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# From insight to action: a qualitative study of the postpartum return to recreational exercise and sport in Ireland and the UK

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#### **ABSTRACT**

Individuals who were active before and during pregnancy face significant barriers to return postpartum, and participation in exercise and sport often decreases significantly during this period. Evidence is beginning to emerge regarding elite athletes' experiences with returning to sport postpartum. Understanding the experiences of recreational participants is essential to improve wider participation postpartum. This qualitative study aimed to describe the experiences of those returning to recreational exercise or sport postpartum, and to identify actions to support such a return. 14 mothers from the UK and Ireland, participated in one-to-one interviews. Interviews were transcribed verbatim and analysed using contemporary reflexive thematic analysis. Six themes were generated: (1) The challenging transition to motherhood. (2) Regaining, reclaiming and role modelling: motivators for returning, (3) Changed bodies and reframed minds: the experience and benefits of returning, (4) The mental load: adaptation, priorities, judgement and guilt, (5) Lack of appropriate knowledge and professional support and (6) Support, environment, culture and provision. Participants gave detailed accounts of the experience of returning to recreational exercise or sport postpartum. A list of actionable steps to support the return to recreational exercise and sport postpartum was generated from the data. These include the training of relevant professionals, the delivery of guidance during antenatal and postpartum care, the provision of opportunities to return postpartum and the embedding of policy to support such a return. The study provides actionable recommendations and future research directions to support postpartum mothers in resuming recreational exercise and sport.

#### INTRODUCTION

Physical activity is defined as 'any bodily movement produced by skeletal muscles that results in energy expenditure'. It is widely understood that physical activity is beneficial to both physical and mental well-being across the lifespan. During the postpartum period physical activity can improve overall maternal well-being and mental health, reduce postpartum depression symptoms and improve children's physical activity participation. 3-5

#### WHAT IS ALREADY KNOWN ON THIS TOPIC

⇒ Engagement in physical activity, including exercise and sport, decreases during pregnancy and frequently remains lower than recommendations in the postpartum period. This has the potential to negatively influence the health of the whole family unit, including mother and child.

#### WHAT THIS STUDY ADDS

⇒ This study highlights the experience of transitioning to motherhood, and how this influences a return to exercise or sport including what motivates and supports mothers to return as well as the challenges and barriers they face.

## HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE OR POLICY

⇒ A list of actionable steps to support mothers returning to exercise and sport is generated. These include actions by a range of stakeholders including health-care professionals, exercise professionals, sports teams/clubs and national governing bodies. Future research should assess the impact of such actions in supporting the return to recreational exercise and sport postpartum.

Therefore, the WHO recommends post-partum women engage in 150–300 min of moderate intensity or 75–150 min of vigorous intensity aerobic physical activity weekly, along with muscle strengthening activities, stretching and reducing sedentary time. 6

Despite these benefits and recommendations, there is an observed decline in physical activity during the postpartum period with a recent report highlighting that only ~30% of postpartum women achieved the physical activity guidelines. This report found that while women have a desire to be physically active postpartum, they experience many barriers to doing so. A lack of time (85%), access to childcare (79%), access to expertise (27%) and low confidence (25%) were reported to be the greatest barriers to postpartum physical activity, and this is echoed



in qualitative studies which also highlight advice from a healthcare professional as crucial for a postpartum return to physical activity. Ollectively this literature demonstrates the complexity and multi-faceted nature of the barriers to postpartum physical activity participation.

Two distinct components of physical activity are exercise and sport. Exercise is a physical activity that is 'planned, structured and repetitive ... the objective of which is to improve or maintain physical fitness' 1 while sport is a 'subset of exercise that can be undertaken individually or as part of a team' within which 'participants adhere to a common set of rules ... and a defined goal exists'. 11 In addition to physical activity in its broadest sense, there are further and distinct benefits to participating in exercise and sport specifically, as separate constructs of physical activity. 12 Engagement in an individual sport, team sport and group exercise have been shown to enhance social and subjective well-being, foster a sense of belonging, improve self-esteem and strengthen social networks. <sup>12</sup> <sup>13</sup> Moreover, factors such as social cohesion, enjoyment and satisfaction enhance adherence to an activity. These benefits make it important to consider postpartum participation in exercise and sport specifically.

