The Effect of Family Knowledge Level on First Aid Speed of Patients with Hypertension Emergencies in Dr. R Soedjati Soemodiardjo Purwodadi Hospital

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Abstract. According to the *World Health Organization* Hypertension is *the silent killer* which is widely known as a very common cardiovascular disease. (WHO, 2019). Data obtained from RSUD dr.R Soedjati Soemodiardjo Purwodadi in 2017 there were 540 patients with hypertension and 212 of them were hypertensive emergencies in 2020, but not higher than 2021, namely 502 with the same hypertension patients as many as 173 people. To determine the effect of the level of family knowledge on the speed of first aid in patients with emergency hypertension at RSUD Dr.R Soedjati Soemodiardjo Purwodadi. This study is an analytical study with a *case control* study design using a *retrospective* approach. The data collection method used a questionnaire in the form of a questionnaire and check the medic notes addressed to. The sample size for each group is 15 respondents using *nonprobability* sampling technique with *Quota Sampling* method.The characteristics of the age of the respondents at RSUD dr.R Soedjati Soemodiardjo Purwodadi from 30 respondents 43.3% aged 36–45 years, 50% have high school education, 33.3% work as farmers, while the level of knowledge 66.7% is classified as having good knowledge, 50% of respondents have fast family first aid for hypertension emergencies and 50% are slow. The results of statistical tests with chi square, obtained a p value of $0.007 < 0.05$, there is an effect of the level of family knowledge on the speed of first aid in emergency hypertension at RSUD dr.R Soedjati Soemodiardjo Purwodadi. There is a significant influence between the level of family knowledge on the speed of first aid for hypertension emergencies at RSUD Dr.R Soedjati Soemodiardjo Purwodadi.

Keywords: knowledge level · speed · first aid · emergency hypertension

1   Introduction

According to the *World Health Organization* is a silent killer that is widely known as a very common cardiovascular disease. Hypertension is a major risk factor leading to cardiovascular diseases such as heart attack, heart failure, stroke and kidney disease which in 2018 ischemic heart disease and stroke became the two leading causes of the death in the world (WHO, 2019).

Riskesdas also mentioned that the prevalence of hypertension based on measurement results in the populations of > 18 years by regency/city of Central Java Province Riskesdas 2020 higest is Wonosobo regency with a percentage of 45.41% and the lowest in sitting by district 31.61 and Grobogan Regency itself has a percentage of 38.98% and the average of Central Java is 37.57 (Riskesdas, 2020).

Data from the Grobogan District Health office with gender-based hypertension in 2019 was highest in Karangrayung Public Health Center with 2231 women and men 2088, while the lowest number of hypertension sufferers was in Gubug Primary Health care with 16 women and men as many as people 11.

If hypertension is not controlled, it will attack the target, it will attack the target organs, and can cause heart attacks, strokes, kidney disorders, and blindness. From several studies reported that uncontrolled hypertension can cause seven times greter chance of stroke, 6 times greater in congestive heart failure, and 3 times greater heart attack (Rahajeng & Tuminah, 2009; Lu, et al. 2015).

Analysis obtained from RSUD dr. R Soedjati Soemodiardjo Purwodadi in 2019 there were 540 patients with hypertension and 212 of them were emergency hypertension 173 people.

2   Method

The research design used in this study is case control and uses a retrospective approach. The population in this study were all hypertensive patients who entered the IGD hospital dr. Soedjati Purwodadi. Using sampling technique is nonprobability sampling with quota sampling (Table 1, 2 and 3).

Table 1. Distribution of Frequency of Respondents by Age At Dr. R Soedjati Soemodiardjo Purwodadi Hospital 2021

No	Education	Frequency	Precentage (%)
1	16–25	4	13.3
2	26–35	9	30.0
3	36–45	13	43.3
4	46–55	4	13.3
	Total	30	100.0

Sumber: Data primer 2021

Table 2. Distribution of frequency of Responden Based on Education at Dr.R Soedjati Soemodiardjo Purwodadi Hospital 2021

No	Education	Frequency	Precentage (%)
1	Primary School	5	16.7
2	Junior High School	7	23.3
3	Senior High School	15	50.0
4	Bachelor	3	10.0
	Total	30	100.0

Sumber: Data primer 2021

Table 3. Analysis of the influence of family knowledge levels on the speed of first aid on hypertensive emergencies

Family Knowledge of hypertension		Speed of first aid emergency hypertension		Total	P value	OR
		Fast	Slow			
Enough	Count	1	9	10	0,007	0.048
	Expected Count	5.0	5.0	10.0		
	% within family knowledge of hypertension	10.0%	90.0%	100.0%		
Good	Count	14	6	20		
	Expected Count	10.0	10.0	20.0		
	% within family knowledge of hypertension	70.0%	30.0%	100.0%		
Total	Count	15	15	30		
	Expected Count	15.0	15.0	30.0		
	% within family knowledge of hypertension	50.0%	50.0%	100.0%		

3   Result

3.1   Discussion

Based on the results of the study showed the age of respondents known the majority of respondents aged 36–45 years with a frequency of 13 respondents and percentage (43,3%).

For the eeducation category, the majorty of respondents to the last education was high school with a frequency of 15 respondents (50%). It is undeniable that the higher

a person's education, the easier they receive information and in the end the knowledge they have more (Wijayanto, 2012).

Based on bivariate analysis it can be known that the families of patients with hypertensive emergency in IGD Dr Raden Soedjati Soemodiardjo Purwodadi who have enough knowledge mostly have the speed of rapid hypertensive emergency first aid number of 9 respondents (90.0%) and who have good knowledge mostly have the speed rapid hypertensive emergency first aid as many as 14 respondents (70.0%). From the results of the data with chi square,obtained a p value of $0.0007 < 0.05$, so the hypothesis states that there is an influence of family knowledge levels on the speed of first aid hypertensive emergencies.

4 Conclusion

From the results of Chi square, obtained p value of $0.007 < 0.05$, so the hypothesis states that there is an influence of family knowledge levels on the speed of first aid in hypertensive emergencies. Families who have good knowledge 48 times can first aid in emergency hypertension faster the value of odds ratio 0.048.

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