



Edge Hill  
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# Evidence Report

Conception to Age Two:  
New Parents, Physical Activity  
and Mental Health



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# Executive Summary



**CONTEXT:** Evidence suggests up to **20%** of **new mums** are affected by **perinatal mental illness** (NHS, 2022). There is also increasing evidence of mental illness among **fathers** during the perinatal period (Darwin et al., 2017). Parental mental illness brings **increased risk of child morbidity and mortality** (Howard and Khalifeh, 2020). Whilst most interventions are targeted at support at the individual level, Howard and Khalifeh (2020) advocate **addressing the social determinants** of mental health (MH) for new parents **through cross-sector support**. Secure relationships and healthy social and emotional development from conception to age 2 years lay the foundation for lifelong physical and mental health (Parent Infant Foundation, n.d. a). Family leisure provides opportunity for developing bonds through leisure and family time (Kay, 2009).

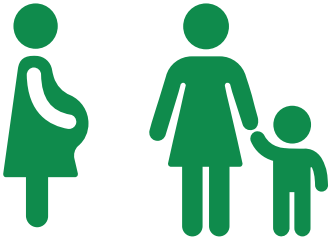
## EVIDENCE REPORT FOR EXPERIENCES OF PERINATAL MENTAL ILLNESS AND PHYSICAL ACTIVITY

**CONDENSED REVIEW AND THIS RESEARCH:** This report brings together **existing knowledge** about perinatal MH and physical activity (PA) and **reports new empirical data** about transitions into parenthood, PA and MH from Edge Hill University. Through this qualitative online survey, new parents told us how transitions into parenthood have often caused reductions in PA and impacted their MH. The new parents surveyed gave insight into their experiences of trying to remain active and the opportunities or support that they would like.

**GOOD PRACTICE AND RECOMMENDATIONS:** Pockets of work both **nationally** (Active Pregnancy Foundation) and **locally** (The Smile Group Wellbeing Walks, and Martyn Dunn PT DadsBods) have begun to promote and support PA for MH for new parents. **Examples** of work in the sport, PA and MH space are provided before **key recommendations** from the current research.



# Condensed Review



- Approximately 1 in 5 women experience perinatal MH problems
- 70% will hide or underplay their perinatal mental illness
- Suicide is the leading cause of maternal death within a year of having a baby (Maternal Mental Health Alliance, 2022).



- Prevalence of postnatal depression (PND) and mental illness among fathers is likely underreported
- Some evidence of double the % of new fathers with depression compared to men in the general population
- Prevalence also increases among men whose partners experience maternal postpartum depression (Hambidge et al. 2021).



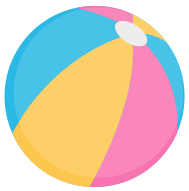
- First 1001 days (conception to age 2) - early relationships critical for infant mental health - impacts for the lifetime of the child and subsequent generations
- Early interactions support the development of language, emotional regulation and other capabilities (Parent Infant Foundation, n.d. b)
- Sport, as a form of family leisure, often used for developing bonds and attachment as children grow older (Harrington, 2009).

Regular exercise/PA is recommended among a range of self help strategies for some mild to moderate perinatal mental illnesses including PND, perinatal anxiety, PTSD and birth trauma (NHS, 2022; Mind, 2022). Despite this, telling somebody who is experiencing mental ill health to be active without appropriate provision and support reduces the issue to individual control.

Crawford (1980), and many others since, have been critical of the healthism and medicalization of everyday life. Healthism is a way of viewing health problems or disease and their treatment at the individual level, with limited recognition of the social and environmental factors that influence health and health improvement strategies. Strategies for health improvement and participation in PA need to go beyond individual choice and individual management.

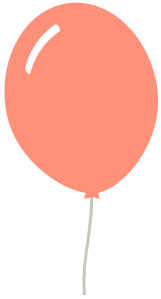
Evidence suggests that the foundations for sporting and active lifestyles to track into adulthood is laid in childhood through families as primary socialisation agents (Haycock and Smith, 2014). Supporting parental and family-based PA is therefore likely to encourage lifelong participation among children by helping them to develop a positive association with physical activity from an early age. Participation data for new parents' PA is not available but we can see trends for participation declining with age through Active Lives data.

