

**Patient Knowledge About Efforts To Minimize Stroke Attacks And Blood Pressure Stability In Hypertension Patients At The Gambiran Regional Hospital**

**Anik Nuridayanti<sup>1✉</sup>, Suhartini<sup>2</sup>, Nurhidayah<sup>3</sup>**

STIKES Ganesha Husada Kediri

Email: [aniknuridayanti@stikesganesshusada.ac.id](mailto:aniknuridayanti@stikesganesshusada.ac.id)<sup>1✉</sup>, [suhartini@stikesganesshusada.ac.id](mailto:suhartini@stikesganesshusada.ac.id)<sup>2</sup>,  
[nurhidayah@stikesganesshusada.ac.id](mailto:nurhidayah@stikesganesshusada.ac.id)<sup>3</sup>

**Abstrak**

Stroke merupakan penyakit gangguan fungsional otak berupa kelumpuhan saraf atau defisit neurologis akibat gangguan aliran darah pada salah satu bagian otak. Gejala stroke adalah kesulitan berjalan, berbicara dan memahami, serta kelumpuhan atau mati rasa pada wajah, lengan, atau kaki. Hampir 70% kasus stroke terjadi pada penderita hipertensi, dari penelitian yang dilakukan pada tanggal 1-30 April 2021 tentang hubungan tingkat pengetahuan tentang upaya meminimalisir serangan stroke dengan kestabilan tekanan darah pada pasien hipertensi di Poliklinik RSUD Gambiran Kota Kediri. dengan jumlah 67 responden.

**Kata Kunci** : *Stroke, Neuron, Tekanan Darah.*

**Abstract**

Stroke is a disease of functional brain disorders in the form of nerve paralysis or neurologic deficits due to impaired blood flow to one part of the brain. Symptoms of stroke are difficulty walking, speaking and understanding, as well as paralysis or numbness of the face, arms or legs. Nearly 70% of stroke cases occur in hypertension sufferers, from a study conducted on April 1-30 2021 concerning the relationship between the level of knowledge about efforts to minimize stroke attacks and blood pressure stability in hypertensive patients at the Gambiran Hospital Polyclinic, Kediri City with a total of 67 respondents.

**Keywords**: *Stroke, Neuron, Blood Pressure.*

**INTRODUCTION**

Hypertension, if not treated properly, can lead to stroke. Hypertensive patients need to make efforts to minimize strokes by continuing to follow the doctor's advice through routine checks. Apart from that, efforts that can be made to minimize the occurrence of strokes are by adopting a regular and balanced healthy lifestyle. Be regular in terms of work time, rest time, exercise, recreation and other activities according to the time. Balance work time with rest, putting each in proportion. Apart from that, don't get used to a lifestyle that tends to consume fast food and high levels of fat, because it can damage the walls of blood vessels which over time disrupts the smooth flow of blood, there is a buildup of blood cells in places on the walls that are damaged, which one day break away. , block the blood vessels in the brain and eventually a stroke occurs. The biggest impact is if hypertension is not treated seriously, there will be a big risk of stroke and if stroke is not treated immediately it can cause death (Siregar, 2009).

The role of nurses is very necessary in nursing care, one of which is by providing health education about efforts to minimize stroke attacks by encouraging hypertension sufferers to avoid obesity, avoid smoking, reduce drinking alcohol, do sports and physical activity, control blood pressure and blood sugar levels, avoid the use of illegal drugs and carry out *medical check-ups* . Apart from that, nurses

should continue to encourage hypertensive patients to carry out routine controls in order to know their blood pressure so that hypertensive patients will try to maintain stable blood pressure (Auryn, 2008; 92). Therefore, researchers are interested in conducting research on "The Relationship between the Level of Patient Knowledge about Efforts to Minimize Stroke Attacks and Blood Pressure Stability in Hypertension Patients at the Gambiran Regional Hospital Polyclinic, Kediri City".

## METHOD

According to Tapan (2007), blood pressure measurement procedures can be carried out using a medical device called a blood pressure meter. The method is to wrap rubber around the upper arm and expand it when the cuff inflates, it will press the arteries in the arm and temporarily stop blood flow, then slowly, the air in the cuff is emptied. During this period the examiner will pay attention to the sound of the stethoscope. When blood vibrates the arteries, a sound will be heard. This sound will continue to be heard until the pressure in the artery exceeds the pressure in the cuff.

The examiner using a stethoscope will continue to hear and monitor the sound of the beating stopping. When the first sound is heard, it is called systolic pressure, which means the blood pressure is the same as the pressure in the cuff. Meanwhile, diastolic pressure (pressure at rest) is monitored by the last sound that can be heard). Blood pressure is measured in millimeters of mercury, symbolized by mmHg.

