THE RELATIONSHIP OF KNOWLEDGE ABOUT HYPOVOLEMIC SHOCK WITH INITIAL HANDLING OF PATIENTS IN NURSES IN EMERGENCY INSTALLATIONS

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ABSTRACT
Hypovolemic shock is a medical or surgical condition in which fluid loss occurs rapidly and results in multiple organ failure caused by inadequate circulating volume and blood flow. Hypovolemic shock caused by trauma or non-trauma can cause death. The purpose of this study was to determine the relationship between knowledge about hypovolemic shock and early management of emergency patients. This research method uses a descriptive correlational method through a cross sectional approach, with a total sampling technique with a total sample of 30 respondents. Data collection used a Knowledge Questionnaire for knowledge variables about hypovolemic shock and a Questionnaire based on hospital SOPs for initial treatment of patients. The results of the research from 30 respondents showed that 16 respondents with a percentage (53.3%) stated that they had a good level of knowledge about hypovolemic shock. 14 respondents with a percentage (46.7%) stated that they had poor knowledge of hypovolemic shock. Based on the results of the study, it was found that the ρ value was 0.002 <0.05, meaning that Ha was accepted and H0 was rejected. From this value, the results of the study were that there was a relationship between knowledge about hypovolemic shock and initial treatment of patients in nurses at the hospital emergency room.

Keywords: Hypovolemic Shock, Knowledge, Emergency

INTRODUCTION

Hypovolemic shock is a medical or surgical condition in which fluid loss occurs rapidly and results in multiple organ failure caused by inadequate circulating volume and blood flow. In most cases, hypovolemic shock is the result of rapid blood loss (hemorrhagic shock).

According to WHO (World Health Organization) injuries due to accidents each year cause 5 million deaths worldwide. The mortality rate in trauma patients who experience hypovolemic shock in a hospital with a complete level of care reaches 6%. Meanwhile, the death rate due to trauma who experience hypovolemic shock in hospitals with inadequate equipment reaches 36%.

The clinical manifestations of shock depend on the injury that triggered it. In hypovolemic shock the patient shows symptoms of hypotension, a weak and fast pulse, tachypnea, sweating, and cyanotic.

As many as 500,000 women with hypovolemic shock due to obstetric haemorrhage die annually and 99% occur in developing countries. Most of the patients died after several hours of

bleeding because they did not receive proper and adequate treatment.

The incidence of hypovolemic shock has not been recorded in Indonesia, but data shows that the most common cause of hypovolemic shock in children in developing countries is diarrhea. According to Basic Health Research (RISKESDAS) data for 2018, the incidence of diarrhea in toddlers in Indonesia reached 11%, a significant increase from 2013 of 2.4%. In hypovolemic trauma due to bleeding, the most common cause is traumatic injury. Still based on RISKESDAS data for 2018, the percentage of injuries was higher than 2007 by 7.5% to 9.2% in 2018. 3

The mortality rate due to hypovolemic shock with bleeding reaches 5 million per year, this number is caused by failure of the hemostatic process in trauma patients. While the mortality rate in non-traumatic hypovolemic shock patients, especially loss of body fluids due to diarrhea. Based on a study using sample-based Bayesian geostatistical analysis with a geolocation data set consisting of 15,072,746 children under the age of five from 466 study sites in 94 low- and middle-income countries.4

The development of science is getting faster and faster, humans are created with various advantages, one of the advantages possessed by humans is curiosity, it is this curious nature of humans that will encourage humans to try something new and look for relationships between facts and phenomena with existing theories. there are5

Knowledge or cognitive is an important domain for the formation of one's actions. Knowledge is needed as a psychological boost in improving attitudes and daily behavior, so that it can be said that knowledge is a stimulation of one's own actions5

According to the WHO (World Health Organization) the relationship between nurse knowledge and the management of initial hypovolemic shock in patients in the emergency department, one of the conditions that requires immediate action in the emergency department is hypovolemic shock.

Patients with hypovolemic shock really need close monitoring of clinical symptoms and hemodynamic status and intravascular status. Being a nurse, you must know and have the ability or skills to handle this condition in every area or room. Nursing actions are independent actions of professional nurses through collaboration in the form of collaboration with clients and other health energy in providing appropriate nursing care.

