

Background

Two of the most common complications during pregnancy and after childbirth are obesity and mental health problems. A healthy lifestyle before pregnancy is key to reduce these pre-and postnatal complications. Reaching women in the preconception period is a major challenge and research on the impact of mental health during the preconception period is lacking. Therefore, the interpregnancy period, is considered an appropriate time window for the prevention of mental health problems. Moreover, insight into interpregnancy mental health and the impact on weight and body composition can assist in the development of effective and timely weight management strategies in women at risk.

Aim(s)

To study the difference in women's mental health during the interpregnancy period and the association with pre-pregnancy body mass index (BMI) & body composition and whether this association is affected by socio-economic factors, sleep and interpregnancy time interval.

Methods

Secondary analysis of the INTER-ACT eHealth supported lifestyle trial. Women were eligible if they had a subsequent pregnancy and mental health measurements at 6 weeks after childbirth and at the start of next pregnancy (n=276). We used univariate analyses to assess differences in mental health and performed regression analysis to assess the association with pre-pregnancy BMI and body composition at the start of next pregnancy.

Results

Our results show a statistically significant increase in anxiety and depressive symptoms between 6 weeks after childbirth and the start of the next pregnancy (sSTAI-6 \geq 40: +13%, $p\leq$ 0.001; GMD \geq 13: +9%, $p=$ 0.01). Of the women who were not anxious at 6 weeks after childbirth (sSTAI<40), more than one third (39%) developed anxiety at the start of the next pregnancy ($p\leq$ 0.001). Regression analysis showed that sense of coherence at the start of the next pregnancy was independently associated with women's pre-pregnancy BMI and fat percentage.

Discussion

We believe that the development of preconception lifestyle interventions that focus on both weight reduction and support in understanding, managing and give meaning to stressful events (sense of coherence) may be of added value in optimising women's preconception health.

Implications and future perspectives

Further research on preconception interventions focused on coping strategies that enable women to cope with stressful daily situations may be of added value.