The following is a blood pressure table:

Pressure in mmHg		Blood pressure levels	Symptoms that may accompany
Systolic	Diastolic		
Less than 90	Less than 60	Low (Hypotension)	Dizziness, weakness, dark eyes, especially if you stand up quickly from sitting, squatting or lying down
90-140	60-90	Normal	There isn't any
> 140-160	> 90-95	Borderline hypertension	There should not be any, if there is there may be another cause or a complication of hypertension
> 160-200	> 95-110	Mild hypertension (Mild)	Blood pressure is sometimes unstable, there are no complications of hypertension
> 200-230	> 110-120	Moderate hypertension	Symptoms/complaints are uncertain. The kidneys should still function well
> 230-280	> 120-140	Severe hypertension	Usually accompanied by heart, kidney and brain abnormalities
Increase once arrived 230	Quickly 130	Accelerated or malignant hypertension	Sudden serious illness with severe impairment of kidney function due to papilledema or retinal abnormalities.

## RESULTS AND DISCUSSION

### RESULTS

**Table 1 Frequency Distribution of Respondent Characteristics in the Gambiran Regional Hospital Polyclinic, Kediri City on Date**

Characteristics	Frequency	Percentage
<b>Gender</b>		
Man	40	60%
Woman	27	40%
<b>Amount</b>	<b>67</b>	<b>100%</b>
<b>Age</b>		
20-30 years	1	1%
31-40 years old	16	24%
41-50 years old	24	37%
51-60 years old	21	31%
> 60 years	5	7%
<b>Amount</b>	<b>67</b>	<b>100%</b>
<b>Level Of Education</b>		
No School	12	18%
Elementary School	10	15%
Junior High School	12	18%
Senior High School	29	43%
Academy / Univercity	4	6%
<b>Amount</b>	<b>67</b>	<b>100%</b>
<b>Suffering From Hypertension For A Long Time</b>		
< 1 year	8	12%
1-5 years	33	49%
6-10 years	22	33%
11-15 years	4	6%
> 15 years	0	0%
<b>Amount</b>	<b>67</b>	<b>100%</b>

From the data above, it can be seen that more than 50% of respondents were male, namely 40 respondents (60%). And that the majority of respondents aged 41-50 years were 24 respondents (37%). Majority of respondents had a high school education level, namely 29 respondents (43%). From the data above, it can be seen that the most respondents who had suffered from hypertension for 1-5 years were 33 respondents (49%).

**Table 2 Frequency Distribution of Patient Knowledge Levels about Efforts to Minimize Stroke Attacks in Hypertension Patients at the Gambiran Regional Hospital Polyclinic, Kediri City on November 13 2017 – November 22 2017**

No.	Knowledge level	Frequency	Percentage
1.	Good	33	49%
2.	Enough	24	36%
3.	Not good	10	15%
<b>Amount</b>		<b>67</b>	<b>100%</b>

From the data above, it can be seen that the majority of respondents with a good level of knowledge were 33 respondents (49%).

**Table 3 Frequency Distribution of Blood Pressure Stability in Hypertension Patients in the Gambiran Regional Hospital Polyclinic, Kediri City on November 13 2017 – November 22 2017**

No.	Blood Pressure Stability	Frequency	Percentage
1.	Stable	47	70%
2.	Unstable	20	30%
<b>Amount</b>		<b>67</b>	<b>100%</b>

From the data above, it can be seen that the majority of respondents had stable blood pressure, namely 47 respondents (70%).

**Table 4 Cross Tabulation of the Relationship between the Level of Patient Knowledge about Efforts to Minimize Stroke Attacks and Blood Pressure Stability in Hypertension Patients at the Gambiran Regional Hospital Polyclinic, Kediri City on November 13 2017 – November 22 2017**

Knowledge level	Blood Pressure Stability				Total	
	Stable		Unstable		n	%
	n	%	n	%		
Good	31	46%	2	3%	33	49%
Enough	15	22%	9	14%	24	36%
Not good	1	2%	9	13%	10	15%
Amount	47	70%	20	30%	67	100%
<b>Uji Spearman Rho p = 0,000</b>						

From the results of the cross tabulation, it shows that respondents with a level of knowledge (good) of blood pressure stability (stable) were 31 respondents (46%), respondents with a level of knowledge (good) of blood pressure stability (unstable) were 2 respondents (3%). The level of knowledge (sufficient) of blood pressure stability (stable) was 15 respondents (22%), respondents with the level of knowledge (sufficient) of blood pressure stability (unstable) were 9 respondents (14%). The level of knowledge (not good) of blood pressure stability (stable) was 1 respondent (2%), respondents with the level of knowledge (not good) of blood pressure stability (unstable) were 9 respondents (13%). Based on the results of the *Spearman's Rho* statistical test with a level of significance  $\alpha \leq 0.05$  obtained  $p = 0.000$  where  $p < \alpha$  then  $H_0$  is rejected and  $H_a$  is accepted, so there is a relationship between the level of patient knowledge about efforts to minimize stroke attacks and the stability of blood pressure in hypertensive patients at the Gambiran Regional Hospital Polyclinic, Kediri City .

