 by filling out an electronic form. Participants were asked to apply their responses according to their perceptions between May 1 and May 30, 2020. In that period, because of COVID-19, confinements and curfews were decreed by the national government in some Colombian cities. In addition, infection and death curves were rising daily.

The women participated voluntarily, anonymously, and confidentially, filling out an electronic form that asked about sociodemographic characteristics and applied the Jong Gierveld Loneliness Scale (JGLS) and Menopause Rating Scale (MRS) items. With JGLS, emotional loneliness, social loneliness and general loneliness were identified. With item eight of the MRS, sexual problems (changes in sexual desire, in sexual activity and satisfaction) were explored. Sample size calculation was performed with data from the Colombian population census of 2005 that established a projection of 25,772,783 women for 2020; of these, 2,859,309 were aged 40 to 59 years old. A sample size of 664 women was calculated in the Epidemiological Analysis from Tabulated Data 3.1 (EPIDAT) software: 99% confidence level, 50% expected proportion, 1% significance and 5% absolute precision. Statistical analysis was performed with Stata-16. The research project has the institutional endorsement of the Universidad de Cartagena, Colombia.

Results: 984 women filled out the form. The median age of the total sample was 48.0 years old (IQR:42.0-53.5). A total of 84.5% of surveyed women were Hispanic, 13.7% Afro-descendant, and 1.7% indigenous; 39.2% were postmenopausal. Emotional loneliness was identified in 433 participants (44.0%) [95%CI:40.9-47.1], social loneliness in 415 (42.2%) [95%CI:39.1-45.3] and general loneliness in 438 (44.5%) [95%CI:41.4-47.6]. Sexual problems were reported by 53.1% of participants [95%CI:48.4-57.7] with emotional loneliness and 33.7% [95%CI:29.9-37.8] of women without emotional loneliness ($p<0.001$). Sexual problems were reported by 51.3% [95%CI:46.5-56.1] of women with social loneliness and 35.6% [95%CI:31.8-39.7] without social loneliness ($p<0.001$). Sexual problems were reported by 53.6% [95%CI:48.4-57.7] of women with general loneliness and 33.1% [95%CI:29.9-37.8] without general loneliness ($p<0.001$).

Conclusion: sexual problems were significantly more frequent among women with emotional, social, and general loneliness than among those who did not have this perception.

P141

Real-life experience of an intravaginal gel containing siliceous dioxide, selenite, and citric acid to promote spontaneous remission and regression of unclear cervical smears in Germany

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Objectives: The intravaginal gel containing SiO₂, selenite, and citric acid is a medical device that promotes spontaneous remission and regression of unclear cervical smears. It also supports the clearance of high-risk types of the human papillomavirus (hr-HPV) and has a positive influence on the tumor markers p16/Ki67. Gynecologists in Germany who recommend the vaginal gel to their patients in case of abnormal cervical smear tests during the watchful waiting period were asked about their real-life experience in daily practice.

Design & Methods: Twenty-two German gynecologists documented in case-report files their real-life experience in the treatment of patients with the vaginal gel during the watchful waiting period after an unclear cervical smear test and/or a positive hr-HPV test. Up to now case reports of more than 40 women with a usual treatment period of 3x 28 days were collected.

Results: Women who were recommended to use the vaginal gel were between 20 and 65 years old (mean age of 37.98 years) and had a mean BMI of 22.45 kg/m². 27.5% of women were smokers, three women received at least 1 dose of HPV vaccine and two women had concomitant infections. Before treatment with the gel most women were diagnosed with LSIL (n=22), followed by ASC-H (n=6), or HSIL (n=6), 77.5% of them (n=31) were tested positive for hr-HPV. After treatment with the gel 30 women were diagnosed with inconspicuous cervical smears (NILM) and the hr-HPV clearance rate was 55%. In one case a woman who smoked 10 cigarettes per day was diagnosed with HSIL and tested positive for HPV18. After the use of the gel, the smear test was normal and she was HPV negative. Another case was a woman previously diagnosed with LSIL and CIN II, who had received laser therapy of the portio. Two years later she was tested positive for hr-HPV despite a NILM smear test result. After the treatment with the vaginal gel, she was tested negative for hr-HPV. Most of the patients mentioned that the vaginal gel was well tolerated.

Conclusions: The real-life experience of the vaginal gel among German gynecologists shows that women within the age span of 20 to 65 years use the gel during the watchful waiting phase. For both cervical smear tests and hr-HPV infections positive effects of the gel have been documented while the patients' feedback was overall very positive. The data base is going to be expanded.

Conflict details: Mueller and Mayr are employees of Exeltis Germany, Regidor is employee of Exeltis Europe.

P142

Barriers and facilitators to cervical cancer screening among under- and never-screened women in Belgium – a qualitative study on community and healthcare providers' perspective

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Background: Cervical cancer is detectable and preventable in pre-malignant stages. In 2013, a cervical cancer screening (CCS) program was set up in Flanders (Belgium) promoting screening through sending reminder letters. Nevertheless, Flanders reaches a CCS coverage of only 63.7%, which has not increased since the implementation of the program.

Objectives: To identify the under- and never-screened women in Flanders and gain a better understanding of barriers that prevent them from attending CCS.

Methods: Twelve in-depth interviews and six focus group discussions were conducted with gynecologists, general practitioners, community health workers and stakeholders, of potentially underscreened women. Transcripts were analysed by a content analysis approach. The Socio-Ecological Model (SEM) was used to classify the barriers on the different levels of impact.

Results: This study confirms socio-demographic disparities in screening attendance. However the group of never- or underscreened women is very heterogeneous and includes many women that are unaware about CCS. The two main barriers on individual level are lack of knowledge and having other priorities. A lack of focus on prevention is the most commonly reported barrier on healthcare system level. We argue that increasing awareness about cervical cancer (screening) and creating more preventive medicine opportunities are the primary facilitators. A causal loop diagram was composed to state the dynamic interrelations among the barriers and facilitators.

Conclusion: A multitude of barriers to CCS were identified on different levels. In Flanders, there is a need for different screening strategies tailored to a diversity of women to improve participation.

P143

Use of Hormonal Contraception as a Protective Factor of Sexual Dysfunction after Suffering from Covid-19

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To determine the effect of Covid-19 on sexual function of women and to compare it among hormonal contraception users with hormonal contraception non-users.

Method: Altogether 188 women were actively questioned and listened to after having suffered from Covid-19 (within 3-9 months) on the possible sexual function disorders or sexual dysfunction (SD): during the gynaecologist's consultation 120 patients were listened to and support rendered to those patients who were actively addressing a sexologist for complaints of a sexual function disorder, or SD – 68 patients.

Results: Comparing SD between persistent hormonal contraception users for 6 months and longer, and non-hormonal contraception users – we found an interesting fact, that SD after the illness of Covid-19 was more common among hormonal contraception users than hormonal contraception non-users, also among those who have visited a sexologist with SD complaints, as well as those who were actively questioned during a gynaecologist's visit did not complain of a possible SD after suffering of Covid 19. It means, that 50 patients of questioned patients during a gynaecologist's visit did not complain of SD: 39 of them were using hormonal contraception, while 11 patients were not using hormonal contraception. From those women who had some complaints of SD: lubrication, excitement, orgasm problems, but most commonly – lack of libido (99 of 138). 108 were not using hormonal contraception, but it was used by 30 patients.

