

# Policy Brief

## Physical activity for overweight and obese pregnant women

### Evidence from Cork University Maternity Hospital

Although the benefits of physical activity during pregnancy are well documented in the literature, women's activity levels often reduce or cease during pregnancy. Moreover, adherence to physical activity guidelines is particularly low for pregnant women with a body mass index  $>25\text{kg/m}^2$ . Research suggests incorporating theory in intervention development helps reduce the decline of physical activity throughout pregnancy.

#### Benefits of physical activity during pregnancy

- Increase in functional mobility
- Reduction in nausea and vomiting
- Prevent pregnancy complications
- Limit pregnancy weight gain
- Decrease the risk of gestational diabetes



Therefore, this research employed recent tools in behavioural science; the Theoretical Domains Framework (TDF) and COM-B model (capability, opportunity, motivation and behaviour) to better understand the factors enabling or inhibiting physical activity behaviours for overweight and obese pregnant women.

#### Methods of the study

- Semi-structured interviews were conducted with a purposive sample of 30 overweight and obese women at different stages of pregnancy attending a public antenatal clinic at Cork University Maternity Hospital.
- Interviews were recorded and transcribed into NVivo V.10 software.
- The framework approach was employed and emerging themes were then mapped to the Theoretical Domains Framework (TDF) and COM-B model (capability, opportunity, motivation and behaviour).

#### Barriers to physical activity for overweight and obese pregnant women

##### Capability

Pregnancy related symptoms were a reason for participants to undertake little or no physical activity. Barriers related to physical health including muscle pain, pelvic or lower back pain, swelling and other conditions. Another barrier was that of feeling too tired to engage in physical activity; finding it hard to move, a lack of energy and being physically drained during pregnancy.

*"It's harder to move faster now that I am pregnant. Like sometimes I have energy and some days I don't... It's difficult, like you feel like you want to do stuff but you can't, your body is just tired and drained physically"*

Women received little information around appropriate types of exercise in pregnancy, describing the information as *'limited', 'quick', 'automatic', 'like a checklist'*.

##### Opportunity

Other family members were seen as barriers to physical activity.

*'Put your feet up' that's what I get especially over the last four weeks, from my mother in law'*

##### Motivation

A fear based on previous pregnancy outcomes was highlighted with women afraid to do any exercise due to previous miscarriage experiences.

*"...from the moment I knew I was pregnant it has been terrifying for me. Because like I'm after having 3 miscarriages in 2 years"*

## Enablers to physical activity for overweight and obese pregnant women

### Capability

Being physically fit before pregnancy was identified as a potential enabler.

*'I don't know I think it depends on everyone's circumstances. Like a lot of women would be fit before they got pregnant and they would keep up their walking or running'*

Women suggested that action planning; goal setting and self-monitoring would be an enabler to physical activity. *'Pedometers'* or *'step counts'* might help in terms of motivation and to monitor current levels of physical activity.

*'If there was definitely some sort of measurement like a pedometer or something like that, just something that would flag where you are at and what your targets should be'*

### Opportunity

Women also expressed an interest in pregnancy exercise classes giving mothers a chance to *'talk'* and compared these classes to a *'support group'*.

### Motivation

Pregnancy was viewed as a time of change particularly for the benefit of the baby

*'I just have to...be as healthy as I can be now, I mean it's all for the baby'*.

Others reported being motivated when talking about after pregnancy and their implicit intentions to change.

*'I have it planned out in my head', 'I know I am not having any more and I tell myself afterwards I'll get back into it'*

## Types of physical activity behaviours identified

- Walking
- Swimming
- Aqua aerobics
- Pregnancy physical activity classes
- Pilates and yoga
- Housework



## Recommendations

- Being active can reduce pregnancy symptoms. This may be a useful motivational strategy to encourage women to be active early on.
- Taking a holistic approach to care, taking into consideration the women's social support network (family/friends) and to include their partners in group pregnancy sessions.
- Future interventions should include some component of self-monitoring (pedometers) in order to improve physical activity levels.
- Use results from this study to inform the development of a physical activity intervention for pregnant women.

## Conclusion

This research provides an overview of the behavioural factors enabling or inhibiting physical activity amongst pregnant women with overweight and obesity. Using the TDF and COM-B model is a theoretical starting point for understanding physical activity behaviour and to make a 'behavioural diagnosis' of what needs to change to alter behaviour.

**Reference:** C Flannery, S McHugh, AE Anaba, E Clifford, M O'Riordan, LC Kenny, FM McAuliffe, PM Kearney, M Byrne. **Enablers and barriers to physical activity in overweight and obese pregnant women: an analysis informed by the theoretical domains framework and COM-B model.** BMC Pregnancy Childbirth. 2018;18(1):178.

This research was conducted as part of the SPHeRE Programme, and funded by the Health Research Board.

