

## ANAL AND URINARY INCONTINENCE IN MULTIPAROUS WOMEN NINE MONTHS AFTER CHILDBIRTH.

### Hypothesis / aims of study

Faecal and urinary incontinence are distressing and disabling symptoms causing significant morbidity predominantly in women. The social, psychological, occupational, domestic, physical, and sexual lives of all women are affected. Many of the women sufferers can trace the aetiology of their condition back to childbirth. Faecal and urinary incontinence are linked through a common mechanism of muscle and nerve injury following childbirth.

The aim of the study were to investigate whether questionnaires posted to women nine months after childbirth can facilitate the identification and assessment of women with anal and/or urinary incontinence that would not normally have sought help. Other aims were to determine the prevalence of faecal and urinary incontinence after childbirth, to measure how faecal and urinary incontinence affects a woman's quality of life, and to compare quality of life scores of multiparous and primiparous women.

The study was carried out on multiparous women. This is a follow up study to one performed by the authors on primiparous women (1).

### Study design, materials and methods

Multiparous women who delivered more than nine months ago were selected consecutively from the Birth Register in a district general hospital. If urinary symptoms were present she was asked to complete the King's Health Questionnaire and for anal symptoms, the Manchester Health Questionnaire (1).

The women all delivered at least nine months prior to the study to avoid including those who may have had symptoms post partum which have since spontaneously resolved (2).

The domain scores for the questionnaires were analysed using Statsdirect. The data is non parametric: comparisons of the medians were made using a Mann Whitney - U test.

### Results

189 (38%) of the five hundred multiparous women responded. This compares to 65% of respondents from the initial study on primiparous women (2). The denominator used in calculating the prevalence of symptoms was the number of respondents, not the total number of women who had been sent the questionnaire, as the non-respondents cannot be assumed to be asymptomatic. 118 (63%) were symptomatic, 71 (37%) stated that they were asymptomatic. 35 women requested help with their symptoms.

The mean age of the respondents was 31 years (19–42). The parity of the respondents ranged between 2 and 6 with a mean of 2.48 (sd = 0.7). The mean gestational age of the last pregnancy at delivery was 39 weeks and the mean birthweight was 3475g (sd = 515.13).

84.9 % had a vaginal delivery, 2.4% had a ventouse delivery, 7.8% an emergency caesarean section and 4.8% an elective section. Only one woman suffered a third degree tear.

In most cases there was no significant difference between the median scores of the questionnaire domains between multiparous and primiparous groups. However there was a significant difference in the social limitations domain in patients with urinary incontinence ( $p=0.03$ ). Patients with anal incontinence showed a significant difference in the emotions domain ( $p=0.02$ ). (tables 1 and 2).

### Interpretation of results

A higher number (65%) of primiparous women responded to the initial study compared with 38% of multiparous women. This could infer that multiparous women have more demands on their time. Incontinence symptoms are not uncommon amongst women in the reproductive age group. 62% of respondents were symptomatic but of these only 35 (30%) requested help. This suggests that women may not find their symptoms to be functionally or socially troublesome.

The results show there is no statistically significant difference in most of the domains of the KHQ. There is some evidence of a difference for two of the domains, social limitations (KHQ) and the emotions (MHQ), however further research would be needed to confirm this finding.

### Concluding message

Self-completion questionnaires can help to identify women who have symptoms of incontinence after childbirth. Our study shows that there is no difference in the incontinence symptoms of multiparous compared to primiparous women.

### References

1. BJOG 2001; 108:1057-1076
2. Int Urogynecol J Pelvic Floor Dysfunct 2005; 16(5): 405-408
2. BJOG 1997; 104:1374-1379

Table 1. Table 1. Table comparing scores for multiparous and primiparous women who responded to the Kings Health Questionnaire with **urinary symptoms**.

KHQ Domains	Multiparous women		Primiparous women		Mann Whitney U Test P values
	n	med (IQR)	n	med (IQR)	
General Health Perception	118	25 (0-25)	117	25 (25-25)	P=0.27
Incontinence Impact	117	25 (0-25)	116	25 (0-25)	P=0.94

Role Limitations	112	0 (0-25)	115	0 (0-25)	P=0.34
Physical Limitations	112	12.5 (0-25)	115	0 (0-12.5)	P=0.14
Social Limitations	112	0 (0-0)	114	0 (0-0)	P=0.03
Personal Relationships	94	0 (0-12)	94	0 (0-0)	P=0.07
Emotions	108	0 (0-19)	112	8.3 (0-16.7)	P=0.85
Sleep / Energy	110	25 (12.5-37.5)	116	25 (12.5-37.5)	P=0.995
Severity Measures	107	15 (5-25)	110	12.5 (5-25)	P=0.27

Table 2. Table comparing scores for multiparous and primiparous women who responded to the Manchester Health Questionnaire with **anal symptoms**.

KHQ Domains	Multiparous women		Primiparous women		Mann Whitney U Test P values
	n	med (IQR)	n	med (IQR)	
General Health Perception	43	25 (0-25)	37	25 (25-25)	P=0.89
Incontinence Impact	43	0 (0-25)	37	25 (0-25)	P=0.20
Role Limitations	43	0 (0-25)	37	0 (0-25)	P=0.99
Physical Limitations	43	0 (0-6)	37	0 (0-0)	P=0.76
Social Limitations	43	0 (0-0)	37	0 (0-0)	P=0.68
Personal Relationships	41	0 (0-0)	32	0 (0-3)	P=0.53
Emotions	42	0 (0-23)	37	16.7 (0-33)	P=0.02
Sleep / Energy	42	0 (0-22)	37	0 (0-12.5)	P=0.57
Severity Measures	43	5 (0-15)	37	10 (0-30)	P=0.61

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**HUMAN SUBJECTS:** This study was approved by the Oldham Local Ethics Committee, UK and followed the Declaration of Helsinki Informed consent was obtained from the patients.