

The Improvement of Compliance with Catheter Traction Treatment Through Leaflet Media Education as an Effort to Prevent Post-BPH Surgery Syndrome

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ABSTRACT

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Surgery that is often done to overcome the presence of an enlarged prostate is called Transurethral Resection Prostate (TUR P) surgery. Post-surgery bleeding often occurs within the first 24 hours, so it is necessary to perform catheter traction action. The traction action of the catechetical causes pain and discomfort. Lack of understanding and discomfort conditions make some patients remove catheter traction by themselves. Health education has been done but less effectively. Furthermore, Health education is needed by using leaflet media to improve patients' understanding and compliance to post-surgery care of TUR P This research aims to find out the influence of educational media leaflets on compliance with catheter traction treatment of patients post-BPH surgery. The research method uses a quasi-experiment with a post-test-only control group design approach. The population of the study is all patients post- BPH surgery at RSUD Jombang as many as 30 respondents. The sample met the inclusion criteria of 24 respondents with a simple random sampling technique. Data analysis used was Mann Whitney U Test sig $\alpha < 0.005$. The results of the study were obtained by ρ Value Sig. $0,004 < 0,005$ means that there is an influence of educational media leaflets on compliance with catheter traction care of patients post-BPH surgery. Inappropriate media on the condition of respondents led to a lack of understanding of respondents resulting in non-compliance with catheter traction treatment post-TUR P surgery. Non-compliance with catheter traction treatment causes bleeding. Health education with the right media is effective to reduce the occurrence of TUR P syndrome 24 hours after the surgery

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I. INTRODUCTION

BPH (Benign Prostat Hyperplation) is an enlarged prostate gland that often occurs at age 50 to elderly people^[1]. BPH treatment can be done in various ways including transurethral resection prostate (TUR P) surgery. TUR P is one of the most commonly performed surgical measures to treat an enlarged prostate. This surgery was chosen because it has a minimal effect when compared to other types of surgery. Post-surgery bleeding is a complication that can occur in this action^[2]. Bleeding that occurs during post-surgery can be overcome by doing catheter traction and irrigation in the bladder^[3].

Traction fixation is done by pulling a catheter balloon towards the bladder neck, this action can block the entry of prostate bleeding into the bladder. Traction can be done by gluing a catheter to the patient's thigh or by putting a liter of NaCl load on the catheter through a pulley. Thighs that are done catheter gluing should not flex / legs must remain straightened as long as traction is still attached so that traction still presses the jars^[4]. Traction should not be more than 24 hours because it can cause an emphasis on the penoscrotal urethra so that which can result in bladder stenosis due to ischemia^[5].

Hamid, 2016 stated that the installation of catheter traction pulled tight for 24 hours will affect pain accompanied by anxiety in patients. Pain causes non-compliance with the installation of traction fixation catheters that have not been 24 hours removed by the patients and the traction-mounted legs

should be straight, should not be bent for 24 hours, but because of the discomfort feeling undergone by the patients, it makes the patients bend themselves because of the patients' lack of the information obtained and due to the patient's internal factors.

The previous BPH cases based on Kemenkes 2008, estimated as many as 70 million degenerative cases. It occurs in developed countries as much as 19%, while in developing countries as much as 5.35%. In 2018 in Indonesia there were 9.2 million cases of BPH that happened in men over the age of 60^[6]. Based on preliminary studies on medical records at RSUD Jombang the number of BPH patients in 2019 was 158 patients.

Another research was done by Sodiq (2012) mentioned that there is an effect of catheter installation on patients during post-TUR P surgery against the onset of bleeding with a value of $p = 0.001$ before the installation of catheter traction occurred bleeding by 48% and after the installation of catheter traction observed 1-12 hours occurred bleeding by 20% and observed 12-24 hours bleeding by 8%^[7].

Based on previous researchers on 10 patients at RSUD Jombang found that non-compliance patients with catheter traction fixation, before 24 hours the patient had removed catheter fixation as many as 4 (40%) and as many as 6 (60%) patients did not remove catheter fixation. This non-compliance happened since the patients did not understand if the catheter traction should not be removed during the 24-hour post-surgery. The patients remove the catheter traction by themselves because they feel pain when traction is pulled tightly and feel tired as their feet should not be bent for 24 hours. The patients' mobilization is also limited, they are only allowed to tilt right and left during the first 24 hours.