While research has explored the barriers to postpartum physical activity broadly, 10 16 less is known about the experiences of returning to exercise or sport as distinct forms of physical activity. Given the additional benefits of exercise and sport, this is important to examine. Where this has been explored, it is typically among those who combine elite sport with motherhood 17-20 hence leaving a gap in the literature regarding postpartum women who take part in exercise or sport recreationally. It is reasonable to hypothesise that women who are returning to exercise or sport recreationally would have distinct experiences compared with those who are returning to elite sport postpartum. This is important to explore to support the development of evidence-based policy and practice and hence increase the number of women who return to exercise and sport postpartum.

This study therefore aimed to describe the experiences of those returning to recreational exercise and sport as mothers in Ireland and the UK, and to identify actions to support such a return.

#### **METHODS**

## Research design

This study used an interpretative description approach to explore and understand the experiences of postpartum women returning to recreational exercise and sport. Interpretative description is a qualitative methodology designed to generate insights applicable to practice-based disciplines, making it well-suited for addressing complex, contextualised human experiences, the findings of which can be applied to policy and practice. <sup>21</sup> Data was collected during semi-structured online interviews, and a reflexive thematic approach was employed.

#### Patient and public involvement

The public was not involved in this study.

#### **Participants and inclusion**

Participants were recruited through social media posts on X and Instagram, through word of mouth, and snowball sampling. While specific social media groups were not targeted, participants were purposively selected based on the eligibility criteria. To be eligible participants needed to be: ≥18 years of age, a mother to at least one child, based in Ireland or the UK, taking part in weekly exercise or sport and able to understand written and spoken English. No lower limit was placed on weekly exercise or sport participation, as it was deemed important to capture the experiences of all mothers who have returned to exercise or sport, not just those who achieve a certain threshold of participation. Those interested in taking part emailed the researcher (OB) to express their interest. The researcher responded, by providing a participant information sheet, consent form and demographic questionnaire. For those who subsequently wished to participate, a mutual time for the online interview was set via email. Similar research on elite athletes has included between 10 and 18 participants.<sup>20</sup> Previous literature suggested that data saturation is likely to occur with 6-10 participants, thus likely providing the depth of data and analysis relevant to the present study.<sup>23</sup>

#### **Data collection**

A semi-structured interview guide was developed using open-ended questions and prompts.<sup>24</sup> The interview guide (table 1) was generated in line with previous similar literature conducted with elite athletes.<sup>20</sup> The questions related to the experiences of returning to recreational exercise or sport as a mother, including the motivators, facilitators, barriers and benefits. The interview guide was piloted on one individual who fit the inclusion criteria. Data generated from the pilot interview were not included in the analysis.

14 semi-structured, individual interviews took place between January and April 2024. The demographic data included: age, number of children, marital status, employment status and country of residence (UK or Ireland). Interviews were carried out online, using Microsoft Teams (Microsoft Corp), were recorded using a password-protected iPhone Dictaphone (Apple) and were transcribed verbatim with all personal identifiers removed. One researcher (OB) carried out all interviews and transcription, with a sample checked for accuracy by another researcher (ED). Following transcription, audio recordings were deleted, and transcription documents were saved to a password-protected OneDrive folder, accessible only by the researchers.

#### Data analysis

Reflexive thematic analysis was used, following the framework provided by Braun and Clarke. <sup>25</sup> <sup>26</sup> This approach acknowledges that researchers are active participants in



Table 1 Interview guide		
Section	Question	
Opening questions	<ol> <li>Can you tell me a bit about your exercise and sport life/ involvement with exercise and sport to date?</li> <li>How many children do you have and how long have you been a mum//mummy/mammy/mother?</li> </ol>	
Transition questions	How did you find the transition to motherhood?	
Participant experiences of returning to recreational exercise and sport	Can you tell me about your return to exercise and sport (as a mum//mummy/mammy/mother)?	
Barriers	Can you tell me about any of the challenges you had with returning to exercise and sport?	
Facilitators	What, if anything, facilitated your return to exercise and sport?	
Benefits	<ol> <li>What, if any, benefits have you experienced since returning to exercise and sport?</li> <li>Has motherhood had any benefits in your exercise and sport?</li> </ol>	
Challenges	What, if anything, have been the challenges to you returning to exercise and sport as a mother?	
Closing question	Is there anything you would like to add about the transition to motherhood and exercise and sport?	

the generation of knowledge, and that interpretation of data is subjective and socially constructed. 25 26 To this end, the authors acknowledge a constructivist epistemological position, which is also influenced by pragmatism. Combining these philosophical viewpoints, pragmatic constructivism seeks to uncover knowledge within the social conditions from which it arises or is constructed.<sup>27</sup> The authors acknowledge that their own identities, experiences and perspectives can shape the interpretation of findings (online supplemental information). Therefore, the authors remained conscious of the potential for bias and blind spots given their personal circumstances and took steps to ensure reflexivity and trustworthiness of the knowledge generated as detailed in the following sections. The authors had no relationship with any of the participants.

