Putting research into practice to support mothers to be active

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Research

Physical activity (PA) during pregnancy is beneficial, including lowering risks of gestational diabetes, excess weight gain and preeclampsia. 1,2

- PA levels drop during pregnancy, especially in those with lower socio-economic status (SES) 3
- Interventions based on behaviour change theory can be more effective in achieving outcomes. 4
- The research was used to develop a Leicestershire based perinatal offer.

Aims

To understand and identify what influences PA behaviour of pregnant women with lower SES in Leicestershire.

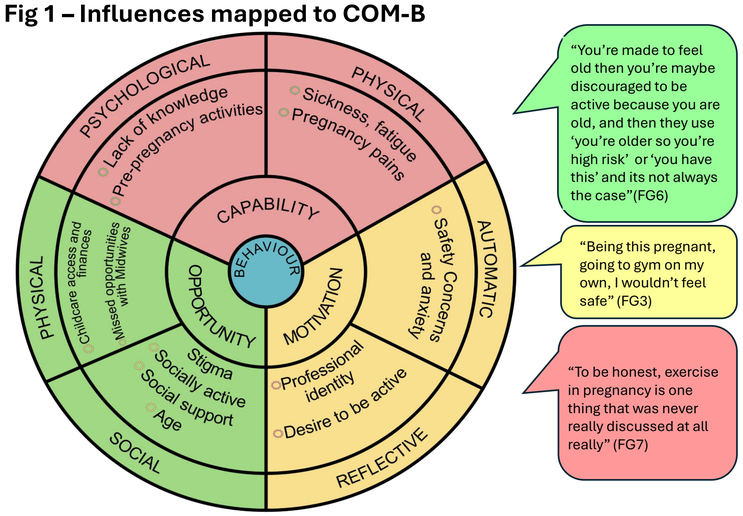
Research methods

- A generic qualitative methodology approach was used.
- Convenience sampling recruited 37 mothers and 8 staff from the Children and Family Wellbeing Service (CFWS) centres, in deprived areas of Leicestershire.
- 10 focus groups were conducted. Thematic analysis using the framework method was used.5
- Transcripts were inductively coded and then themed using the COM-B model of behaviour change where appropriate.

Results

- Sub-themes were constructed under COM-B (Fig. 1)
- Influences impeding PA included: lack of knowledge, pregnancy symptoms,
- Lacking social support and finances, safety and missed opportunities
- from midwives
- Enablers included: social support and social PA
- Age appeared to negatively influence PA, which is a new finding.

Fig 1 – Influences mapped to COM-B



"You're made to feel old then you're maybe discouraged to be active because you are old, and then they use 'you're older so you're high risk' or 'you have this' and its not always the case"(FG6)

"Being this pregnant, going to gym on my own, I wouldn't feel safe" (FG3)

"To be honest, exercise in pregnancy is one thing that was never really discussed at all really" (FG7)

Intervention

The research led to the development of a perinatal programme of physical activity, with Leicestershire County Council and Active Together working in partnership to create 'Active Mum's Club' (AMC). AMC was further co–produced with local mothers who play a fundamental role in the delivery of the programme. The primary aim of AMC was to create an online movement for women and to engage and empower local mothers to take ownership of their movement levels.

A logic model was developed to outline the specific activities and outputs for AMC (Fig 2) and following this 3 core pillars of activity were created. These are outlined opposite.

Fig 2 – AMC Logic Model

Inputs	Activities	Outputs	Outcomes
Funding	Development and coordination of a partnership steering groups	Delivery of online content including social media, website	Increase in pre and post-natal women being active
Officer Time	Development of a training package	Development of the Active Mum's Club brand	Impact on health related conditions of inactive women
Stakeholder Support	Creation of an 'online perinatal physical activity movement'	Various face to face sessions delivered	Decreased stigma around being active whilst pregnant
Volunteer Time	Development of a tiered offer of interventions	Volunteers engaged with and delivering sessions	Increased psychological capability around PA
Links to Existing Programmes /Offers			

"I've had a few mums say that they felt a million times better after coming along than when they left the house that morning"

"I think AMC is a brilliant idea, I love that there are so many walks going on – for free"

Pillar 1 – Advocacy and Education
We advocate for key messages on maternal physical activity to healthcare professionals and wider partners and work to shift the narrative around its importance.

Pillar 2 – Online resources and Community
AMC offers a comprehensive resource and signposting library including informative videos, links to local and national services, national activity guidelines as well as active social media accounts and regular newsletters.

Pillar 3 - Face to face activities
AMC has developed a programme of activities for women through building a network of local instructors, offering classes, linking with community leisure providers and upskilling the professional and volunteer workforce.

"I love the fact I have other mums to talk to whilst getting fit. I feel so alone at times like I have nobody"

Spotlight on Active Mums Club Army

The AMC Army was established following the successful 2022-23 walking programme created to encourage more pre and post natal women to get active. 13 women have now been trained and are leading walks in their local community. To date there has been over 900 attendances across 148 walks throughout Leicestershire. 5 of these walks take place in areas of deprivation.

Impact

A follow up survey was conducted in January 2024 to understand the impact of AMC on women's well-being and activity status. Key headlines include:

- **61%** of participants increased their physical activity levels by at least 1 day after joining AMC
- **42%** of participants felt less anxious at the point of the survey
- **26%** of participants reported an increase in their health status since joining AMC

N.B – Survey data captures women who have signed up to the online offer. The survey used matched data to ensure impact is truly representative.

Other key impacts from AMC include:

- **26** presentations delivered to groups including; INT teams, NHS, Children & Family Service and local PA networks
- **1,386** Instagram & Facebook posts with a reach of **110,000**
- **62** health professionals trained in e-Learning for Health online module 'Pregnancy & post natal period – Being Active'
- **18** newsletters sent with a distribution list of over **1025**
- **954** Active Mum Clubs members
- Over **26,500** individual views of the AMC website

References

1. Santos S, Voerman E, Amiano P, Barros H, Beilin LJ, Bergström A, et al. Impact of maternal body mass index and gestational weight gain on pregnancy complications: an individual participant data meta-analysis of European, North American and Australian Cohorts. BJOG 2019:126(8):984-95. https:doi.org/10.1111/1471-0528.15661
2. Aune D, Saugstad OD, Henriksen T, Tonstad S. Physical Activity and the Risk of Preeclampsia: A Systematic Review and Meta-Analysis. Epidemiology 2014;25(3):331-43. doi: 10.1097/EDE.0000000000000036
3. Abbasi M, van den Akker O. A systematic review of changes in women's physical activity before and during pregnancy and the postnatal period. J Reprod Infant Psychol 2015;33(4):325-58. https://doi.org/10.1080/02646838.2015.1012710 https://doi.org/10.1371/journal.pone.0254364
4. Currie S, Sinclair M, Murphy MH, Madden E, Dunwoody L, Liddle D. Reducing the decline in physical activity during pregnancy: a systematic review of behaviour change interventions. PLoS One. 2013; 8(6):e66385. https://doi.org/10.1371/journal.pone.0066385
5. https://bmcmedresmethodol.biomedcentral.com/articles/10.1186/1471-2288-13-117