



#24765: Feasibility and acceptability of implementing a Pelvic Floor Muscle Exercise (PFME) programme in antenatal care: process evaluation of a feasibility and pilot randomised controlled trial

Salmon V¹, Hay-Smith J², Smith C³, Jones E³, Edwards E⁴, Terry R¹, May R¹, De Giorgio L¹, Frawley H⁵, Bick D⁶, MacArthur C³, Dean S¹

1. University of Exeter, 2. University of Otago, 3. University of Birmingham, 4. Birmingham Women's and Children's NHS Foundation Trust, 5. University of Melbourne, 6. University of Warwick



Introduction

Urinary incontinence (UI) affects approximately 30% of women after childbirth.

Evidence indicates Pelvic Floor Muscle Exercises (PFME), begun in pregnancy, can prevent UI antenatally and postnatally.¹

Midwives in the UK are well placed to provide advice and education during the antenatal period, yet they lack confidence to teach PFME.

The APPEAL research programme developed a comprehensive training package for midwives, and resources for pregnant women, to support teaching of PFME within antenatal care.²



This training package was evaluated in a feasibility and pilot cluster randomised controlled trial (RCT) with the parallel process evaluation reported here.

Process Evaluation Aim:

To understand if the training, implementation and trial processes were feasible and acceptable to those delivering support (midwives) and those receiving the support and resources (women).

Methods

Community midwifery teams from two UK hospitals allocated to intervention (n=8) or control (n=9) teams.

Midwives in intervention teams received the training package and were asked to implement PFME education and support as trained; midwives in control teams continued to deliver standard antenatal care.

The process evaluation used multiple methods and data sources:

Qualitative online or telephone interviews with:

- Intervention team midwives (during implementation and post-trial),
- Control team midwives (post-trial),
- Women who received care from intervention or control team midwives (post-trial).

Implementation evaluation questionnaire for intervention teams.

Monitoring data collected by intervention champions.

Analysis was informed by mapping research questions, methods and data sources to a framework.

Analysis considered processes involving trial clusters (community midwifery teams), the target population delivering PFME in antenatal care (community midwives) and the target recipients of the PFME teaching (women).

Processes such as fidelity, uptake, challenges and opportunities for implementation, were analysed to understand the feasibility and acceptability of implementing the intervention.

Results

Response of trial clusters (midwifery teams)

95 community midwives and 11 maternity support workers (MSWs) were trained. All intervention teams (n=8) recruited a midwife champion to support implementation; this role was helpful for support and advice.

Delivery to and response of midwives during trial

Interviews with intervention midwives (n=13) concluded the intervention was well received and acceptable:

"I'm enthusiastic about it"

"I do feel confident" about the intervention

"it's a very good fit" [with personal and professional values]

"I think it should help get that message across"

Key challenges were:

"It just feels a bit impossible [to implement]" mainly due to volume of work, time pressures for appointments and wider system challenges

Difficulty remembering everything with "so many other priorities"

Implementation evaluation questionnaire results, completed by n=59 intervention midwives and MSWs, showed:

- Providing the resource bag for women was the most frequently implemented component (89% most/all of the time).
- Asking women to practice PFME during an appointment the least frequently implemented (45% most/all of the time).
- Resource bag (n=31), prompt cards (n=17) and team champions (n=16) were the most important resources.
- Top challenges: 'Lack of time' (n=39); 'forgetting' (n=29); and 'language barriers' (n=26).
- 44 physiotherapy referrals were reported during the trial.

Interviews with intervention team midwives post-trial (n=6) indicated increasing implementation inconsistency as time passed since training, and ongoing challenges with burden of delivery. Interviews with control team midwives post-trial (n=12) confirmed lack of consistency for implementing PFME into standard care.

Response of women

Interviews with women post-trial (intervention n=13, control n=16) noted that antenatal PFME advice was received by women in both trial arms with some women, only from the intervention arm, recalled being given the resources. It was evident from all interviews (women and midwives) that understanding why and how to do PFME is important and an intervention like this was wanted.

Conclusions

Training was delivered as planned, with minimal evidence of cross-contamination.

The APPEAL intervention was acceptable to midwives and feasible to implement. Midwives felt enthusiastic about embedding this in antenatal care.

Despite challenges, midwives and women reiterated a desire for better PFME advice and education in the form of an intervention like the one developed for this trial. However, service-level constraints need to be addressed if post-programme implementation is to be successful.

References

- Woodley SJ, Lawrenson P, Boyle R, Cody JD, Mørkved S, Kernohan A, Hay-Smith EJC. Pelvic floor muscle training for preventing and treating urinary and faecal incontinence in antenatal and postnatal women. *Cochrane Database of Systematic Reviews*, 2020, Issue 5. DOI: 10.1002/14651858.CD007471.pub4.
- Dean, S, Salmon V, Terry R, Hay-Smith J, Frawley H, Chapman S, Pearson M, Boddy, K, Cockcroft E, Webb S, Bick D, MacArthur C, *et al*. Teaching effective pelvic floor muscle exercises in antenatal care: design and development of a training package for community midwives in the United Kingdom. *International Continence Society conference Vienna 7-10 Sept 2022*. doi.org/10.1016/j.cont.2022.100204