ASSESSING PELVIC FLOOR DURING CHILDBEARING YEAR

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PromoCon, a charity led by the Disabled Living Centre that focuses on the promotion of continence and management of incontinence, has developed a multiprofessional, multifaceted approach to managing pelvic floor dysfunction associated with pregnancy and childbirth.

A significant number of women experience pelvic floor muscle dysfunction during the year they give birth or later in life. Symptoms resulting from damage to the pelvic floor can include urinary stress and urge incontinence, faecal incontinence, genitourinary prolapse and sexual dysfunction.

The prevalence of urinary incontinence at any time during pregnancy is estimated to be between 32% and 64% for all urinary incontinence and between 40% and 59% for stress urinary incontinence (Hunskaar et al, 2005). Wilson et al (1996) identified a prevalence of incontinence of 34.3% in an analysis of 1,505 women three months following delivery.

Childbirth is the most common cause of faecal incontinence in healthy adult women (Kamm, 1994) and can affect up to 8% of women who have had one previous delivery (Højberg et al, 2000).

Pelvic organ prolapse (POP) is the descent of the pelvic organs, which results in a protrusion of the vagina and/or the uterine cervix. POP is estimated to affect up to 48% of women who have had a vaginal delivery (Hunskaar et al, 2005).

Despite the high prevalence rates for the symptoms of pelvic floor muscle dysfunction, the majority of women with urinary and faecal incontinence or pelvic organ prolapse do not ask for help. Reasons for this include:

- They have low expectations of treatment;
- They believe people should cope on their own.

In addition, embarrassment and an increase in severity, duration and type of symptom may be important in influencing women's decisions to hide their problem (Hunskaar et al, 2005).

Whether women seek and receive the help they require at an appropriate time during pregnancy and throughout the childbearing year is also influenced by the knowledge and understanding of the healthcare professionals looking after them (Hunskaar et al, 2005).

Identifying the problems

PromoCon's helpline service had identified a significant number of women who do not have access to appropriate treatment but requested advice on managing the consequences of pelvic floor muscle dysfunction.

Simultaneously, healthcare professionals had expressed concerns to the helpline and during PromoCon study days about the level and type of services available for women experiencing pelvic floor muscle dysfunction.

In 2003 a project team was established by PromoCon to look at improving the experience for these women. The project team included specialist physiotherapists, specialist nurses, midwives and health visitors, as well as obstetric and gynaecology, urogynaecology and colorectal consultants and a speech and language therapist.

The project initially mapped services and reviewed patient information literature.

Mapping services

A questionnaire was sent to a healthcare professional at each PCT who was known to members of the project team in the north west of England; they were asked to complete this on behalf of their whole service. The return date was four weeks, which enabled a snapshot of services to be made; the response rate was 70%.
The results highlighted large variations in the provision of services and also the professional background and knowledge base of those providing them. It also identified that, in many areas, referrals for treatment happened more by chance than via an identified pathway of care.

**Review of patient information literature**

Ideally, pelvic floor muscle exercises (PFME) should be taught by a trained healthcare professional following an assessment and examination (Bump et al, 1991; Be et al, 1988). However, the majority of services for pregnant women are unable to offer this due to limited resources, so learning PFME from literature is often the only option available.

The views of service users were included in an evaluation of existing PFME literature available from a variety of sources, including charities, product companies and healthcare services.

The evaluation identified features that made some literature more accessible than others and therefore more likely to support women in learning the exercises correctly. It also identified information that was outdated or inaccurate.

Patient literature needs to be written specifically for its target readership so it was not appropriate to write a definitive leaflet. Therefore PromoCon (with financial support from SCA) worked with users and healthcare professionals and produced a booklet of guidance for writing PFME literature.

**PromoCon pelvic floor risk assessment tool**

The mapping project identified problems with access to treatment. The project team decided to review existing risk assessment tools for PFME dysfunction, and identified that existing tools did not cover the whole childbearing year. This runs from the time the woman becomes pregnant to the period when care is provided by a health visitor following childbirth.

The need for a pelvic floor muscle risk assessment tool was identified. The main objectives of developing a new assessment tool are listed in Box 1.

A simple tick-box system was chosen because the team wanted a tool that healthcare professionals would find easy to use. There was insufficient evidence in the literature to support the use of a weighting system for factors affecting pelvic floor health. Therefore the tool has a list of potential antenatal and postnatal risk factors, with the risk of pelvic floor dysfunction rising as more risks are identified (Fig 1, p43). The tool was designed to be used in three parts.

**BOX 1. OBJECTIVES OF THE RISK ASSESSMENT TOOL**

- Identify those at risk of pelvic floor muscle dysfunction without this resulting in inappropriate referrals.
- Give clear guidelines for action.
- Easy and quick to use.
- Scoring system that is simple and uncomplicated.
- Based on best available evidence.

Part 1 should be used at the first antenatal booking appointment in order to screen for existing problems and alert staff to any need to take appropriate action during pregnancy.