Conclusions:

1. The development of Covid-19, among other functions, can undoubtedly have a negative effect on sexual function.
2. Lack of libido was reported as the most common SD after developing Covid-19 (73% of reported SD).
3. Interestingly, in the group of persistent hormonal contraception users, Covid-19 SD was not observed in most patients or was on average three times less frequent than in non-hormonal contraception users. This could be explained by as an anti-inflammatory factor against changes in the body caused by the Covid virus.
4. The study reaffirms the literature data on the effect of the predominance of psychoemotional factors on SD, which during the Covid-19 pandemic can be considered as psycho-psychosexual, but the use of hormonal contraception can provide protection / balance of psychosexual functions.
5. Of course, further research is desirable, both broader and more detailed, on hormonal contraception, sexual functions and Covid-19 interactions.

P144

From fear to not care: The risk perception of contracting COVID-19 among female sex workers in Xi'an, China

Min ZHAO

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Objectives: To construct a theoretical model that tries to explore the interaction mechanisms of the risk perception of contracting COVID-19 and its contributing factors among female sex workers.

Method: We used grounded theory to guide our data collection and analysis process. Respondents' selection criteria were women who were at least 18 years old and had engaged in sexual services to obtain money in the past 12 months. A total of 22 female sex workers participated in the interview. We used a selective code family of Six Cs in adaptation to knit formed categories as this suited our data to develop a theory

Results: The study identified the risk perception of contracting COVID-19 when female sex workers returned to sex work as a core category, and other five categories were arranged around this core to develop the theory. The developed model showed that, in the context of lifting the lockdown measures, the economic vulnerability led female sex workers to return to sex work and perceive the risk of COVID-19 during sex work; the pandemic prevention measures in entertainment venues and the trust of female sex workers in clients were the conditions/triggers for their risk perception of contracting COVID-19; female sex workers' coping strategies were moderating factors that moderated the effect of conditions/triggers on the risk perception of contracting COVID-19. As female sex workers spent more time performing sex work in the entertainment venue, the combined effect of the above factors has led to changes in female sex workers' risk perceptions of contracting COVID-19.

Conclusions: This study pays particular attention to the specific conditions and duration of sex work experienced by female sex workers, which adds new dimensions to understanding the risk perception of COVID-19. Based on the findings of the study, it is important to conduct targeted research on female sex worker groups to determine intervention strategies in specific situations to help them overcome the dissemination risk of COVID-19. The involvement of entertainment venues is crucial to effectively prevent the transmission and spread of COVID-19 in the prostitution context. Therefore, some activities should be carried out to help female sex workers conduct accurate self-risk assessments. As well as taking the basic pandemic prevention measures in prostitution establishments, the key measures should be the regular and comprehensive disinfection of entertainment venues and the health checks of all people in the establishments.

Role of self-sampling for the diagnosis of human papillomavirus in rural areas from Cuenca Ecuador: Acceptance, sensitivity and specificity among urine sampling, self-sampling and clinician sampling.

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Background: During 2020, 1534 new cases of cervical cancer were reported in Ecuador and 813 women died from this cause. Pap smear has decreased mortality of (CC), however in Ecuador 41.6% of women in their reproductive age have been never screened. Different barriers for CC screening have been identified, among them: long waiting times, pain, embarrassment, lack of risk perceptions are related with this low coverage. High sensitivity tests for primary screening of HPV are useful for an early detection of cervical pathology. Self-sampling techniques could overcome barriers and increase participation in screening and increase the participation of under screened women.

Objectives

- 1.- Identify the acceptability of self-sampling tests in rural women. (qualitative)
- 2.- Compare the sensitivity and specificity of urine and vaginal self-sampling test with clinician sampling test for HPV diagnosis. (quantitative)

Methodology: This research contains a qualitative and quantitative part.

For the qualitative phase, a phenomenological approach through focus groups of discussion (FGD) was conducted, with women from the rural area of the El Valle parish in Cuenca Ecuador. Snowball technique was used to recruit participants.

For the quantitative phase, women who attended the health service of the el Valle Parish of Cuenca Ecuador were invited to participate. Each participant provided three samples in the same consultation (urine, self-sampling and clinician sampling). The samples were processed in the laboratory of the University of Cuenca for HPV detection.

Results: Qualitative results: A total of 47 women participated in 7 FGD. Women consider the clinician sampling: painful, intrusive and embarrassing. Self-sampling methods advantages include: privacy, less waiting time, more comfortable.

Quantitative results: A total of 120 women participated in this phase. HPV detection in the clinician sampling was used as a gold standard. The sensitivity and specificity were 88,8% (IC 67.2- 96.9) and 94,1% IC (87.76, 97.28) for the urine test; 94,4 % (IC 74.2- 99.0) and 92,1 % (IC 85.2- 95.9) for the self-sampling.

Conclusions: Self-sampling tests constitute a highly sensitive and accepted method for primary HPV screening at community level.

Does making condoms freely available on a university campus reduce the percentage of students diagnosed with chlamydia or gonorrhea?

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Background: Among professionals in the field of sexual health, there is a consensus that - Condoms are a critical component in a comprehensive and sustainable approach to the prevention of HIV and other sexually transmitted infections.

Aim: This pilot study will assess the impact of condoms, which were made freely available to students in 2019.

Methodology: Participated in a HSE initiative providing free condoms having identified a need.

Used data collected through screening in the Student Health Centre (SHC). Data related only to those positive for chlamydia/gonorrhea used. Data presented from February 2017 to November 2017(pre condom distribution). Data presented February 2019 to November 2019 (during distribution). Highlight numbers of condoms distributed

Results: February 2017 to November 2017.

There were 733 students screened. 51 tested positive representing 6.9% - 37 chlamydia, 14 gonorrhea. February 2019 to November 2019. There were 641 students screened. 68 students tested positive, representing 10.6 % - 58 chlamydia, 10 gonorrhea. This identifies an increase of 3.7%. During this period, 13,000 condoms were distributed.

Points for Discussion: It is a plausible possibility that reduced sexual sensitivity is a factor precluding condom use for males and therefore the reluctance is more related to lack of appeal than cost. Also the fact that young females in this group may not feel confident enough to speak up due to the power imbalance that exists.

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The Successful Use of Outreach Testing

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Background: A recognised outbreak of Chlamydia and Gonorrhea among students on a university campus in Nov/Dec 2016.

Aim: To raise awareness. Establish prevalence of STI's. Explore if the patterns of STI diagnosis changed over a 10 month period.

Methods: Messages sent to students on social media to alert them of time, date and site of free testing. Outsource testing was arranged for C. Trachomatis and N. Gonorrhoea infection with low vaginal swabs and first void urine testing. A suitable clinical space for triage and testing was identified. Staff members met with attendees on entry to the clinical area. They were advised asymptomatic testing was taking place.

Participants

367 students were tested for C. Trachomatis and N. Gonorrhoea infection in February 2017.

366 students were tested for the same STI's in November of 2017 (10 months later).

