

Understanding women's experiences of electronic interviewing during the clinical episode in urogynaecology: a qualitative study

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Received: 5 April 2013 / Accepted: 14 May 2013 / Published online: 13 June 2013
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Abstract

Introduction and hypothesis Questionnaires for assessing health and related quality of life are increasingly advocated but little is known about women's views on them. The aim of the study was to understand women's experiences of using an electronic personal assessment questionnaire for pelvic floor disorders (ePAQ-PF) during the clinical episode.

Methods A qualitative study was performed in a tertiary referral centre for urogynaecology. Women who completed the electronic questionnaire (ePAQ-PF) before and after intervention for pelvic floor disorders were recruited. Semi-structured interviews were conducted in 20 women and the transcripts were analysed using a thematic approach to identify themes and categories. The main outcome measures were: (1) women's feelings about their experience of using the questionnaire and the impact it had on their clinical episode, (2) exploration of ways in which the questionnaire influenced communication, (3) influence of the questionnaire on anxiety and expectations relating to clinical care and (4) women's feelings about how the use of the questionnaire has affected their health and well-being.

Results Qualitative analysis identified eight themes relating to the burden and the benefit of questionnaire use with 'benefit' being the dominant theme. Women felt that the questionnaire improved their understanding of their

condition, improved communication with clinicians and helped prepare them for clinical consultations, generally finding it relevant, easy and enjoyable to complete. Some women commented on the burden of questionnaire use and expressed concerns about its length and that its closed multiple choice format was restrictive.

Conclusions The identified principal themes of enhanced communication and preparedness for clinical consultation provided by the questionnaire appeared to support improved focus and insight, which in turn contributed to the setting of realistic expectations.

Keywords Electronic interviewing · Qualitative study · Women's expectations · Women's experiences

Introduction

The use of questionnaires in research has increased with the aim of reliably and objectively quantifying health-related quality of life (HRQOL) and accurately assessing outcome [1]. The measurement of HRQOL and patient-reported outcome measures (PROMs) in health care is increasingly advocated in routine clinical practice (National Institute for Health and Clinical Excellence guideline on urinary incontinence). The use of questionnaires may be of value to clinicians and providers of health care and may also be helpful to patients by enhancing doctor-patient communication and promoting discussion [2, 3]. Appropriate use of well-designed instruments may help to ensure that treatment is focused on the patient rather than the disease or condition. Using PROMs to evaluate the impact of interventions is of value to providers in service evaluation, clinical audit, research, clinical governance and revalidation [4]. However, the value to patients may be less apparent and questionnaire use in practice often proves burdensome, expensive and

The study was conducted at the Jessop Wing, Royal Hallamshire Hospital, Sheffield Teaching Hospitals NHS Trust.

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impractical, hence the growing enthusiasm for exploiting computer technology to lower resource burden in this context [5]. Compared with paper questionnaires, electronic systems have been shown to improve response rates, to be reliable and to offer a practical approach to clinical data collection [5, 6]. E-questionnaires compare favourably with paper-based equivalents, with lower levels of missing data and patients finding them relatively easy to complete [7, 8].

The electronic personal assessment questionnaire-pelvic floor (ePAQ-PF) is a self-administered, interactive, Web-based questionnaire that measures urinary, bowel, vaginal and sexual symptoms and their related impact [9, 10]. The 132-item questionnaire aims to provide a detailed and comprehensive assessment and instantaneous analysis of pelvic floor symptoms and their impact on HRQOL. In clinical practice, it is either completed online via a secure website prior to attending the clinic or in a private room in the clinic, before consultation. The questionnaire is used for routine clinical assessment of patients and also for monitoring of outcome.

The psychometric properties of the instrument itself have been established in previous studies [9, 10]. However, its influence on patients' experiences of their clinical episode in urogynaecology warrants further investigation. This study explores patients' views and perceptions of using the questionnaire during their clinical care and its influence on their experiences and outcomes.

Methods

A qualitative study, using semi-structured interviews in women who had completed ePAQ-PF before and after intervention, was conducted in Sheffield Teaching Hospitals NHS Trust between July 2009 and July 2010. The study was approved by the North Sheffield Research Ethics Committee (STH14702).

