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ANALYSIS OF SATISFACTION OF PEOPLE WITH SPINAL CORD INJURY USING DIFFERENT TECHNOLOGIES FOR CLEAN INTERMITTENT CATHETERIZATION (CIC).

Hypothesis / aims of study

A growing number of publications have demonstrated the importance of studies comparing catheters used for CIC, studies demonstrate some physiological benefits of pre-lubricated catheters, compared to conventional catheters ^(1,2), however, there is a need to compare rates of user satisfaction with the use of different catheters in order to anchor the elaboration of public policies capable of promoting the right of choice of the individual and facilitate adherence to treatment. The aim was evaluate the satisfaction of people with spinal cord injury, with the use of three different catheters for clean intermittent catheterization

Study design, materials and methods

Research exploratory-descriptive cross-sectional study using 59 individuals with neurogenic lower urinary tract dysfunction caused by spinal cord injury, who performed CIC for at least three months. Subjects evaluated three types of catheters, catheter conventional, as they used previously, a polyurethane with hydrophilic lubrication of PVP and a PVC lubricated with glycerin and attached collection bag, the two pre-lubricated catheters were provided for use for 24 hours. Assessment of satisfaction with the use of catheters was performed by completing an instrument of customer perception, with specific questions about catheters and an instrument adapted from a scale of enchantment, with general issues of consumer products.

Results

The conventional catheter was not superior to pre-lubricated catheters in any item evaluated, but the item manipulation of the catheter, the difference between them was not significant. The hydrophilic catheter was superior to conventional with statistical significance for opening the package, slip into the urethra, overall score, satisfaction, response to pre desires consumption, quality and performance. The set was superior to conventional in items broached, introduction and removal of the catheter, slip into the urethra, concept, overall score, expectations, perceptions, quality, performance, meet the wishes pre consumption propensity product recommendation and positive comments. The set for CIC was also higher in the hydrophilic safety items, concept, expectation, satisfaction and product recommendation. An important aspect observed was that interferes directly in lubricating sliding the catheter, since the conventional showed a low percentage of people satisfied (37.3%), when the catheter hydrophilic lubrication second generation obtained nearly 90% of individuals satisfied, however, observed that other aspects contributed to increasing the indices and take the user to prefer a pre-lubricated catheter relative to the other, among them the devices which facilitate the manipulation, since opening the package until removal of the catheter and to prevent accidents with spills of urine.

Interpretation of results

The adhesive of the package, the opening ring and facilitated separation side of the packaging may have contributed to the greatest satisfaction in item opening. Agreed with other studies, familiarity with conventional catheter interferes in the evaluation of catheter manipulation, which resulted in no statistical difference ⁽¹⁾. Dissatisfaction in the introduction of hydrophilic catheter may be associated with impossibility to hold the catheter in any place of its length, it was considered too slick for participants from other studies ⁽³⁾, on the other hand, lubricating it resulted in a higher percentage of satisfaction to slip. In item pain, in addition to lubrication, another important item is the flexibility of the catheter. For catheter removal was a key factor in the catheter does not allow splashing of urine.

Table 01: Satisfaction of people with spinal cord injury using three different catheters for CIC. Brazil, 2013;

Attribute rated	C1	C2	C3	p* value for	p* value for	p* value for			
(Values for the mean)				the difference	the difference	the difference			
				C1xC2	C1xC3	C2xC3			
Assessment scale customer perception as to the catheter in CIC									
Opening the package	3,5	4,1	3,9	0,003	0,046	0,309			
(01 a 05)									
Catheter Manipulation	3,6	3,6	3,9	0,760	0,085	0,124			
(01 a 05)									
Catheter Introduction	3,3	3,6	3,9	0,157	0,004	0,114			
(01 a 05)									
Sliding in the urethra	3,0	4,3	4,2	<0,001	<0,001	0,612			
(01 a 05)									
Removal	3,7	4,0	4,2	0,103	0,001	0,150			
(01 a 05)									
Security	2,8	2,8	3,3	0,809	<0,001	0,001			
(01 a 04)									
Note/ Concept	3,4	3,8	4,3	0,063	<0,001	0,007			
(01 a 05)									
Score	23,3	26,2	27,9	0,004	<0,001	0,066			
(07 a 34)									
Adaptation of the evaluation scale of enchantment/satisfaction - Adapted from Almeida and Nique (2007)									

Expectations (01 a 07)	4,1	4,8	5,5	0,072	<0,001	0,039
Satisfaction (01 a 07)	3,9	5,0	5,6	0,001	<0,001	0,046
Quality (01 a 07)	4,0	5,4	5,8	<0,001	<0,001	0,176
Performance (01 a 07)	3,9	5,1	5,5	0,001	<0,001	0,109
Desires (01 a 07)	4,2	4,9	5,4	0,050	0,001	0,138
Positive comments (01 a 07)	4,4	4,9	5,5	0,184	0,001	0,093
Recommendation to friends (01 a 07)	4,5	4,9	5,5	0,302	0,004	0,041

C1: conventional catheter C2: hydrophilic catheter C3: set to catheterization

Concluding message

There is a difference in satisfaction among persons with spinal cord injury using conventional catheter and pre-lubricated catheters and different pre-lubricated. The indication for catheter ideal depends on individualized assessment of the individual, their difficulties and their strengths and preferences, noting that this information may be a determining factor in patient adherence to a program of CIC and that this, in turn, can be the distance between a life dependent on a caregiver and greater risk to health and life quality, social inclusion and the preservation of health related to bladder function.

References

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^{*}Nonparametric Wilcoxon, p<0,05