This part used evidence of risk factors for PFME dysfunction that the group felt were relevant to the antenatal assessment (Bower et al, 2005; Gurbuz et al, 2005; RCOG, 2001; Hendrix et al, 2002; Rortveit et al, 2001; Højberg et al, 2000; MacLennan et al, 2000; Chiarelli and Campbell, 1997; Spence-Jones et al, 1994).

A scoring system is used to direct patients to the continence service where appropriate. It also recommends discussing management and delivery options for women with a history of bladder and/or bowel problems, including bedwetting or an antenatal score higher than three.

Part 2 is used following delivery to screen for women needing immediate postnatal continence care. It includes risk factors that the project group believed were relevant following delivery (Chiarelli et al, 2003; Christianson et al, 2003; Gupta et al, 2003; Farrell et al, 2001; RCOG, 2001; Højberg et al, 2000; Carrol and Belizan 1997). An antenatal score greater than three was also added as an added risk.

Part 3 suggests appropriate action for a healthcare professional caring for a woman following delivery. Sharing the assessment with members of primary healthcare teams following discharge encourages the teams to become involved in the care of women with pelvic floor muscle dysfunction.

The tool indicates that women with a high PFME dysfunction risk score should be referred directly to the continence service. It is acknowledged that continence service provision will vary between trusts and the tool is designed to be customised for local services. The electronic version allows for local details for referral to be added and for a trust’s logo to be inserted into the document.

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**REFERENCES**


The assessment tool, sponsored by a grant from Neen Healthcare, is available on a tear-off pad and electronically from PromoCon or Neen Healthcare for a small donation. The electronic version can be customised with a trust’s logo and referral information; the tool has been validated in its current form so other details must not be modified. When used, there must be an acknowledgement that it is the intellectual property of PromoCon. The training pack is available electronically for a small donation from PromoCon or Neen.

If you would like more information about this project, please contact PromoCon on 0161 834 2001.
Piloting the tool
All members of the project team were invited to test the tool in their own work situations. Minor changes were made in light of the feedback from this process.

The assessment tool was then piloted. Ashton, Leigh and Wigan PCT in Lancashire was chosen as the pilot site because it was represented on the project team by a midwife, a specialist continence nurse, a specialist physiotherapist and an obstetrician.

An audit was undertaken to collect information on the number and source of referrals to the specialist physiotherapy service. The specialist physiotherapist made an area in 2002 over a six-month period. The specialist physiotherapist and the continence nurse specialist then embarked on running a training programme targeted at midwives and health visitors. From across the trust, 70% of midwives and 50% of health visitors attending the training. Some other healthcare professionals, including trainee GPs, also attended.

The training took place over several weeks in maternity wards, clinics and antenatal clinics, with each person attending one 90-minute session. The sessions, which were kept informal with opportunities for discussion, covered:
- Anatomy and physiology of the pelvic floor;
- Symptoms and causes of incontinence;
- Treatment, including pelvic floor muscle exercises.

The tool was then introduced across the trust and after six months the pre-pilot audit was repeated. The analysis of the referral pattern identified that the assessment tool was extremely successful in correctly identifying women who are at risk of incontinence. While the number of referrals to the specialist continence physiotherapy service of pregnant women increased, no inappropriate referrals were identified.

Before the pilot, the source of the referrals was 72% from the obstetrics and gynaecology department and midwifery services, and 28% from GPs. Following implementation of the tool 100% of the referrals came from the obstetric and gynaecology department during pregnancy.

In the 2002 audit, all referrals (100%) were made when women were in the postnatal period. In 2005, 19% of women referred were in the antenatal period. The tool supports midwives as it enables them to refer women directly to the specialist physiotherapist at an earlier stage. This is instead of women consulting their GP for referral after living with their continence problems for a while.

This pilot study had a limited scope and there is a need to explore whether the tool missed identifying any women who were at risk. The scope of the pilot did not allow for testing of reliability.

Midwives' perception of the tool
During the pilot phase a midwife conducted a linked study to investigate the participating midwives’ perceptions of using the tool.

The midwives reported that it took less than two minutes in total to complete. They found it easy to use and said they would recommend its use to other units. They felt that the training and the tool equipped them to give better advice on PFME and continence issues. They also found that the tool acted as a prompt for them to discuss continence and PFME health to women, and identify those who were at risk.

Training package
The final stage of the overall project promoting pelvic floor health has involved the development of a training package to support the use of the tool; this includes a PowerPoint presentation and lecture notes. The training pack is based on material used in the pilot and is primarily targeted at midwives and health visitors.

Conclusion
The NICE guidelines on urinary incontinence in women suggest that women in their first pregnancy should receive pelvic floor muscle treatment as a preventative intervention for urinary incontinence, and that a trial of pelvic floor muscle treatment should be offered as a first-line treatment to women with stress or mixed urinary incontinence. This assessment tool supports the implementation of the NICE (2006) guidelines.

The outputs from the project – which include guidance on writing pelvic floor muscle exercise literature, a risk assessment tool and a training pack to support the tool – have been piloted. The pilot results demonstrated that the approach was successful and also acceptable to staff, in particular to midwives. The project success was also assisted by collaboration with the business community to enable the guidance, tool and training pack to be available at low or no cost.