Results

	Chlamydia	Gonorrhoea
February 2017	Female – 16 Positive	Female – 0 Positive
	Male – 6 Positive	Male – 1 Positive
November 2017	Female – 20 Positive	Female – 1 Positive
	Male – 6 Positive	Male – 2 Positive

Conclusion: Despite the era of widespread free sexual health screening and social media information, the results suggest that these infections may be on the rise in the student population. They results indicate a growing need for awareness campaigns and outreach that relate specifically to C. Trachomatis or N. Gonorrhoea infections for university students and that this is a valuable public health intervention that reinforces the need for sexual health awareness in a high-risk cohort.

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Sexually Transmitted Infections (STIs) at the Genitourinary Clinic in Malta: Prevalence and Risk Behaviours, 2017-2020

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Objectives: To analyse the occurrence of Sexually Transmitted Infections (STIs) and risk behaviours among those attending the only state-run genitourinary clinic in Malta between 2017-2020.

Method: The demographics, STI diagnoses and risk behaviours of all patients were analysed.

Results: In the past four years, 12,132 individuals between 10 and 85 years of age were tested for STIs over 22,362 visits. Of these visits, 66% were male, 67.2% were Maltese, 70.1% were heterosexual, and 46.6% were asymptomatic at the time of presentation. The age at first intercourse ranged from 12 (n=46, 0.9%) to 30 (n=11, 0.2%), modal age 16 years (n=966, 18.8%).

Three quarters were sexually active in the six months prior to testing. Among them, 15.9% had had sex with casual partners, 23% had had sex with more than two partners, 8% with more than five and 3% with more than ten partners in the six months prior to the visit; one third had never used condoms; 20 percent admitted to illicit drug use.

Almost half of all visits (n=10,417; 46%) resulted in a diagnosis; of these 6961 were STIs (66.8%); 1508 (12.4%) had two STIs diagnosed concurrently, 321 (2.6%) had three, 67 (0.6%) had four, and 12 (0.1%) had five. The most commonly diagnosed STI was anogenital warts (14% of visits; 30.5% of all diagnoses, 45.6% of all STIs), followed by chlamydia (5.4% of visits; 11.8% of diagnoses, 17.6% of STIs), non gonococcal urethritis (2.4% of visits; 5.2% of diagnoses, 7.8% of STIs), anogenital herpes simplex (2.1% of visits; 4.5% of diagnoses, 6.8% of STIs), molluscum contagiosum (1.4% of visits; 3% of diagnoses, 4.6% of STIs), and syphilis (1.2% of visits; 2.5% of diagnoses, 3.8% of STIs). The overall STI prevalence was 30.8% of visits, 57.4% of patients and 66.8% of diagnoses.

Conclusions: Promoting safer sexual behaviour and increasing testing rates among key populations through targeted prevention strategies is essential to better address sexual health in Malta. Self-testing and home testing, combined with digital health and digital engagement models, may lead to the provision of reliable and accessible sexual health services in the country.

The impact of the Covid-19 pandemic on sexual health services and provision

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Social distancing in the bedroom? COVID-19 pandemic control measures' impact on young people's SRHR in the Netherlands

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1. Objective: COVID-19 pandemic control measures greatly influenced the social and sexual lives of young Dutch people since March 2020. Quantitative research revealed variation in the impact of restrictions on different groups. More insight into how young people deal with risk, changing pandemic control restrictions and health seeking behaviors in their intimate and sexual relations was needed to better inform public health policies.

2. Design & methods: Using semi-structured in-depth interviews, a cohort of 43 young persons was followed throughout 2021. Participants were asked to look back at different phases of the COVID-19 pandemic and draw a love lifecycle to visualise changes in their intimate and sexual life. Using their love lifecycles participants were asked to reflect on sexual activity and satisfaction, relationships and intimacy, online dating, parental and peer influence in decision-making, sexual risk and violence, information needs, access to sexual and reproductive health services, and mental health.

3. Results: In total 21 women, 19 men and 3 non-binary people between 16 and 25 years participated. For about half of the participants restrictions strongly influenced their sexual lives, relationships and possibilities to meet people. Especially single people struggled to meet new people. Low points in their love and sex life as well as mental health were linked to curfew and lockdown restrictions. Sexual activity and satisfaction increased during times of fewer restrictions. For some young people in pre-existing relationships, the restrictions forced them to spend more time together, which proved beneficial for some and detrimental to other relationships. Participants noted the novel occurrence of a 'corona relationship': a (monogamous) partnership between two people which would not have been initiated nor continued without COVID-19 restrictions. Participants rarely mentioned unmet health information needs. Few participants personally perceived issues accessing STD testing or reproductive health services. Instead many pointed out the need to meet new people, experiment and catch up on intimate experiences they missed out on in 2020 and 2021. Participants appreciated the interviews as opportunities to have acknowledged and validated which impact COVID-19 has had on young people's lives.

4. Conclusions: COVID-19 restrictions strongly affected the sexual and intimate lives of young people. Due to social distancing and lockdown of social spaces, young people struggled to meet new people. It is important for public health professionals to acknowledge the profound impact of COVID-19 restrictions and weigh the significance of positive sexual health versus COVID-19 pandemic control for young people.

Teenagers unwanted pregnancies in Covid Era-deep concerns over family planning in Romania

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Objectives:our study is aiming to specifically address the concerns over the teen pregnancies in Romania-regarding the behavioral changes and lack of medical accessibility due to the pandemics.**Methods:**we compared the incidence of teen unwanted pregnancies two years before the pandemics has started(2019-2020)and during the pandemics,the rate of abortion and the rate of birth to this specific category of age-studying statistics the place of provenience(urban/rural),the age group (11-15),(16-18),level of education (no school attendance at all/primary/secondary),knowledge about contraception methods,access to healthcare community services,child abandonment and STI risks or substance abuse(alcohol,drugs etc).**Results:**During pre-pandemic era the number of teen pregnancies was slightly higher (10%)but also the accessibility was quite better-a 23 % of young girls prefers to see a physician (generally an obgyn).There is no notability in any kind difference regarding the abortion rate -specifically considering the fact that the general hospitals mostly "closed"for the public-requiring to go to private clinics for the termination of the unwanted pregnancies.Most of teen pregnancies were originated for rural areas(79,2%) with no level of education or a very low one(just four or 6 classes of school attendance).Only 10 %had any knowledge of at least one method of contraception (pill,condom or IUD),4.1% were also using them-even wrongly with reported missing pills or lack of understanding of the correct use of condoms(12%).The rate of birth to this particular ages is constantly at the same number in both pre-pandemic and Covid-Era-slightly different in the last one(probably due to changes in behavioral patterns regarding sexuality in the pandemics).When it comes to STD it seems that the strong link between its high incidence,lack of sexual education although quite increased sexual activity and no correct and accurate informations about the risks)is permanently demonstrated by the 67 %of connectivity.Abandonment is the high payment for a unhealthy reproductive habit(25 %).Substance abuse was on the rise during pandemics(43.2 % reported alcohol consumption at least once at 2 weeks-mostly 2 glasses of wine).**Conclusions :**The highest risk of unwanted pregnancies,births,abortions of STD is no different to the age group 11-15 or 16-18 before of during the pandemics. The lack of sexual education of the missing notions about contraception's method or getting STD are still a visible characteristic of a constant need in our country's healthcare services which needs are not only specifically not addressing the particular age groups but also the Romanian education system with strong needs for medical information combative regarding the sexual and reproductive health,the abandonment and substance abuse.We hope that strong political policies should have a visible impact on this young generation in high needs of total support.

