

Description Of Factors Influencing Stroke In Early Adults At Rsu Imelda Medan

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ABSTRACT

Stroke is a disease that most often causes disability in the form of paralysis of the limbs, speech disorders, thought processes, memory, and other forms of disability as impaired brain function. In general, people think that stroke is a disease that only occurs in middle age and old age. In fact, 10% of strokes occur at a relatively young age (less than 45 years). But now there is also a trend in patients under 45 years of age. According to WHO in 2012, 51% of deaths from stroke worldwide are caused by high blood pressure. Based on the results of the 2013 Riskesdas, the prevalence of stroke in Indonesia increases with age. The highest cases of stroke diagnosed by health workers were 75 years and over (43.1%) and the lowest were in the age group 15-24 years (0.2%). The prevalence of stroke based on gender is higher for males (7.1%) than for females (6.8%). Based on place of residence, the prevalence of stroke in urban areas is higher (8.2%) compared to rural areas (5.7%). This research was conducted in May 2017 which was descriptive in nature with the aim of getting an overview of the factors that influence the occurrence of stroke in early adulthood at the Imelda general hospital, Indonesian workers in Medan. This research technique used a sample method of 30 respondents. The results of this study showed that the most influential risk factors for the incidence of stroke in early adulthood were lifestyle, namely eating and drinking habits (89.1%), hypertension (84.3%), family history (84.3%), obesity (83%), smoking (67.6%), and physical activity (30%). Eating and drinking habits have a high influence, because in their daily lives they consume the foods they like and what they want to eat without thinking that these foods are at risk of causing degenerative diseases. factors that influence the occurrence of stroke in early adulthood, so that the family's knowledge of stroke patients increases.

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INTRODUCTION

Stroke can occur because a healthy individual has risk factors for stroke, there are risk factors for stroke that can be controlled and risk factors that cannot be controlled. Understanding these stroke risk factors will be important, controlling these stroke risk factors will reduce a person's risk of having a stroke. The number of stroke sufferers around the world who are under 45 years old continues to increase. At an international neurologist conference in England it was reported that there were more than 1000 stroke survivors aged less than 30 years.

Based on data obtained from the Medan Indonesian Worker Imelda Hospital in 2017 there have been stroke sufferers at the age of less than 45 years, stroke sufferers ranged from 34 -44 years as many as 3 sufferers, with various risk factors that can affect the occurrence of stroke at a young age . One of them is unhealthy lifestyle factors such as smoking, drinking alcohol, lack of activity, consuming drugs.

Stroke causes a high death rate. Most of the events are experienced by men than women (19% higher difference) and the general age is over 55 years (Padila, 2012). Stroke is a cerebrovascular disease (brain blood vessels) due to death of brain tissue (cerebral infarction). reduced blood flow and oxygen and oxygen to the brain due to blockage, narrowing or rupture of blood vessels (Ratna Dewi, 2011).

Stroke is still a medical problem that is the number 2 cause of morbidity and mortality in Europe and number 3 in the United States. As many as 10% of stroke patients experience weakness that requires treatment. Stroke is divided into 2 types, namely ischemic stroke and hemorrhagic stroke. Ischemic stroke is mostly a complication of vascular disease, which is characterized by symptoms of a sudden drop in blood pressure, tachycardia, pallor, and irregular breathing. While hemorrhagic strokes are generally caused by intracranial bleeding with symptoms of increased systolic blood pressure > 200 mmHg in hypertonic and 180 mmHg in normomotor, bradycardia, purplish face, cyanosis, and snoring. The incidence of ischemic stroke is around 80% of all stroke cases, while hemorrhagic events are only around 20% of all stroke cases (Indonesian Stroke Foundation, 2012).

Early adulthood is a transitional period from adolescence. Adolescence is marked by the search for identity. In early adulthood, self-identity is obtained little by little according to chronological age. Various problems also arise with increasing age at this time. Early adulthood is a period of transition from dependence to independence, both in terms of the economy, freedom of self-determination, and a more realistic view of the future.

Stroke is still the number one cause of death in various hospitals in Indonesia. This disease also causes the most disability in the adult age group that is still productive. One of the reasons for the high incidence of stroke is the low level of public awareness in overcoming the various risks that cause stroke through a healthy lifestyle. The Indonesian Stroke Foundation (Yastroki) has caused the incidence of stroke according to basic hospital data to be 63.52 per 100,000 population aged over 65 years. While the number of sufferers who died was more than 125,000 people. It is estimated that nearly half a million people are at high risk of stroke

METHOD

The population in this study were all stroke patients treated at RSU IPI Medan in 2017 totaling 30 people. The sample is part of the entire object under study and is considered to represent the entire population. In other words, the sample is the elements of the population that are selected based on their representative abilities. With the number of samples taken as many as 30 people. Data collection was carried out using primary data taken using the questionnaire method, as a guide to the questions asked to respondents. Data analysis was carried out univariately to find out the description of the risk factors possessed by stroke patients at RSU IPI Medan in 2017. Variables used in this study This research is all categorical, so the research results will be presented in the form of proportions. Presentation of results is supported with the help of tables and diagrams to make it easier to read the results

RESULTS AND DISCUSSION

Research Results

Based on the results of research that was conducted on 30 respondents at the Imelda Indonesian Workers Hospital in Medan regarding the Description of the Factors Influencing the Occurrence of Stroke in Early Adults at the Imelda Indonesian Workers Hospital in Medan in 2017, it is presented in the following table:

1. General Data

Table .1 Frequency Distribution of Respondents by Age at Imelda Hospital for Indonesian Workers in Medan in 2017.

