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RANDOMISED CROSSOVER TRIAL COMPARING EFFECTIVENESS AND PATIENT PREFERENCE OF A TOUCH SCREEN COMPUTER SYSTEM WITH A LEAFLET PROVIDING WOMEN WITH INFORMATION ON URINARY SYMPTOMS SUGGESTIVE OF DETRUSOR INSTABILITY

Patients are given information about medical conditions in a variety of different ways The most common methods (apart from face to face consultation) are leaflets, posters, audiotapes and videotapes More recently, the use of computers with "touchscreens" has been described We have developed such a system to provide information regarding the aetiology, investigation and treatment for women complaining of urinary frequency, urgency or urge incontinence.

Aims

To evaluate how well women learn and retain information given to them by either a leaflet or a touchscreen computer system To evaluate whether women prefer to use a touchscreen computer information system or a conventional information leaflet to learn about their urinary symptoms

Methods

40 women who had been referred by their general practitioners with symptoms of urinary frequency, urgency or urge incontinence were recruited prior to any further consultation, investigation or treatment Each woman completed a questionnaire the first part of which assessed her prior computer experience The second part consisted of 11 multiple choice questions to evaluate baseline knowledge of the cause, investigation and treatment of their urinary symptoms The women were then equally randomised to use first either the touchscreen system (group 1) or the information leaflet (group 2), for a total of twenty minutes The leaflet and the computer contained the same information Subjects were left alone whilst using their allotted system The only additional instruction given to the computer group was to follow the on screen instructions to navigate the programme Subjects then answered the same 11 multiple choice questions, giving a range of scores 0-11 Women were then asked to use the other information system for a total of 20 minutes in an identical manner Finally, another questionnaire asked 8 questions assessing each system for (a) ease of use, (b) whether they the found information helpful, (c) whether they feel they have a better understanding of the causes, investigation and treatments of their urinary symptoms and (d) whether they would use such a system again in the future Suggested answers were (1) strongly agree, (2) agree, (3) neither agree nor disagree, (4) disagree, (5) strongly disagree

The questionnaires were validated on 10 women prior to the study using face to face interviews carried out by one of the authors

Results

All women completed the study and there were 20 in each group The mean age of group 1 was 58 6years (range, 36-76) and group 2, 61.5 years (range, 43-81) 50% of the touchscreen group had experience of using computers before compared to 35% of the leaflet group. The mean baseline scores were 3 9 (SD 1 94) for group 1 and 4 3 (SD 1 53) for group 2 Mean improvements in scores following intervention, were 3.6 (SD 1.87, $p<0.001$) for group 1 and 2.85 (SD 1 63, $p<0.001$) for group 2 The mean difference in improvement between the two intervention groups was 0 75 (SD 2.83, $p=0.25$). The following table shows response to both information systems for all subjects.

	Leaflet		Touchscreen	
	Strongly agree	Agree	Strongly agree	Agree
Was easy to use 13 (32.5%)	27 (67 5%)	22 (55%)	18 (45%)	
Information was helpful	14 (35%)	26 (65%)	21 (52.5%)	19 (47.5)
Have a better understanding	10 (25%)	30 (75%)	12 (30%)	28 (70%)
I would use again in the future	16 (40%)	24 (60%)	14 (35%)	26 (65%)

(No woman chose the three alternative responses listed above)

Overall, 26 (65%) would prefer to use a touchscreen system rather than a leaflet if given a choice

Conclusions

In the short term at least, women significantly increased their knowledge after using either an information leaflet or a touchscreen system. There was no significant difference in information learned between the two groups. All subjects in this study found both our conventional leaflet and new touchscreen information system easy to use and useful. Our numbers are small but there appeared to be a trend for the touchscreen system to be both better liked and slightly more efficient Since both systems work well, consideration should be made to patient preference and ease of access since there is little point in having a good information system that nobody uses It is well accepted that women with lower urinary tract symptoms frequently do not seek help (and therefore information) because of the embarrassing nature of their condition. With computer use and access to the Internet increasing, perhaps more women would take up information if they could source it from the security and privacy of their own home

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