



EVIDENCE BASED NURSING (EBN): BLADDER TRAINING IN URINE ELIMINATION DISORDERS PATIENTS IN LABUANG BAJI MAKASSAR HOSPITAL

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ABSTRACT

Background: Bladder Training is one of the applications of Evidence Based Nursing (EBN) to reduce urinary elimination disorders in Chronic Kidney Disease (CKD) patients with urinary catheters. Bladder training is bladder training that aims to develop muscle tone and bladder sphincter muscles for maximum purpose

Objectives: The purpose of this EBN is to identify the effectiveness of Bladder Training (delay urination) in reducing urinary elimination disorders in Chronic Kidney Disease (CKD) patients

Result: The results of this EBN application were found that at the time of administering bladder training, on the first day the patient has not felt the sensation of wanting to urinate and at the time of giving bladder training on the second day the client has felt the sensation of wanting to urinate.

Conclusion: Bladder training (delay urination) can be recommended as a non-pharmacological therapy to reduce urinary elimination disorders, is easy to do, safe and technically practical to reduce elimination disorders in Chronic Kidney Disease (CKD) patients.

INTRODUCTION

Chronic Kidney Disease is a public health problem throughout the world. The Global Burden of Disease research estimates that every year 5-10 million people die from Chronic Kidney Disease (WHO, 2018).

The number of patients with chronic kidney failure in Indonesia in 2013 was recorded at 2.0% and increased in 2018 to 3.8%. The province in Indonesia with the highest prevalence of chronic kidney failure is North Kalimantan with a percentage of 6.4%

and the lowest prevalence of chronic kidney failure is West Sulawesi with a percentage of 1.8%. Meanwhile, the prevalence of chronic kidney failure in South Sulawesi reaches 3.5% (Riskasdas, 2018).

The prevalence of chronic kidney disease based on age, namely those aged 65-74 years, reached 8.23%, while those aged 15-24 years reached 1.33%. Based on gender, male with a percentage of 4.17% and female as much as 3.52% (Riskasdas, 2018).

Some of the causes of chronic renal failure are different including pyelonephritis. Pyelonephritis is an infectious and inflammatory process that usually begins in the renal pelvis, the renal canal that connects to the urinary tract (ureters) and the renal parenchyma or kidney tissue. Infections can result from many types of bacteria, especially from colonic bacilli. The origin from fecal urinary tract contamination. When bacteria invade kidney tissue, progressive damage is triggered resulting in loss of kidney function. The most common site of attack is the renal medulla, the part responsible for concentrating urine. Thus, patients with this condition have decreased ability to concentrate urine.

The impact of urinary elimination disorders in patients with chronic renal failure are changes in urinary excretion, increased blood pressure, nausea, which is characterized by edema or decreased urine output volume and pruritus which is characterized by dry and scaly skin. Another impact of urinary elimination disorders is a fluid-electrolyte

balance disorder which is characterized by decreased levels of creatinine clearance and increased serum creatinine levels because the kidneys are no longer able to maintain body homeostasis so that there can be a decrease in consciousness in the patient and lead to death (Tarwoto & Wartonah, 2015).

One of the non-pharmacological ways to treat urinary elimination disorders is bladder training (Bladder Training). Bladder training is bladder training that aims to develop muscle tone and bladder sphincter to function optimally, there are 3 types of bladder training methods, namely kegel exercise, delayed urination, and scheduled bathroom trips. Kegel exercises are exercises to tighten or strengthen the pelvic floor muscles, delay urination is to delay urination, while scheduled bathroom trips are to schedule urination (Pamungkas Reza, M, 2013).

Bladder training is bladder training that aims to develop muscle tone and bladder sphincter muscles for maximum purpose. Bladder training is usually used for stress incontinence, urge incontinence or a combination of both or what is known as mixed incontinence. Bladder training that requires the client to delay voiding, fight or block the sensation of urgency and urinate at a predetermined time and not in accordance with the urge to urinate. The purpose of bladder training is to prolong the interval between client urinations, stabilize the bladder and relieve urgency (Shabrini, 2015).

Bladder training methods include delayed urination and scheduled urination. Delay urination is an exercise to hold / delay urination. In patients with a catheter still attached, delay urination is done by clamping or tying the urine stream to the urine bag. This action allows the bladder to fill with urine and the detrusor muscle to contract while releasing the clamp allows the bladder to empty its contents. This exercise is done 6-7 times per day until the patient can delay urination (Nurhasanah & Hamzah, 2017).

The results of Fajar Dwi's research (2020) after the delay urination exercise showed that almost half of the patients had improved by no longer experiencing urinary incontinence, while in patients who underwent scheduled urination exercises it was known that half of the patients had improved and no longer experienced urinary incontinence. In addition, bladder training can also prolong the time to excrete urine, increase the amount of urine retained by the bladder, improve control of the urge / urge to urinate according to a schedule and reduce / eliminate urinary incontinence.

METHODS

The application of EBN begins with finding phenomena in the room which is formulated in the form of clinical statements with the PICO format (Problem, Intervention, Comparison, and Outcome) and searches for appropriate articles that can answer client questions. Then one of the articles is selected and a critical appraisal is carried out to find out

whether the article is feasible or not as a basis for implementing EBN. After that, the proposal was prepared. And then all the equipment needed was prepared, namely arterial clamps.