The analysis procedure consisted of six distinct steps: familiarisation of data, coding (OB and ED), generating initial themes (OB and ED), reviewing themes (including discussion of alternative viewpoints and challenging assumptions; OB, ED, MF), naming themes (ED, MF) and writing the report (OB, ED, MF). These iterative steps served to encourage dialogue, reflexivity and critique of the interpretation of the data, helping to strengthen the trustworthiness, rigour and accuracy of knowledge created. No software was used in the analysis or generation of data.

The use of iterative analysis allowed authors to continuously assess the evolving data set, ensuring that saturation was appropriately determined in relation to the richness of the information and the research goals rather than based on a sample size calculation. Data saturation was considered to have occurred when no new themes, patterns or insights were generated from subsequent interviews. In this study, saturation was reached after

approximately 10 interviews, at which point the research team observed that the data became repetitive, with no additional themes being generated that were relevant to the research questions. Theoretical saturation was also considered, determining that no further significant information would be generated in relation to the study's objectives.<sup>29</sup>

#### **RESULTS**

14 participants were recruited for the study. Participant characteristics are shown in table 2. Six themes were generated: (1) The challenging transition to motherhood, (2) Regaining, reclaiming and role modelling: motivators for returning, (3) Changed bodies and reframed minds: the experience and benefits of returning, (4) The mental load: adaptation, priorities, judgement and guilt, (5) Lack of appropriate knowledge and professional support and (6) Support, environment, culture and provision (figure 1). An overview of themes including illustrative quotes can be found in table 3. Figure 2 illustrates how some of the key challenges and barriers might be addressed by actionable steps, to support a postpartum return to recreational exercise and sport.

## Theme 1: The challenging transition to motherhood

Participants described the transition to motherhood as being more challenging than expected. Many felt that they could never have been fully prepared for the transition to motherhood, and others felt they had been somewhat 'naïve' regarding what to expect. The challenges discussed included a lack of sleep, having less time and less energy to train, less recovery opportunities following training and having to find childcare to take part in their exercise or sporting

Table 2         Participant characteristics	S		
Age (years) N (%)			
18–25	1 (7)		
26–35	7 (50)		
36–45	5 (36)		
46–55	1 (7)		
Place of residence	N (%)		
Northern Ireland	9 (64)		
England	3 (21)		
Ireland	2 (14)		
Employment	N (%)		
Full-time	9 (64)		
Part-time	3 (21)		
Student	1 (7)		
Self-employed	1 (7)		
Number of children	N (%)		
1	6 (43)		
2	7 (50)		
3	1 (7)		
Primary recreational exercise	N (%)		
Gaelic football	5 (36)		
Running	3 (21)		
Gym	3 (21)		
Triathlon	1 (7)		
Irish dancing	1 (7)		
Kick boxing	1 (7)		

activity. There was a sense that being a mother who aims to return to exercising and/or playing sport added to the complexities of this transition to motherhood.

All participants explained that they had a strong sense of identity or self through their exercise or sport, and that they felt they had lost this sense of identity, and the capacity for personal time, as they transitioned to motherhood. The common experience was that their identity became entwined with that of their child. Participants described the complex evolution of identity, and the balance of roles between mother, exerciser or sports person and individual.

It [sport] was my identity, but after becoming a mother I have a new identity. I'm a mother now and while I like to be independent and competitive and active in my lifestyle, I have somebody else to look after [now]. (P11, Gaelic footballer, 36–45 years old, mother of two)

Regaining personal time and a sense of identity were key motivators to returning to exercise and sport having become a mother, as will be explored in the following theme.



Figure 1 Overview of themes generated from the data.

## Theme 2: Regaining, reclaiming and role modelling: motivators for returning

Regaining a sense of identity and physical fitness, reclaiming personal time and social connection, and role-modelling to children were salient motivators to return to exercise or sport postpartum. Participants often associated this 'regain and reclaim' with improved mental and physical health, as explored in theme 3.