Respondents in this study were hypertensive patients at the Gambiran Regional Hospital Polyclinic, Kediri City, meeting the inclusion criteria. The number of respondents studied was previously planned to be 81 respondents, during the data collection implementation the number of respondents could not be matched because there were respondents who did not meet the inclusion criteria, so the number of respondents was reduced to 67 respondents.

Level of Patient Knowledge about Efforts to Minimize Stroke Attacks in Hypertension Patients at the Gambiran Regional Hospital Polyclinic, Kediri City

Based on the research results, it was found that 33 respondents (49%) had a good level of knowledge, 24 respondents (36%) had a good level of knowledge and 10 respondents (15%) had a poor level of knowledge. So most respondents had a good level of knowledge about efforts to minimize stroke attacks

## CONCLUSION

There is a relationship between levels knowledge patient about effort minimize attack strokes with stability pressure blood in patients hypertension in the Gambiran Regional Hospital Polyclinic, Kediri City . Matter This caused patients who have knowledge Good about effort minimize attack strokes so patient hypertension the will try with Good For control stability pressure his blood as well as forever suffer hypertension the can also influence results study this , because suffer more and more hypertension so patient hypertension will know many matter about various possible complications \_ caused by disease hypertension the.Effort patient to be able to guard pressure blood still stable include : avoiding obesity avoiding \_ smoking , reducing drinking alcohol, doing sports and activities physical , controlling pressure blood high and blood sugar levels , avoid use medicines forbidden ,, and doing *medical check up* is possible done for pressure blood still stable or not experience complications among them strokes. By Because That patient hypertension will try For maintain pressure \_ his blood still stable with maximum maybe .

## BIBLIOGRAPHY

- Astawan, Made. (2009). *Prevent Hypertension with Diet* .  
<http://www.depkes.do.id/index.php?option=articles&task=viewarticle&artid=20&Itemid=3> .
- Auryn, Virzara. (2008). *Recognizing and Understanding Stroke*. Yogyakarta: Words of the Heart.
- Bustami, Murshid. et. all. (2007). *Management Comprehensive Stroke*. Yogyakarta: Cedekia Press Library .
- Doengoes, Marilyn E. (1999). *Nursing Care Plan* . Edition 3. Jakarta: EGC.
- Doengoes, Marilyn E. (1999). *Nursing Care Plan* . Jakarta : EGC.
- Gray, Huon H. (2003). *Cardiology* . Fourth Edition. Jakarta : Erlangga.
- Gunawan, Lany. (2001). *Hypertension High Blood Pressure* . Yogyakarta: Kanisius.
- Lumbantobing. (2007). *Circulatory Catastrophic Stroke in the Brain* . Jakarta : FKUI.
- Mangku. (2000). *Hypertension Disease* . Copyright © 2000. Suara Karya Online Powered by Hanamon-i .
- Mansjoer, Arif. (2001). *Capita Selecta Medicine* . Jakarta : FKUI.
- Meliono, Irmayanti. (2007). *Knowledge* . <http://id.wikipedia.org/wiki/>
- Notoatmodjo, Soekidjo. (2002). *Health Research Methodology*. Jakarta : Rineka Cipta.
- Notoatmodjo, Soekidjo. (2003). *Public Health Science Basic Principles* . Jakarta: Rineka Cipta.
- Nursalam and Pariani, Siti. (2001). *Practice Approach to Nursing Research Methodology* . Jakarta: Sagung Seto.
- Nursalam. (2001). *Nursing Research Methodology* . Jakarta: Sagung Seto.
- Nursalam. (2003). *Concept and Application of Nursing Science Research Methodology* . Jakarta: Salemba Medika.
- Purnomo, Windhu. (2005). *Preparation of Instruments and Data Analysis in Quantitative Research Presented in the Technical Dissemination of the Final Program Examination (UAP)* . Surabaya: FKPKK.
- Siregar, Anggiat. (2009). *Recognizing and Preventing Stroke* . [www://google.com](http://www://google.com). Accessed March 5 2010 at 7 pm.
- Siswono. (2002). *Hypertension*. [www.complicationsofhypertension.com](http://www.complicationsofhypertension.com).
- Sugiyono. (2007). *Statistics for Research* . Bandung: Alfabeta.
- Tapan, Erik. (2004). *Kidney Disease and Hypertension*. Jakarta : PT. Elek Media Komputindo.
- Tedy. (2009). *Understanding High Blood Pressure* . <http://www.a-madu.blogspot.dom>. Retrieved 23 October 20 17 at 4 pm.
- Vitahealth. (2004). *Strokes* . Jakarta: Gramedia Pustaka Utama.
- Wicaksono, Hardian. (2004). *Hypertension and Kidney Function Disorders* .