As part of routine practice in Sheffield, all women who attend the urogynaecology unit with pelvic floor disorders are given the opportunity to complete ePAQ-PF at initial assessment and, when undergoing surgery, at follow-up, usually 3 months post-operatively. Women who underwent surgical treatment for pelvic floor disorders during the study period and completed ePAQ-PF both pre- and post-operatively were eligible for inclusion. The penultimate question on ePAQ-PF is about global impression of improvement following surgery (five-point scale: much better, better, about the same, worse and much worse). In order to avoid selection bias, a purposive sample was recruited including women with good and poor outcomes following surgery. Women reporting outcome as 'much better' or 'better' were considered to have good outcome and those

reporting 'about the same', 'worse' or 'much worse' were considered to have poor outcome.

Patients who completed follow-up after surgery were identified by the attending clinician who provided them with a written information leaflet about the study. Women who expressed interest in participating were then seen by the researcher, who discussed the nature and purpose of the research and the voluntary nature of their involvement. Opportunity was provided for further questions related to the research during this visit and women were also provided with a contact number of the researcher should they have any further questions or concerns. Those willing to participate were provided with a consent form to be completed and returned by post. Having obtained written consent, semi-structured interviews were scheduled.

Interviews

The format of the semi-structured interview centred on four key areas to explore: (1) how women felt about their completion of ePAQ-PF and the impact it had on their clinical episode, (2) ways in which the questionnaire influenced communication during their consultation, (3) ways in which the questionnaire influenced their anxiety and expectations of their clinical care and (4) how the questionnaire affected their health and well-being. A semi-structured interview schedule with open-ended questions was created relating to these areas. Follow-up questions such as "Is there anything else you would like to add?" and "Why did you feel like that?" were used by the interviewer, as needed to ascertain further details of their experience (Table 1).

Interviews were conducted by two independent researchers who had not been involved in patient care. All interviews were conducted in a private room within the hospital. Demographic data and details of surgical interventions were recorded in a standard pro forma prior

Table 1 Guide for the semi-structured interview

Format
Introduction
Opening question: number of occasions ePAQ-PF was completed
Women's feeling on completing ePAQ-PF
Influence of ePAQ-PF completion on clinical episode
Impact of ePAQ-PF completion on communication during consultation
How ePAQ-PF influenced their anxiety & expectations of clinical consultation
How women felt their QOL has been affected
Women's experience & views on questionnaire completion

to interview. Interviews lasted from 10 to 25 min (mean length 14.05 ±4.4 min) and were tape-recorded. All tape recordings were transcribed and anonymized by the third author (HW).

Analysis

Data were analysed using a thematic approach based on the framework proposed by Marshall and Rossman [11]. Thematic analysis is a generic approach to data analysis and is widely used in qualitative research. It enables data sources to be analysed in terms of the principal concepts or themes, to enable the data to be reduced to key ideas.

All interviews were listened to and transcripts read several times by two investigators to familiarize themselves with their content. Key themes and categories which addressed the research questions were identified and the interviews indexed and coded according to these categories. Interviews were charted using the QSR NVivo 8 Computer Assisted Qualitative Data Analysis Software. The data were then analyzed by an expert qualitative researcher who was not familiar with the original coded topics and compared to look for similarities and differences.

Throughout this process of analysis, the categories and codes were discussed further with the study team and the coding inductively restructured as appropriate to represent underlying messages. Once coding was complete, main themes were identified, summarized and conclusions drawn from the most significant themes.

Results

A total of 34 women were approached, of whom 27 consented to study entry. Of these, 4 women could not attend for interview and therefore interviews with 23 women were anticipated. However interviews and recruitment were stopped after 21 women had been interviewed as saturation of data relating to the research question had been reached and therefore the remaining two were not interviewed. Unfortunately due to technical failure of recording equipment, one of these interviews could not be transcribed. Twenty transcribed interviews were included in the final analysis. All women who attended for the interview were Caucasian with a mean age of 58 years (± 9.3 years). The demographics, details of surgery and surgical outcomes are shown in Table 2. Eleven women reported outcome as better or much better and nine reported the outcome as worse or about the same.