STI/HIV care in times of COVID-19 according to Dutch care professionals: A mixed methods study.

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- 1. Objectives:** Dutch surveillance data show a decrease in the number of STI/HIV tests since the start of the COVID-19 pandemic (Staritsky et al., 2021). However, the impact of the pandemic on both demand and provision of testing and care may be complex, and various risk groups could be differentially affected. In this study, we investigated whether professionals experienced changes in demand and provision of care, a shift to hybrid or online care, and consequences for the quality of care, since the first lockdown.
- 2. Method:** 192 Professionals from general practices, sexual health centers of the public health service, HIV specialists, and other professionals involved in STI/HIV care completed a survey. In-depth interviews were held with 23 healthcare professionals (including professionals from private testing companies).
- 3. Results:** Access to STI/HIV care was lower and workload was higher since the start of the pandemic, especially during lockdowns. These findings were more pronounced in PH services than in GP practices.

The lower testing rate was attributed to both lowered access to care (stricter triage, implicit messages of 'not burdening care', a temporary stop of outreach programs), and potentially lower demand for testing because of lower STI/HIV risk in lockdowns. Private testing companies generally saw an increase in testing rates since the pandemic started. Many professionals felt that mostly young, internet-savvy and higher SES people would have made the transition to online (private) STI/HIV testing, but that people with lower health literacy, lower digital skills, and lower SES might not have made this transition. However, professionals felt that testing behaviour of typical risk groups like MSM or sex workers was not necessarily affected by covid measures, since healthcare for these groups was not scaled down as much and many people in these groups knew where to get tested. Furthermore, a general observation was that hybridization of care was not up to standards and that most organizations struggled with technical issues. Lastly, professionals were skeptical with regard to standards of care after a positive test, in hybrid/online forms of care.

4. Conclusions: Low access to care during the covid pandemic may be less related to risk behaviour per se (e.g., MSM, sex work) but more related to other vulnerability factors like lower health literacy. Since there is a growing demand for online testing, and it is unlikely that this trend will decline, professionals would like to see that standards of follow-up care after online testing are high and uniform.

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Are victims of sexual assault receiving optimal care during the Covid-19 pandemic?

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Objectives: To audit the quality of the care for individuals reporting acute sexual assault (SA), using the UK National Guidelines on the Management of Adults and Adolescent Complainants of Sexual Assault 2011, from the British Association for Sexual Health and HIV (BASHH).

Design and methods: Coding of electronic patient records was used to identify patients who attended our Integrated Sexual Health Service from January 2020 to November 2021. All 14 standards are set at 100% including documentation of: historical elements of SA, physical injuries, HIV risk assessment, offer of post exposure prophylaxis, self harm risk assessment, offer of forensic examination, emergency contraception (EC), prophylactic antibiotics, baseline STI tests, a plan for repeat STI testing, hepatitis B vaccination, child protection needs assessment if victim was under 18.

Results: There were 24 patients: 22 women and 2 men who presented with an acute sexual assault. The mean age was 26.45 years (age range 14-54, median age 22). The pandemic resulted in 10 telephone consultations (10/24, 42%), in normal circumstances all patients would be seen face-to-face. Three of these patients were referred from the Sexual Assault Referral Centre (SARC).

In total 6 female patients (25%) had had a forensic examination at the SARC. In most cases in our cohort the alleged perpetrator was an acquaintance, partner or ex-partner, only 4 cases were stranger rape. One was a female perpetrator. One standard did not apply to since antibiotic prophylaxis is not given in our service. Eleven of the 13 remaining standards were fully met in 100% of cases. In 2 cases the self harm risk assessment was not documented (both were face-to-face consultations). There were some gaps in 14 cases (14/24, 58%) where of the aspects of the assault such as the time and place of the incident, and whether a condoms was used or ejaculation may have occurred were not documented. Over half of these cases were telephone consultations.

Conclusion: We were pleased at the high standards achieved in this audit. The documentation was more detailed and complete when clinicians used the sexual assault EPR template compared to the general integrated sexual health template. The challenges of establishing rapport and appreciating body language and distress may have led to telephone consultations having more missing information. We have been mindful of the need to support clinicians undertaking distressing consultations during the pandemic and their access to support and well being services and supervision, especially if working from home.

COVID-19 pandemic on women's fertility intentions: A cross-sectional multi-country study from the I-SHARE survey

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Objective: To explore the effects of the COVID-19 pandemic on the change of fertility intentions among women of reproductive age.

Methods: This study was part of the larger I-SHARE study (International Sexual and Reproductive Health Survey in Times of COVID-19), which conducted online surveys in 30 countries between July 2020 and February 2021. The primary outcome of this study was the change of fertility intentions prior to and during the initial COVID-19 wave. Participants were women of reproductive age (18-49 years old) (n= 10672). Analyses were performed at the individual level. Descriptive characteristics of participants were expressed as numbers and percentages, means and standard deviations (+/-SD) where applicable. The Chi-square test was used to compare socio-demographic characteristics and COVID-19-related experiences. Multi-variable logistic regression analyses were conducted to identify independent factors associated with the change of fertility intentions in the whole sample and then by different age groups. The results were presented as adjusted odds ratios and 95% confidence intervals.

Results: A total of 1,539/10,672 (14.42%) participants stated that they had changed their fertility intentions. The COVID-19-related experiences were significantly different between 18-32 and 33-49-year-old women. After controlling for all other variables, there were higher odds of changing fertility intention for 18-32-year-old women who were in lockdown for between 6-9 months (AOR 1.38; 95%CI 1.07-1.77), been quarantined (AOR 1.33; 95%CI 1.06-1.68), lost personal income (AOR 1.57; 95%CI, 1.21-2.03), lived with sexual partners (AOR 1.57; 95%CI 1.21-2.03), had less tension with sexual partners (AOR 1.39; 95%CI 1.05-1.84), were more angry (AOR 1.32; 95%CI, 1.02-1.70), more worried (AOR 1.53; 95%CI, 1.25-1.87) or more frustrated (AOR 1.31; 95%CI, 1.05-1.63) than before. There were higher odds of changing fertility intention among 33-49-year-old women who had increased cannabis use (AOR 3.96; 95%CI 1.87-8.38), had improved household economic situations (AOR 2.03; 95%CI, 1.08-3.82), were less frustrated (AOR 2.64; 95%CI, 1.02-6.81), more bored (AOR 1.77; 95%CI, 1.23-2.54) or more worried (AOR 1.58; 95%CI, 1.08-2.32) than before.

Conclusions: This study highlights how the fertility intentions of reproductive-aged women may be influenced by the pandemic. COVID-19 related experiences are positive predictors for the change of women's fertility intentions and are pronounced differently between 18-32 and 33-49-year-old women. The COVID-19 pandemic has brought new challenges to women's fertility intentions. There is a need for specific support policies and measures for women in different age groups during the implementation of social distancing measures.

