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# Relationship on Knowledge Level of Nurses About Prevention of Decubitus Towards Stroke Patients in The Inpatient Room

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#### ABSTRACT

Decubitus is a damage to the integrity of the skin or can be said to be a wound due to trauma and surgery as well as a chronic disease caused by prolonged pressure on the skin which causes irritation. This study aims to determine the relationship between the level of knowledge of nurses in preventing pressure sores on stroke patients in the inpatient room. By conducting a study entitled the relationship between the level of knowledge of nurses about prevention of pressure sores on stroke patients in the inpatient room at RSU Imelda Workers Indonesia Medan in 2020. This research is a quantitative study using a descriptive correlation design with a cross sectional approach. The population in this study were nurses who served in the inpatient room as many as 133 nurses and the sample in this study was 57 nurses based on sampling technique. While the incidence at Imelda Hospital Medan based on the level of knowledge of nurses based on the majority of respondents whose age interval is 20-25 years as many as 25 people (44%), while the minority of respondents whose age interval is 41-45 years are 5 people (9%). Based on the majority of respondents whose last education interval was D3 as many as 35 people (61%), while the minority of respondents whose last education interval was Nurses were 4 people (7%). Based on the majority of respondents whose gender interval is female as many as 34 people (60%), while the minority of respondents whose gender interval is male as many as 23 people (40%). And the majority of respondents whose working period interval is < 1 year are 19 people (33%), while the minority of respondents whose working period is 7-8 years are 23 people (40%). ), while as many as 16 people (28%), and less than 10 people (18%). Conclusions were obtained based on the research. The level of knowledge of nurses about decubitus in the Imelda Hospital inpatient room, Medan, was that most nurses already understood. And the suggestion from the researcher is that it is highly expected to be able to further improve the right service for stroke patients in the Imelda Hospital inpatient room, Medan.

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# INTRODUCTION

One of the most important aspects of nursing services is to maintain and maintain the integrity of the patient's skin so that it is always awake and intact. Interventions in patient skin care will be one indicator of the quality of nursing services. Damage to skin integrity can come from wounds due to trauma and surgery, but can also be caused by prolonged pressure on the skin which causes irritation and will develop into pressure sores or pressure sores.

Pressure sores are a very serious problem, especially for patients who have to be hospitalized for a long time with limited activities, medical complications in various organs and which can be life-threatening as a result of the onset of pressure sores while the patient is hospitalized. As a result of the emergence of decubitus can also increase the duration of

stay in the hospital or LOS (length of stay) so that it will increase the burden, especially the cost of hospitalization will increase along with the length of time staying in the hospital

The European pressure ulcer advisory panel (EPUAP) (2009) defines a pressure ulcer as an area of localized damage to the skin and underlying tissue caused by pressure, shear or friction, or a combination of both. These injuries generally occur on bony prominences, especially in unhealthy and immobile body parts (Jaul, 2010).

Pressure ulcers are caused by pressures that exceed capillary closure pressures and result in ischemia and tissue death. When the patient is in bed and not moving, the external source of pressure can be the surface of the bed, a tight bedcover or the pressure and friction produced when the legs become restless (Bangova, 2013).

According to Bujang, Aini, and Purwaningsih (2013), in their research on the effect of nursing actions on pressure sore reduction, the incidence of pressure sores in Japan, Korea, and China ranged from 2.1-18%. And the incidence of pressure sores in Indonesia is quite high at 33.3%. The prevalence of pressure sores in the United States is quite high, so it gets the attention of health workers. This study shows that the prevalence of pressure sores varies, but in general it is reported that 5-11% occur in acute care settings, 15-25% in long-term care settings, and 7-12% in home care settings. (home health care).

Based on the results of the research Chapter (2017), regarding the implementation of bed transfer in the prevention of pressure sores, it was found that the number of cases of pressure sores recorded in a private hospital in Central Indonesia was 4 out of 1654 patients (0.002%) inpatient and ICU (based on data taken from one of the private hospitals in Central Indonesia for the period 2016-2018, on March 21, 2018). The data obtained from the observations of the research team from December 21, 2017 to March 12, 2018, which were not recorded by the hospital, were 13 out of 267 inpatients and ICU patients (0.05%) who received pressure sores due to prolonged bed rest at home. sick.

Knowledge is the result of knowing, and this happens after people sense a certain object. Sensing occurs through the human senses, namely the senses of sight, hearing, smell, taste, and touch. Most human knowledge is obtained through the eyes and ears (Notoatmodjo, 2014). Knowledge or cognitive is a very important domain in shaping one's actions (overt behavior).

Nurses as one of the implementers of therapy have the potential to make a mistake if they do not have a high level of knowledge and awareness that the actions taken will have an effect on the patient. One example is in the prevention of pressure sores.