I've always done sport ... I wanted to get back to that ... It just, it's part of who I am and what I do. (P3, runner, 26–35 years old, mother of two)

While for the majority of women this theme of regaining and reclaiming was a positive experience, some women spoke of an internal pressure to lose weight or regain physical fitness or performance capabilities postpartum, identifying this as a negative experience during the transition to motherhood. One participant explained that even during pregnancy she walked 'like three miles every night, hoping to not gain too much weight during pregnancy' (P7, gym-goer, 46–55 years old, mother of three). Some participants explained that they felt they had 'no choice' but to return quickly, leading to them going back to their exercise or sport in a timeframe that they reflected on as being 'too soon'. Some women reflected that they approached their second postpartum return to exercise and sport more conservatively, feeling less internal pressure to rush back. Conversely, other participants who explained that they had returned to their exercise or



Illustrative quotes
'We knew we'd have to adapt to her coming into our world. But we didn't quite envisage how much Yeah, [it has been] a lot harder [than expected]'. (P1, triathlete, 36–45 years old, mother of one) 'The transition was very difficult in terms of including my children or trying to find a babysitter. It was different financially, it was different emotionally and it was different physically'. (P11, Gaelic footballer, 36–45 years old, mother of two) 'Nobody warns you. Nobody prepares you it's a massive transition. In everyday life it's a massive transition, but if you're involved in sport and stuff, it's even more difficult it's a learning curve'. (P12, gym-goer, 36–45 years old, mother of two)
'Your body obviously gets taken over for 9 months, or longer than 9 months anything you do during that 9 months is to look after the baby all the exercise you do is to look after the baby. So, it's really nice to get my body back, not particularly the way it looks, but in the way it feels and works a bit more of your identity that I can be a runner'. (P9, runner, 36–45 years old, mother of one) 'I returned at three weeks I'd that much weight to lose. I was so overweight that I had no choice I probably wouldn't have been back as quick (if I didn't feel this way)'. (P5, gymgoer, mother of one) 'I think being a mum and seeing the children on the sideline gives you something to work for you know that you're meant to be a good role model to them [so] you're going to pu in the graft they help inspire me to work harder'. (P6, Gaelic footballer, 26–35 years old, mother of two) 'We can see the benefits of those early buggy runs and getting her outside and being active It is good Because I wouldn't want to have a child that just wants to stay in and play on an iPad or something all day. She wants to be outside We're hoping that it's our influences from such an early age'. (P1, triathlete, 36–45 years old, mother of one)
'My fitness levels are right back up to where they were(pre-pregnancy), and I actually think that I'm probably as fit, if not fitter, now as I was pre-baby, so I definitely think that mentally and physically it has helped [but] I definitely found it more challenging to get my fitness levels up I had to put in a lot more work'. (P6, Gaelic football, 26–35 years old, mother of two) 'My body type changed, there was a lot of things that I could do and couldn't do'. (P11, Gaelic footballer, 36–45 years old, mother of two) 'I needed to try and learn myself how to build muscle again, build my pelvic floor sport helped me strengthen things that gave me the motivation to get back into sport'. (P12, gym user, 36–45 years old, mother of two) 'After the [birth] injury occurred my pelvic floor and even my bowel, everything was very weak I found that it [sport] helped me [to] build muscle and help[ed] me contract and do things with my body that I couldn't do [after having children] that encouraged me to keep going'. (P12, gym-goer, 36–45 years old, mother of two) 'I think it has helped me to see you know from another perspective I love my sport and I'm very competitive and anytime I get on the pitch I want to win, but I realise as a mom too I've learned how to sort of balance'. (P2, Gaelic football, 36–45 years old, mother of two)
'I think one of the [challenging] things is, like, feeling guilty yesterday, I had a two-and-a-half-hour run that's quite a lot of time to leave family on a Sunday. So, there's that sort of(a)toss-up. But I know that if I do it, I am a better mum for doing it'. (P3, runner, 26–35 years old, mother of two) 'I always felt guilty that I was getting time to myself even though it was only for an hour But the guilt always got to you, it was always the guilt in the back of your head'. (P5, gym-goer, mother of one) 'She [a physiotherapist] was disgusted that I went back so early the health visitor also expressed concerns about going back so early but I got passed by the GP, so I knew myself my body had recovered'. (P6, Gaelic footballer, 26–35 years old, mother of two) 'You'd get the odd person questioning whether you should be resting, you should be going out for a run and things like that a few family [members] and friends were sort of querying whether I was getting back into it too quickly, yeah'. (P1, triathlete, 36–45 years old, mother of one)



