Nursing Experience of a Home-Based Patient with Fear of Medical Procedures During Urinary Catheterization

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Objective: To summarize the nursing experience of a home-based patient with fear of medical operation during insertion of ureter.

Methods: The home visiting nurses carefully observed and comprehensively assessed the patient's condition, excluded other confounding factors, and promptly identified the patient's fear of medical procedures.

Results: The process of reinsertion went smoothly and the patient did not complain of pain. The patient and her family expressed satisfaction.

Conclusion: Nurses' nursing activities in the home environment carry certain unknown medical risks. Nurses need to assess patients thoroughly, identify problems and take interventions in time to prevent undesirable conditions.

Keywords
Home patient, Urinary catheterization, Fear of medical procedure.

Introduction
Fear is a desire to avoid harm in anticipation of painful and disruptive events [1]. Medical fear is a common psychological reaction of patients to the emotional response to medical experiences and their associated events, including fear of medical procedures, fear of medical environment, interpersonal fear and self-fear [2,3]. Medical fears can lead to the inability to cooperate well with treatment and care, thus affecting the progress of treatment and recovery from illness. Medical fears in children are mostly reported in the relevant studies, however, there are few literature on medical fears in the elderly population [2-4]. Transitional Care Department of the first author’s hospital received a case of a home patient requiring a replacement of a urinary catheterization in May 2019. The patient developed a fear of medical procedures during the home care. After giving adequate reassessment, removing confounding factors, dispersing the attention and other care methods, the home patient was successfully retained the urinary catheter. The nursing experience is reported below.

Case History
The patient is female, 61 years old, retired worker with educational background of junior high school. The patient had multiple diagnoses of end-stage renal disease, hyperkalemia, rheumatoid arthritis, atherosclerotic coronary artery disease, heart disease, hypertension (very high-risk group), type II diabetes, and other diseases. The patient has been hospitalized several times and the last time was admitted to an acute care hospital on February 2nd, 2019 for "elevated creatinine for more than two months and blood pyuria for one month". The patient was discharged on February 13th after symptomatic treatment. After being discharged from the hospital, she has been going to the hospital regularly to have her urinary catheter replaced. In May 2019, she came for Transitional Care Department of the first author’s hospital to request an in-home urinary catheter replacement.

Nursing Procedure

Nursing Assessment

Daily Life of The Home Patient: Home visiting nurses assessed the patient, and the patient was conscious, slightly tired, weak, and limited in movement due to shoulder and knee pain. Slow
activities could be performed at home with the aid of a walker. The patient had an indwelling urinary catheter, a 14-gauge latex catheter which drained clear urine, with no complaints of perineal discomfort. Her blood pressure was 155/69 mmHg, her pulse was 67 beats/min and her respiration was smooth and she had no fever.

**Psychosocial Status of the Home Patient:** The home patient had normal cognitive function and was slightly depressed due to the prolonged illness. She lived with her husband, son and daughter-in-law, and her husband was the main caregiver.

**Nursing Problems**
The home patient did not complain of pain and was instructed to drink sufficient water. About half an hour later, the percussion of the urinary bladder area was cloudy, and the patient wanted to urinate but could not do it without the urinary catheter. According to the assessment results, the home patient needed to be retained the urinary catheter. The home visiting nurses explained the purposes of keeping the urinary catheter and precautions to the patient, and obtained the patient’s cooperation. The 14-gauge latex catheter was selected and in strict accordance with the catheterization operation procedures. During the process of gisting the indwelling urinary catheter, the patient appeared to shout loudly, sweated profusely, and complained of severe pain that was difficult to relieve.

**Nursing Intervention**
Home visiting nurses immediately suspended the operation, reassured the patient and gave a measurement of vital signs. The patient’s blood pressure was 200/82 mmHg, P69 beats/min which was high, and breath was also slightly rapid.

Home visiting nurses observed the condition and asked the patient how she felt during the previous ureter insertions. The patient complained of severe pain each time, and the family also complained on behalf of the patient that this had happened each time when inserted the catheter in the past.

About ten minutes later, the blood pressure of the home patient was measured as 160/70 mmHg and P67 beats/min with smooth breath. The patient was then distracted by talking while the ureter was being inserted. In the end the ureter was successfully retained this time.

