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# STORAGE DISORDER OF THE BLADDER: PREVALENCE, INCIDENCE AND NEED FOR SERVICES IN THE UK

## Aims of Study

Apart from incontinence, storage symptoms and related impact and need for health care have received little attention to date. Prevalence estimates for monthly or more incontinence in the UK show a threefold variation (8-23% in women and 3-9% in men) leaving considerable uncertainty for policy makers(1). There is no consensus on appropriate indicators or thresholds of need. Impact is estimated at 2-44% prevalence in women and 1-12% in men, in contrast to primary care consultation rates below 14% in women and 9% in men, suggesting either major levels of unmet need or unrealistic problem thresholds. This study aims to establish valid and reliable prevalence and incidence rates for storage disorder and estimate the extent of associated health care need and requirement (ie felt need) in the UK.

#### Methods

Two cross-sectional and longitudinal population based studies involving all registrants with 108 general practices in Leicestershire and Rutland counties, living at home were carried out. 162,533 (cross sectional study) and 39,602 (longitudinal study) people aged 40 or more were approached by postal questionnaire with response rates of 60% and 63% respectively and 79% at 1-year follow up. 1050 non-responders were followed up by interview with no evidence of significant non-response bias(2). *Main measures:* individual symptoms were validated against pad tests and diary measures(3): *incontinence* - involuntary leakage; *storage disorder* - including incontinence or urgency or frequency or nocturia above clinically defined thresholds(4); *storage symptoms* - as for storage disorder, above epidemiologically defined thresholds(5); *professionally defined need* - storage disorder, and storage symptoms with impact on life(6); *felt need/ health care requirement* - using services or feeling a need for help; *health care need* - professionally defined and/or felt need (all within the previous year).

## **Results**

The study population was similar to the UK as a whole in terms of age, gender and socio-economic status. Overall 1 year period *prevalence*: moderate or more incontinence 16.1%; storage disorder 28.5%; storage symptoms 51.4%; professionally defined need 37.1%; felt need 21.8% and healthcare need 38.6%. Among those with storage disorder 81% reported impact on life and there was a strong relationship between symptom severity and impact. *Incidence rates*: incontinence 6.3%; storage disorder 14.1%; professionally defined need 15.6%, felt need 9.8%; healthcare need 16.5% per annum. Remission rates were 23 fold higher in men than women, the problem becoming increasingly established and less likely to remit with age.

#### **Conclusions**

One fifth of people over 40 (6 million in the UK) feel they need care for storage symptoms at some point in a year. In total, over one third (10.6 million) have a recognised health care need and could benefit from increased public and professional awareness about the condition and more positive attitudes towards its management. Apparent inconsistencies between prevalence, impact, consultation and wanting help reflect different conditions of need and time. Impact is a measure of the experience of illness which it is essential to include within professionally defined health care need because there is imperfect clinical knowledge concerning appropriate symptom thresholds in the population. Although impact may be more subjective than symptoms, it still represents an externally applied definition of need in relation to health care. In contrast, felt need refers to demonstrating in some way motivational to obtain help(7) which is why it represents a more dependable measure of health care requirement for planning purposes.

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