The data were initially analysed separately for women with good and poor outcomes. However, there was no difference in the emergent themes with ‘benefit’ being the major category in both groups. Overall women expressed no major concerns about completing ePAQ-PF and generally

Table 2 Demographics

Age	Surgery	Outcome (as reported on ‘global impression of outcome scale’)
62	TVT	Worse
49	Anterior repair	About the same
50	Sacrocolpopexy	Somewhat better
70	Anterior repair	Much better
68	Posterior repair and TVT	Somewhat better
55	Anterior & posterior repair	Much worse
48	Anterior & posterior repair	About the same
64	Anterior repair	Worse
63	Anterior+posterior repair	About the same
50	TVT	Much better
67	Anterior repair	Much better
73	Anterior+posterior repair	Somewhat better
64	Anterior repair	Much better
56	Anterior+posterior repair	Much worse
71	Anterior repair	Somewhat better
55	Posterior repair	Somewhat better
56	Anterior repair	Worse
40	TVT	Somewhat better
47	Posterior repair	Worse
53	TVT	Much better

TVT tension-free vaginal tape

made positive comments irrespective of the outcome. Eight categories were identified relating to women’s views on questionnaire use in the urogynaecology clinic.

Understanding

Women’s views centred on the theme that the questionnaire helped improve their understanding and provided them with greater insight into their condition. Many said that the questionnaire educated and informed them and prompted them to think about issues they had not previously considered. It also made them more aware of other symptoms linked to their condition, such as sexual symptoms associated with vaginal prolapse. Typical examples of this included:

Some questions I perhaps wouldn’t have thought about until it was there on screen I didn’t think that the problems I’d got were affecting other aspects (P 1). You can do like an analysis on different points, it gives you like highlights of where you’ve got problems (P 7). It gives you longer to have a look at what your symptoms are & be able to think a lot more about them... informative in a way (P 14).

Some women expanded on this theme with comments suggesting that the questionnaire made them realize how much the condition had been affecting their QOL and to

what extent they had hitherto been coping with their symptoms. Seeing the questions on a screen helped them to reflect on their symptoms and their impact. It also made them aware of potential outcomes to expect from treatment.

It actually brings the problems you've got further forward and you haven't actually thought about it before. It makes you look at your life a bit differently, makes you realise how you have been coping (P 3). Helped you to know...after one treatment the area concerned or problem is in a different area now? Yes that's useful (P 14).

One woman expressed views that completing the questionnaire did not improve her understanding of the condition and therefore did not have any impact on the clinical episode.

I've got no issues with competing it. I just wasn't sure what effects it had, what benefit it gave anyone because I knew why I was coming to clinic and that just backed up, that just confirmed it (P 7).

Preparedness

Other commonly reported issues were that the experience of completing the questionnaire *prior* to the consultation helped focus on issues patients wished to discuss with their clinician, helped them to organize their thoughts and what they wished to discuss and thereby enhanced the benefits of the consultation.

It gives you a vocabulary & it reminds you of all the different things that could be, you could have symptoms of...little things the doctor might be interested to know about (P 18).

It brought things up like bladder problems...it made me think about that a bit more...Just mention that at the consultation (P 3).

A lot of people forget what questions to ask when you go into a check-up or anything to remember and it will give you an idea what to ask (P 9).

Reassurance

Some women reported that it was comforting to know that their symptoms were not unusual or unique, that other people suffered from similar symptoms which in turn made it easier for them to cope with their condition. The knowledge that these intimate and embarrassing disorders are prevalent, as well as potentially treatable, proved reassuring.

I could identify with them so therefore these problems I was having wasn't abnormal...other people must be

having the same problems as it was part of the questionnaire (P 21).

It lessens anxiety—probably because I understood a bit more about things. When I'd gone into details about various things, what you take for granted.