The application of EBN was carried out in the Mamminasa Baji inpatient room at Labuang Baji Hospital Makassar on March 03 to March 04, 2021. And identification of the subjects involved in the application of this EBN with the inclusion criteria of patients who had a catheter inserted, communicative patients, carried out when they were about to be released (aff catheter) and did not have a urinary tract infection.

The procedure for implementing EBN is carried out by taking into account the clinical condition of the patient, reviewing the patient's basic data including age, weight, height, BMI, and pharmacological drugs, examining the patient's BAK, recording urine output before bladder training (delay urination) is performed.

The steps for bladder training (delay urination) are:

- 1) Nurse washing hands;
- 2) bring the equipment close to the patient's bedside;
- 3) wear sterile gloves;
- 4) measure the volume of urine in the urine bag and empty the urine bag;
- 4) clamp or tie the catheter according to the program (for 1-2 hours) which may fill the bladder with urine and the detrusor muscle contracts, in order to increase the residual urine volume;
- 5) encourage the patient to drink according to the program (200-250cc);
- 6) ask

RESULT

In the application of this EBN, the patient involved is 1 person. The patient on behalf of "Mr. R" 21 years old was admitted to the hospital with complaints of difficulty urinating, before being taken to the hospital the client had a fever for 3 days. Complaints of difficulty urinating in patients experienced since 3 days before being taken to the hospital. At the time of giving bladder training on the first day the patient had not felt the sensation of wanting to urinate and when giving bladder training on the second day the client had felt the sensation of wanting to urinate.

DISCUSSION

The nursing intervention given for the diagnosis of urinary elimination disorders based on EBN in addition to interventions based on SIKI (2019) is providing bladder training (delay urination). Bladder training is bladder training that aims to develop muscle tone and bladder sphincter muscles for maximum purpose. Bladder training is usually used for stress incontinence, urge incontinence or a combination of both or what is known as mixed incontinence. Bladder training that requires the client to delay voiding, fight or block the sensation of urgency and urinate at a predetermined time and not in accordance with the urge to urinate. The purpose of bladder training is to prolong the interval between client urinations, stabilize the bladder and eliminate urgency.

Bladder training methods include delayed urination and scheduled urination.

Delay urination is an exercise to hold / delay urination. In patients with a catheter still attached, delay urination is done by clamping or tying the urine stream to the urine bag. This action allows the bladder to fill with urine and the detrusor muscle to contract while releasing the clamp allows the bladder to empty its contents. This exercise is done 6-7 times per day until the patient can delay urination. Meanwhile, scheduled urination is the habit of urinating according to the schedule made by the nurse 6-7 times per day, the schedule must be followed strictly by the patient, so that the patient is able to learn to recognize and respond appropriately to the desire to urinate (Nurhasanah and Hamzah, 2017).

Before doing the intervention, first observe the client's condition and the complaints that the client can feel about the catheter tube that is attached to the client, bladder training (delay urination) can be done after recording the urine output contained in the urine bag, then emptying the urine bag which aims to find out how much urine output during bladder training (delay urination). The provision of bladder training (delay urination) cannot be given if there is a refusal from the client or the client's family, to anticipate the rejection from the client, the client and the client's family must first be given education and also an explanation of the purpose of giving bladder training (delay urination) to the client.

The implementation of bladder training is provided in accordance with established

work operational standards. On the first day of implementation of bladder training, 3 cycles of training were given with a time of 2 hours for each cycle. The first administration at 15:00 was evaluated at 16:00 then the clamp was released at 17:00, the second administration at 18:00 was evaluated at 19:00 then the clamp was released at 20:00, and the third administration at 19:00 20:00 is evaluated at 21:00 then released at 22:00. Every time bladder training (delay urination) is given, the client is advised to drink 200 cc-250 cc in order to fill the bladder.

This is in line with the results of research by Dwi Febrianto (2015) which states that Bladder Training is effective for stimulating the voiding sensation. This is because Bladder Training will stimulate the bladder which causes the bladder to increase control of the urge to urinate.

In line with Purnomo (2016) said that the results of research in general found that the Bladder Training intervention was proven to be significantly able to overcome the problem of urinary incontinence after urinary catheterization, both with the scheduled urination method and delayed urination which was carried out every day for 6-7 times of exercise in the day before urinary catheter removal. In implementing the bladder training intervention, the patient is first given an understanding of incontinence and the bladder training method, to increase the success of urinary incontinence problems, it requires cooperation between the nurse and the patient

with catheter insertion causing the bladder to not feel the sensation of urination and the sphincter cannot close properly. If good, muscle tone and sphincters become weak and then cause incontinence.

CONCLUSION

Impaired urinary elimination is a problem that interferes with patient comfort. Patients who experience urinary elimination disorders are closely related to the role of nurses in providing nursing care in dealing with patient elimination disorders. Non-pharmacological therapeutic interventions are important interventions to ensure high-quality care. Several research results reported that Bladder Training intervention (delay urination) is a method that is easy to do and very effective in reducing elimination disorders so that it can increase patient comfort and improve the quality of nursing services provided.

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