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The 6 Rs Framework: return to sport postpartum

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Abstract

Athletes choosing to become mothers during their performance career is a relatively new concept. As such, there is little guidance and support for this population, and sportswomen are often unsure about how they can continue to train. The transition into motherhood brings about significant physical, physiological and psychological changes, and the symptoms of pelvic floor dysfunction can be prevalent in this population. Postpartum recovery requires more consideration and understanding, and sporting organizations should have policies and provisions in place to support perinatal athletes. It is recommended that an evidence-based approach such as the 6 Rs Framework is used to support athletes during and beyond motherhood so that they can plan their return to sporting activities.

Keywords: athlete, motherhood, pelvic floor dysfunction, perinatal, postpartum.

Introduction

Athletes choosing to become mothers during their performance career is a relatively new concept, and as such, there is a lack of guidance and support for this population. Sportswomen are often confused about what they can or cannot do in relation to physical activity and training during and after pregnancy. Furthermore, many feel that they have to make a choice between becoming a mother or continuing with their performance career (Davenport *et al.* 2022).

It is well established that the perinatal transition brings about widespread physical, physiological and psychological changes including: abdominal and pelvic floor muscle lengthening and loading; fluctuations in breast size; lactation; changes in body mass; generalized deconditioning; compromised sleep quality; and hormonally altered environments (UK Sport 2021; Donnelly *et al.* 2022a, b). The symptoms of pelvic floor dysfunction are also prevalent, and regardless of the mode of delivery, one in three women are at risk of leaking from their bladder (NHS 2019). Furthermore, this prevalence is likely to rise if postpartum women expose their pelvic floor to increases in load and impact. This may negatively influence their ability to return to or maintain sport, and will ultimately have an impact on their performance.

Postpartum recovery

Despite such significant bodily changes, postpartum rehabilitation is neither standardized nor routine in the UK. However, women can access services (e.g. a pelvic health physiotherapist) via the National Health Service if their symptoms of pelvic floor dysfunction are bothersome enough. Nevertheless, postpartum recovery should be considered similar to injury rehabilitation, which adopts a graded approach to activity and training with progressive loading. Unlike returning to sport following an injury, the transition into motherhood offers an opportunity to anticipate the expected bodily changes and prepare for these. In addition, it is recommended that elite athletes have a postpartum pelvic health evaluation, regardless of the presence or absence of symptoms, in order to ensure that they are training their pelvic floor and abdominal muscles appropriately, and attend to their wider individual needs (Donnelly *et al.* 2020, 2022b).

Sporting organizations must urgently expand their understanding of perinatal health, and include screening measures and education in their management of female athletes. In addition, wider consideration needs to be given to the technicalities of athletes training while having dependent young children, or the planning logistics involved in breastfeeding while returning to training and competition (UK Sport 2021). It is recommended that a structured, evidence-based

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plan is used when returning to sport postpartum (e.g. the 6 Rs Framework; Donnelly *et al.* 2022b), and that risk assessments are made by support teams (UK Sport 2021).

The 6 Rs Framework

The 6 Rs Framework is a biopsychosocial informed progression of phases that includes sports

medicine alongside female-specific considerations relevant to the transition into and beyond motherhood (Fig. 1). The framework is underpinned by a whole-systems biopsychosocial approach, and the safety of both the mother and baby is the overarching concern. The “6 Rs” are ready, review, restore, recondition, return and refine.

Postpartum women can progress or regress through this framework depending on their

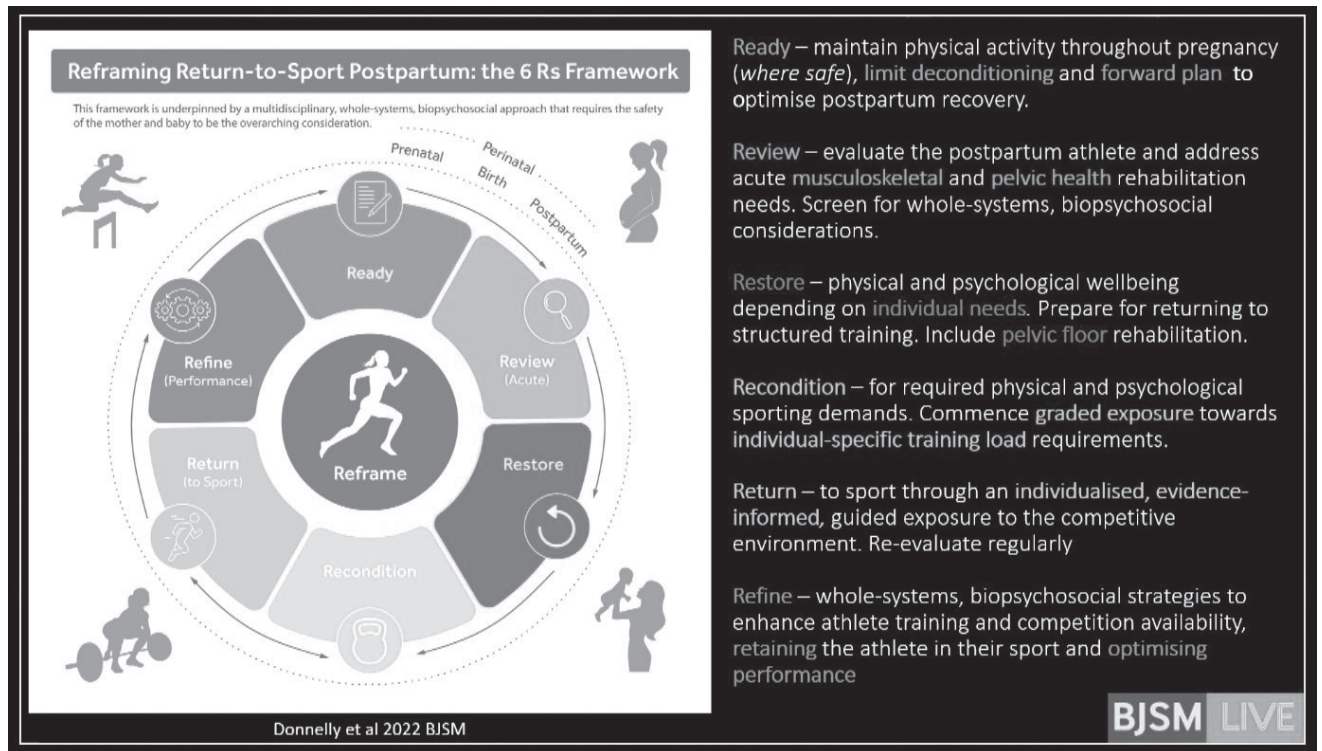


Figure 1. The 6 Rs Framework.



Figure 2. Gráinne Donnelly presenting her work at BJSM Live.

individual needs. The objective is to achieve and maintain a return to sport at the right time for each individual, and safeguard their long-term ability to engage in competition (Donnelly *et al.* 2022b).

Athletes should advocate for their care during this time. They should ensure that there is a plan in place to assist the maintenance and modification of training throughout their pregnancy, and a recovery strategy to guide them as they return to the level of load and exertion specific to their sport. In addition, access to a multidisciplinary team who can attend to their perinatal training needs is essential, and a postpartum pelvic health evaluation is particularly important. Overall, we want to facilitate the athlete's postpartum return to sport by using a proactive approach rather than a reactive one.

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