Age	Mount	Persentase
34 - 44	3	10%
45 - 54	18	60 %
55 - 64	5	16,6 %
65 - 74	2	6,7 %
75 - 84	2	6,7 %
Total	30	100 %

Based on the table above, the respondents used were stroke patients at the Medan Indonesian Worker Imelda Hospital as many as 30 respondents. The most respondents who had strokes were in the age range of 45 -54 years by 60%, ages 55 - 64 years by 16.6%, ages 34 - 44 years by 10%, 65 - 74 and 75 - 84 years each by 6,7%.

Table 2 Frequency Distribution of Respondents by Gender at Imelda Hospital for Indonesian Workers in Medan in 2017

Gender	Mount	Persentase
Man	10	33,3%
Woman	20	66,7%
Total	30	100

Based on the table above, the most strokes were in women, 66.7%, while men were 33.3%. The description of respondents by occupation consisted of various professions, namely housewives at 33.3%, employees and laborers each at 30%, and traders at 6.65 and with an elementary school level of 40%, followed by a junior high school level of 23.3%, SMA is 10%, S1 is 16.6%, not going to school is 6.6% and the rest are at the D3 level by 3.3%.

Table 3. Frequency Distribution of Respondents Based on Hypertension at Imelda Hospital Indonesian Workers in Medan in 2017

Blood pressure category	Mount	Persentase
<120/80	2	7 %
120/80 - 139/89	3	10%
140/90 - 150/99	10	33 %
>160/100	15	50 %
Total	30	100%

Based on the calculation table above, the results show that the majority of those who had a stroke with blood pressure > 160/100 mmHg from 30 respondents were 15 (50%) at Imelda Indonesian Workers Hospital. Then followed by blood pressure 140/90-150/99 in 10 (33%), with blood pressure 120/80 - 139/89 mmHg in 3 (10%), with blood pressure <120/80 mmHg in 2 (7) %). It can be concluded that 15 (50%) people who have had a stroke have blood pressure > 160/100 mmHg.

Table 4. Frequency Distribution of Respondents Based on Obesity at Imelda Hospital for Indonesian Workers in Medan in 2017

Obesity	Mount	Persentase
Not Obese	5	16 %
Obesity	25	83 %
Total	30	100 %

Based on the table above, it shows that obesity affects the occurrence of stroke at Imelda Hospital, an Indonesian worker in Medan. Of the 30 stroke survivors at Imelda Hospital, Indonesian workers in Medan, 25 (83%) were obese, and 5 (16%) were not obese.

Table 5. Frequency Distribution of Respondents Based on Family History at Imelda Hospital for Indonesian Workers in Medan in 2017

Question Item	Number of Answers Yes	Number of Answers No
P1	29	1
P2	30	0
P3	17	13
TOTAL	76	14
RATA - RATA	25,3	4,6

$$\text{Answer "Yes" Average } \frac{25,3}{30} \times 100\% = 84,3 \%$$

Based on the table above, the results of the calculation show that hereditary history influences the occurrence of stroke by 84.3% of 30 respondents. From the calculation results table above, it can be seen that the risk factor for family history is quite influential.

Table 6 Frequency Distribution of Respondents Based on Smoking at Imelda Indonesian Workers Hospital in Medan in 2017

Question Item	Number of Answers Yes	Number of Answers No
P1	8	22
P2	26	4
P3	27	3
TOTAL	61	29
Average	20,3	9,6

$$\text{Answer "Yes" Average } \frac{20,3}{30} \times 100\% = 67,6 \%$$

Based on the questionnaire analysis, of the 30 respondents who were asked questions about the risk factors for smoking, in the first question the respondents were asked whether the respondent smoked before the stroke, 8 people stated that they smoked or had smoked, while 22 other stroke sufferers stated that they had never smoked. .

In the second question which contains questions about the respondent's family who smokes, as many as 26 respondents stated that there were members of their family who smoked and there were 4 respondents who stated that they did not have a family who smoked. Whereas in the third question which contains a question about whether there are other people who smoke where the respondent works or has worked, 27 people answered that where they work there are people who smoke while 3 respondents stated that no one else smoked because 3 respondents were smokers. Housewife.

