

UPTAKE OF ANTEPARTUM CONTINENCE SCREENING AND PELVIC FLOOR MUSCLE EXERCISE INSTRUCTION BY MATERNITY CARE PROVIDERS: AN IMPLEMENTATION PROJECT.

Hypothesis / aims of study

Pelvic floor muscle (PFM) training to prevent postpartum urinary incontinence (UI) is recommended for continent, pregnant women having their first baby, and should be offered as a supervised and intensive strengthening antepartum PFM training programme(1). Research has investigated patient barriers to uptake of PFMT, however little attention has been given to healthcare provider barriers to implementing these recommendations. Physiotherapists and continence nurses routinely implement these recommendations, however they do not have contact with all pregnant women. Midwives and Obstetricians do not routinely undertake continence screening, nor instruct in PFM training beyond brief verbal or written instructions. For best practice to be implemented routinely in public health care settings, a change in primary maternity practice is required. Feasibility and acceptance of such a change is not known. The aim of this project was to trial an implementation project to increase the uptake of continence screening and PFM exercise instruction, in collaboration with midwives and obstetricians, in a public hospital setting.

Study design, materials and methods

This was a translational research study, using pre- / post-intervention cohort study design. Three maternity sites within a metropolitan public health network were invited to participate in 2010 – 2012. Midwives and obstetricians were invited to participate in a new continence screening and PFM exercise instruction implementation project, to be delivered at one antenatal visit. A barriers-enablers analysis was undertaken and a change process model followed, incorporating themes of orientation, insight, acceptance, change and maintenance (2). At each stage of this process, the findings were used to modify the development of the subsequent step, utilising anthropological methodology. The tools used in the intervention included a symptom screening questionnaire, a pelvic floor risk assessment tool (3), and continence and PFM management checklists. This was a pilot implementation project, hence no formal sample size calculation was performed. Qualitative outcomes were reported descriptively, and themes extracted from semi-structured interviews and informal discussion.

Results

The table below illustrates each step in the process of change model that was undertaken, and the results at each step.

Table: Process of change model applied

Phase of change	Behaviour change strategies	Participants	Themes and responses to behaviour change strategies
Orientation	Educational meetings; local opinion leaders	Midwives: n=30 from antenatal clinics and postnatal wards; n=10 from 'Family Birth Centre'; n=2 from 'Know Your Midwife' program Obstetricians: n=20 from antenatal and postnatal clinics	Lack of awareness of guidelines and recommendations; interest in the extent of the problem and the need to address it
Insight	'brain-storming' meetings; local opinion leaders; informal discussions with unit managers and staff;	Midwives: as above Obstetricians: n=3 from antenatal and postnatal clinics	Acceptance regarding continence screening; concern regarding time commitment within consultation to undertake protocol; 'cultural' opposition to perform PFM examination; lack of confidence in skill-set to undertake this. Collaborative development of modified protocol for PFM exercise instruction, acceptable to staff. Concern regarding time commitment within consultation to undertake protocol; did not consider the intervention was part of routine obstetric care
Acceptance	Tailored education regarding UI and PFM exercise instruction; strategies to increase self-efficacy; role-modelling; feedback on consultations	Midwives: n=10 from 'Family Birth Centre'; n=2 from 'Know Your Midwife' program	Midwives found the role-modelling and immediate feedback on patient consultations empowering; agreement reached to implement the intervention routinely
Change	De-briefing; ongoing support if required; provision of resources to assist independent practice	Midwives: as above	Positive feedback from pregnant women and belief in the clinical value of the intervention enabled integration into the clinical care pathway

Maintenance	Audit and feedback	Midwives: as above	6-month follow-up (post cessation of data collection) revealed integration and embedding into routine care
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PFM=pelvic floor muscle; UI=urinary incontinence

The barriers-enablers analysis highlighted specific system and clinical factors which either obstructed or facilitated the implementation of the proposed intervention. Twelve midwives and no obstetricians participated in the trial of intervention. At the 'insight' phase, an alternative model of PFM assessment was designed, which allowed a step-wise approach: from individualised, detailed verbal instruction, modified according to the pregnant woman's feedback to the instruction, to visual perineal assessment, to *per vaginam* PFM examination only if the midwife felt this was necessary. The continence screening and verbal instruction process was timed at 5 – 10 minutes, depending on the individual consultation. This model gained cultural acceptance and was considered to fit local work patterns, therefore became a key enabling factor to agreement to trial the intervention.

Interpretation of results

This study has provided valuable data on barriers and enablers to implementation of best practice guidelines of continence screening and PFM exercise instruction by maternity care providers in a public health network. The results have highlighted the challenges of a complex intervention in a multi-disciplinary setting, and the need for contextual adaptation in order to engage key stakeholders in provision of best practice. Only midwives from midwifery-led clinics reached the 'acceptance' phase of change. A modified method of PFM assessment and exercise prescription was adopted which was acceptable to midwives in the study and showed sustainability beyond the data collection phase of the project. Future research is required to assess the effectiveness of this approach on continence outcomes in women.

Concluding message

Midwives working in public health maternity care units are able to implement a continence screening and individualised PFM exercise verbal instruction session in their routine care of pregnant women.

References

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2. Grol, R., et al., eds. Improving patient care: the implementation of change in health care. 2nd ed. 2013, Wiley Blackwell: Oxford.
3. Pearl, G. and J.H. Herbert, Assessing pelvic floor during childbearing year. Nurs Times, 2008. 104(18): p. 40.

Disclosures

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