Does nurse self-testing affect catheter choice?

In this article...

- The benefits of nurse specialists self-testing products
- The rationale used by continence nurses for catheter selection
- Nurses’ opinions on self-testing intermittent catheters

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Self-testing of intermittent catheters by continence nurses could form part of intermittent catheter evaluation and give them better insight into patients’ experiences.

Although it is not a new concept, there has been increasing emphasis on patient-centred care within nursing in the health service. This approach is reflected in the Department of Health (2010) policy guidance Equity and Excellence: Liberating the NHS, in which the tenet of “no decision about me without me” is expressed.

The Department of Health (2010) policy acknowledges the importance of involving patients in decision making about their care. According to this, involving patients in decision making requires expert knowledge and understanding of patients’ perspectives. Knowledge comes from several sources and experience; however, the self-testing of products by health professionals who teach clean intermittent self-catheterisation (CISC) has not been investigated.

This study aimed to assess the impact of self-testing on catheter evaluation by continence nurses.

Sixteen continence nurses self-tested two catheters and completed a questionnaire on their opinions about the catheter, routine self-testing and whether the study would make them change their usual practice.

Almost half of the participants found self-testing intermittent catheters a useful experience and some of those who did not routinely self-test said they would do so in future.

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Self-testing intermittent catheters can provide useful knowledge to those who teach CISC.
However, CISC can cause urethral trauma, irritation, stricture and recurrent urinary tract infections (UTIs) in some users, and its introduction demands emotional and psychological adjustment (Ramm and Kane, 2011). A negative experience can be stressful (Winder, 2002), give rise to poor adherence (Addison, 2001) and sometimes result in complete abandonment of this method of bladder drainage (Shaw and Logan, 2013). For this reason, selecting the most appropriate intermittent catheter (IC) is essential.

When training patients to perform CISC, continence nurses must be able to select the most appropriate catheter for the individual, while engaging them in the decision-making process. With the increased popularity of CISC, there has been a proliferation in the range of catheter types available, from the basic PVC Nelaton catheter to those that are pre-lubricated, have a hydrophilic coating, no-touch sleeves and discreet packaging. This variety of product makes the choice of catheter for first-time users increasingly complex.

Our study was divided into two parts. In part one (not described in detail in this article), we aimed to identify which criteria nurses who teach CISC considered important in the choice of IC for first-time users. We sent out 470 questionnaires and received 217 (46%) replies from health professionals. Most nurses said that catheter design was the most important factor to be taken into consideration when choosing an IC.

As the number of catheter brands increases, market competition focuses increasingly on marketing strategies and added benefits, rather than simply on meeting legal performance and safety standards. CNs need to be aware that their choices should be based on patient suitability, design and ease of use, and be supported by research evidence or clinical experience. They should not be influenced by marketing claims.

The debate on the relative values of theoretical versus practical knowledge is extensive but most practical knowledge is limited to teaching the procedure to patients rather than personal use of the devices. Most CNs will not have personal practical knowledge of using all brands of ICs, even though they recommend using them and teach CISC.

Part two of our study, reported below, investigated whether the intimate knowledge of self-testing a catheter would influence CNs’ decision-making process and catheter selection.

**Aim**
The aim of the study was to investigate the impact of self-testing by continence nurses on IC selection.

**Method**
The study was conducted in the UK during 2010-11. Ethical approval was obtained from the Southmead Research Ethics Committee. Research and development (R&D) approvals were required from each NHS or primary care trust where participants worked.

Participants were health professionals who had a nursing qualification and were involved in teaching CISC. They were identified from professional organisations such as the Association for Continence Advice, the RCN Continence Care Forum and the British Association of Urological Nurses. Most had already participated in part 1 of the study on catheter choice.

Potential participants (n=41) were sent an information leaflet describing the study and asked to sign and return a consent form. Those who consented (n=20) were sent the following:

- A study instruction leaflet;
- A pregnancy testing kit (to eliminate the possibility of being pregnant before entering the study, which was an exclusion criterion);
- A urine testing kit (to eliminate the possibility of having a UTI before entering the study);
- Two test ICs with the manufacturers’ instructions for use;
- An evaluation questionnaire.

Participants had to self-test two leading catheter brands, one week apart. A crossover (non-blinded) design was adopted with half the study group using catheter 1 first and the other half using catheter 2 first. Participants were assigned to the two groups by alternate allocation to each group on receipt of the signed consent form. On completion of the testing, they were asked to return the evaluation questionnaire, which asked for their opinions on:

- Catheter design;
- Ease of use, including hydration, lubrication, comfort on insertion and removal;
- Feelings of urgency after removing the catheter;
- Clarity of product information.

