Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

It is important to assign an obstetrician they already know and to encourage them to discuss the emotional aspects of the experience.

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366. Psychological impact on healthcare workers in the departments of obstetrics and gynecology in france during and after the first covid-19 lockdown: a prospective observational study

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Introduction and aims of the study: The previous Asian epidemics have had a pregnant mental impact on healthcare workers. After the physical morbidity of the Covid-19 outbreak, it is the mental and psychological impact that reaches the global population. We aimed to assess the level of stress and anxiety in all healthcare workers in the departments of obstetrics and gynecology in France during and after the first Covid-19 lockdown in 2020. *Methods*: Two web-based cross-sectional surveys were proposed to all staff of obstetrics and gynecologic department of 18 French university hospitals in spring 2020 : The HAD scale (Hospital Anxiety and Depression scale), the PSS-10 questionnaire (Perceived Stress Scale), a 10-cm continuous Visual Analogue Scale (stress-VAS) and the Short Form 12 Questionnaire (SF-12) were used to assess the level of stress, anxiety, depression and quality of life during and after the first national lockdown. *Results and/or discussion*: A total of 1565 respondents answered the first questionnaire and 1109 completed the second survey. They reported greater levels of stress and impaired mental quality of life during the lockdown, followed by a significant improvement after the end of lockdown (respectively p <.0001 and p = 0.01). Anxiety was significantly higher among the older participants during the lockdown (>37 years old) (p = 0.008). The potential putative factors related to impaired mental health status were personal protective equipment deficit (<.0001), the fear of contracting the virus from the workplace (<.0001), the fear of transmitting the virus to their families (<.0001), and concerns about information given by media and hospital (<.0001). *Conclusions*: Understanding the heavy mental repercussions of the COVID-19 pandemic on healthcare workers could lead to the identification of high-risk in medical and non-medical staff and the implementation of specific and targeted psychological monitoring program.

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368. Maternal mental health (mama) trial evaluating short-term estrogen as a strategy to prevent postpartum depression in high-risk women: Protocol for a double-blind, randomized, placebo-controlled trial

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Introduction and aims of the study: Perinatal depression affects 10–15% of women postpartum and has a recurrence rate of 40% in subsequent pregnancies. Women who develop perinatal depression are suspected to be more sensitive to the rapid and large fluctuations in sex steroid hormones, particularly estradiol, during pregnancy and postpartum. This trial aims to evaluate the preventive effect of three weeks transdermal estradiol treatment immediately postpartum on depressive episodes in women at high risk for developing postpartum depression. *Methods and analysis:* The Maternal Mental Health Trial (MAMA) is a double-blind, randomized, and placebo-controlled clinical trial. The trial involves three departments of obstetrics organized under Copenhagen University Hospital in Denmark. Women who are singleton pregnant with a history of perinatal depression are eligible to participate. Participants are randomized to receive transdermal estradiol patches (200 μg per day) or placebo patches for three weeks immediately postpartum. The primary outcome is clinical depression, according to the DSM-V criteria of Major Depressive Disorder with onset at any time between 0 and 6 months postpartum. Secondary outcomes include, but are not limited to, symptoms of postpartum depression, exclusive breastfeeding, cortisol dynamics, maternal distress sensitivity, and cognitive function. The primary statistical analysis will be performed based on the intention-to-treat principle. With the inclusion of 220 participants and a 20% expected drop-out rate, we anticipate 80% power to detect a 50% reduction in postpartum while controlling the type 1 error at 5%. *Discussion:* It is essential to develop a preventive strategy for depressive episodes during pregnancy and childbirth that is targeted, cheap, short-term, and easy to implement. The MAMA trial is expected to generate evidence on the prevention of postpartum depression and, if successful, could pave the way for improved maternal mental health and may also improve long-term outcomes of infant's physical and mental health.

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369. Lifestyle habits among pregnant women in denmark during the first covid-19 lockdown compared with a historical period – a hospital-based cross-sectional study

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Introduction

The first national lockdown due to the COVID-19 pandemic in Denmark was declared on March 11, 2020. From this date, numerous national restrictions were imposed. **Aims of the study:** We aimed to assess the potential influence of this first national lockdown on exercise, alcohol consumption and smoking in early pregnancy. **Methods:** In a cross-sectional study based on routinely collected patient-reported data, we compared lifestyle habits of women who were pregnant during the first phase of the pandemic (COVID-19 group) (N=685), with women who were pregnant the year before (Historical group) (N=787). **Results:** We found a significant reduction in the prevalence of any exercise, the adherence to recommended level of exercise, and binge drinking in the COVID-19 group compared with the Historical group. The most common types of exercise changed during the lockdown while the prevalence of reported any weekly alcohol consumption and smoking cessation during pregnancy were similar between groups. **Discussion:** These findings can be applied in the planning of antenatal counselling in this as well as in future pandemics as they highlight the importance of addressing the challenges, and the opportunities, regarding maintenance of a healthy lifestyle during pregnancy.**Conclusion:** Our findings indicate that the national restrictions due to the COVID-19 pandemic influenced the lifestyle habits of pregnant women.