Catheter fixation procedures must be taken during the first 24 hours during post-surgery correctly unless it results in post-surgery bleeding complications. Repeated bleeding causes the urinary catheter hose to be jammed so the urine cannot flow. Post-surgery bleeding causes the catheter hose to be stuck so that the treatment will be longer and can even result in surgery again^[7]. Education to patients about the first 24-hour during post-BPH surgery care is very important since it affects the success rate of post-TUR P surgery^[8]. Education is carried out by nurses to assist patients in increasing the level of health knowledge so that there is a change in behavior from non-compliance to compliance in adhering to catheter traction care^[9]. So, it is expected that the role of nurses in delivering health education to the patients can be maximized when giving information^[10].

The knowledge of catheter traction care has been provided by nurses through health education with lecture methods but the results are less effective because some patients do not comply with the rules, so it is necessary to make educational efforts that are easier to understand, namely through leaflet media. The advantages of using leaflet methods can be carried everywhere, facilitate understanding and, increase learning passion^[11]. The purpose of this research is to know the influence of educational media leaflets on compliance with catheter traction treatment of patients during post-BPH surgery.

II. METHOD

The quasi-experiment post-test only control group design is used in the research. The population was all post-BPH surgery patients treated at the 'rose*' ward in RSUD Jombang amounted to an average of 15 patients each month. The number of samples taken as many as 24 respondents were divided into 12 respondents for the treatment group and 12 respondents for the control group who met the research criteria, using simple random sampling techniques. The research instruments use leaflets and observation sheets. The implementation of the research was through educating the treatment group and control group after patients with post-BPH surgery were sent from the operation room into the ward. Education is done by using leaflet media for treatment groups and education using lectures for the control group such as those that have been done in the ward. After being given the education both in the treatment group and in the control group, observations were made about care compliance during the first 24 hours using observation sheets. The data collected were analyzed using the Mann-Whitney U Test.

III. RESULTS AND DISCUSSION

Table 1. Characteristics of respondents of Post-BPH surgery in the ward 'Rose', RSUD Jombang, August 2021

No	Characteristic of General Data	Group			
		Treatment		Control	
		Σ	%	Σ	%
1	Age				
	26-35 years old	0	0,0	0	0,0
	36-45 years old	0	0,0	0	0,0
	46-65 years old	5	41,7	6	50,0
	> 65 years old	7	58,3	6	50,0
2	Education level				
	Not going to school	1	8,3	0	0,0
	Elementary school	2	16,7	4	33,3
	High school	6	50,0	5	41,7
	University	3	25,0	3	25,0
3	Occupation				
	Not working	7	58,3	6	50,0
	Farmer	1	8,3	1	8,3
	Civil servant	2	16,7	2	16,7
	Retired	2	16,7	3	25,0

Source: primary data, 2021

Table 1 shows that most of the respondents of the treatment for people aged 65 years above in the elderly people category amounted to 7 (58.3%) respondents, while for the control group half aged 46-65 years as many as 6 (50%) respondents and half aged over 65 years as many as 6 (50%) respondents. Table 1. based on education level, in the treatment group showed that half of respondents were high school students as many as 6 (50.0%) respondents while for the control group almost half were high school students which is as much as 5 (41.7%) respondents.

Based on the data seen in table 1, showed the majority of respondents of the treatment group who do not go to school as many as 7 (58.3%) respondents, while for the control group half of them did not work, which was as many as 6 (50.0%) respondents.

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Table 2. Compliance rate of Respondents of post-BPH surgery patients in the ward RSUD Jombang, august 2021

Compliance	Group		
	Treatment	Control	
	%	Σ	%
Low	16,7	7	58,3
medium	50,0	4	33,3
High	33,3	1	8,3
Total	100,0	12	100,0

Source: primary data, 2021

Table 2 shows that half of the respondents of the Treatment group had a moderate compliance rate of 6 (50.0%) respondents. While in the control group most respondents had a low compliance rate of 7 (58.3%) respondents.