Participants were also asked whether they self-tested ICs as part of their usual practice and, if not, whether testing them in this study had changed the way they viewed their selection.

The study also collected data on participants’ opinions of the catheters used. This information is not disclosed in this article.

The aspect we were interested in was whether trying the catheters influenced decision-making.

**Results**
A total of 24 NHS organisations were approached, of which 18 agreed to take part in the study. Forty-one nurses who teach CISC volunteered to take part; 20 gave informed consent and 16 completed the study. The large drop-out was...
mainly due to the process of obtaining R&D approvals from every NHS organisation, each of which had only one or two CNs eligible to participate.

In general, both catheter brands were well received, with some participants preferring catheter 1 and others catheter 2. There were no statistically significant differences in evaluation based on whether the catheter was tested first or second.

Free text comments primarily related to ease of use, patient information and catheter comfort. Nearly a third of the participants (n=5) said they routinely self-tested new catheters as part of their professional evaluation of them. Seven (44%) did not think that self-testing would change how they evaluated ICs, while another seven (44%) agreed or agreed strongly that doing so would change their practice (Fig 1). Of the seven participants who neither agreed nor disagreed, two already self-tested; it is reasonable to assume they believed it to be beneficial and their opinion was not changed by the study. Only two (12%) participants disagreed that self-testing would make a difference, both of whom did not routinely self-test ICs (Fig 1).

Of those who did not already routinely self-test, four (36%) said they would change their practice. Five (31% of all participants) nurses already self-tested as part of their routine practice. The proportion of nurses in this study who would self-test increased from 31% to 56% after trying self-testing.

Discussion

Although there is literature stressing the importance of health professionals being well informed about new devices (Hamilton, 2007), there is little on the use of personal testing as part of professional practice.

By self-testing ICs, CNs shift their role and perspective from those of professional practitioner to those of user. Reflective practice encourages understanding and empathy with the patient, while role play is used to mimic patient experience. By self-testing ICs, nurses are going beyond role play to help them understand their patients’ experience.

The criteria for choosing an IC in this study appear to be personal, with little reference to research evidence, company reputation, availability or cost. Attention was focused on practicalities, such as manufacturer’s instructions for use, comfort (a major aspect of catheter design) and ease of use (packaging).

These criteria were identified by CNs as having the highest levels of (theoretical) importance in part one of this study, which suggests that the criteria that CNs theoretically prioritise in choosing an IC are those that are most important to patients.

To have shared the experience of self-catheterisation, albeit in a limited way, arguably offers CNs a greater capacity to empathise with their patients. Self-testing also permits the CN to personally test the claims made by manufacturers and therefore gain a greater knowledge of the product.

Catheter marketing is focusing increasingly on benefits beyond their usual features

Around a third of participants said they already self-tested ICs to evaluate them. It should be noted, however, that some CNs who decided to participate may be biased towards self-testing so the proportion of self-testers in this study may not be a reflection of the numbers who self-test in the population as a whole.

Several participants who had not routinely tried new ICs on themselves agreed it would change their practice and said they intended to apply self-testing in the future. This implies CNs felt that testing ICs gave them valuable additional information about the IC that they could not achieve through other more conventionally accepted means, such as visual assessment, feedback or research evidence. Potentially, this could result in an improvement in the experience of first-time IC users and have a positive effect on future adherence.

The self-testing of products is a contentious issue in clinical training and practice. The risk of UTIs to IC users is less than eight cases per 1,000 days catheterised (de Ridder et al, 2005). For healthy CNs, who are knowledgeable on IC technique, testing catheters occasionally therefore carries a very low risk – yet it is not an approved practice. The perception of risk associated with IC use was a factor for a number of NHS and primary care trusts refusing to give R&D approval, which prevented their staff from participating. Others took a more pragmatic approach and allowed the CNs to make the decision themselves.

This study highlights that the personal testing of ICs is already widely employed by CNs who advise and instruct patients on IC use. Self-testing can offer valuable information to the CN and should be considered as an approved optional approach to IC care.

Conclusion

Self-testing of ICs was undertaken by CNs. Of those who did not self-test before this study, one-third said they would do so in the future. The remainder neither agreed nor disagreed, or disagreed, that self-testing would alter the way in which they evaluate ICs.

The contribution of self-testing as part of clinical practice or training and as a way of increasing product knowledge is worthy of further investigation.

References