Supporting parental mental health can benefit baby through supporting parents ability to build strong connections in the first 1001 critical days (Parent Infant Foundation, n.d. b).



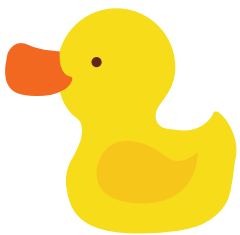
## **BARRIERS:**

Being tired, lack of time, childcare duties, physical limitations, weather, lack of motivation, lack of support, work, money, depression, feelings of guilt (Cramp and Bray, 2011; Mailey et al., 2014)



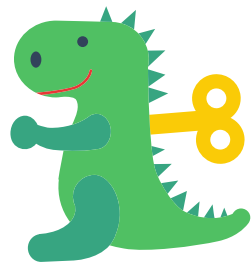
## **ENABLERS:**

Support, active with children/during their activities, being a role model for children, making time/prioritizing benefits to health/family (Mailey et al., 2014). Higher levels of self-efficacy, both exercise and barrier self-efficacy (Cramp and Bray, 2011).



## **PHYSICAL ACTIVITY + FOR PND**

Psycho-social support strategies that included educational information, exercise advice or counselling had beneficial outcomes when they were used to supplement exercise/PA interventions for PND (Brown et al., 2017; Saligheh et al., 2017). Parent education topics that supplemented exercise sessions included baby massage, nutrition for mothers, introducing solids, adjusting to a new lifestyle, communicating with baby, and play development (Norman et al. 2010).



## **BENEFIT WITH OR WITHOUT CHILDREN PRESENT**

Improvements in feeling states post exercise (using the State-trait Anxiety Inventory and the Exercise-induced Feeling Inventory) regardless of whether the baby was present or not (Cramp and Bray, 2010)

The Active Pregnancy Foundation have worked with the Chief Medical Officer (CMO) to produce CMO guidelines for pregnancy and postnatal physical activity. For pregnancy, the key messages are to keep going and adapt if pregnant women are already active, or to start gradually for inactive women. Postnatally, previously active women are advised to gradually re-introduce activity, starting with adaptations, or start gradually for inactive women. The value of walking is promoted with no minimum amount of activity needed to start feeling a benefit. Building up towards 150 minutes/week of moderate intensity activity can be gradually achieved over a 12 month period after birth. There is supportive messaging about starting with just a little activity.

For further detail see:

<https://www.activepregnancyfoundation.org/mums-mums-to-be>



# Examples of Good Practice

In considering examples of good practice, the complexities of programmes and evaluation must be recognised. Pawson (2006) writes about evaluating what works, for whom, in what circumstances, in what respects, over what durations, with what outcomes and why. We should therefore consider the mechanisms (processes, experiences and relationships) that might achieve programme impacts rather than full programmes more broadly (e.g. sport), or solely outcome-based evaluation (Coalter, 2007).

Some examples of work with families or using sport/PA for MH are provided here. There are also pockets of work emerging using libraries as a site for engagement but limited details or evaluation are available for these. In looking to engage inactive populations we need to try new things and have more detailed evaluation about the processes and mechanisms that work, and report what doesn't work, to better inform future practice. So far, very few interventions combine parent education, psycho-social support and/or counselling with PA for new parents.



## 01 This Mum Moves

Informed CMO Guidelines for pregnancy and postnatal women and provide training for Health Visitors and Midwives to gain confidence promoting PA.

## 02 Offload and Tackling the Blues

Work with EHU as research partner to identify mechanisms that work for sport-based mental health programmes.

- Offload: rugby league themed men's mental fitness and wellbeing project (Rugby League Cares)
- Tackling the Blues: sport and arts-based MH programme in schools (EitC).

Key mechanisms include non-clinical settings and peer mentors (Wilcock et al., 2021).

## 03 Mini Movers on Ice

Combine nursery rhymes, stories, movement and play with a family on-ice session and refreshments at the National Ice Centre to improve physical and mental wellbeing and social connectivity for young families, with children 0-4 years, in areas of increased deprivation in Nottingham City. In partnership with The Renewal Trust.

## 04 Local

Check with providers for details on engagement and facilities:

- The Smile Group Wellbeing Walks
- DadBods - Martyn Dunn PT.