Analysis of deliveries from juvenile mothers during COVID 19 pandemic a multicentric study

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Introduction: Deliveries from underage mothers represent a major healthcare problem for many countries, but especially for Romania, the EU country with the most deliveries from juvenile mothers. It is well known that under age mothers have higher risks to develop medical complication due to pregnancy and delivery, but the psychosocial and behavioral ones are even worst and quite difficult to assess.

Objectives: To analyze the deliveries from juvenile mother in 4 university medical centers (3 from Romania and one from Serbia) and to assess the impact of COVID 19 on this problem.

Method: Teams from the four medical centers are performing a retrospective study using the data received from the Emergency Clinical County Hospital of Arad, the Emergency Clinical County Hospital of Timis, the Emergency Clinical Hospital Saint Pantelimon Bucharest (all three from Romania) and University Medical Hospital of Kragujevac, Serbia. The period statistically analyzed is 01.01.2019-21.12.2021, using the same clinical parameters.

Results: The study is still ongoing, as not all of the information has been collected so far. Data collected from 2019 is similar with the previous years, while for the Arad center an increase of the number of juvenile mothers is seen during the pandemic.

Conclusions: Juvenile mothers are prone to develop complications compared to general population. COVID 19 had a negative influence on juvenile mothers and sexual abuse (juvenile mothers aged less than 16 years). Better sexual education and social programs are needed in order to reduce the number of juvenile mothers and to help them get a much better social reinserction.

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Impact of the COVID-19 lockdown on quality of life and mental health in people with gender incongruence.

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Objective: To Evaluate the impact on psychological, sexual, and social health in people with gender incongruence due to the lockdown and social distancing along the COVID-19 pandemic.

Methods: Between June and December 2020 a cross-sectional study was carried out with people with gender incongruence who were users of Valencia-Dr Peset Gender Identity Unit. The study included those people who requested to start gender-affirming hormonal treatment and those one who had already started it. The measurement of the variables was carried out by means of an anonymous and confidential survey with 26 questions.

Results: Data of 94 people were analyzed, 71.3% stated that the pandemic control measures had affected their medical transition process due to cancellation and delay of the scheduled consultation or delay in the start of hormonal treatment. Most of them (85.1%) claimed that consultation by phone or rescheduling the consultation were offered. More than half of them (67%) did not have problems related to hormonal treatment. The psychological impact during lockdown induced emotional instability in 74.5% of patients. Social relationships were affected in 62.8% of people. The fear of contagion was referred in 63.8% affecting sexual, social and relationship activity. The emotional state worsened in 53.2% of people, and 64.9% were unable to receive the psychological assistance they needed. Despite of the pandemic situation and the difficulties, 96.6% of people maintained the decision to initiate the transition and the gender-affirming hormonal treatment.

Conclusions: The lockdown due to Covid-19 has affected to the quality of life and health of people with gender incongruence. Most of people maintained the decision to initiate the transition and the gender-affirming hormonal treatment.

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The antenatal and postpartum healthcare experiences of resettled Syrian refugee women during COVID-19 in Canada

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Objectives: To understand resettled Syrian refugee women's experiences accessing ante- and postnatal healthcare services and informal supports (e.g., help provided by friends and family) during the first wave of the COVID-19 pandemic in Nova Scotia, Canada.

Method: This qualitative study was conducted using elements of constructivist grounded theory. Women were purposively recruited through community organizations in Nova Scotia's urban centre by an Arabic-speaking research assistant as part of a broader study. Eight resettled Syrian refugee women who were postnatal during the first wave of the COVID-19 pandemic (March through August 2020) participated in virtual, semi-structured, interviews in Arabic and English. Data analysis was guided by the analytic techniques of constructivist grounded theory.

Results: Three themes emerged: "the impacts of COVID-19 on access to postnatal healthcare;" "loss of informal support;" and "grief and anxiety." Women experienced difficult healthcare interactions, including socially and physically isolated deliveries, limited in-person interpretation, and cancelled or unavailable in-home services (e.g., public health nurse and doula visits). Increased childcare responsibilities due to school and childcare closures and limited informal support due to pandemic restrictions left women feeling especially overwhelmed and exhausted. Stay-at-home orders and physical distancing requirements resulted in some women reporting feelings of isolation and loss, as they were unable to share the joyous, in-person postnatal moments with friends and family, ultimately impacting their mental wellness. Women expressed feeling additional anxieties due to COVID-19, worrying they may be exposed to the virus at the hospital during their delivery or follow-up appointments.

Conclusions: This research study is one of the first to examine the experiences of resettled refugee women who were postnatal during the early months of the COVID-19 pandemic in Canada. COVID-19 and associated public health restrictions significantly disrupted access and use of health services and supports used by resettled Syrian refugee women—a population already marginalized by the Canadian health system. Yet many of the barriers highlighted in this study—such as lack of informal support after birth, isolated deliveries, and difficulties accessing interpretation services—were already felt by resettled Syrian refugee women and other newcomer populations prior to the onset of the pandemic. Data presented in this study suggest that the pandemic environment and related restrictions have amplified pre-existing barriers to care and postnatal health inequalities for resettled refugee women. Many issues reported by participants are liable to persist in the aftermath of COVID-19 and must be addressed to ensure equitable access to care and support for postnatal women as we move towards a post-pandemic environment.

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To Ask or Not to Ask ? What factors were associated with a pro-active communication of general practitioners and their patients concerning domestic violence during the COVID-19-pandemic

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Background: The COVID-19-pandemic left no one untouched. Worldwide people were asked to stay home, restrict their movements and drastically minimize social contacts. In the first months, health care services cancelled or postponed regular care for non-COVID patients. Meanwhile, many patients avoided the care services themselves out of fear of being infected or by trying to relieve the burden on caregivers. The experts' fear for the consequences that the lockdown might entail on help-seeking behaviour came true. The PRICOV-19 study tried to explore how primary care practices were organized during the COVID-19 pandemic to guarantee safe, effective, patient-centered and equitable care for their patients, with a focus on the vulnerability of their patients.

Method: The PRICOV-19 study uses a multi-country cross-sectional study design. Data were collected between November 2020 and October 2021 in 37 European countries through an online questionnaire (one per practice). The questionnaire consists of 53 items arranged across six topics: (1) infection prevention; (2) patient flow for COVID and non-COVID care; (3) dealing with new knowledge and protocols; (4) communication with patients; (5) collaboration; (6) wellbeing of the general practitioner; (6) and characteristics of the general practitioner and the practice.

Results: 4295 general practitioners were included in the analysis of which 521 (12.1%) checked more than before with patients to determine if they (in)directly experienced domestic violence (psychological, physical

and sexual violence) since the COVID-19 pandemic. This improved pro-active communication was significantly associated to the type of patients coming to the practice, the presence of other initiatives concerning pro-active communication and the role changes in the practice's team of professionals.

Conclusions: Domestic violence (psychological and/or physical) is known to be a major risk factor for sexual violence (and all other forms of violence), especially when it remains undetected. However, only a handful of victims will reach out for help. A pro-active communication coming from health care providers, such as the general practitioners, is needed to detect domestic violence early on and to guarantee patient-centered and effective care. Important factors to achieve this pro-active communication seems to lie in a habit of taking initiatives to reach vulnerable patients and in the role of a general practitioner and his other team members and less in the mental health of the care provider or in the COVID-19-measurments.

