



THE RELATIONSHIP BETWEEN SELF EFFICACY WITH HYPERTENSION DEGREE

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ABSTRACT

Hypertension is defined as blood pressure with the systolic above 140 mmHg and the diastolic pressure above 90 mmHg. Non-pharmacological therapies for the elderly are in the form of lifestyle modifications including diet patterns, physical activity, smoking bans, and self-efficacy. Self-efficacy helps a person in making choices, as well as persistence in maintaining the tasks that span their life. The purpose of this study was to determine the relationship between self-efficacy and hypertension degree at the Dempet Health Center, Demak Regency. This research is quantitative research with a cross sectional approach. This research was conducted on 36 samples using purposive sampling technique. Data processing used Spearman Rank correlation test. Most of the respondents had not confident self-efficacy of 15 respondents (41.7%). The results showed that as many as 15 respondents (42.8%) were categorized as Degree 3 hypertension. The results of the statistical test were p value = 0.000 and rcount = 0.914. Ha was accepted and H0 was rejected, it means that there was a relationship between self-efficacy and the degree of hypertension at the Dempet Health Center, Demak Regency.

Keywords: elderly; hypertension; *self efficacy*

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INTRODUCTION

Hypertension is defined with the systolic blood pressure above 140 mmHg and the diastolic pressure above 90 mmHg (WHO (2013 in (Okatiranti et al, 2017)). Hypertension in the elderly occurs because blood vessels that were previously flexible and elastic harden and stiffen, so that the blood vessels are unable to supply the need for blood flow to every organ (Nurrahmani & Kurniadi, 2015). The prevalence of hypertension in the world is almost 1 billion people in the world suffering the hypertension. Based on WHO (World Health Organization) data in 2015 there were around 1.56 billion adults suffering from hypertension (Ministry of Health, 2020). In Indonesia, based on measurements of the population aged 18 years is 34.1%, the highest hypertension sufferer is in South Kalimantan (44.1%), while the lowest is in Papua (22.2%).

The prevalence of hypertension in the population with Age >18 years in the Central Java province was 12.98% in 2017. Demak Regency is part of Central Java province that has a high hypertension sufferer as much as 76.07% (Alhogbi, 2017). The prevalence of hypertension according to age group was divided by age 31-44 years (31.6%), age 45-54 years (45.3%), age 55-64 years (55.2%). The proportion of the prevalence of hypertension is 68.75% (Ministry of Health, 2020). The proportion of (Kemenkes, 2020) shows tha elederly

has the risk of developing hypertension especially in 60-74 years in women (75%) and men (81.81%) (Swandito Wicaksono, 2015). Thus, many elderly suffer from hypertension. These data show that the older the age, the more susceptible they are to hypertension.

The efforts to manage hypertension include non-pharmacological therapy and pharmacological therapy. Non-pharmacological therapy in the form of lifestyle modification includes diet, physical activity, smoking ban and alcohol consumption restriction. Pharmacological therapy can be given antihypertensive or in combination. The prevention effort of hypertension requires the involvement of all parties such as doctors, nurses, nutritionists, families and patients themselves. Nurses as educators play very important role in providing appropriate information to people with hypertension about disease, prevention, complications, treatment, and management, including motivating and increasing self-efficacy (Khoir, 2020).

Self efficacy is the key idea from the developed social cognitive theory. Bandura defines self-efficacy as an individual belief in his ability to organize and perform certain tasks needed to get the expected results. Self-efficacy helps a person in making choices, efforts to move forward, as well as persistence and perseverance in maintaining the tasks that cover their lives. Self-efficacy is an individual belief to regulate and perform behaviors that support the health based on the goals and expectations (Bandura, 1997). The role of nurses is to increase patient self-efficacy by building self-confidence, motivating patients to their ability to carry out healthy behavior to control hypertension. According to the International Council of Nurses, one of the chronic disease treatment models currently being developed is The Chronic Care Model (CCM). CCM is focusing on the interaction of informed and active patients with a proactive and ready-to-serve health team. It means that a relationship between patients who are motivated and knowledgeable and confident to make decisions about their health with a team capable of providing good quality information, motivation and sources of care is essential. Based on this concept, patients with chronic diseases need support to obtain information, knowledge and maintain their optimal health status. Successful management of hypertension depends on the patient's own motivation and self-awareness to carry out self-care management designed to control symptoms and avoid complications (Goodall & Halford, 1991 in Wu et al., 2006, in research (Siti D, 2017).

Research conducted by Siti et al (2017) entitled the relationship between self-efficacy and motivation to prevent complications with hypertension degree in the elderly in RW 01 Wonokromo Village Surabaya. The results obtained from the number of respondents 30 people, namely self-efficacy in respondents with hypertension in RW 01 Wonokromo Village Surabaya mostly not good (56.66%). The motivation to prevent complications in respondents with hypertension in RW 01 Wonokromo Surabaya was mostly not good (53.33%). Elderly people with hypertension in RW 01 Wonokromo Village, Surabaya (43.33%) have a level II hypertension degree. There was a relationship between self-efficacy and hypertension degree in the elderly in RW 01 Wonokromo Village, Surabaya. There was a relationship between motivation to prevent complications and the degree of hypertension in the elderly in RW 01 Wonokromo Village, Surabaya (Siti D, 2017).