# New Parents, Physical Activity and Mental Health Research: Key Findings

**Research Aims:** Develop knowledge about physical activity through transitions into parenthood and physical activity for self-care for any perinatal mental health problems.

**Methods:** Online qualitative survey for parents in the UK of children under 4 years. 218 parents completed the survey (186 new Mums, 32 new Dads). Respondents are likely to be a relatively privileged sample given the typical promotion and completion of online surveys. Those motivated to respond are also likely impacted by the topic and/or have an interest in the area.

## CHANGING FAMILY DYNAMICS

- Identity – some previously active parents who struggle to maintain PA as new parents notice that impacts their MH.
- PA with children present was enabling (maintain PA and role modelling) and constraining (time, type and intensity. Parents often do more individual activity which is more isolating).
- Changes over time – some increase as baby stages change and with postnatal recovery. Some decrease on return to work.
- 89.4% of respondents want to be more active.

## MUMS AND DADS

- Guilt – Many experience guilt for not being active enough AND guilt if they spend money or take time out for their own PA.
- Mums often feel more guilty/failing if you ask them about PA without providing opportunities/reducing barriers.
- Dads are often not accessing support for MH + Dads isolated and not included in baby groups. Therefore PA for MH is a potential hook to bring Dads together but the social element and support needs facilitating.

## ENGAGEMENT IN PHYSICAL ACTIVITY

- Those who do manage to remain active, do so through more efficient, individual activity, family walks, or support from spouse/network for childcare.
- Reasons for activity/what they want from opportunities:
  - fun, social (peer support from people like me), bond with children, entertain children (age appropriate and potential to include different ages), fresh air, connect with nature, free, support from somebody with good knowledge of postnatal bodies (Mums), flexible commitment (both in payment structures and attendance based on babies needs).





## KEY RECOMMENDATIONS

### FAMILY-BASED LEISURE

Broadly speaking, we know that **sports-active families produce sports-active children**, primarily through early socialization into sport and PA. We saw in our research that for some parents who were previously active and struggled to remain active, this impacted their MH and wellbeing; they tried to find ways to modify their activity and involve the family. If we rely on this, participation levels are unlikely to rise. **By working with less active families** we may be more likely to **grow participation** whilst **supporting parental mental health** through support to be active (rather than relying on the individualized idea of self-care) and **supporting infant and child mental health** through nurturing **family bonds** and attachments through **fun** family activity. Sport and PA competes with a range of family-based leisure activities like theme parks and heritage sites (Roberts, Kovacheva and Kabaivanov, 2020) so a **broader offer for physical activity** could be explored.

### INCIDENTAL PHYSICAL ACTIVITY

Most of the new parents in this research wanted opportunities for support with physical activity or mental health to be social. **Social connections** were key for many, including the Dads, some of whom found **fatherhood isolating**. Within any programme, time for building social connections needs facilitating. The reasons given for being active, or what they wanted in a programme were: **fun, enjoyment, creating family bonds, entertaining the children, local, social for the parents, free, fresh air, connect with nature**. Some also mentioned being active for **health, both physical and mental**, and a small proportion mentioned weight loss. It is therefore important to think more broadly about how we promote activity and tap into the **broader motives**, where the **exercise/physical activity is incidental to the other primary motives**.

### ADDRESS SOCIAL DETERMINANTS THROUGH PARTNERSHIP WORKING

Whilst PA or sport for development is not a panacea for the widening socio-economic inequalities in MH and the social determinants of health, there is evidence for improved MH, wellbeing and resilience and reduced social isolation through involvement in PA, linked programmatic interventions and social networks (Smith, Kinnafick and Rogers, 2022). There are past examples of **PA combined with counselling and educational information** having positive impacts for **PND** (Saligheh et al., 2017). Through their Policy Brief and Research Report, Smith, Kinnafick and Rogers (2022) highlight the importance of **collaborative cross-sector partnership** working with a diverse range of community stakeholders and experts by experience in the **design, implementation and evaluation** of programmes. This will be especially important to address inequalities and work towards **equity from the start for babies and young children**. See *Moving for Mental Health* for further evidence and key recommendations: <https://www.sportfordevelopmentcoalition.org/moving-mental-health>



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