Communication

Several women said that it was easier to communicate about and describe embarrassing issues using the computer questionnaire compared with face-to-face consultation and were relieved that they did not have to initiate discussion on these issues. Extending this further, some women felt that completing the questionnaire helped 'break the ice' and more comfortably explore sensitive matters. It also prompted them to get more information about certain aspects of their condition. Their comments also centred on how the questionnaire might help their clinician to understand their condition better and to decide on the most appropriate management as well as providing an opportunity to inform the clinician about their symptoms in detail which may not be feasible during a short consultation and therefore improves overall efficiency.

Sometimes it can be quite difficult explaining exactly what you mean. It helped with communication, because I was able to tell him without stuttering. I knew for the screen what I was going on about (P 6).

Some people see doctors as somebody big up there, that sometimes are unapproachable; (questionnaire) can help to communicate (P 12).

It helped to communicate as I am not an open sort of person...I'd rather just do it on computer and not have to talk about it (P 5).

Some women completed the questionnaire with the help of other family members and found it useful in breaking the barriers and improving communication with them.

Well, we had a few laughs and I quite understood that, because it broke the ice because we were both doing it (P 8).

To the contrary, some women expressed views that they preferred the personal contact with a clinician rather than a computer.

If I've got a consultation or if I have a problem, I'd rather talk about it than answer questions on the screen I'm stressing the point of personal, one to one consultation... (P 19).

Relevance

Most women did not consider completing the questionnaire to be a burden and felt that the items were relevant to their

condition. They felt it was valuable in interpretation of their symptoms and were happy to repeat the questionnaire again during future consultations.

Generally speaking, it was quite relevant to what operation I had and what happened to me (P 18).

Design of questionnaire

(a) Ease of use

Most women found the questionnaire easy to complete and some also found the experience enjoyable. Most women felt that they could complete the questionnaire at home prior to the clinical consultation without supervision. The comments included that the questions were clearly set out and easy to understand. They liked the layout of the questionnaire, which helped them to skip questions they did not wish to answer and also revisit questions if needed.

The computer having people stake out what's wrong with them and how they're feeling and different symptoms, I think it was great (P 9).

When you've finished you can revert back and you think I've answered that question wrongly and you can actually go back and correct it and change it if you want to (P 13).

However, some women expressed concerns and were discouraged by the length of the questionnaire and felt that some items were repetitive. ePAQ-PF is a comprehensive pelvic floor questionnaire with 132 items related to four dimensions (bladder, bowel, vaginal and sexual) with mean time of completion up to 26 min (range 14–38 min) [9]. Although some women commented on the length of the questionnaire and repetition of items, but interestingly there were no comments about the time taken for completion.

I just felt like sometimes they were asking me the same questions again that I'd already answered, that I was just repeating myself again and again (P 9).

(b) Restrictive format

Some women expressed concerns that the questionnaire did not have a free-text space and did not allow them to elaborate on issues and therefore found it difficult to respond to some of the questions.

Some of the answers to the questions, they were either black or white, yes or no and sometimes it's difficult to answer (P 14).

Sometimes it's difficult to say yes or no. There's no maybes and no in-between, so you can't give a proper answer (P 4).

I have a bit of stress incontinence...that was difficult to say whether it was...once a day, once a week, occasionally—if have a cough you might have an episode of it once or twice a day, if...cough free you might not have any for a week (P 21).

Health and well-being

The comments in this category included a reflection of the overall clinical care that they had received, rather than ePAQ-PF in particular. Irrespective of the clinical outcome, women generally reported that the care they had received was good. Women viewed the questionnaire as an integral part of their clinical episode which helped to improve the quality of care they received.

The care was great, the situation was scary. It's just been actually really great. Everybody's been so lovely and the staff were great (P 3).

Discussion

This qualitative study provides insight into women's views of using an electronic questionnaire during their clinical care in urogynaecology. Most interviewees expressed positive views, in particular that the questionnaire helped inform, provide insight and in particular communicate about their condition. They viewed the questionnaire as a valuable and important component of their care and that it supported decision-making. Some women commented on the burden of questionnaire use and expressed concerns about its length and that its closed multiple choice format was restrictive.