Previous research was conducted by Oktarianti et al. (2017) entitled the relationship of self-efficacy with self-care for elderly hypertension. The results were obtained. From 69 respondents the results of self-efficacy descriptions at one of the Puskesmas in Bandung City, some respondents had high self-efficacy as many as 35 (50.7%) and some had low self-efficacy as many as 34 (49.3%) and of 69 respondents the results of treatment descriptions

Self-care showed that some respondents did good self-care as many as 35 (50.7%), and some respondents did less self-care as many as 34 (49.3%). The results of this study indicate that the self-efficacy of elderly people with hypertension was high, it showed that the ability of hypertension sufferers at the Bandung City Health Center in carrying out self-care was good (Okatiranti et al, 2017).

Another study is also conducted by Srigati et al. (2017) entitled The Relationship of Self Efficacy with Problem Focused Coping of Hypertensive Patients. From this study, it was found that self-efficacy in hypertension patients at the Baron District Health Center, Nganjuk Regency in 2016 with 57 respondents were very confident (1.8%) , not confident (42.1%) and confident (56.1%) and respondents problem focused coping that was sufficient, namely (59.6%) good (7.0%) and less (33.3%). From this data, with 59 respondents, it is known that the crosstab process is known that the relationship between problem focused coping was sufficient and self-efficacy was confident as many as 29 respondents (50.9%) (Sutarinik & Maunaturrohmah, 2017).

Based on the results of a preliminary study at the Dempet Health Center, Dempet District, Demak Regency in November 2020, it was found that since May there was an increase of the of elderly people undergoing health checks found the most cases of hypertension from monthly data checks, around 70% were elderly with hypertension. Beside the obtained data , the researchers also conducted interviews with 5 elderly with hypertension, from the results of interviews with these patients, it was found that 3 people said they were not sure they could control their emotions and were not sure to do things to overcome blood pressure. Meanwhile, 2 people said that they believed that exercise is more effective to lower blood pressure than taking medication.

METHOD

This research is quantitative research. This research used a correlation study research design. The study approach was cross-sectional with purposive sampling technique. The entire population was 36 people. The study was conducted on April 17th , 2021. The respondents in this study were the elderly with hypertension at the Dempet Health Center, Demak Regency.

RESULTS

**Respondent
Gender**

Table 1.

Frequency Distribution of Respondents Based on Gender (n=36)

Gender	f	%
Male	15	41,7
Female	21	58,3

Table 1, the results of this study were the majority of women who suffer the hypertension as many as 21 (58.3%)

Table 2.

Frequency Distribution of Respondents by Age (n=36)

Age	f	%
60-65	10	27,8
66-70	12	33,3
71-74	14	38,9

Table 2, the results of this study showed that Age 71-74 was higher with 14 respondents (38.9%)

Education Level

Table 3.
Frequency distribution of respondents based on education level (n=36)

Education	f	%
Not Educated	20	55,6
Elementary School	11	30,6
Junior High School	4	11,1
Senior High School	1	2,77

Based on table 3, the results showed that the majority of respondents at the Education level were not educated as many as 20 respondents (55.6%).

Univariate Analysis

Self Efficacy

Table 4.
Frequency Distribution based on Self Efficacy (n=36)

Self Efficacy	f	%
Very confident	10	27,8
Confident	11	30,6
Not confident	15	41,7

Table 4, the results of the highest self-efficacy was not confident as many as 15 respondents (41.7%), the lowest was with self-efficacy with very confident as many as 10 respondents (27.8%).

Degree of Hypertension

Table 5.
Frequency Distribution of Respondents with Degree of Hypertension (n=36)

Degree of Hypertension	f	%
Degree 1	10	27,8
Degree 2	7	19,4
Degree 3	19	52,8

Table 5, the highest hypertension was degree 3 as many as 19 people (52.8%)

Bivariate Analysis

Table 6, it is known that respondents with very confident self-efficacy t with Hypertension Degree 1 were 10 respondents (27.8%), confident self-efficacy with Hypertension Degree 2 was 7 respondents (19.4%) and confident self-efficacy as many as 4 respondents (11.1%) , while with non confiendt self-efficacy with hypertension degree 3 Degree were 15 respondents (41.7%). 0.005) that means Ha was accepted, H0 was rejected and it means there was a relationship.

