

## ASSESSING PELVIC FLOOR QUALITY OF LIFE IN POSTPARTUM WOMEN-PPFDQ, A NOVEL SCREENING TOOL

### Hypothesis / aims of study

Pelvic floor dysfunction (PFD) is common following child birth with one in three women suffering postpartum urinary incontinence and one in ten suffering anal incontinence.<sup>(1)</sup> PFD can occur following both vaginal and abdominal deliveries and lead to a reduced quality of life. Up to 87% of Obstetric Anal Sphincter Injuries (OASIS) are undiagnosed at delivery and PFD is significantly worse in women who have suffered OASIS.<sup>(2)</sup> PFD may thus be a marker for OASIS undiagnosed at delivery.

General Practitioners (GPs) and midwives are established points of contact for women at 6 weeks postpartum, but there is evidence that up to 71% of women suffer in silence.<sup>(3)</sup>

Existing pelvic floor questionnaires tend to be long (Pelvic Floor Incontinence Questionnaire) or very specific, ICIQ-Vaginal Symptoms and are not validated for postpartum women.

The aim of this study was to create a new short symptom questionnaire to screen for PFD in postpartum women.

### Study design, materials and methods

To ensure 'Content validity,' focus groups, consisting of patients, GPs and midwives were convened.

Responses from the patients focus group included ***"I had been pre-occupied with the assessment of my baby and didn't think to ask questions about my pelvic floor," "I felt embarrassed"*** and ***"If I had been asked, I would have discussed it."***

Responses from the GPs and midwives focus group included ***"Time constraints during the check-up appointment meant balancing care for the mother and baby and may remove attention from the mother's pelvic floor"*** and that a ***"Questionnaire utilised in person or preferably by a nurse over the telephone would be beneficial."***

It was confirmed a structured screening questionnaire, to be used in person, or by telephone would be beneficial.

Based upon concerns identified by these focus groups, a tertiary center multidisciplinary team of women's health nurses, physiotherapists, urologists, colorectal surgeons and urogynaecologists devised a draft questionnaire. Feedback regarding the draft questionnaire was received from the focus groups and the questionnaire amended accordingly. A pilot version of the questionnaire with 9 items was then successfully tested on 10 patients.

A prospective cross sectional study was then carried out to validate PPFDQ. Ethical approval was obtained. All postnatal ward patients  $\geq 18$  years, English literate and able to provide informed written consent were invited to participate between July and December 2014. All trial participants were called by telephone 4-8 weeks postpartum to complete the PPFDQ. 40 women were required to complete it again a week later.

'Test/re-test reliability' compared the difference between the responses at the first and second call with weighted kappa(k).

'Internal consistency' was assessed using Cronbach's alpha ( $\alpha$ ) correlating items addressing similar issues within the questionnaire.

MedCalc and SPSS were used for statistical analysis.

### Results

210 women were recruited. 177 participated in the first phone call, of which 45 participated in the second. Median age of 33 years (18-47 yrs), median BMI 25.3(16.7-49.9), and median parity 2(1-9). 9.6%(17 women) were delivered by forceps, 10.7% (19) by ventouse, 19.2% (34) by caesarean section, and 58.8% by spontaneous vaginal delivery. 1.7% (3) had a vaginal delivery for a first twin followed by CS for the second twin. 34.5% (61) had no trauma or 1<sup>st</sup> degree tear, 60.5% (107) 2<sup>nd</sup> degree or episiotomy, 5.1%(9) 3<sup>rd</sup> degree tear and none had a 4<sup>th</sup> degree tear.

Psychometric analyses showed good test/re-test reliability throughout the questionnaire ( $k=0.66-0.97$ ), and good internal consistency ( $\alpha=0.62$ ).

Question	Weighted kappas (k)	Confidence Interval
1	0.72	0.41 - 1.00
2	0.74	0.47 - 1.00
3	0.68	0.44 - 0.82
4	0.77	0.46 - 1.00
5	0.97	0.91 - 1.00
6	0.91	0.81 - 1.00
7a	0.66	0.39 - 0.93
7b	0.94	0.86 - 1.00
7c	0.79	0.34 - 1.00
8	0.94	0.86 - 1.00

#### Interpretation of results

PPFDQ, is a novel post-partum pelvic floor function telephone based questionnaire devised in co-operation with a multidisciplinary team in both primary and tertiary care to ensure content validity. PPFDQ also demonstrated good test/re-test reliability and internal consistency.

#### Concluding message

These findings support the use of the PPFDQ as a global assessment of pelvic function in post-partum women. Further research will now be carried out to assess PPFDQ responses in women with previously undiagnosed OASIS to ascertain if PPFDQ can be used as a tool to screen for undiagnosed PPFDQ.

#### References

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2. Andrews V, Sultan AH, Thakar R, Jones PW. Occult anal sphincter injuries--myth or reality? BJOG. 2006 Feb;113(2):195-200
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#### Disclosures

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