The intimate nature of urogynaecological conditions means that clinical interview data might be prone to inaccuracy and non-disclosure, as seen in other conditions [12]. Pelvic floor disorders rarely result in severe morbidity or mortality but commonly impact substantially on QOL. In recent years the use of QOL assessment tools has been encouraged, leading to development of numerous questionnaires. Patient interviews and the involvement of user groups often form an integral part of initial questionnaire development [13–15]. Questionnaires that are intended for clinical use not only require rigorous validation and establishment of their psychometric properties, but also warrant assessment and evaluation in terms of patients' views of their use. However, despite the use of a number of questionnaires in urogynaecology, insight into patient's views and experiences is generally lacking.

Qualitative research methods are increasingly deployed in health service research and health technology assessment [16]. Whereas one of the main aims of quantitative studies is to help explain causal relationships, qualitative research

searches for reasons, motives or explanations [17]. The aim of qualitative research is to describe and interpret meanings and experiences of people as accurately as possible. Therefore, a qualitative methodology was considered most appropriate in the context of exploring patient experiences and feelings about questionnaire use in urogynaecology.

A key theme emerging in this study was the capacity of the questionnaire to enhance understanding and provide women with an opportunity to reflect on their condition. This in turn helped to improve the quality of the consultation, with particular reference to communication facilitated by prompted prioritization and focus on relevant issues. The feasibility of electronic interviewing has previously been studied, suggesting that patients generally have little difficulty in using the technology and often find it enjoyable [7, 8]. In other fields, the use of questionnaires in routine clinical practice has been shown to improve doctor-patient communication [2, 3]. Our results reiterate these findings in the context of electronic interviewing in urogynaecology. An additional theme of the present study was the increased self-awareness and influence of the questionnaire on women's expectations of outcome. For example, women with stress incontinence anticipated improvements in cough and exercise incontinence following tension-free vaginal tape (TVT) as opposed to urgency and urgency incontinence. This awareness is likely to improve overall satisfaction.

Interestingly, none of the women in the study expressed reservations about using a computer for the questionnaire and one woman who had never used a computer before also reported finding it easy to use. Two negative themes emerged, relating to the duration and format of the questionnaire, in particular the closed nature of multiple-choice questions. Since the personal expectations of women following prolapse and incontinence surgery have been found to correlate poorly with standard QOL measures, the use or inclusion of free-text items relating to patient-defined goals may provide valuable additional measures in this context [18]. This study also found that despite the comprehensive assessment provided by the questionnaire, several women felt unable to fully express themselves, an issue that may have been addressed by the inclusion of free-text items on personal concerns, goals and expectations. These items are now being evaluated in a final 'personal data' dimension of the questionnaire.

Although the study was conducted in a tertiary referral, inner city hospital, a large number of patients attending the urogynaecology clinics are Caucasian. All women who agreed for interviews for the purpose of this study were Caucasian, which is one of the limitations of the study. Further research is needed in women with different ethnic background to understand their views on completing questionnaires, which are not in their primary language.

In recent years, outcomes research in urogynaecology has increasingly focused on QOL and health status. Existing

measures, however, do not necessarily equate to overall patient satisfaction. In health care, satisfaction with outcome also depends on patients' views of the care they receive, with 'good quality care' equating to high satisfaction [19]. Approaches to the assessment of satisfaction commonly involve semi-structured open questions, allowing patients the freedom to comment on specific aspects of their care or condition [19]. As patient satisfaction is a central element of urogynaecology services, it is vital to understand patient's views on the care that they receive and the instruments deployed to deliver it.

Conclusions

We conclude that women generally consider electronic questionnaire use to be beneficial when used in their clinical care in urogynaecology. It appears to impact favourably on doctor-patient communication, provides insight and prepares patients for consultation. It enhances their experience of the clinical episode and may contribute to increased satisfaction. Some women expressed views on the burden of questionnaire use with comments relating to its length and closed, restrictive format. These issues may be in part addressed by the inclusion of free-text items.

Acknowledgments The authors would like to thank all the women who participated in the study and gratefully acknowledge the help of Mr. A. Farkas for allowing his patients to take part. The study was granted £2000 by the Sheffield Teaching Hospitals NHS Trust's small grants scheme.

Conflicts of interest None.

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