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The Impact of COVID-19 Pandemic on the Provision of Contraceptive Methods, Live Births, and Abortions in a Brazilian Mid-sized City

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Objectives: The COVID-19 pandemic has disrupted health systems around the world, imposing logistic and economic barriers to accessing reproductive healthcare. We assessed changes in contraceptive provision, live births, and abortions in the public health system before and during the COVID-19 pandemic, in a Brazilian mid-sized city.

Methods: We used health information system data from the Brazilian Public Health System (which provides universal, public, free healthcare for 75% of the Brazilian population) of a city with 711,825 habitants (Ribeirão Preto, São Paulo State) from January 2018 to December 2020.

We analyzed the number of contraceptive methods per year provided for free by the Brazilian Public Health System [i.e., combined oral contraceptive (COC), combined injectable contraceptive (CIC), depot medroxyprogesterone acetate (DMPA), copper intrauterine device (Cu-IUD), tubal ligation], the number of live births, and abortions (miscarriages and induced abortions) in a mid-sized city.

Results: Compared to 2018, the numbers of 21-day packs of COCs, units of CICs, units of DMPA dispensed in 2020 reduced by 43.1% (from 32,800 packs to 18,656 packs), 17.7% (from 27,600 units to 22,700 packs), and 2.9% (from 34,600 units to 33,600 units), respectively. In the same period, the number of tubal ligations performed reduced by 44.7% (from 649 procedures to 359 procedures) whereas the number of Cu-IUD insertions increased by 127.9% (from 1145 insertions to 2610 insertions). The number of live births and abortions decreased by 4.5% (from 8305 live births to 7928 live births) and 4.8% (from 735 abortions to 700 abortions), respectively.

Compared to 2019, the numbers of 21-day packs of COCs, units of CICs, units of DMPA dispensed in 2020 reduced by 36.8%, 22.3%, and 3.4%, respectively. In the same period, the number of tubal ligations performed reduced by 37.6% whereas the number of Cu-IUD insertions increased by 52.6%. The number of live births and abortions decreased by 1.8% and 9.8%, respectively.

Conclusion: Despite the reduction in short-acting reversible contraceptives (i.e., COCs, CICs) provision over 2020 compared to 2018 and 2019, the numbers of live births and abortions did not have relevant changes in the same period. The increase in the Cu-IUD provision over 2020 might played a role in preventing an augmentation in unintended pregnancies. Strengthening long-acting reversible contraception

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Strengthening organizational capacity to provide telehealth care for sexual and reproductive health: Findings from a California clinic network

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Objective: A diverse group of publicly funded health centers throughout California were funded in 2020-2021 to strengthen their ability to provide telehealth services for sexual and reproductive health care (SRH).

We conducted a pre-funding survey and post-funding interviews to assess organizational capacity, and barriers to and strategies for implementing these services.

Design & Methods: We used an online survey platform to collect and compile initial data from funded organizations. Descriptive survey data were collected from all 24 organizations (100%) between November and December 2020. At project end, between January and February 2021, we conducted interviews with 22 of the 24 agencies (92%) by video call to collect qualitative data. A thematic analysis was conducted using an on-line notes platform to compile observations by type (e.g., benefit, challenge, innovative practice) and group them by topic area. Topics addressed included capacity to provide telehealth, the implementation process, workflows, reimbursement challenges, desired policy changes, patient access, providing telehealth for special populations, patient and provider satisfaction, perceived benefits and challenges, and training and technical assistance needs.

Results: Prior to the pandemic only 8% were providing any telehealth services for SRH but 100% expected to do so by April of 2021. High percentages of respondents reported that telehealth increased patient convenience and reduced no-show rates (100%), protected patients from COVID-19 (95%), improved patient satisfaction and engagement (95%), and increased practice efficiency (95%). Common challenges encountered included provider struggles using new technology (91%) and increased staff time (91%).

Thematic analysis revealed high frequencies of comments regarding the benefits of telehealth for patient access and contact (n=22) and patient-provider interaction (n=12). The most frequently cited challenges included patient access and contact (n=24), workflows (n=20), implementation and staff training (n=14), and patient privacy and confidentiality (n=12).

Conclusions: When COVID-19 emerged, health centers across California had yet to begin implementing telehealth services for SRH, but they quickly pivoted to this new modality in order to provide vital care as safely as possible. Telehealth allowed patients to obtain care more conveniently, although many struggled due to lack of Internet access and other technical hurdles. Some providers found telehealth increased the quality of their patient interactions, while others encountered challenges using new technology. Overall, participating organizations found that telehealth did increase clinic efficiency. Despite remaining challenges, telehealth services for SRH were expected to become a permanent part of SRH care well beyond the pandemic.

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Reasons for induced abortion and access to contraception in Sweden during the COVID-19 pandemic

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Objectives: The COVID-19 pandemic has impacted on individual's sexual and reproductive health in different ways globally. The aim of this study was to investigate if the pandemic has affected Swedish women's decision to have an induced abortion and their access to contraceptive counselling.

Design & Methods: This cross-sectional study was conducted between January and June 2021. Swedish-speaking women seeking a first trimester abortion at seven different clinics were asked to fill out an anonymous questionnaire. The questions covered background, abortion decision and contraception. Descriptive statistical analysis was performed using SPSS.

Results: In total, 623 women participated. Among them, 13% (n=77/604) stated that the pandemic had affected their decision to undergo an abortion. One out of ten (11%, n=64/604) stated it had some impact, and 2% (n=13/604) that it had great impact on their decision. The most common COVID-19 related reasons for the abortion were: not wanting to be without their partner in maternity care, fear of the virus' health effects and worsened economy. Otherwise, the most cited reasons for having an abortion were poor economy, the pregnancy was too early in the relationship or already completed family size. Only 4% (n=23/517) of the women reported that the pandemic had affected their access to contraception.

Conclusions: The COVID-19 pandemic has partially impacted women's decision to undergo an abortion, which is otherwise mainly determined by personal circumstances, including economy. Access to contraception was not largely affected by the pandemic, but most women in this study used no method or methods not involving healthcare contact.

Conflict details: We do not regard this as a true conflict of interest, but for transparency; Prof Kristina Gemzell Danielsson has a leading role in the European Society for Contraception and Reproductive Health.

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OBSTETRIC/GYNECOLOGIC CONSULTATIONS DURING CORONA-PANDEMIC ERA

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OBJECTIVE: The pandemic and the required lockdowns worldwide have spiked interest in internet services. Among the fields of interest on the internet, obstetrics/gynecology (ob/gyn) information has become even more popular than it was before the pandemic. The aim of this study was to investigate the impact of this challenging time worldwide on ob/gyn content contained in virtual media.

DESIGN AND METHODS: Page views on a particular health website that includes articles on various medical specialties were analyzed using appropriate software. The total number of page-viewers was analyzed, regarding the preferred health topics based on number of page openings from January 1 through December 31, 2020 and compared with the page openings in 2019. Predictable statistical methods were used to analyze the data.

