



Editorial

Guiding the journey: Essential tools for monitoring exercise in a healthy pregnancy



The proper progression of pregnancy and childbirth significantly influences the well-being of the mother, foetus, and newborn.¹⁻³ It is now well established that being physically active is associated with significant reductions in major pregnancy complications (e.g., gestational diabetes mellitus, gestational hypertension, preeclampsia) without increasing the risk of adverse outcomes including miscarriage, preterm delivery or a small for gestational age baby. Emerging trends now extend beyond gestation, linking potential prenatal alterations with a reduction in later-life metabolic, cardiovascular, and emotional pathologies through epigenetic mechanisms. This underscores the critical importance of maintaining an optimal intrauterine environment throughout pregnancy for long-term human health.

Therefore, it is essential for healthcare professionals managing prenatal care and for pregnant individuals themselves to define and adopt maternal behaviours that support holistic maternal health. Given the increasingly integral role of physical activity in daily life, it is imperative to establish mechanisms and facilities that promote physically active pregnancies, tailored to diverse population characteristics. Cultural differences, particularly heightened by significant migratory flows, underscore the necessity of designing interventions with careful consideration for the varied experiences and capacities within pregnant populations across different geographic regions.

The Get Active Questionnaire for Pregnancy (GAQ-P) was developed to reflect our changing understanding of prenatal physical activity from a potentially risk activity to a prescription for improved maternal and foetal health.⁴ Traditionally, physical activity guidelines recommended medical clearance for all women prior to being physically active following conception. Contemporary guidance has removed this barrier to participation, yet the need to identify contraindications (medical conditions during pregnancy where moderate-to-vigorous intensity physical activity may not be recommended) remains important. The GAQ-P (Guidelines for Activity Questionnaire for Pregnancy) was developed to empower pregnant women and support professionals who work closely with them.⁴ These professionals—who may not always have access to tools that facilitate clear and straightforward recommendations about physical activity during pregnancy—often find it challenging to provide guidance beyond general advice. Statements like "Move but be careful" are common in many consultations; however, pregnant women require more specific information. They need guidance that not only assures them but also provides clarity on the reasons behind what activities they can or cannot safely continue or begin. This information helps them make informed decisions about staying active, promoting both their safety and confidence during pregnancy.

However, interest in pregnancy and physical activity is not limited to the general population alone. The world of professional sport is at the

same time moving fast as pregnancy in professional sports has become an important topic in recent years. Female athletes are speaking openly about their experiences and advocating for better support systems. They ask for clear, evidence-based education and information about preconception and pregnancy and in response, various organizations and sports federations have started developing resources, guidelines, and policies that address these needs. The International Olympic Committee (IOC) have published reports and guidelines with specific recommendations on pregnancy for high-performance athletes.⁵ These documents are based on medical and sports research and provide guidance on how to manage pregnancy at different stages, potential risks, and recommendations for physical activity. FiFPro⁶ has recently released the post-partum return to play guidelines to ensure their health and well-being without compromising long-term performance.

On the other hand, in research settings, the adaptation of validated instruments is crucial for ensuring rigorous scientific adjustment to population-specific differences.

The Spanish adaptation of the GAQ-P previously published,⁷ facilitates the seamless transition from evidence to practice, emphasizing the importance of translating established questionnaires into different languages and contexts within the experimental scientific landscape.

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Declaration of competing interest

The authors declare that they don't have any conflict of interests.

References

1. Davenport MH, Ruchat SM, Poitras VJ, Jaramillo Garcia A, Gray CE, Barrowman N, et al. Prenatal exercise for the prevention of gestational diabetes mellitus and hypertensive disorders of pregnancy: a systematic review and meta-analysis. *Br J Sports Med.* 2018;52:1367–1375.
2. Vargas-Terrones M, Barakat R, Santacruz B, Fernandez-Buhigas I, Mottola MF. Physical exercise programme during pregnancy decreases perinatal depression risk: A randomised controlled trial. *Br J Sports Med.* 2019;53(6):348–353.
3. Davenport MH, Meah VL, Ruchat SM, Davies GA, Skow RJ, Barrowman N, et al. Impact of prenatal exercise on neonatal and childhood outcomes: a systematic review and meta-analysis. *Br J Sports Med.* 2018;52(21):1386–1396. Nov 18.

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4. Davenport MH, Neil-Sztramko S, Lett B, Duggan M, Mottola MF, Ruchat SM, et al. Development of the Get Active Questionnaire for Pregnancy: breaking down barriers to prenatal exercise. *Appl Physiol, Nutr Metab.* 2022 Jul 1;47(7):787–803.
5. Bo K, et al. Exercise and pregnancy in recreational and elite athletes: 2016 evidence summary from the IOC expert group meeting, Lausanne. *Br J Sports Med* 2016; 0:1–9. doi:10.1136/bjsports-2016-096810.
6. FiFPro the postpartum return to play guide. 2024.
7. Ferrer E, Brik M, Davenport M, Barakat R, Palacio M. Translation and cross-cultural adaptation of the Get Active Questionnaire for Pregnancy (GAQ-P) to Spanish population 10.1016/j.apunsm.2024.100463.

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