			<u> </u>	
12	h	le 3	Continued	

Theme	Illustrative quotes
Theme 5: Lack of appropriate knowledge and professional support	'Whenever I announced my pregnancy he [the coach] wasn't happy that I got pregnant in the middle of the league, so I was very grateful that that coach wasn't still there whenever I went back postpartum'. (P6, Gaelic footballer, 26–35 years old, mother of two) 'Being a physio[therapist] myself, I knew that I couldn't exercise, (following my emergency caesarean, and that I) shouldn't do any sort of intensive exercise for three months. But I got absolutely no guidance whatsoever about that, which was incredibly difficult If you're someone who has always been active [to] then not be able to was really hard whenever you've got a newborn baby and everythings sh't that was the most challenging thing for me, was having no idea of what I could or couldn't do medically! Women need to exercise, and we know that women don't exercise as much as they should, and I just felt that [the lack of guidance] was really bad'. (P9, runner, 36–45 years old, mother of one) 'I had a bad birth I had [an] ileostomy for a year and had to go through surgery so I was quite unwell for a long time nobody really talked to me about actually like pelvic floor, and things I needed to do to recuperate to actually go and train'. (P12, gym-goer, 36–45 years old, mother of two)
Theme 6: Support, environment, culture and provision	'I think as(a)club as managers and coaches and even as team-mates we need to be saying to our girls [on the team] we're not expecting you to do A, B, C or D just see how you go It is important that the mothers are allowed to come back whenever they feel ready but that there's [not] just massive pressure put onto them [to return]'. (P2, Gaelic footballer, 36–45 years old, mother of two) 'My husband's support was absolutely fantastic, and he knows how important it is that we exercise, and so we protect time for each other to do exercise and make sure we both get a chance to exercise'. (P9, runner, 36–45 years old, mother of one) 'My family's been really supportive. My parents. My mum helps out a lot with like, having the kids so I can go and do things as well. So yeah, I've been quite lucky'. (P3, runner, 26–35 years old, mother of two) 'The coach has been supportive in sort of bringing me back in, but also like knowing that there's limitations when you've got kids'. (P3, runner, 26–35 years old, mother of two)

sport in a timeframe considered 'early', felt that they had made the right decision for them personally, and as will be explored in themes 4 and 5, felt they had been judged, or had not been supported in this return.

Being a positive role model for their child or children was another prominent motivator in participants' return to exercise and sport. Many discussed how they wished to lead by example and show their children the benefits of leading a physically active lifestyle. Participants explained that they would like their children to be involved in exercise and sport throughout their lives. Some explained how they felt this was already having a positive impact on the physical activity behaviours of their children.

# Theme 3: Changed bodies and reframed minds: the experience and benefits of returning

This theme explores the physical changes, reframed perspective and holistic benefits of returning to exercise or sport postpartum. Participants spoke of the physical changes experienced during pregnancy and the postpartum period, reflecting on the impact that this had had on their exercise or sporting capabilities. Many women experienced a sense of having to get to know this new body, and having been unprepared for the physical changes postpartum would encompass.

Some described how the physical changes experienced postpartum had made the return to exercise or sport challenging. For some, this caused a lack of self-confidence regarding their return to exercise or sport, which ultimately stalled their postpartum return. Many

experienced a sense of lower fitness or needing to work harder to regain pre-pregnancy fitness. Despite this, the majority of women felt that they had rebuilt their prepregnancy fitness.

Some things are harder now than they would have been before ... your body definitely isn't the way it used to be. (P5, gym-goer, mother of one)

For some, the physical changes postpartum related specifically to pelvic floor strength and function, and this often impacted the return to exercise or sport. Many participants explained that this was made more challenging as they had not been expecting or prepared for such physical changes, and in relation to pelvic floor function, participants did not feel equipped to manage this change. The experience of a lack of appropriate support and guidance to return is further explored in theme 5. Despite this, participants explained that returning to exercise or sport had led to improvements in pelvic floor strength and function. The pelvic floor improvements described were profound, and positively impacted the perceived quality of life of participants.

