

## THE BLADDER DIARY. DO WOMEN PERCEIVE IT AS A USEFUL INVESTIGATION?

### Hypothesis / aims of study

The filling in of a bladder diary is a standard basic investigation undertaken as part of the routine assessment of women presenting with lower urinary tract symptoms. Though anecdotally some women find it a nuisance to fill in a fluid volume chart, at present there are limited data regarding patient perception of bladder diaries.

The QQ-10 is a questionnaire that has been developed to assess the value of other questionnaires. It may also be used to evaluate patients' perception of other investigations. (1) It consists of ten questions each of which is graded on a 5 point Likert scale. It is scored from 0-4, along the spectrum of strongly agree to strongly disagree. The first six questions address the positive aspects of the investigation and are used to make up the value score whereas the last four questions address any potential negative aspects and make up the burden score.

The primary aim of this study was to evaluate women's perception of the filling in of a bladder diary as part of their investigative process. The secondary aim was to identify reasons why women fail to complete one.

### Study design, materials and methods

All women attending a one stop urogynaecology clinic in a tertiary referral centre were, as part of the standard protocol of the unit, sent instructions to fill in a 3 day bladder diary prior to attending the clinic. In addition, all women attending the clinic over the study period were asked to fill in a copy of the QQ-10. The wording of the QQ-10 was minimally modified for use of evaluation of the bladder diary as shown in Table 1 below:

**Table 1: Modified QQ-10**

Question 1	The diary helped me communicate about my condition
Question 2	The diary was relevant to my condition
Question 3	The diary was easy to complete
Question 4	The diary included all aspects of my condition that I am concerned about
Question 5	I enjoyed filling the diary
Question 6	I would be happy to complete the diary again in the future as part of my routine care
Question 7	The diary was too long
Question 8	The diary was too embarrassing
Question 9	The diary was too complicated
Question 10	The diary upset me

Women who did not complete a diary were asked to circle the appropriate reason from the list below:

- I did not receive a bladder diary
- I did not feel filling in a bladder diary was relevant to my condition
- I did not have a jug to perform the measurements
- I did not have time
- I thought it was too embarrassing
- Other

Data were analysed using SPSS V. 13, Chicago Illinois

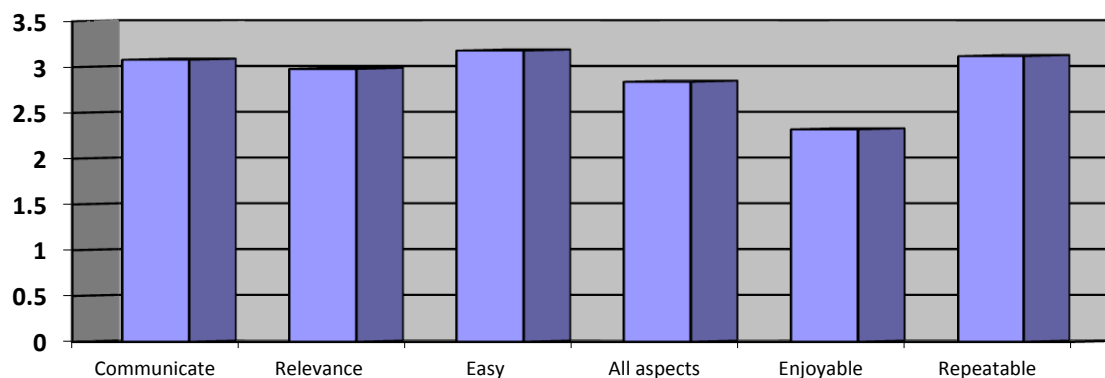
### Results

In total 128 women attended clinic during the study period. Of these 100(78%) completed a diary and hence a modified QQ10 form and 28 women (22%) did not. The latter were therefore asked to cite the reason for not filling in a diary.

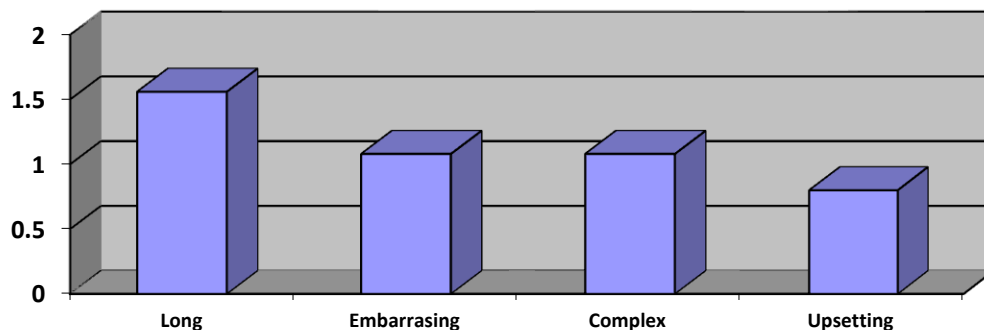
The mean of each domain making up the value score of the QQ10 was above 2.(range 0-4) whereas the mean of each domain making up its burden score was below 1.8 (range 0-4) as shown in Figures 1 and 2.

The mean value score was found to be high, at 72.6 (SD 17.87) whilst the mean burden score was low at only 27.7 (SD. 21.14).

**Fig1: Mean value of all domains contributing to value score**



**Mean value of all domains contributing to burden score**



The reasons

cited for not filling in a diary are in Table 2 below:

**Table 2: Reasons for not filling in diary: (n= 28)**

I did not receive a bladder diary	10 (36%)
I did not feel filling a bladder diary was relevant to my condition	4 (14%)
I did not have a jug for measurements	1 (4%)
I did not have time	4 (14%)
I thought it was too embarrassing	0 (0%)
Other: Forgot	4 (14%)
Did not understand how to fill in	3 (10%)
Did not read paper work sent	1 (4%)
Have cataracts and could not see	1 (4%)

#### Interpretation of results

The high mean value score shows that women understand the importance of the bladder diary in the assessment of their lower urinary tract problems. In addition, the low mean burden score would suggest that the majority do not perceive the filling of the bladder diary to be an onerous or bothersome task. Furthermore the majority of women who did not fill one in did not receive a diary in the first place and only a very small percentage of women cited lack of time or lack of relevance to their condition as reasons for not filling it in

#### Concluding message

Therefore our study suggests that women feel that the benefits of taking the time and effort to fill in the diary outweigh any associated inconvenience.

#### References

1. The QQ10 Abstract UKCS 2009

<i>Specify source of funding or grant</i>	No specific grant. Work was funded by the urogynaecology research trust at King's College Hospital
<i>Is this a clinical trial?</i>	No
<i>What were the subjects in the study?</i>	HUMAN
<i>Was this study approved by an ethics committee?</i>	No
<i>This study did not require ethics committee approval because</i>	It involved part of our routine service evaluation
<i>Was the Declaration of Helsinki followed?</i>	No
<i>This study did not follow the Declaration of Helsinki in the sense that</i>	It was not a clinical trial. It was just a part of our normal service evaluation
<i>Was informed consent obtained from the patients?</i>	No