Prevention of pressure sores is the role of nurses in an effort to provide nursing services to patients. Efforts to prevent pressure sores are recognized as early as possible since the patient is identified as being at risk for pressure ulcers. Prevention of pressure sores should focus more on efforts to prevent excessive and continuous pressure in addition to improving other risk factors (Virani et al, 2011).

The results of the initial survey of researchers conducted on July 25, 2020 at the Imelda Workers' Hospital in Medan, the prevalence of stroke patient data in the last 5 years (2016 - 2019) was 442 stroke patients. Based on the experience of researchers while carrying out hospital duties carried out by nurses only motivating the patient's family to do bed mobilization every 2 hours to the right and another 2 hours to the left regardless of the effectiveness of the success of the bed mobilization. Based on the above problems, the researchers are interested in conducting a study entitled "The Relationship between Nurses' Knowledge Levels About Prevention of Decubitus in Stroke Patients in the Inpatient Room at Imelda Indonesian Workers Hospital Medan in 2020"

# METHOD

# Types of research

This research is a quantitative study using a descriptive correlation design with a cross-sectional approach. Correlation design aims to find out whether there is a relationship and if there is, how close the relationship means or not (Arikunto, Suharsimi 2010).

#### Research Location and Time

The location of this research was carried out in the inpatient room of the Imelda Indonesian Workers General Hospital in Medan with the reason that this location was one of the hospitals that served many ward patients and could meet the number of research respondents. This research was conducted after obtaining permission to conduct research from the institution or the University of Imelda Medan (UIM). This research took place around April-May 2020 with the reason that the sample was fulfilled with a predetermined method.

### Population and Sample

Population can be measured by an object and other natural objects, population also includes all the characteristics or properties possessed by a subject or object. The population in this study were nurses who served in the inpatient room as many as 133 nurses. The sample in this study were 57 nurses.

### Method of collecting data

## 1. Primary data

The data in this study were obtained by means of direct interviews with respondents using a questionnaire accompanied by observations using a checklist sheet.

### 2. Secondary data

Secondary data in this study is data obtained from agencies related to this research.

### **Research Instruments**

To obtain information from the respondents, the researcher used a research instrument, namely a questionnaire that was made by the researcher according to the literature review and conceptual framework. The questionnaire is a measuring tool with several questions, and this measuring tool is used if the number of respondents is large and not illiterate (Hidayat, 2012).

This questionnaire uses a checklist type of questionnaire which is a list containing questions or statements that will be observed and respondents provide answers with a checklist  $(\sqrt{})$  in accordance with the desired results.

### Data collection

According to Notoatmojo (2012), after all the data has been collected, the next step is to process the data in such a way using a computer program and mark the complete data according to the following steps:

## a. Editing (Checking)

Data editing is carried out to ensure that the data obtained is completely filled out, the writing is clearly legible, and there are no habits in data interpretation.

# b. Coding (Code)

It is an activity to convert data in the form of letters into data in the form of numbers or numbers. Each data is given certain codes to facilitate data processing activities.

# c. Tabulating (Table)

Entering research data into the table according to the criteria.

# d. Cleaning

It is an activity of checking back the data that has been entered whether there are errors or not.

# Data analysis

After the data is collected, it is tabulated in a table according to the variables to be measured. Data analysis was carried out through the stages of editing, coding, tabulation

and statistical tests. The statistical test used was Univariate and Bivariate with computerized services.

# 1. Univariate Analysis

Univariate analysis is carried out on each variable from the research results. This analysis of variance is to see the frequency distribution of the data: age, education, experience.

### 2. Bivariate analysis

Performed on two variables that are suspected to be related to cross tabulation between all dependent variables and independent variables using the Chi-Square method with the formula:

X2 = ki = 1 (Oi - Ei)2

Εi

Information:

Oi : The number of cases observed in category i

Ei : Expected case

### **RESULTS AND DISCUSSION**

# Research result

After conducting a study entitled "The Relationship of Nurses' Knowledge Levels About Prevention of Decubitus to Stroke Patients in the Inpatient Room at RSU Imelda Indonesian Workers Medan in 2020" on 57 respondents who were taken by accidental sampling, the following results were obtained:

### General data

Distribution of Characteristics of Respondents Based on Age Nurses Knowledge Level About Prevention of Decubitus Against Stroke Patients in the Inpatient Room at RSU Imelda Indonesian Workers Medan in 2020.

No	Characteristics	Frequency	Percentage %
1.	20-25 years	25	44
2.	26-30 years	10	18
3.	31-35 years	11	19
4.	36-40 years	6	10
5.	41-45 years	5	9
Jumlah		57	100

Based on table 4.1. The above shows that the majority of respondents whose age interval is 20-25 years are 25 people

(44%), while the minority of respondents whose age interval is 41-45 years are 5 people (9%).