In addition to physical benefits, all participants explained the benefits that their return to exercise or sport had on their mental and social health. Many felt that this positively impacted their perceived ability to be a mother, to deal with daily stress, and their overall well-being. These benefits were particularly pertinent in the early postpartum months and during maternity



Evidence-based guidance regarding physical activity, exercise, and sport is delivered throughout pregnancy and postpartum stages.

Women experiencing postpartum complexities e.g. birth injury, postpartum anxiety/depression, birth trauma etc provided with

additional support.



Healthcare professionals, coaches and exercise professionals have evidence-based knowledge regarding the promotion of a safe return to exercise and sport.



Healthcare professionals, coaches and exercise professionals have access to, and maintain appropriate training and qualifications to provide guidance regarding exercise, sport and physical activity during the pregnancy and postpartum stages.



Increased community and club-based opportunities for mothers to exercise or participate in sports, with provisions for bringing their children along.



All provision is designed to enhance accessibility for those with children including parental deferrals, feeding opportunities, changing areas, child participation etc.



A non-judgemental exercise and sport environment, which acknowledges the multiple commitments and challenges of returning postpartum.



Development of policy from national governing bodies to embed these actionable steps into practice.



Figure 2 List of actionable steps and recommendations generated from the data.

leave, when there was, for some, a sense of isolation. Two participants explained how their return had helped them manage their postpartum depression:

I would have struggled a bit with postnatal depression after ... so I found it a massive release you know ... it would have been very hard to get through you know without the sports. (P2, Gaelic footballer, 36–45 years old, mother of two)

A positive change in perspective was experienced by many participants following their transition to mother-hood. Participants explained that they had an improved sense of 'balance' and an understanding of the priorities that people juggle in addition to their exercise or sport. Others discussed a greater appreciation for any opportunity to do their exercise or sport activities. Many also acknowledged a new outlook on time management and being more time-efficient since becoming a mother and balancing many demands, as will be explored in theme 4.

# Theme 4: The mental load: adaptation, priorities, judgement and guilt

There was a prevailing sense of heavy mental load involved in a postpartum return to exercise or sport. Participants explained that it was more challenging to take part in their exercise or sport, compared with before becoming a mother. Some acknowledged that this becomes easier as children become older. Many of the challenges experienced related to logistics, ever-changing routines, and arranging schedules and childcare to facilitate training and events. There was also a sense of needing to adjust to a more flexible routine, which was out-of-the-ordinary and challenging for many participants who had adhered to, and enjoyed, structured training previously. Participants also discussed an overwhelming and negative experience of being pulled in multiple directions by perceived family commitments and their exercise or sport, and many experienced a sense of guilt regarding their participation in exercise or sport. For some participants, this had led to them adapting their training goals, or their level of competitiveness in their activity. In addition to guilt, some participants spoke of feeling judgement from family, friends and healthcare professionals including physiotherapists and health visitors regarding their return to exercise or sport postpartum. Others experienced judgement from individuals outside of the exercising or 'sporting world' and attributed this to a lack of understanding of the wider benefits of returning to exercise and sport by those not involved in this area.



Participants explained how this mental load, in addition to caring for children, led to a decreased sense of readiness and recovery to train or compete:

You're obviously much more tired [than before having children] ... you're not getting the same sleep ... I attended trainings exhausted because I was exhausted physically ... not sleeping enough and I wasn't fuelling my body right. (P6, Gaelic footballer, 26–35 years old, mother of two)

# Theme 5: Lack of appropriate knowledge and professional support

Many participants experienced a lack of appropriate knowledge and professional support for returning to exercise or sport postpartum. This is related to intrasport support (including coaches, interdisciplinary team staff, fellow players), and medical and professional support (including GPs, health visitors, exercise professionals and physiotherapists). One participant expressed that the lack of appropriate support from their club had been apparent since they announced their pregnancy. Some explained that their club, team or coach expected 'too much too soon', and that there was a pressure to return quickly, yet a lack of support in returning. A lack of visibility of postpartum women in exercise or sport was acknowledged as a contributing factor. A general lack of awareness, and fear, were also discussed as contributing factors, ultimately negatively impacting the return to exercise or sport postpartum and postpartum mental well-being.

For women returning to sport, there's not enough help out there ... a lot of women have histories of tears and things through pregnancy, but actually [they] don't know what to do in the return ... a lot of women is put off then, because you end up with weak bladders and end up leaking ... it's off putting for women that don't know ... don't have the support. (P12, gym-goer, 36–45 years old, mother of two)

Some participants did feel well-supported during their return to exercise or sport as will be further illustrated in theme 6.

