

DEVELOPMENT OF AN ELECTRONIC PELVIC FLOOR SYMPTOMS ASSESSMENT QUESTIONNAIRE

Aims of Study

Historically, the development and validation of condition specific and generic quality of life measures has been driven by the demand for reliable outcome measures in research. As a result, these instruments have often neglected clinical utility. We aimed to develop a computerised electronic pelvic floor symptoms assessment questionnaire (e-PAQ), to be relevant and user-friendly for both patients and clinicians in a wide variety of clinical settings.

Methods

The e-PAQ derived from previously developed condition-specific paper-based instruments evaluating pelvic floor symptoms. Factor analysis was carried out in a sample of 594 women with pelvic floor disorders who completed an 80-item paper version of the questionnaire in order to identify the most salient dimensions. The e-PAQ was created using internet-based software to facilitate patient self-entry of data directly into a Microsoft Access database, which formed the core element of the system. A combination of computer programming languages added dynamic and interactive elements and a touch-screen provided the patient-computer interface. Basic principles of questionnaire design and development were utilised. Local user-group consumer surveys were conducted and initial psychometric testing of the instrument was carried out in a cohort of 213 women with pelvic floor symptoms. Patient satisfaction and completion time were also measured.

Results

Factor analysis of the 594 completed paper questionnaires identified distinct pelvic floor symptom domains; bladder, bowel, vaginal and sexual. Poorly understood items were modified, redundant or repetitive items were removed and new items were introduced. The e-PAQ now contains a total of 110 items within these 4 domains. In a sample of 213 women with pelvic floor disorders, over 90% of subjects completed the e-PAQ in less than 20 minutes (mean = 16min, SD = 6). Feedback was generally positive, complimentary and constructive. 73% of subjects stated that they enjoyed completing the questionnaire, 93% stated that it was easy to complete, 7% found the questionnaire embarrassing and 2% found it upsetting. Internal consistency was high and a simple additive scoring system is proposed. Clinicians regarded the instrument as highly intuitive and a potentially valuable clinical assessment tool.

Conclusions

The e-PAQ has built on previous experience gained in the development of paper-based questionnaires and offers an informatics system of genuine clinical value. The ePAQ also aims to address the needs of clinical governance, audit and research. The instrument is user-friendly and positively enhances the clinical episode. It is designed to be multidisciplinary in its application, including primary care and the continence care pathway. Further interactive elements including the skipping of non-relevant questions, help pages and condition specific patient information have been added and are undergoing evaluation.