

## **EXPERIENCE OF FOLLOWING THE PROTOCOL OF URINARY CATHETER BUNDLE CARE IN HOSPITALIZED ELDERLY PATIENTS—A QUALITATIVE STUDY**

### Hypothesis / aims of study

Carefully monitor the use of urinary catheter is important to prevent the iatrogenic damage caused by the inappropriate use of urinary catheter. Unfortunately there was no clinical protocol related the urinary catheter bundle care specifically for the elderly patients. The aim of this study is to explore the experience of elderly patients, their caregivers, and health care professionals of a newly developed protocol of urinary catheter bundle care. Based on the study findings, we may modify the current protocol to be more suitable for clinical practice.

### Study design, materials and methods

Purposive sampling was conducted to recruit ten hospitalized elders at a geriatric ward of a medical center located in southern Taiwan. Patients were eligible if indwelling urinary catheter after admission. Data were collected from different sources which included the medical chart, health care documentation, observation and face to face interview. Content analysis for qualitative data involved iterative comparisons of 18 progress records and 51 transcripts.

### Results

Based on the phases of catheter use, the results were analysed from two domains,(1) the experiences of the elders and their caregivers, and(2) the experiences and perception of the health care professionals.

First phase was the initial placement of urinary catheter. Three themes emerged from the elderly patients and their caregivers' perceptions of the rationales: inability to urinate, the reduced discomfort caused by activity, and treatment needs. While the health care professionals were focus on managing the problem of bladder dysfunction, convenience of work, patient's past experiences of urine retention experiences, care considerations after discharge, comfort care, and need for accurate measurements of urinary output.

During the phase of placement of urinary catheters, four themes were identified: appreciation of the function of IUCs, adverse impacts of IUCs, being unaccustomed to or uncomfortable with IUCs, and questions about the need for IUCs. The elderly patients expressed that the use of urinary catheters could enhance physical comfort, but the catheter would restrict their mobility. They may worry about the complications of using urinary catheter and feel of the judgments from others. Furthermore, the caregivers also concerned about the complications of use of urinary catheters. The health care professional expressed that the use of urinary catheters could enhance convenience of care because they did not need to change the diapers or use of external devices for voiding.

At the phase of withdrawing the urinary catheter, health care professionals may postpone removing the urinary catheters by following reasons, such as convenience of work, concerns of urinary catheter re-insertion and progressive wound by external urinary catheter devices.

After removing the urinary catheters, the bladder retraining actions, as listed in newly developed the protocol of urinary catheter bundle care, cannot be done by the patients and the caregivers. Six themes were identified from the experiences of failure to implement bladder retraining actions, included difficulty in following the voiding schedule, method to induce natural urination, voiding diary: self- awareness of care, not effective, not consistent with patient preferences, in response to changes in the clinical status, execution error, and undelivered messages between caregivers. Four themes were emerged from the elderly patients and their caregivers' perceptions of the intermittent urinary catheterization (IC): concern of infection and catheterization, not ready to do IC, convenience of care, substitution caregivers after discharge. Five themes emerged from the health care professionals' perceptions of care after removing the urinary catheter: care considerations after discharge, convenience of work, fears of causing patient discomfort, no need, and not used to do. Even part of the health care professionals, their care after removing the urinary catheter were based on their own perception and lack of clinical evidence. Based on the study findings, the protocol had been modified to be more close to clinical conditions.

### Interpretation of results

Different perceptions among hospitalized elderly patients, their caregivers, and health care professionals may influence the use of urinary catheter and the implement of the protocol of urinary catheter bundle care. Inappropriate use of urinary catheters may be caused by the inconsistency in the indications of use of urinary catheter among health care professionals.

In addition, some health care professionals did not adhere to the policy of catheter care which was developed based on the clinical evidence. Fail to recognize elderly and caregiver concerns may lead to failure of catheter removal. Almost all the participants, elderly patients and their caregivers, did not receive comprehensive health education of the care of urinary catheter.

#### Concluding message

Urinary catheters are the most common medical devices used among hospitalized elderly patients with dysfunctional voiding. Without careful monitoring, the urinary catheter may be inappropriate use in the elderly and lead to the iatrogenic damage to the patients. The protocol of urinary catheter bundle care is important to enhance the safety and proper use of this medical device. Not only the elderly patients and their primary caregivers need to receive comprehensive education associate with the care of the urinary catheter. Even the health care professionals, continuous in-service education are needed to promote the proper care of the urinary catheter according to the clinical evidence.

#### Disclosures

**Funding:** NO **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** Institutional Review Board National Cheng Kung University Hospital **Helsinki:** Yes **Informed Consent:** Yes