Pregnancy and Physical activity: Facilitating Change

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Introduction

There are several benefits of physical activity (PA) in pregnancy, yet engagement levels are low. Less than 30% of pregnant women worldwide meet PA recommendations, compared with 45-55% of non-pregnant women in developed countries.[1] Benefits of PA in pregnancy include; reduced risk of hypertensive disorders and gestational diabetes, and decreased gestational weight gain.[1,2] Furthermore, PA can be used in pregnancy to treat medical conditions, such as improving glycaemic control in pregnant women with diabetes.[3] However, less than half of healthcare professionals know the PA pregnancy guidelines and only one third of pregnant women receive professional PA guidance.[4,5] Whilst PA pregnancy guidelines exist, the translation of these guidelines to the end user has not been effective. In this commentary, we discuss PA recommendations during pregnancy, how healthcare professionals can support and facilitate PA in pregnancy, and explore future research opportunities.

The recommendations

In 2019, The Chief Medical Officers (CMO) of the four countries comprising the United Kingdom (UK) recommended that pregnant women aim to accumulate 150 minutes of moderate intensity PA per week and engage in muscle strengthening activities two days a week.[2] Being active in pregnancy is safe for most women, but some may need to consult a healthcare professional before they begin or continue to be physically active. The Get Active Questionnaire for Pregnancy is a self-administered pre-screening tool that can help identify women who need to consult with a healthcare professional before they begin or continue to be physically active. Additionally, the questionnaire can help healthy pregnant women overcome any concerns and fears they might have.[6] Absolute contraindications to PA include; uncontrolled hypertension, restrictive lung disease, multiple pregnancies (3 or more foetuses), persistent vaginal bleeding and severe anaemia.[7] Activities with an increased risk of falling, sustaining high impact or contact injuries, or those that limit oxygenation (e.g., high altitude training when not normally living at high altitude) are also best avoided.[3] Vigorous activity is not recommended for women who were previously inactive whilst women who significantly exceed the recommended PA guidelines prior to becoming pregnant are advised to consult with a healthcare provider specialised in managing this active population.[2,3]

Changing the message: How healthcare professionals can support PA in pregnancy

Pregnant women face a variety of barriers and report many concerns when it comes to engaging with PA. For example, fear of harming their baby, pelvic floor dysfunction, nausea, fatigue, and anxiety may lead to low levels of PA and/or reducing previous PA engagement.[1] Other constraints may play a role, such as a shortage of time or lack of support at home to allow women to engage with PA. Prior to encouraging PA, healthcare professionals should seek to understand a pregnant woman's current feelings towards PA and concerns and/or barriers they may have. Such a person-centred approach can facilitate meaningful discussions to tailor advice rather than using a 'one size fits all' approach.

By using person-centred advice, based on individual intention and behaviour status, healthcare professionals can provide appropriate guidance. Four profile types potentially exist:[8] 1) regularly active women who intend to continue being active in pregnancy; 2) regularly active women pre-pregnancy who do not intend to continue in pregnancy; 3) inactive women who intend to be active in pregnancy and; 4) inactive women who do not intend to start being active. Strategies needed for each profile may differ.[8] For example, those who fit profile 1 may require brief intervention and those who fit profile 2 may benefit from a goal-setting, person-centred approach. Profile 3 may benefit from motivational interviewing, and profile 4 may benefit from a PA counselling approach.[8] However, further research on these different approaches based on profiles is needed.[8]

In addition to adopting different strategies and overcoming barriers or concerns, practical suggestions on how PA can be accumulated during the day are encouraged. Getting creative to fit PA around current life demands, such as taking the stairs or having active walking meetings, alongside identifying PA already undertaken such as housework and running errands, may help women feel confident in meeting PA guidelines. Additionally, breaking the PA time requirements down into daily requirements (e.g., 22 minutes) may appear more manageable for pregnant women with busy home and work lives.

Barriers to healthcare professionals discussing PA to pregnant women include a lack of training, confidence, time and resources.[9] To aid professionals facilitate meaningful conversations with patients, the UK's CMO created an infographic outlining the PA guidelines in pregnancy (Figure 1).[2] Further, to enable clinicians to integrate PA advice into consultations, the Faculty of Sport and Exercise Medicine created pregnancy-specific guidance on their Moving Medicine online platform.[10]

Future research

Pregnancy is a key life event that can act as a trigger for optimising and maintaining health. It is essential healthcare professionals feel empowered and knowledgeable to encourage pregnant women to begin, or continue being, physically active. Future research should involve assessing direct benefits of PA in pregnancy to the offspring (epigenetics), indirect benefits to children, families and communities, cost-effectiveness of PA in pregnancy and further research into specific groups such as those who exceed the current recommendations and twin/multiple pregnancies. The barriers healthcare professions face in providing PA advice to pregnant women and their solutions should also be investigated. Finally, it is essential that future studies focus on pregnant women who are less likely to engage in PA and those currently under-represented in research (e.g., ethnic minorities, lower socio-economic groups).

Healthcare professionals are well-placed to change the message regarding PA in pregnancy, moving away from fear and misunderstanding, to promoting the benefits to our patients and communities. We have provided some practical examples for healthcare professionals to approach the discussion,

from starting the conversation, to tailoring their advice and making the PA recommendations appear more manageable. We hope this enables healthcare professionals to positively facilitate PA behaviour change in pregnant women to enable more pregnant women to reap the health benefits of PA engagement.

Figure 1. The UK CMO's infographic on PA in pregnant women[2]

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Equity, diversity and inclusion statement

This piece has used references mainly related to women in western countries, and therefore potentially not relatable to other geographic locations. The authorship team is made up of academics and practitioners based in the UK. In this piece we refer to women as those assigned female at birth and apologise to those who may not feel included due to this.