The family is the first guardian of health when the family can affect the health of other family members. The health function is a function in the family that emphasizes aspects of family health resulting from interactions and patterns of family development, and will be implemented properly in it to make decisions about health problems. Based on these functions, it aims to maintain family health in order to maintain high productivity and the ability of families to manage family and individual health

Preliminary study results through interview techniques to 10 nurses. Of the 10 nurses, only 4 stated they knew about the treatment of hypovolemic shock in patients, while 6 others said they did not know.

Based on the problems above, the researcher is interested in conducting research with the title "Relationship of Knowledge About Hypovolemic Shock with Early Treatment of Patients in Nurses in the Emergency Room".

RESEARCH METHODS

This research design is a type of Quantitative Analytical Research Quantitative research is a systematic scientific study of parts and phenomena and their relationships.9 The research design is descriptive correlational. Correlational descriptive is research that aims to reveal correlational relationships between variables. While the method used is a cross-sectional method, namely a study to study the dynamics of the correlation between risk factors and impacts. This research is only used for a certain time

This research was conducted at the Hospital Emergency Room in Bogor City. In this study, the total population was 30 respondents, then the samples were taken based on the Krejicie table as many as 30 respondents with an error of 5% and the sampling technique in this study was total sampling. Data collection tool used is a questionnaire sheet.

The variables in this study consisted of 2 variables, namely the independent variable was knowledge of hypovolemic shock and the dependent variable was the initial treatment of patients on nurses. Data processing and data analysis used the SPSS version 17 computer program. In this study, bivariate and univariate analysis were used.

RESEARCH RESULT

Univariate Analysis Results

Table 1 Frequency Distribution of Knowledge About Hypovolemic Shock

Knowledge of Hypovolemic Shock	Frequency	Percentage %
Good	16	53.3%
Not good	14	46.7%
Total	30	100%

Based on table 1 of the frequency distribution of Knowledge About Hypovolemic Shock in Hospitals, it was found that the majority (53.3%) were stated to have good knowledge about hypovolemic shock.

Table 2. Frequency distribution of initial treatment of patients to nurses

Initial treatment of patients on nurses	Frequency	Percentage %
Good	20	66.7%
Not good	10	33.3%
Total	30	100%

Based on table 2 the distribution of the frequency of initial treatment of emergency patients, it was found that the majority (66.7%) had good initial treatment, namely 20 respondents.

Results of Bivariate Analysis

Table 3 Relationship Knowledge of hypovolemic shock Initial treatment of patients on nurses

Knowledge of hypovolemic shock	Initial treatment of patients on nurses				Total		***Kendall's Tau***
	Good		Not good				
	n	%	n	%	n	%	$\rho\ Value$
Good	9	30.0 %	7	23.3 %	28	53.3 %	0.001
Not good	11	36.7 %	3	10.06 %	16	46.7%	
Total	20	66.7 %	10	33.3 %	44	100.0 %	

The results of statistical test data using the Kendall's tau test obtained a value of ρ 0.002 ≤ 0.05 meaning that Ha was accepted and H0 was rejected. Based on this value, the results showed that there was a relationship between knowledge about hypovolemic shock and initial treatment of patients in nurses.

DISCUSSION

1. Knowledge of Hypovolemic Shock

Based on the results of the frequency distribution of Knowledge About Hypovolemic Shock with a total of 30 respondents, 11 respondents with a percentage of 36.7% showed that the initial handling of patients in nurses was not good.

The results of this study were compared with research conducted by Weli Wensi (2017) with the title Relationship between Education and Years of Service with Knowledge of Early Handling of Hypovolemic Shock Patients in the IGD RSI Siti Khadijah Palembang, as many as 33.3% of respondents had undergraduate education, as many as 66.7% of respondents had education diploma, 56.7% had worked for a long time, and 43.3% had just worked. The results of the statistical test obtained a p value of 0.372 (p <0.05), meaning that there was no significant relationship between education and knowledge of early treatment in hypovolemic shock patient

This researcher believes that from the research results and supporting data obtained by researchers that the knowledge and behavior of nurses is quite important in the management or initial management of patients with hypovolemic shock.

2. Early Treatment of Patients in Nurses

Based on the results of the study, it was shown that out of 30 respondents, it could be seen that 20 respondents with a percentage (66.7%) stated that they had good initial treatment of patients with nurses.

The results of this study were compared with research conducted by Melya Florensisca Sinaga (2021) with the title Relationship of Knowledge and Attitudes of Nurses in the First Handling of DHF Patient Shock Conditions in the Children's Room of a Private Hospital in Bandung, showing that most of the 45 respondents (68.2%) had good knowledge and positive attitude in first handling the shock condition of DHF patients. In the results of the data showing a small number of 21 respondents (31.8%) had good knowledge but negative attitudes in the first handling of shock conditions in DHF patients.