**Results**
During the subsequent insertion of the ureter, the patient did not complain of discomfort or pain. She was surprising and expressed great satisfaction after knowing that the ureter had been successfully placed. Her family also expressed their satisfaction.

**Discussion**
We should promptly identify patients’ medical fears and provide appropriate care. Urinary catheterization is a medical application widely used in clinical practice and it is one of the most commonly used techniques in basic nursing operations. This patient shouted loudly, sweated profusely and complained of unbearable pain during the insertion of the ureter, which was suspected to be caused by the difficulty in catheterization. According to the research, the majority of patients with catheterization difficulties are reported to be male. The common causes are prostatic hyperplasia, circumcision, and urethral trauma, etc.; catheterization difficulties for female are rare and may be due to atrophy of the external urethral orifice and urethra are not in normal anatomy position for elderly female, etc. [5].

However, the home patient had been using ureter for a long time, and the urethra was in a normal anatomical position which was clearly visible. Moreover, the process of placing the ureter was very smooth, with urine flow and normal urine color, which could exclude urinary catheterization difficulties. Fear varies with age, and research shows that fear and anxiety are more common in children than in adults [6]. In fact, many elderly people also have fears that lead to severe psychological stress when they are facing to the medical care operations. However, they pretend not to be scared since they are ashamed to be afraid. The patient’s fear of medical procedures was typical in this case. The patient’s experience of illness may include frightening expectations about the medical care procedures, which would affected the actual experience [7].

She has experienced multiple retention and replacement of urinary catheters in the past, and the first insertion of the catheter was painful. As a result, the home patient believed that every time a urinary catheterization would cause pain. Medical fears can lead to the inability of patients to cooperate favorably with medical care, which can affect the effectiveness of treatment and even lead to more serious problems. There was a study found that fear of needles may cause certain populations to defer or avoid vaccination, leading to a significant increase in the number of disease cases and government spending [8].

The patient’s sense of fear is important to make the operator aware of the danger and ready to take safe action. Although the home visiting nurse is stressful when the patient shouts out loudly and complaining of excruciating pain during the process, it enables the home visiting nurse to aware of the risk. For instance, the home visiting nurse can suspend the operation immediately and provide a measurement of vital signs in order to avoid the medical accident. After excluding all possible factors that causes the fear of the patient, the nurse can use distraction, psychological comfort and other nursing methods to ensure the process of insertion going smoothly without adverse effects on the patient.

Nurses need assess not only the patient’s general condition, disease status, and psychosocial status, but also the patient’s previous experiences and feelings about retaining a urinary catheter. Home visiting nurses assumed that this was not the first time that the home patient had a catheter replacement and neglected to fully assess the patient’s previous experience, which resulting in greater stress when the patient had a fear of medical procedures. Therefore, nurses are required to thoroughly assess the patient’s medical history and condition before performing the urinary catheterization. Furthermore, nurses should also carefully observe
the patient’s emotional response and changes in order to timely detect the problems and take actions.

**Conclusion**

Home care is different from hospital care, nurses need to explain items clearly, inform consent to adequately assess and provide quality care. Home care refers to nurses visiting patients at home to provide personalized and professional nursing cares to them to prevent illness and disease. The goal of health promotion and health maintenance can be a continuation and complement to the inpatient care. It is a new form of medical care [9]. The incidence of dysuria due to stroke, male prostate hypertrophy, urinary incontinence, and Alzheimer’s disease is increasing. As a result, more and more patients are discharged from hospitals with urinary catheters requiring home care [10].

Since 2007, the first author’s hospital has been providing transitional care and home nursing services, which is a perfect solution for those patients being discharged from hospital with urinary catheters. However, the working environment of nursing care at home is totally different from that at hospital, which means that nurses have to go to an unfamiliar environment to carry out medical procedures that existing certain unknown medical risks. Therefore, nurses should follow the spirit of prudence in home care, should explain and inform consent to the patients and their families clearly, should be proficient in specialized theoretical knowledge and skills, should fully assess the patient’s situation; and should implement the nursing procedures in strict accordance with regulations. With the development and propaganda of the national pilot project of “Internet Plus Nursing Service”, more and more nurses provide home care services to the residents [11]. Therefore, nurses not only need to have solid theoretical knowledge and professional skills, but also have strong psychological qualities in order to offer better and more convenient services to the home patients.

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