RESULTS: Preferred health topics and the number of page-viewers who clicked on the pages included ob/gyn (1506), dermatology (604), urology (498), general medicine (438), cardiology (424), and 8 other medical specialties. Compared with 2019, the overall interest in these medical contents increased by 49% during the 2020 pandemic year. Analyzing medical specialties individually, pages for each had been opened at least twice more during 2020 compared with 2019. However, the greatest interest based on page views was shown in obstetrics/gynecology, in both 2020 and 2019.

CONCLUSIONS: Beginning in Spring 2019 up to now and counting, it is an extremely challenging time throughout the world. In this so-called Corona-pandemic era, obstetric/gynecologic consultations have also experienced some changes. The particular website that covers different ob/gyn topics in the form of short articles and answers to questions, which, indeed, has been the most popular website since the very beginning in 2008, has exploded. The results of this study are much more than expected – it is not only that the obstetric/gynecological content has been the most searched for, read, and commented upon, it has also been nearly three times more popular than the second medical specialty, dermatology. Another question has been raised after these results: what is the reason, or what are the reasons, for the huge popularity in obstetrics/gynecology on this website versus other websites? Probably more than one reason exists, but perhaps the popularity of obstetrics/gynecology should be partly attributed to the obstetrician/gynecologist herself because other content on the internet has not had such popularity.

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Three cases of a blip in HIV viral load following SARS-CoV-2 vaccines

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Objectives and Method: Three individuals living with well controlled HIV were found to have a blip in their HIV viral load within a week of receiving a C19 vaccine. No alternative explanations for these blips were identified. We have been unable to find other similar cases of rises in HIV viral load likely attributable to C19 vaccines in the literature. Consequences of viral blips remain uncertain, but some studies have found a correlation between viral blips and subsequent virological failure⁽¹⁾

Results:

Age	Gender	Antiretroviral regimen	Date of vaccine	Date of blip	Type of vaccine	Self-reported adherence	New illnesses	Other new medicines/vaccines
56	M	Tenofovir/emtricitabine Raltegravir	01/05/2021 (2nd dose)	VL<40 (26/11/20) VL 62 (4/5/21) VL<40 (1/6/21)	Pfizer-BioNTech	100%	Nil	Nil
55	F	Tenofovir/emtricitabine Raltegravir	2/3/24 (2nd dose)	VL<40 (16/4/21) VL 254 (2/3/21) VL<40 (8/9/20)	Pfizer-BioNTech	100%	Nil	Nil
57	M	Tenofovir/emtricitabine Rezolsta	9/4/21 (1st dose)	VL<40 (13/10/20) VL 51 (9/4/21) VL<40 (6/5/21)	Oxford-AstraZeneca	100%	Nil	Nil

Discussion: There is limited data about the absolute and comparative immunological consequences of the available C19 vaccines on people living with HIV ⁽²⁾ Some C19 trials have included people with well-controlled HIV, and have reported no unusual safety concerns in this population ⁽³⁾ If people living with HIV do have reduced responses to C19 vaccinations ⁽⁴⁾, and therefore may require an increased number of booster vaccines in the future ⁽³⁾, we need to understand if there are any implications for HIV viral control. Transient, clinically non-significant increases in HIV viral load have been reported after several vaccines ⁽⁵⁾ It will be important to monitor if C19 vaccines do cause blips in HIV viral load, and whether or not these lead to clinical sequelae. These cases illustrate principles of how to manage HIV viral load blips in relation to C19 vaccination.

Conclusion: These cases may suggest a connection between C19 vaccines and HIV viral load blips. The clinical significance of this is unknown. Further research is necessary to study this phenomenon in more detail.

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The role of: sexual Identity: gender; sexual orientation; pornography; FGM; sexual dysfunction

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Is there an unmet need for sexual rehabilitation after Acquired Brain Injury (ABI)?-A population-based study concerning sexual activity, sexual relationships, and sexual rehabilitation after ABI

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Objectives: Research has stressed the importance of brain injury rehabilitation to include sexuality issues due to increased risk for sexual dysfunctions after Acquired Brain Injury (ABI). This study aims to explore experiences after non-stroke ABI concerning sexual activity, relational aspects and received information about sexuality at rehabilitation.

Method: A self-administered study-specific questionnaire was conducted as a postal survey in 2018-2019. The sample included individuals who had participated in brain injury rehabilitation 2014-2016, in Sweden, with a diagnose of Traumatic Brain Injury (TBI), Subarachnoid Hemorrhage (SAH), anoxic brain injury, post-infectious, or post-inflammatory brain injury. All inclusion and exclusion criteria were ensured by data collected in the national Web-Rehab Sweden register during rehabilitation.

Results: The study response rate was 40% (250/624). A total of 94 % (236/249) of the participants reported physical intimacy as important, and 80% (198/248) reported that sexuality was considered important on an individual level and 91% (223/245) stated sexuality as important for the relationship. Among all participants, 78% (194/250) had resumed sexual activity, and there was a significant difference between males (84%, 118/140) and females (69%, 76/110, $p=0.004$). Significantly more females (34%) than males (22%) had tried sexual aids ($p=0.000$). Significantly more males (29%) than females (16%) reported that professionals at brain injury rehabilitation addressed sexual issues ($p=0.024$).

Conclusion: Even though sexuality issues were important to the participants, few had received information about sexuality after ABI. Further research should investigate why sexuality issues are not addressed, though research has stated the need for rehabilitation after ABI to include sexuality.

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Is Polish LGBTQ+ youth more at risk of adverse health outcomes? - selected results from POLKA18 phase two study.

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Objectives: This study aims to evaluate the prevalence of risky behaviors among Polish adolescents, with particular emphasis on sexual minorities groups.

Methods: The data were retrieved from POLKA 18 study, funded by European Society of Contraception and Reproductive Health, which is a youth-led cross-sectional analytical study of Polish adolescents. A paper-based self-reported questionnaire, building up on the interdisciplinary model of holistic approaches in adolescent gynecology, has been used to collect data from schools in five Polish regions. The questionnaires were distributed in the schools during the time of April-June and September-December 2019 by local research associates, who were medical students.

Results: We included 2700 results in our final analysis, 41% men and 58% women. When asked about sexual orientation: 81,3% declared as heterosexual, 2,3% declared being attracted to people from the same sex, 6,8% declared being bisexual, and 1.1% asexual ($p < 0.0001$).

We asked our respondents about various risky behaviors including those related to illicit drug use or engagement in high-risk sexual activities. 66% of them claimed that have ever smoked during their lifetime (66,5% for heterosexual, 77,8% homosexual and 73,2% bisexual). Significantly smaller number of respondents (40,3%) declared smoking marijuana, 39,9% of which were heterosexual, 49,2% homosexual and 47,5% bisexual ($p < 0.0001$).

28.3% of adolescents in the study reported having sex after use of alcohol (28.9% heterosexual, 39.6% homosexual, 34.9% bisexual, 16.6% asexual, Chi sq 900.4, $p < 0.001$).

7.26% reported engaging in sexual relations after use of illicit drugs (6.7% heterosexual, 9.52% homosexual, 15.3% bisexual, 13.3% asexual)

LGBTQ+ youth was also at significantly more risk of being exposed to violence (including intimate partner violence, domestic violence, school bullying and cyberbullying). Non-heterosexual individuals in the study also reported more suicidal and self-harm thoughts and other negative mental health outcomes.

