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### **Maternal Obesity across the Reproductive Stages**

**Track:** Behavioural and Public Health

**Aim:** The aim of this symposium will be to discuss and explore the health and care of women living with obesity, from preconception to postpartum.

**Rationale:** Women's health has been overlooked and under-studied for many years, suggesting that 51% of the population is being underserved and more work is needed to improve the health of women and their children (Women's Health Strategy for England, 2022). One pressing issue relates to the steadily increasing prevalence of obesity in the reproductive years (Obesity Profile, OHID, 2022). Whilst obesity is relevant to both men and women in the reproductive years (Caut et al., 2022), women face unique challenges physically and psychologically related to hormonal changes, pregnancy, childbirth and the menopause (Bailey et al. 2022). Women are at a greater risk of developing severe and complex obesity over the reproductive years, with parity posing a significant risk factor for increased weight (Makama et al., 2023). Notably, less than half of women remain weight stable between successive pregnancies (Ziauddeen et al., 2022) and approximately one in four women have significant postpartum weight retention (>4.55kg) a year after childbirth (McKinley et al., 2018). Retaining weight between pregnancies is an important contributor to lifelong obesity risk and there are currently gaps in knowledge about effective and appropriate weight management interventions in women during the postpartum and interconception phases (Andreu et al., 2023). This is important, as living with obesity in pregnancy, as well as during the preconception, interconception and postpartum stages can lead to increased risks of adverse health outcomes for mothers and babies (Poston et al., 2016). Given projected trends for the increasing prevalence of women living with obesity, the prevalence of these potential (short- and long-term) adverse health effects will also rise. Greater attention on the issue of maternal obesity including evidence on positive action, as well as spotlighting the specific needs of women during their reproductive years is now needed to improve health outcomes for women and their babies.

This symposium builds on the evidence-base presented at UKCO 2018 which examined the preconception period, by including the full spectrum of reproductive stages. Dr Laura McGowan, Queen's University Belfast, will open and Chair the session.

Five speakers: 10-12 minutes each; 15-20 minutes discussion:

1. ***Dr Danielle Schoenaker, Senior Research Fellow, University of Southampton***

**Proposed title: Inequalities in preconception overweight and obesity among pregnant women in England: findings from the national Maternity Services Dataset.**

This talk will describe the prevalence of preconception overweight and obesity according to pregnant women's age, ethnicity, level of deprivation and region, to identify inequalities and discuss opportunities for preventive intervention.

2. ***Emma Cassinelli, PhD student, Queen's University Belfast***

**Proposed title: Preconception health behaviours among women with overweight and obesity in Northern Ireland: an analysis of a national maternity dataset 2011-2021.**

This talk will focus on findings from a national maternity dataset in Northern Ireland, examining trends in Body Mass Index (BMI) in the preconception and early pregnancy period, alongside key health behaviours, such as folic acid supplementation which is of particular importance for women with obesity.

3. ***Lem Ngongalah, Faculty Fellow, Newcastle University***

**Proposed title: Pre- and post-migration influences on overweight and obesity in African migrant women and nutrition support needs in pregnancy.**

This talk will address the behavioural determinants of overweight and obesity among African migrant women, including socio-cultural and environmental influences on their weight preferences, dietary behaviours, and physical activity patterns before and after migrating to the UK, as well as their nutrition support needs during pregnancy.

4. ***Moscho Michalopoulou, Behavioural Scientist, University of Oxford***

**Proposed title: Reduced-carbohydrate intervention for the management of obesity and reduction of gestational diabetes (RECORD): a feasibility study.**

This talk will report results of a feasibility trial delivering a moderately reduced-carbohydrate dietary behavioural intervention to women with obesity during pregnancy, alongside their routine antenatal care, aiming to help reduce their risk of gestational diabetes.

5. ***Professor Michelle McKinley, Professor of Nutrition, Queen's University Belfast***

**Proposed title: Supporting weight management in the postpartum period: changes in self-regulatory behaviours in the Supporting MumS (SMS) pilot study.**

Weight management interventions that are sensitive to the needs of postpartum women are needed. The Supporting MumS pilot study examined the feasibility and acceptability of an automated, 12-month, text-message based intervention to support diet, activity and weight management in the postpartum period. This talk will describe how self-regulatory behaviours related to the theoretical basis of the intervention changed during the 12 month intervention, and how this was related to engagement.