## Theme 6: Support, environment, culture and provision

All participants felt that their own parents and/or partners had a key role in supporting their return to exercise or sport postpartum. This support was always in the form of someone caring for the child or children, rather than providing emotional or practical support, hence doing little to lighten the mental load or juggle of competing priorities previously outlined in theme 4. Indeed, for some, arranging childcare and preparing the children for such care added to the mental load they experienced, even when the child was to be cared for by their second parent.

Despite this, there was a sense of gratitude to have this support, and an understanding that if this support was

not present, the return to exercise or sport would have been much more challenging. Many mothers recognised that their source of support was someone involved in exercise or sport themselves, and therefore there was an understanding of the importance of returning, and a mutual protection of each other's time to participate in exercise or play sport.

Environment, culture and provision were also discussed as impacting the experience of returning postpartum. Several participants explained the importance of womenonly environments in supporting their return. There were also many examples of the support and encouragement received from coaches and peers when returning to exercise or sport postpartum. Some participants also expressed that coaches and team-mates were understanding of limitations to time and sometimes physical capacity in the initial return to exercise or sport. Others discussed how an environment which facilitated children being present supported their return. However, a general lack of such environments or provisions was highlighted.

I think there should be, in society, more availability of [child-friendly] exercise ... not just like a 6-week course or something like that, or pushing your buggy with other mothers around a park. I think it should be a bit more welcoming competitively. (P11, Gaelic footballer, 36–45 years old, mother of two)

One participant explained that having access to equipment such as a running buggy and a bike trailer, made it possible to bring their child along with them for training sessions and hence facilitated their return to triathlon training postpartum.

#### DISCUSSION

This study sought to describe the experiences of a postpartum return to recreational exercise and sport in Ireland and the UK, and to identify actions to support such a return. Our findings highlight that there are profound physical, mental and social health benefits to returning. However, it cannot be ignored that there are a multitude of challenges for mothers to overcome in order to return. The present study found that the initial transition to motherhood was more challenging than expected, but that exercise or sport can offer coping mechanisms during this transition, and into motherhood, especially due to having time away from the role of caregiving and regaining a sense of one's own identity. These findings reflect other qualitative research that has highlighted postpartum exercise as a coping mechanism during this time, by alleviating stress, improving health, and providing social interactions.<sup>30</sup> Therefore, it is important to promote a return to exercise and sport during the postpartum period and actionable steps to support such a return in the postpartum period have been suggested. These actionable steps include the training of relevant professionals, the delivery of evidence-based guidance during antenatal and postpartum care, the provision of opportunities to return postpartum and the embedding



of policy to support such a return. To do so has the potential to impact the physical, mental and social well-being not only of the mother, but of the whole family unit including continued physical activity participation of parent and child, hence influencing lifelong health. <sup>30 31</sup>

Our findings highlight that mothers are juggling numerous competing priorities, including work commitments, home tasks, caregiving and perceptions of guilt and judgement from both internal and external sources. This sense of competing roles and priorities echoes findings with elite athletes considering pregnancy,<sup>32</sup> highlighting further similarities in experience between elite and recreational participants. Among our participants, even when there was support from a partner or family members, this tended to solely take the form of child-care and hence still placed the burden of responsibility of planning and organisation, of arranging meals and drop-offs, etc on the mother. This phenomenon has been previously documented as the 'invisible load', whereby, while there appears to be improved gender balance of household tasks, much of the planning and 'project-management' continues to fall disproportionately to women and/or mothers. 33 Our findings highlight that this can and does negatively impact the return to exercise or sport as a mother. While it is beyond the scope of this research to fully address this invisible load, it is vitally important that there is understanding, among the general public, coaches and healthcare professionals, of the complexity of barriers facing mothers who would like to return to exercise or sport postpartum. Proposed steps to alleviate such barriers are outlined in figure 2.