Tabel 3 Mann Whitney's statistical test results

Group	Mean	SD	ρ
Treatment	6,75	1,138	0,004
Control	5,00	1,348	

Source: Primary Data, 2021

Table 3 showed the average compliance score of respondents in the treatment group of 6.75 with the standard deviation of 1,138, while the control group averaged a compliance score of 5.00 with the standard deviation of 1,348. Based on statistical tests with Mann Whitney test ρ Value Sig. 0,004 < 0.05 means that there is an influence of educational media leaflets on compliance with catheter traction treatment of post-BPH surgery patients.

Based on the results as seen in table 2, this research showed that half of the respondents of the Treatment group had a moderate level of compliance and the rest had high and low levels of compliance. The level of compliance means that the patients are compliant in catheter care during the first 24 hours post-surgery in terms of not sitting, not removing the catheter traction fixation by themselves, the patients drinking the 2 liters of water per day and the patients only moving the right and left tilt-only during the first 24 hours of post-TUR P surgery. Compliance is the behavior of the individual as recommended by therapy and health. The level of compliance can start from heeding every aspect of the recommendation to complying with the plan^[12].

According to Hamid (2016), the installation of catheter traction that is pulled tight for 24 hours made the patients feel painful causing anxiety. It drove the patients to be non-compliance with the installation of catheter traction fixation. It also made the patients tend to remove the catheter fixation before reaching 24 hours^[4].

Respondents in the control group mostly had low levels of compliance. At the time of observation, some respondents bent the legs on the side of the attached traction catheter, a reason for pain in the traction area, respondents also strained and did not maintain the traction position of the catheter due to a lack of understanding of the information provided by the nurses. A person's level of compliance with education can be affected by age, level of education, and employment^[13]. The age of respondents in the control group averaged over the age of 65. It is categorized as the elderly people where the elderly people can experience changes in various physiological systems of the body, one of which is the nervous system. These changes cause the elderly to experience a decrease in brain work function/decrease in cognitive function^[14]. The existence of impaired cognitive function can cause a decrease in the ability of respondents to receive education given in lectures. The lecture method is a method in which respondents must remember a lot of the contents delivered by the speaker without being able to learn to repeat the material delivered.

The education level of the control group of some respondents had a low level of education. According to Kuncoroningrat (2010), the higher the level of education of a person, the easier it is to receive information so that more knowledge is possessed. Conversely, less education will hinder the development of one's attitude towards the new values given. Based on the results of the study showed that half of the respondents of the treatment group were middle-educated. The level of education is influential in responding to the health education provided. Respondents who have a higher level of education provide better responses and understanding when given education^[15].

The Treatment Group had a better level of compliance than the control group. Based on the results of the Mann-Whitney test. It is obtained that the value of P-Value is Sig. 0.004 ($P < 0.05$) meaning that there is an influence of educational media leaflets on compliance with catheter traction care of post-BPH surgery patients in the ward RSUD Jombang. Health education to adhere to the compliance of the first 24-hour post-BPH surgery patients is very important because it affects the success rate of post-TURP surgery. Nurses are responsible for providing effective client care^[8]. This role is done by helping patients in improving the patients' health knowledge in changing their behavior from non-compliance to compliance^[9].

The improvement of knowledge is done by providing health education. Health education requires good communication and additional knowledge competencies so that a health educator can

select and use the right strategies for different educational purposes. Such as the selection and use of media is one of the important components in the delivery of information to the public^[16].

Characteristics of respondents in the treatment group are some respondents aged over 60 years in which during this age, the patients have experienced a lot of decrease in body functions including cognitive function. According to the results of Rahmawati's research, 2014 said the age over 60 years as much as 35.5% experienced low cognitive function disorders. And some respondents had low levels of education. It needs the right educational media.

A leaflet is one of the educational media that highlights vision or visuals to be more memorable and understood by all levels of society^[6]. This media is very suitable for various levels of society with different levels of education. Leaflets are also easier to remember, more communicative, more effective to achieve goals^[16]. Educational media using leaflets has the advantage of being more concise and easy to understand, can be used for self-study, and can be read repeatedly. So that the leaflet media is suitable for all ages despite the elderly whose thinking ability has decreased.

Because this method can be read again and again so that the understanding gained will be better. When the patients/ respondents were educated using leaflet media, they can listen to the education delivered by nurses while reading the leaflets given. After education, respondents also re-read the leaflets that have been given.

IV. CONCLUSION

The results showed there is an influence of educational media leaflets on compliance with catheter traction treatment of post-BPH surgery patients.

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