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371 Improving iui success after modified slow-release insemination: a prospective cohort study

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Introduction: Previous studies also showed a higher IUI success rate after slow-release insemination instead of bolus injection. *Aim of the study*: To examine whether a modified slow-release insemination (SRI) increases the clinical pregnancy rate (CPR) after intrauterine insemination with partner semen (IUI-P) and donor semen (IUI-D) *Methods*: We studied the data of an ongoing prospective cohort study. During the period of July 2011 until December 2018, data from 2565 IUI-Ps in 989 women and 1995 IUI-Ds in 606 women were collected prospectively. As from January 2016 (period 2), the insemination procedure was performed by midwives instead of medical doctors. Instead of bolus injection of sperm a slow-release IUI was performed. Instead of ordinary logistic regression analysis we used a cluster-weighted generalized estimating equations (GEEs) for statistical analysis. Results of two periods (2011-2015 and 2016-2018) were examined for both homologous and donor inseminations. *Results*: Clinical pregnancy rates (presence of fetal heart beat at 7-8 weeks of gestation) ollowing IUI-P increased significantly from 9.0 % (period 1) to 13.4 % (period 2) (p = 0.001). In case of donor inseminations, clinical pregnancy rates increased from 16.5 % to 20.8 % (p = 0.088), a non-significant increase. *Conclusion*: The CPR after modified slow-release inseminations increased significantly after IUI with homologous semen. After using donor sperm the CPR increased from 16.6 % to 20.8 % per cycle with donor semen, a non-significant increase. Although our results were analysed in a prospective cohort study, a prospective randomised trial is needed to confirm our findings. We also have to examine whether our better results can be explained by the slow-release IUI, the patient-centred approach or both.

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372. Use of reproductive health services among women initiating long-acting reversible contraception free-of-charge or continuing or initiating short-acting contraceptive methods – A cohort study from finland

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Objective: To evaluate the use of reproductive health services among women initiating free-of-charge long-acting reversible contraceptive (LARC) methods or initiating, switching, or continuing short-acting reversible contraceptive (SARC) methods. *Methods*: In this cohort study, altogether 8,646 women in the City of Vantaa, Finland were followed-up for two years using comprehensive Finnish national health registers. Women were divided into three groups according to index visit at the family planning clinics of Vantaa in 2013–2014: women initiating or switching SARC method (n = 1,524), women initiating free-of-charge LARC (n = 1,689), and women visiting for SARC follow-up (n = 2626). For each woman, we calculated the number of all visits for gynecological reasons in primary or specialized health care, and the number of visits for reasons other than follow-up at the family planning clinics. We obtained incidence rate ratios (IRRs) for service use with 95% confidence intervals with negative binomial regression models on visit counts. *Results*: A total of 11,290 visits accumulated at the family planning clinics (n = 7,260) or for gynecological reasons in primary (n = 3,385) or specialized care (n = 645) during the follow-up of two years. Compared with women initiating or switching SARC methods, women initiating free-of-charge LARC had similar adjusted IRR 0.93 (95% CI 0.82–1.05) whereas women continuing with their SARC method lower adjusted IRRs 0.65 (95% CI 0.59–0.72) for additional visits for gynecological reasons in primary or specialized care, or at the family planning clinics. Women initiating LARC and women continuing with the same SARC method had less visits for abortion care, adjusted IRRs respectively 0.05 (95% CI 0.03–0.08) and 0.16 (95% CI 0.11–0.24), compared with women initiating or switching SARC. *Conclusion*: Women initiating LARC methods have similar needs for additional reproductive health services than women initiating SARC methods. This should be acknowledged when planning and organizing LARC services.

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379. Virtual reality learning: a randomised control trial assessing medical student knowledge of fetal development

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Introduction: Virtual reality (VR) is a technology that offers an immersive experience to promote discovery and exploration of personal knowledge, and an opportunity to learn by doing, develop