

**Sigma's 30th International Nursing Research Congress**  
**Development and Validation of Educational Video for Children Caregivers to**  
**Clean Intermittent Catheterization Orientation**

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**INTRODUCTION:** Urinary bladder dysfunction (UBM) is a disorder in the storage and emptying dynamics of the bladder, mainly due to Myelodysplasias, which can affect children in a congenital or acquired form. One of the main treatments for this pathology is the Clean Intermittent Catheterization (CIC), a bladder catheter continuously used by those who have urinary dysfunction. This medical advice, for being simple, low cost and safe technique, it has a good acceptance by the users and their family. However, the incorrect use of this procedure can lead to complications such as urethra trauma, urinary tract infections, bleeding, epididymitis, pyelonephritis, bladder perforations, among others. This procedure requires prolonged and often uninterrupted treatment, the reason that caregiver must be trained to do the CIC, in order to avoid disinterest and abandonment of treatment, affecting patient care. Health professionals attending children with micturition dysfunction deal with the lack of caregiver adherence because physical disabilities, psychological factors, and other external factors. Through information and communication of quality and health education, the nurses can involve the process of training the child and caregivers to perform home care CIC. One of the educational strategies is the educational video to improve in the teaching-learning process. In this perspective, it is important that nurses create and apply technologies, such as videos, in order to mediate educational practices that can change the life habits and health of the patient and family. **OBJECTIVE:** To develop and validate an educational video for family orientation during a clean intermittent catheterization in children. **METHOD:** A methodological study developed in two steps in the period from March to December of 2016. The first step was the development of the educational video and the second was the validation by nine health and three audiovisual professionals. Judges were recruited through non-probabilistic intentional and snowball sampling. For the video production method, it was used according to the three phases proposed by Fleming: Pre-Production, Production and Post-production. The pre-production was a material compiled extracted in national and international literature, between 2011 and 2016, in the following databases: PubMed; Scopus, CINAHL and LILACS, using Medical Subject Headings (MeSH): "intermittent urethral catheterization", "children", "neurogenic urinary bladder", "nursing care", "caregivers", through the Boolean operator AND. Fifteen articles were used to construct the video content. The script and storyboard were created with the following scenes: 1. Opening video; 2. Nurse's presentation; 3. Parents-characters' presentation; 4. Anatomy and physiology of the urinary system; 5. Signs and symptoms of micturition dysfunction; 6. What is CIC?; 7. Materials used in CIC; 8. Hand washing technical; 9. Genitals Hygiene; 10. Procedure and care; 11. Materials and urine disposal; 12. CIC topics review; 13. Finalization. The educational video was established and filmed using the physical space and technological equipment of LabCom\_Saúde (Health Communication Laboratory), located in the Nursing Department of the Federal University of Ceará, in Brazil. An

instrument content general information and script evaluation with a Five items Likert scale was utilized to response and calculate the instrument's questions. The degree relevance was scored between 0 and 1 considered irrelevant and between 2 and 3 to relevant. The Intraclass Correlation Coefficient (ICC) was chosen to analyze the responses, using the significance of the p value <0.001, completed with an agreement between the at least 0.8 (80%) by the judges. The video was filmed at Laboratory of Communication in Health (LabCom\_Saúde), located in the Nursing Department of the Universidade Federal do Ceará (UFC), in Brazil. The present study was approved by the Research Ethics Committee of the Federal University of Ceara. **RESULTS:** The final video version contained 10 minutes and 38 seconds. The Intraclass Correlation Coefficient (ICC) to agreement between all the health judges on the degree of relevance was observed regarding the following aspects from the script: Idea concept, dramatic construction, characters, visual style, target audience, and relevance. However, six health professional judges evaluated that the scenes reflected stereotypes or discrimination. Five health professionals judges affirmed that dialogues and language could be more simple and compatible with the audience knowledge. Regarding total, the ICC value for all script categories evaluated was 0.768, considered considerable. The confidence interval was set at 95%, estimated to be between 0.444 and 0.939, being adequate and with a significant p value of 0.0001. For all audiovisual judges reported that the dialogues should be more fluid. Regarding the ICC from audiovisual judges, inferring in the 95% confidence interval, relevance totaled an average of 0.764, being considered relevant. **CONCLUSION:** An educational technology in the form of video to interventions and guidance of children caregivers in CIC contributes as a facilitating tool in the nurses' practice in their practice with those clientele. For the next step, this educational video will be applied to the caregivers at a reference brazilian pediatric hospital.

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**Title:**

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**Keywords:**

Child Health, Educational Technology and Urinary Catheterization

**References:**

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### **Abstract Summary:**

Urinary bladder dysfunction is a disorder in the storage and emptying dynamics of the bladder, mainly due to Myelodysplasias, which can affect children in a congenital or acquired form. Nurses can create and apply technologies to mediate educational practices to modify life habits and health of the patient and family.

### **Content Outline:**

One of the main treatments for Urinary bladder dysfunction (UBM) is the Clean Intermittent Catheterization (CIC), a bladder catheter continuously used by those who have urinary dysfunction. This medical advice, for being simple, low cost and safe technique, has a good acceptance by the users and their family. However, the incorrect use of this procedure can lead to complications such as urethra trauma, urinary tract infections, bleeding, epididymitis, pyelonephritis, bladder perforations, among others. One of the educational strategies is the educational video to improve the teaching-learning process. In this perspective, it is important that nurses create and apply technologies, such as videos, in order to mediate educational practices that can change the life habits and health of the patient and family. Aimed to develop and validate an educational video for family orientation during a clean intermittent catheterization in children. A methodological study developed in two steps in the period from March to December of 2016. The first step was the development of the educational video and the second was the validation by nine health and three audiovisual professionals. Judges were recruited through non-probabilistic intentional and snowball sampling. The final video version contained 10 minutes and 38 seconds. The Intraclass Correlation Coefficient (ICC) to agreement between all the health judges on the degree of relevance was observed regarding the following aspects from the script: Idea concept, dramatic construction, characters, visual style, target audience, and relevance. An educational technology in the form of video to improve interventions and guidance of children caregivers in CIC contributes as a facilitating tool in the nurses' practice in their practice with those clientele.

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