Distribution of Respondents' Characteristics Based on Recent Education About Nurses' Knowledge Levels About Prevention of Decubitus Against Stroke Patients in Inpatient Rooms at RSU Imelda Indonesian Workers Medan in 2020.

No	Characteristics	Frequency	Percentage %	
1.	D3	35	61	
2.	S1	18	32	
3.	Ners	4	7	
	Iumlah	57	100	

Based on table 4.2. The above shows that the majority of respondents whose last education interval was D3 were 35 people (61%), while the minority of respondents whose last education interval was Nurses were 4 people (7%).

Distribution of Characteristics of Respondents by Gender About Nurses' Knowledge Levels About Prevention of Decubitus Against Stroke Patients in the Inpatient Room at RSU Imelda Indonesian Workers Medan in 2020.

No.	Characteristics	Frequency	Percentage %
1.	Male	23	40
2.	Female	34	60
	Jumlah	57	100%

Based on table 4.3. The above shows that the majority of respondents whose gender interval is female are 34 people (60%), while the minority of respondents whose gender interval is male are 23 people (40%).

Distribution of Characteristics of Respondents Based on Period of Work About Nurses' Knowledge Levels About Prevention of Decubitus Against Stroke Patients in Inpatient Rooms at RSU Imelda Indonesian Workers Medan in 2020.

No	Characteristics	Frequency	Percentage %
1.	< 1 year	19	33
2.	1-2 year	10	18
3.	3-4 years	9	16
4.	5-6 years	12	21

	5.	7-8 years	7	12
I		Jumlah	57	100

Based on table 4.4. The above shows that the majority of respondents whose working period interval is < 1 year are 19 people (33%), while the minority of respondents whose working period is 7-8 years are 23 people (40%).

# **Special Data**

Distribution of Characteristics of Respondents Based on Nurses' Knowledge Levels About Prevention of Decubitus Against Stroke Patients in the Inpatient Room at RSU Imelda Indonesian Workers Medan in 2020.

No	Karakteristik	Frekuensi	Persentase %
1	Baik	31	54
2	Sedang	16	28
3	Kurang	10	18
	Jumlah	57	100

Based on table 4.5. It can be seen above that the level of knowledge of the respondents is good as many as 31 people (54%), while 16 people (28%), and those who lack knowledge are 10 people (18%).

### **Bivariate Results**

Analysis of Nurse Knowledge Against Nurses' Knowledge Levels About Prevention of Decubitus Against Stroke Patients in the Inpatient Room at RSU Imelda Indonesian Workers Medan in 2020.

Vnoulodgo	Prevention		Amount	P Value	
Knouledge	Good	Enough	Bad	Amount	P value
	N	N	n		
Good	31	0	0	31	
Enough	0	16	0	16	0,000
Less	0	0	10	10	
Amount	31	16	10	57	

Description: p < 0.05 then there are 2 variables that relate nurses' knowledge about prevention of pressure sores to stroke patients.

### **DICUSSION**

After the researchers conducted research by collecting data through test tests and conducting data analysis techniques carried out on 57 respondents about the relationship between the level of knowledge of nurses about prevention of pressure sores on stroke patients in the inpatient room of Imelda Indonesian Workers Hospital Medan in 2020, the researchers conducted a discussion with the results of the study. The research found is based on the majority of respondents whose age interval is 20-25 years as many as 25 people (44%), while the minority of respondents whose age interval is 41-45 years is 5 people (9%). Based on the majority of respondents whose last education interval was D3 as many as 35 people (61%), while the minority of respondents whose last education interval was Nurses were 4 people (7%). Based on the majority of respondents whose gender interval is female as many as 34 people (60%), while the minority of respondents whose gender interval is male as many as 23 people (40%). And the majority of respondents whose working period interval is < 1 year are 19 people (33%), while the minority of respondents whose working period is 7-8 years are 23 people (40%). And based on the level of knowledge of good respondents as many as 31 people (54%), while as many as 16 people (28%), and less than 10 people (18%).

## **CONCLUSIONS AND SUGGESTIONS**

Based on research that has been carried out by researchers at Imelda Indonesian Workers Hospital in Medan regarding the level of knowledge of nurses about prevention of pressure sores in stroke patients, the conclusions in this study are as follows: 1. The level of knowledge of nurses about pressure sores in the inpatient room at Imelda Indonesian Workers Hospital Medan is mostly understood. 2.

The relationship between the level of knowledge of nurses about decubitus and its prevention in the inpatient ward of Imelda Hospital Medan (p = 0.000).

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