Conclusions: Polish LGBTQ+ are more frequently to engage in risky sexual health and more prone to sexual abuse. They also have worse mental health status and are more prone to self-harm and suicidal behavior. Our study brings the light to the need of developing strategies protecting adolescents from taking up high-risk actions that can implicate the negative health burden in adulthood. The health of Polish LGBTQ+ needs to be cherished and protected. Unfortunately due to the blossoming anti-LGBTQ+ movement in Poland as well as "LGBT-free zones" and discriminatory national policies being introduced it is increasingly more challenging to gather data, let alone advocate for rights and health of non-heterosexuals adolescents.

The use of the Internet in social media; knowledge; education; self-testing; internet governance; data protection; telemedicine

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Use of websites: Youth Friendly Center

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Objectives: This study was conducted to evaluate the use of the Youth Friendly Center's website.

Method: The website of ESOGU GEDAB was examined to determine the efficiency of the data provided on the site.

Results: It was visited by 1.198.300 students between October 2019 and October 2021. On our website; safe healthy behaviors during the global pandemic, reproductive health, and sexual health, sexually transmitted infections, sexually transmitted diseases, important information on HIV AIDS, hepatitis, contraceptive methods, technology addiction, smoking, alcohol, substance abuse, suggestions on healthy, oral contraceptive methods, are you examining yourself, don't give way to cervix cancer, topics are included.

Conclusion: These results revealed that young people need to reach accurate information about the subjects they are curious about through internet websites. It also emphasizes that institutions and organizations providing health services in reaching young people should make new regulations to increase the effectiveness of their websites.

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Digital contraception provision: Expanding choices for women during the COVID era

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Background/Aims: Provision of sexual and reproductive healthcare (SRH) via digital services has seen an exponential expansion in response to the COVID-19 pandemic⁽¹⁾. Croydon Sexual health services quickly responded by developing a digital service where women can order contraception 24/7. The characteristics of women accessing the services along with their choice of contraception are described in this study.

Methods: Croydon sexual health has developed an online service where Croydon residents can order contraception online where they fill up an online questionnaire and enter their biometrics such as height, weight and blood pressure. The pills are posted to the home address or collected from the clinic. A total of 1646 women requested the pill during the study period of one year from June 2020 to May 2021. Data was collected from the electronic case records and analysed using Microsoft Excel and R Studio.

Results: Majority 74% belonged to the 15-29yr age group. Most women 65% requested Progesterone only pill (POP) and 30% opted for combined oral contraceptive pill (COCP) ($P < 0.0001$). There is a significant difference between the age group and the choice of contraception $P=0.001$. Women under the age of 30yrs have chosen COCP compared to women over 30 yrs, who have chosen POP as their preferred choice ($P<0.001$). The month of September recorded the highest number of requests followed by November and April. 38.3% were White, 36.7% Black & 8.1% belonging to the Asian ethnic group. There is significant difference in ethnic group and choice of contraception $P=0.002$. White women have chosen POP and black women tend to go for COCP ($P<0.05$).

Conclusions: Digital contraception service is significantly used by younger women under the age of 30 yrs and the most popular method requested was POP ($P<0.0001$). All ethnic groups are accessing online contraception however white women tend to choose POP and black women significantly choosing COCP. Digital provision is improving access and expanding the choices for women further, freeing face to face access to women with more complex needs. Limitation is the inability to provide a long acting contraceptive method and women who is not able to use digital services are missed out. This service needs to be expanded & continued in the future to reduce unintended pregnancies in Croydon.

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What do users want from a mobile app for abortion self-management? Initial results from a mixed-methods, user-centered design study in Venezuela.

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Objectives: To identify women's preferences for a sexual and reproductive health (SRH) app focused on abortion self-management in a legally restrictive context.

Methods: We conducted a mixed methods study which included a social media survey and in-depth interviews (IDIs) with women and key stakeholders in Venezuela. Due to Covid-19, we conducted all interviews remotely. This was the first phase of a three-phase user-centered design project.

Results: We received 851 completed survey responses; we interviewed 9 key stakeholders and 12 women. Most (83%) survey respondents can access a smartphone, and 87% said they would be somewhat or very likely to use it to obtain information about SRH. In terms of receiving SRH-related messages, respondents felt most comfortable with personal e-mail (76%) and WhatsApp messages (69%). Only 21% were worried about the word abortion being used in messages. Survey and IDI respondents alike emphasized the importance of an SRH app that provides scientifically accurate information, including about contraceptive methods and abortion. Procedure and service cost information was also a popular request, as was the possibility for direct contact with a health professional. Privacy and security were key themes for survey and IDI respondents. IDI respondents also emphasized that any platform designed for Venezuela should remain politically neutral.

Conclusions: Among Venezuelan women, the desire to access scientifically accurate information is high, as is the need to maintain privacy and security in a complex legal and political environment. We used these findings to design an abortion self-management mobile app.

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Could routine monthly pregnancy self-testing combined with text reminders facilitate earlier recognition of unintended pregnancy? A feasibility study from South Africa

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Objectives: Abortion later in pregnancy is associated with a higher risk of complications compared to first-trimester termination, however later gestational age is a common reason for denial of legal, safe abortion care. Similarly, antenatal screening and treatment programs aimed at reducing perinatal and maternal morbidity and mortality are rendered less effective when initiated at advanced gestation. To facilitate early entry into care, we explored whether routine pregnancy testing is feasible and acceptable to women, and whether this approach lends itself to testing in a larger randomized controlled trial.

Design and Methods: A feasibility study among sexually active women not desiring pregnancy within 1 year and not using long-acting or injectable contraceptives. We purposively sampled younger women (at least 50% ≤25 years, all ≤35 years) from 3 distinct settings in South Africa: a student wellness centre, an urban reproductive healthcare non-governmental organization (NGO) providing abortion care (combined in analysis as the “health care facility” group), and a peri-urban, economically disadvantaged community. At recruitment, we provided five free urine pregnancy tests for self-testing on the 1st day of the next three months. A research assistant conducted baseline (in-person) and exit phone interviews. We also sent monthly text reminders to use the tests with requests for no-cost text replies.

Our main outcome was the proportion of participants self-testing within 5 days of the text reminder over three consecutive months. Secondary outcomes were pregnancies identified, number of tests used and response rate to text messages; participant experience with self-testing; preference for self-testing; acceptability of routine self-testing; satisfaction with reminder text messages; and frequency and rationale for repeat testing. Group outcomes were compared using Chi-squared or Fisher’s exact tests where appropriate. **Results:** We followed up 71/76 participants (93%). Two confirmed new pregnancies at the first scheduled test and completed exit interviews, and 64/69 (93%) self-reported completing all 3 monthly tests. Self-testing was easy to do (66/71; 93%); advantages were convenience (21/71, 30%), and privacy (18/71, 25%), while the main disadvantage was no nurse present to advise (17/71, 24%). Most would recommend monthly testing (70/71, 99%). Text reminders were generally not bothersome (57/71; 83%); 35/69 (51%) replied with test results over all 3 months.

Conclusions: Providing free pregnancy test kits to sexually active women at some risk of unintended pregnancy is a feasible approach to strengthen early confirmation of pregnancy status; future research is needed to test effectiveness in a randomized controlled trial.