

DEVELOPMENT AND TESTING OF A CONTINENCE RECORD FOR USE WITH ILLITERATE OLDER WOMEN IN RURAL BANGLADESH

Hypothesis / aims of study

Urinary diaries allow a relatively non-expensive, non-invasive means of investigating lower urinary tract symptoms [1]. They are commonly used in continence care and are a useful adjunct to the urinary history [2]. Diaries are usually completed in a fashion which renders them subject to minimal recall bias and are variably used as a method of monitoring response to intervention or reinforcement for bladder retraining. Although diaries are extensively used in research and clinical practice there are none which have been used in a largely illiterate adult population. We wished to develop a bladder diary suitable for use in the field for illiterate subjects which was both paper free and able to be concealed for the preservation of confidentiality for those with incontinence, where the condition is viewed with much stigma. The aim of this study was to develop such a diary in preparation for testing in the field

Study design, materials and methods

This mixed methods study used groups of Bangladeshi women in Canada and Bangladesh in order to gain information on design of a continence record which would fulfil the required criteria. The resulting design (Figure 1) was then tested in the field as part of a pilot project to test feasibility of a trial protocol. Women wore and maintained the continence record for three days, recording urinary frequency and urinary incontinence (UI) episodes. Women also completed the Sandvik Severity Index (SSI) and Urinary Distress Inventory (UDI) version 6 Short Form with verbal assistance at baseline and three months following a continence intervention. Diary records and questionnaire results were compared. Qualitative data on acceptability of record use were collected from a sample of women following the study

Results

Women were numerate, if illiterate, and counting by tying knots on string was felt to be acceptable to all. The diary consisted of three paired ribbons, red and yellow, secured to a string which allowed the ribbons to be tied around the waist. Each pair of ribbons was intended to represent a day. Tying a knot in the yellow ribbon indicated a micturition episode and tying a knot in the red ribbon, an incontinence episode. The record was discreet enough to be hidden in a local woman's skirt during use.

122 women, aged 60 – 75 years, used the record. 98 (80.2%) completed all questionnaires. Two thirds of women (83/122, 68.0%) recorded at least one episode of urinary incontinence (UI) over the 3 days of the baseline continence record. For the 98 women who had completed all questionnaires, three day total UI episodes from the continence record at baseline was correlated with UDI ($r=0.41$, $p<0.001$) and SSI ($r=0.26$, $p<0.01$).

At study end, 68/122 (55.7%) women recorded at least 1 UI episode over the 3 days of continence record use. Total diary UI episodes were correlated with UDI ($r=0.38$, $p<0.001$) and with SSI ($r=0.27$, $p=0.007$).

Qualitative interviews were held with 22 women after using the belt. All had used the record at least once. One woman believed the continence record itself to be of benefit for UI; 1 felt that it was of no use. Three women felt that the belt did not “look good” hanging on their waist.

Interpretation of results

This study has led to the successful development and field testing of a novel 3 day continence record for use with illiterate older, rural Bangladeshi women. The record proved simple to use following explanation and was, overall, acceptable to the women. The record appeared to correlate with questionnaire based assessments and was sensitive to change. A larger study using the record is ongoing.

Concluding message

A non-pictorial, bladder diary record for use with illiterate older adults has been successfully developed and tested in the field.

Figure 1. The 3 day continence record



References

1. Obstet Gynecol. Jun 1988;71(6 Pt 1):812-817
2. Scand J Urol Nephrol Suppl. 1996;179:47-53

Disclosures

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