# P Best in Category Prize - Geriatrics / Gerontology

30

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# IS THE BELIEF THAT URINARY INCONTINENCE IS NORMAL FOR AGING RELATED TO OLDER WOMEN'S EXPERIENCE OF UI?

# Hypothesis / aims of study

Urinary incontinence (UI) is increasingly common in later life. For many women UI is seen as a normal part of growing older. This attitude may serve to "normalise" the condition in older women and make the well-described delays in treatment seeking more likely. Severity of incontinence, younger age and a greater severity of disease experience are known to influence the likelihood of seeking help, but in a large community study, only 15.3% of people >60 years of age with incontinence expressed a "felt need" for healthcare [1,2]. The aim of this study was to describe the distribution of UI, including type, frequency and impact on quality of life and likelihood of having sought help, in a large cohort of Canadian community dwelling older women. The relationship of the belief that UI is normal for aging with frequency of urine leakage, pad use, quality of life and help-seeking behaviour was examined and analysed

## Study design, materials and methods

This was a secondary analysis of data collected as part of a large randomised controlled trial which evaluated whether continence promotion and self-management improved HRQoL in community dwelling older women. This study used baseline data from all women who signed consent for data collection and who were both eligible and ineligible for participation in the primary study. Collected data included validated assessments of overall health, physical activity, frequency of incontinence using the ICIQ-FLUTS scale, incontinence subtype (urgency, stress, mixed, other, help-seeking behaviour, and quality of life using the Incontinence Quality of Life (I-QOL) and Short Form 12 (SF-12) questionnaires.

Data were analysed in STATA version 12.1 to describe the characteristics of the sample, the distribution of LUTS / UI, UI severity and quality of life. The relationship between symptom severity and QoL were examined using correlations and compared to women without LUTS / UI using unpaired t-tests. Multivariable logistic regression analyses described the relationships between diagnosis, severity and impact on HRQoL using the belief that UI is normal for ageing as the dependent variable.

#### Results

The overall sample included 4446 women, with a mean (SD) age of 78.23 (8.99) and mean (SD) BMI of 26.55 (5.55). Women without incontinence numbered 2424 (54.52%). Of those 2022 (45.48%) with UI, 729 (16.4%) had a diagnosis of stress UI, 453 (10.19%) urgency UI, and 840 (18.89%) mixed incontinence symptoms. Women who contributed greater ≥19 responses to the I-QOL questionnaire, n=3579, were included in this analysis. The average (SD) IQOL score was 84.68 (19) /100. 2149 (68.56%) women believed that urinary incontinence is normal for ageing.

Incontinence diagnosis (stress, urgency, or mixed UI) was significantly associated with BMI (adjusted relative risk ratios: stress 1.03, p < 0.001; urgency 1.04, p < 0.001; mixed 1.07, p < 0.001), but not age (adjusted relative risk ratios: stress 0.98, p < 0.001; urgency 1.00, p = 0.501; mixed 1.00, p = 0.635). Quality of life was statistically significantly decreased with increasing frequency of urine leakage (adjusted regression coefficients: once or less per week -3.51, p < 0.001; 2-3 times per week -8.56, p < 0.001; once per day -11.24, p < 0.001; several times per day -22.67; p < 0.001). All types of UI were associated with a decrease in IQOL score: stress incontinence (adjusted regression coefficients: -3.18, p < 0.001), followed by urgency UI (-5.44, p < 0.001), and mixed UI (-14.46, p < 0.001). Two or more urinations per night was statistically significantly associated with decreased quality of life (adjusted regression coefficients: 2 per night -3.23, p < 0.001; 3 per night -7.86, p < 0.001, 4 or more -15.94).

Frequency of urine leakage	Adj OR (95% CI)	p-value
Never	1	
Once or less per week	1.69 ( 1.38, 2.08 )	<0.001
2-3 times per week	1.88 ( 1.43, 2.48 )	<0.001
Once per day	1.64 (1.18 ,2.28 )	0.003
Several times per day	1.06 ( 0.75, 1.50)	0.751
Number of pad used per day, n (%)	Adj OR (95% CI)	p-value
0	1	
1	1.54( 1.25, 1.91 )	<0.001
2	1.39 ( 1.03, 1.87 )	0.031
3	1.01 ( 0.67, 1.53 )	0.949
4 or more	0.96 ( 0.60, 1.55 )	0.876

Table 1. Multivariable logistic regression exploring the association between the belief that urinary incontinence is normal for aging with frequency of UI episodes and number of pads used.

There was no statistically significant association between the belief that incontinence is normal for ageing and incontinence sub type ( $\chi^2$ =1.35, df=5, p=0.50). However, women who believe that incontinence is normal for aging had a more impaired) QoL than those who did not (mean (SD) 83.9 (19.4) v 87.4 (18.6) (p<0.00001)).

#### Interpretation of results

For these older community dwelling women, urinary incontinence had a significant demonstrable impact on QoL, as expected. In this cohort, urgency incontinence did not demonstrate a more severe impact than the other subtypes. More than two-thirds of these women believed that incontinence is normal for ageing. This belief had no association with age, or perception of overall health, despite the expectation that older, sicker women may be more likely to hold this belief. Women who thought incontinence to be normal for aging were also more likely to have up to twice daily incontinence episodes and use up to two pads daily; more severe incontinence and greater quantities of pad use did not make women less likely to hold this belief. In contrast, women who held this belief were less likely to have either performed previous pelvic floor exercises or sought health care, although not statistically significantly so. There was no association between the belief that UI is normal for aging and UI subtype, it was anticipated that women may be more likely to suffer stress incontinence, as women may associate this with an expected consequence of childbirth. Compared to those women who think incontinence isn't normal for ageing, women who think incontinence is normal for aging experience a significantly worse impact of UI on QoL. Attitudes to UI in women are recognised as a barrier to healthcare seeking, this may be amenable to awareness raising amongst older community dwelling women.

#### Concluding message

Despite being associated with a worse impact on quality of life, the belief that incontinence is normal for ageing is not affected by incontinence severity, pad use, or underlying diagnosis.

#### References

- 1. Eur Urol, 2008. 53(5): p. 1029-37
- 2. J Public Health Med, 2000. 22(3): p. 427-34

### **Disclosures**

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