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DECISION-MAKING CRITERIA OF HEALTHCARE PROFESSIONALS IN CHOICE OF INTERMITTENT CATHETER

Hypothesis / aims of study

The use of intermittent self-catheterisation (ISC) for the management of bladder disorders has increased in the last 20 years, and the range of products available has similarly increased. For some patients, ISC can cause urethral trauma, irritation, stricture, and recurrent urinary tract infections (UTIs), and it has been suggested that the initial teaching and acceptance of the catheter are significant in determining a successful outcome (1). If this is the case, and faced with so much choice, how does a Health Care Professional (HCP) make an appropriate selection?

The aim of this study was to explore which factors HCPs considered to be important in the choice of intermittent catheter (IC) for a first time user.

Study design, materials and methods

Participants were HCPs within the UK, actively teaching ISC. The study was conducted in 3 parts; Part A was designed to explore the selection criteria HCPs believed to be important when recommending a particular IC to a patient for the first time; Part B was designed to investigate the use of these criteria in practice; and Part C explored whether or not the experience of using a particular catheter influenced selection.

Parts A and B employed the use of postal questionnaires, each comprising a set of multiple choice questions. HCPs were invited to provide additional comments relating to the catheters or their criteria for selection. Part C involved the physical testing of 2 leading catheter brands.

The Part A questionnaire was posted to 470 HCPs; 217 responses were received (46%) of which 129 agreed to take part in Part B. Of these, 83 participants responded (64%). Participants for Part C were recruited from and via HCPs who participated in Part B. A total of 43 HCPs were approached, 20 gave informed consent and 15 completed the study.

Part A included scoring 8 pre-determined criteria that had been established using a combination of personal experience and criteria previously identified (2, 3). These were: Cost, Familiarity, Availability, Evidence of effectiveness, Packaging design (ease of use, appearance), Catheter design (ease of use, effectiveness), Patient information and Company reputation.

Part B involved asking participants to use these criteria to evaluate and comment on each of 3 leading catheter brands, Speedicath Compact (Coloplast), Lofric Primo (AstraTech) and Hydrosil Discreet (Rochester Medical). Participants were also asked to comment on aspects of the catheters they liked and disliked.

In Part C participants were divided into 2 groups and asked to use 2 different brands of catheter; one group using Hydrosil Discreet followed by Speedicath Compact a week later; the second using Speedicath Compact first and Hydrosil Discreet a week later. All participants were asked to complete a questionnaire.

Results

Part A Catheter design (37%) and packaging/ease of use (32%) were the most frequent factors ranked as '1st choice'. Another category emerged, one of 'patient suitability and choice', and 28% of HCPs put this as their 1st choice. All other categories were ranked as 1st choice by less than 6% of HCPs.

Eighty-seven percent (n=134) of HCPs with over 5 years experience in teaching ISC stated evidence of effectiveness as an important factor in their choice of catheter compared to only 74% with less than 5 years experience (p=0.021, Pearson's Chi-squared). Evidence of effectiveness was also considered important by those HCPs whose NHS trust had a policy on ISC (88%) as opposed to those who said that their trust did not have a policy (77%) (p = 0.039)

Packaging design/ease of use was considered to be important by 91% (n=140) of HCPs with over 5 years experience in teaching ISC compared to 81% (n= 46) of those with less than 5 years experience (p=0.042). HCPs solely based within the community setting placed a higher emphasis on cost (39%) than HCPs in solely acute or multi-centered settings (12%) (p=0.006).

Part B Statistically significant differences between all 3 catheters were shown against criteria of familiarity, availability, evidence, packaging design/ease of use and company reputation (Cochran's Q test). Comparisons using the pairwise Wilcoxon test showed significant differences between Speedicath Compact and Lofric Primo for value for money, evidence of effectiveness, packaging ease of use, catheter design and quality of patient information; between Speedicath Compact and Hydrosil Discreet for familiarity, availability, evidence of effectiveness, packaging ease of use, catheter design, quality of patient information and company reputation; and between Lofric Primo and Hydrosil Discreet for value for money, familiarity, availability, evidence of effectiveness, and company reputation. A Friedman test shows significant differences between all 3 catheters for each factor.

Part C The majority of participants found both Hydrosil Discreet and Speedicath Compact to be well lubricated. A minority experienced discomfort on insertion and/or removal. Several participants recorded experiencing urgency on removal; a total of 5 occasions for the Hydrosil Discreet catheter lasting for an average of 19 minutes (range: 0.05 to 60 mins), and four occasions for Speedicath Compact lasting for an average of 11 minutes (range: 0.17 to 30 mins). Nearly half (43%) of participants agreed that using a catheter would alter the way they evaluate catheters in the future.

Interpretation of results

In this study, HCPs gave a greater priority to patient-centred factors, such as catheter design, ease of use, patient information and patient suitability and choice, compared to previous studies (2, 3). This may indicate a shift in attitude, with greater importance given to the role, perception and priorities of the patient, possibly due to the emphasis the NHS has placed on patient choice. Despite the importance put on evidence of effectiveness in health care guidance and policies, this factor was considered less important than design. Contrary to what may be expected, the more experienced HCPs gave greater

importance to evidence than their less experienced colleagues. Similarly HCPs whose trust held a policy on IC, put a greater emphasis on evidence than those without one.

In comparing the 3 different catheters, the Speedicath compact scored the most highly using the pre-determined criteria. However, if the criteria are weighted according to the importance given to them by HCPs the difference is less marked.

The practice of self-use of IC by HCPs is anecdotal. The participants in this study are self-selected, but we can purport from our results that HCPs find the practice useful in their decision-making.

Concluding message
There is a high level of agreement among HCPs on the most important factors affecting choice of IC. These are primarily catheter and packaging design. The selection is made within the context of patient suitability and choice, indicating that HCPs prioritise the patient's role in the decision-making process. Personal experience may affect the criteria for choice on which an HCP makes a decision.

References
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