Data amounted to 14 respondents, most of whom (60.9%) had insufficient knowledge and negative attitudes in the first treatment of shock in DHF patients. 5

According to WHO (World Health Organization) injuries due to accidents cause 5 million deaths worldwide every year. The mortality rate in trauma patients due to hypovolemic shock in hospitals with complete services reaches 6%, while the number of deaths due to hypovolemic shock in hospitals with inadequate facilities reaches 36%.

The mortality rate due to hypovolemic shock with bleeding reaches 5 million per year, this number is caused by failure of the hemostatic process in trauma patients. While the mortality rate in non-traumatic hypovolemic shock patients, especially loss of body fluids due to diarrhea. Based on a study using sample-based Bayesian geostatistical analysis with a geolocation data set consisting of 15,072,746 children under the age of five from 466 study sites in 94 low- and middle-income countries. The 2017 GBD (Global Burden of Diseases) Study to estimate the distribution of prevalence, incidence and deaths due to diarrhea from 2000-2017.1

The results of the study can be concluded that the most common occurrence of hypovolemic shock in children in developing countries is diarrhea. According to Basic Health Research (RISKESDAS) data for 2018, the incidence of diarrhea in toddlers in Indonesia reached 11%, a significant increase from 2013 of 2.4%. In hypovolemic trauma due to bleeding, the most common cause is traumatic injury. Still based on RISKESDAS data for 2018, the percentage of injuries was higher than 2007 by 7.5% to 9.2% in 2018.

3. Correlation between knowledge about hypovolemic shock and initial management of patients by nurses in emergency departments

The results of statistical test data using the Kendall's tau test obtained a ρ value of 0.002 <0.05 meaning that Ha was accepted and H0 was rejected. From this value, the results of the study showed that there was a relationship between knowledge about hypovolemic shock and initial treatment of patients.

The results of this study were compared with research conducted by Ermin Wiryani Aprilia (2017) with the title Relationship of Nurse Knowledge About Hypovolemic Shock with the Initial Management of Dehydrated Patients in Hospitals in Surakarta City. the results obtained were 0.000

(p = > 0.651) so that the results were accepted which could be interpreted as Ho being rejected and it meant that there was a relationship between nurses' knowledge of early hypovolemic shock in hypovolemic shock patients and the initial management of dehydrated patients in Surakarta City Hospital.

Hypovolemic shock is a medical or surgical condition in which fluid loss occurs rapidly and results in multiple organ failure caused by inadequate circulating volume and blood flow. In most cases, hypovolemic shock is the result of rapid blood loss (hemorrhagic shock).

The development of science is getting faster and faster, humans are created with various advantages, one of the advantages possessed by humans is curiosity, it is this curious nature of humans that will encourage humans to try something new and look for relationships between facts and phenomena with existing theories. there are 3

Behavior is an activity or activity of the organism concerned, which can be observed directly or indirectly. New behavior occurs when something is needed to cause a reaction, which is called stimulation. Means that certain stimuli will produce certain reactions or behaviors

In this study it was seen that the knowledge of nurses with the initial management of hypovolemic shock in patients in the emergency department, one of the conditions that required immediate action in the emergency department was hypovolemic shock. Patients with hypovolemic shock really need close monitoring of clinical symptoms and hemodynamic status and intravascular status. Being a nurse, you must know and have the ability or skills to handle this condition in every area or room. Nursing actions are independent actions of professional nurses through collaboration in the form of collaboration with clients and other health energy in providing appropriate nursing care.

CONCLUSIONS

1. It is known from 30 respondents that 16 respondents with a percentage (53.3%) stated that they had good knowledge about hypovolemic shock.
2. Based on the results of the study, it was shown that out of 30 respondents, it was known that 20 respondents with a percentage (66.7%) were stated to have good initial patient care.
3. There is a relationship between knowledge about shock and initial treatment of patients in nurses with a p value of $0.002 \leq 0.05$.

SUGGESTIONS

1. For STIKes Wijaya Husada
   Can be used as information and reference material for further researchers
2. For PMI Hospital
   Can hold programs in order to improve the quality of nursing care by conducting training on the initial handling of hypovolemic shock patients.
3. For Further Researchers
   Can be used as information in conducting similar research with different variables and can be a

source of knowledge regarding knowledge about hypovolemic shock and the initial management of patients on nurses.

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