The importance of environment, culture and provision in returning to exercise or sport postpartum have been highlighted by the present study and form much of the actions suggested in figure 2. This agrees with recent calls for a whole-society approach to address challenges with being physically active in motherhood.8 At present however, there is criticism that organisational policies, governing bodies and sponsors are failing to support participants postpartum and to provide inclusive exercise and sporting environments. 34 35 Organisations such as '&Mother' and 'sheRACES' offer practical insights into how sponsors, teams, clubs and events can work to enhance inclusivity in exercise and sport, including the provision of lactation support and childcare at events, as well as visibility and representation of the place of mothers in exercise and sport.<sup>36 37</sup> These measures would support the holistic approach outlined as necessary by the Active Pregnancy Foundation.<sup>8</sup> Future research must quantify the impact such measures have on inclusive participation and indeed experiences of participants. Furthermore, it is pertinent to flag, that while these provisions might increase the accessibility of exercise or sport to some mothers by offering an opportunity to bring the child(ren) along, for the majority of mothers in the present study it was important to have this time as independent from the child in order to 'regain and reclaim'. Therefore, having child-friendly environments

should form only part of wider efforts to facilitate a postpartum return to exercise and sport, and is not the only means by which to do so. The wider public knowledge, awareness, culture and norms must also be addressed to support a postpartum return to exercise and sport.

Our findings also highlight a lack of appropriate support, knowledge and guidance regarding a safe return to exercise and sport postpartum. Previous literature shows that elite athletes have similar experiences. 20 38 Indeed, in a recent survey physical activity was discussed with just 13% of women during their 6- to 8-week postpartum check<sup>8</sup> hence demonstrating this gap in support and guidance. Participants in the present study also discussed a lack of guidance regarding pelvic floor symptoms postpartum specifically, citing this as negatively impacting their return to exercise or sport in some cases. Almost 40% of women will experience some form of pelvic floor dysfunction during or after pregnancy<sup>8</sup> and importantly this is associated with a lower perceived quality of life.<sup>39</sup> Given the prevalence of pelvic floor dysfunction postpartum, the potential mental health and quality of life impacts of this, and our findings which show that this can be a barrier to returning to exercise or sport, it is important that efforts are made to guide women through appropriate rehabilitation and their return to exercise and sport during this period. Appropriate training and qualifications must be available to and expected of healthcare professionals and physical activity, exercise and sport professionals. More work is required to explore healthcare professionals' knowledge and training within this area to facilitate a safe and evidence-based return to exercise and sport.

#### **Strengths and limitations**

A strength of our study is the representation of a variety of types of exercise and sport, from women across both Ireland and the UK. Also, the inclusion of women who returned to exercise or sport at a recreational rather than elite level is a key strength and novelty of the present study. Additionally, the inclusion of women who were at various stages of their postpartum journey ensured a broad view and perspective of returning to exercise and sport postpartum. Limitations of the research must also be acknowledged. As our data were collected in Ireland and the UK, transferability to other geographical regions may be limited. Also, while it was deemed important to understand the experiences of women who had successfully returned to postpartum exercise or sport, the experiences of women who want to return but do not or cannot, have not been captured in this study. Finally, it must be acknowledged that while not an inclusion criterion for the study, all participants in this study did experience pregnancy, and birth their babies. Hence our findings do not reflect the important experiences of those who may come to motherhood through different paths, such as adoption and surrogacy. Future research should aim to include the perspectives and experiences of these women also, to broaden the understanding of



the challenges faced when returning to exercise and sport following the transition to motherhood.

#### **CONCLUSION AND FUTURE DIRECTIONS**

Our findings highlight that there are many physical, mental and social health benefits to returning to recreational exercise or sport postpartum. However, there are also many challenges which women are faced with in their attempts to do so. These challenges are often enough to stall the return to exercise and sport postpartum, hence having the potential to impact on the lifelong health of the individual woman, but also the wider family unit. There is therefore a need for a collective evidence-based approach to support women in returning to exercise and sport postpartum, be that at an elite or recreational level. The Active Pregnancy Foundation has called for policy makers, healthcare professionals and exercise professionals to bridge the gap in support and guidance both during and after pregnancy.8 Our study supports this, recommending that evidence-based guidance regarding exercise, sport and physical activity are built into antenatal and postpartum care, and that healthcare professionals, coaches and exercise professionals have and maintain appropriate training and qualifications to provide such guidance. We also recommend that exercise and sport provision enhance accessibility, and opportunities to be active with children including child participation events, parental deferrals, feeding areas, changing areas, etc. Finally, it is recommended that national governing bodies develop policies to enhance support for postpartum women returning to exercise and sport, such as to embed these actionable steps into practice. Such guidance or policy would be necessary to ensure clubs and organisations are well-informed to implement policies and practice for a safe return to exercise and sport postpartum. Future high-quality research should be planned to assess the impact of such actions or interventions in supporting the long-term return to recreational exercise and sport postpartum.

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