In addition to the data obtained and calculations carried out, then calculations are then carried out by dividing the average number of answers divided by all respondents and multiplied by 100%, then getting a result of 67.7%. With these results it can be said that smoking is one of the risk factors for stroke at the Imelda Indonesian Workers Hospital in Medan.

Table 7. Frequency Distribution of Respondents Based on Food and Beverages at Imelda Hospital for Indonesian Workers in Medan in 2017

Question Item	Number of Answers Yes	Number of Answers No
P1	26	4
P2	28	2
P3	29	1
P4	24	6
TOTAL	107	13

Average	26,75	3,25
Answer "Yes" Average $\frac{26,75}{30} \times 100\% = 89\%$		

Based on calculations, the results show that 89% of food and drink affect the incidence of stroke at the Imelda Indonesian Workers Hospital in Medan. Of the 30 respondents, 26 of them liked fried foods, canned food and snacks. There were 28 respondents who often consumed foods high in fat and cholesterol, such as organ meats and fast food. There are 29 respondents who often consume durian, tape (foods containing ethanol). From these results it can be seen that stroke sufferers at the Medan Indonesian Workers' Imelda Hospital pay less attention to patterns and types of food. That is, they eat what they like and what they want to eat without thinking about the long-term effects. Even though foods that are at risk of causing degenerative diseases if consumed continuously.

Table 8 Frequency Distribution of Respondents Based on Physical Activity at Imelda Hospital for Indonesian Workers in Medan in 2017

Question Item	Number of Answers Yes	Number of Answers No
PI	9	21
TOTAL	9	21
Average	9	21

$$\text{Jawaban "Ya" rata - rata } \frac{9}{30} \times 100\% = 30\%$$

From the results of the questionnaire, it was found that 9 out of 30 respondents who had a history of stroke did not exercise regularly before being diagnosed with a stroke. However, even though they did not carry out physical activities, they varied every day according to the type of work the respondents had, such as laundry workers, fried food sellers, housewives, and so on. From the research, it was found that physical activity had an effect of only 30% on the incidence of stroke.

DISCUSSION

The results showed that there were differences in the results between studies conducted by researchers at the Medan Indonesian Workers' Imelda Hospital related to stroke risk factors that could not be modified within the scope of gender. The reason is, in the results of the writer's calculations, it was found that 10 people were male from 30 respondents with a percentage of 33.3%. It can be said that at the Medan Indonesian Workers' Imelda Hospital, the incidence of stroke is more common in women. Meanwhile, a study reported by the UI journal also showed that out of 152 inpatient stroke patients at RSKM, 102 patients were female (Dian Nastiti, 2011).

In addition, in this study the researchers also found that food is the most influencing risk factor for stroke. Poor diet can be one of the causes of stroke, such as consumption of foods that are high in salt, ethanol and cholesterol can increase blood pressure. If these foods are consumed in excess, it can cause hypertension. Hypertension causes damage to blood vessel walls due to blood pressure that exceeds normal limits and releases collagen. The exfoliated endothelium causes the positively charged basement membrane to attract negatively charged platelets, resulting in platelet aggregation. In addition, there is a release of thrombokinase, causing stable blood clots and if the blood vessels are no longer strong enough to withstand high blood pressure, it will be fatal, rupture of blood vessels in the brain, a stroke will occur (Kristiyawati, 2009).

This is different from the results of a study conducted by Kristiyawati, the incidence of stroke was more in hypertensive patients with a total of 68 patients (88.3%) and the incidence of stroke in non-hypertensive patients was 9 patients (11.7%). Based on the results of the statistical test analysis, the value of $p = 0.000$ was obtained. The results of this study indicate that there is a relationship between hypertension and the incidence of stroke.

Based on the results of the study, the researchers did 89.1% of food influence the incidence of stroke while hypertension obtained a result of 83% so that it can be concluded that food is the factor that most influences the incidence of stroke at the Imelda Indonesian Workers Hospital in Medan.

From the results of the analysis above, activities can be made to prevent or reduce the incidence of stroke at the Imelda Indonesian Workers Hospital in Medan. These activities include KIE regarding healthy lifestyles including choosing healthy food types and the dangers of smoking, healthy exercise activities, health check-ups and recording activities for example. The purpose of this activity is to provide education to stroke patients and their families about stroke prevention and management. The target of this activity is all stroke patients, especially those who have a history of stroke.

CONCLUSION

Based on the results of a study entitled "Overview of Factors Influencing Stroke in Early Adults at Imelda Indonesian Workers' Hospital in Medan" it can be concluded that the risk factors that most influence the incidence of stroke in early adulthood are sequentially lifestyle, namely eating habits and drinking (89.1%), hypertension (84.3%), family history (84.3%), obesity (83%), smoking (67.6%), and physical activity (30%). Eating and drinking habits have a high influence, because in their daily lives they consume the foods they like and what they want to eat without thinking that these foods are at risk of causing degenerative diseases.

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