Table 4.
Relationship between Self Efficacy and Degree of Hypertension in the Elderly
(n=36)

Self Efficacy	Hypertension Degree								p	r
	Degree 1		Degree 2		Degree 3		Total			
	f	%	f	%	f	%	f	%		
Very confident	10	27,8	0	0	0	0	10	27,8	0,000	0,914
confident	0	0	7	19,4	4	11,1	11	30,6		
Not confident	0	0	0	0	15	41,7	15	41,7		

DISCUSSION

Self efficacy

The results showed that respondents with very confident self-efficacy as many as 10 people (27.8%) and respondents with self-efficacy were 11 people (30.6%) and respondents with not confident self-efficacy were 15 people (41.7 %). The results of this study were in line with research (Rezky, 2018) that the results of research consisting of 93 respondents showed that the self-efficacy of the elderly who suffer the hypertension at the work area of the Jumandang Baru Health Center obtained self-efficacy of more than half of the respondents was in the poor category of 58,1% with the number of respondents of 54 people. It shows that the elderly with self-efficacy will achieve a better goal because the elderly have strong motivation, clear goals, stable emotions and the ability to provide good results on activities or behavior.

The length of suffering hypertension also affects self-efficacy. In this study, researchers took the inclusion criteria of respondents with a duration of more than one year. This study is in line with Cahyadi's research (2020) that showed the 61 respondents, most of the respondents had poor self-efficacy, that was 70.5%. Different self-efficacy in hypertensive patients may cause the differences in the self-efficacy process undertaken by each hypertensive patient.

Hypertension Degree

The results of the mean confidence regarding the degree of hypertension showed that the respondents had hypertension of Degree 1 was 10 people (27.8%), while hypertension Degree 2 was 7 people (19.4%) and respondents with hypertension Degree 3 was 15 people (42, 8%). The respondents taken were people with hypertension for more than 1 year, the data were obtained from the elderly program cadre, Mrs. Asih Widiyani, M.A.K. so that the respondents who were taken had indeed suffered from hypertension for more than 1 year. According to Laksita (2016), the length of time a person suffers from hypertension may cause anxiety, resulting in peripheral vasoconstriction and elevation of blood pressure. It is in line with Agustono et al. (2018) that there were 36 respondents (42.4%) who suffered from hypertension for >3-5 years, 14 people (16.5%) for >6 years, 32 people (37.6%) for >1-2 years old, and 3 people (3.5%). Based on the research, respondents were dominated by old hypertension sufferers (≥ 3 years).

Hypertension often occurs at the age of 40 years and over, because at that age there is a decrease in the quality of the endothelium of blood vessels so that the level of elasticity of blood vessels decreases (Bangun, 2012 (Siti D, 2017)). Hypertension in the elderly occurs

because blood vessels that are previously flexible and elastic will harden and stiffen, so that blood vessels are unable to supply the needs of blood flow to every organ (Nurrahmani & Kurniadi, 2015). The results of this study are also not the same as the results of this study (Siti D, 2017) it is known that of the 30 respondents, almost half (43.33%) had a level II hypertension degree and the lowest was a level III hypertension degree, amounting to 7 (23.33%). Beside age, the level of education also affects the increase in the degree of hypertension, because most of the data (56.6%) had a junior high school education level, the majority of this research study had a good education, while in this study the majority of respondents did not go to school. According to the results of the 2016 Riskesdas in the Indonesian Ministry of Health (2017), it is stated that hypertension (high blood pressure) tends to be high in low education and decreases according to the increase in education. The high risk of developing hypertension in low education is probably due to a lack of knowledge with low education on health and the difficulty to receive information (counseling) provided by officers, it has an impact on healthy behavior/patterns of Anggara and Prayitno, (2018).

The relationship between self-efficacy and hypertension degree in the elderly

The results showed that respondents with self-efficacy strongly believed in the degree of hypertension 1 were 10 respondents (27.8%), while self-efficacy believed in the degree of hypertension 2 were 7 respondents (19.4%) and respondents with high self-efficacy were confident with the degree of hypertension 3 as many as 4 respondents (11.1%). Self efficacy Not confident about hypertension degree 3 as many as 15 respondents (41.7%). The analysis of test results from the Spearman Rank correlation test obtained p value $< (0.000 < 0.05)$ with a significant level of 5%. It can be concluded that p value < 0.05 then H_a was accepted and H_0 was rejected, p value < 0.05 , meaning that there was a relationship between Self Efficacy and the Degree of Hypertension in the Elderly at the Dempet Health Center, Demak Regency. It can be seen that the calculated rho value was 0.914, it means that the level of strength of the relationship between the self-efficacy variable and the degree of hypertension in the elderly was 0.914 or very strong.

The results of this study were in line with (Siti D, 2017) with the results of the Mann Whitney correlation test, obtained $= 0.001 < = 0.05$ so that H_0 was rejected. It means that there was a relationship between self-efficacy and the degree of hypertension in the elderly in RW 01 Wonokromo Village Surabaya. that of the 10 respondents with the degree of hypertension level I almost entirely (80%) had good self-efficacy, of the 13 respondents with the degree of hypertension level II most (69.2%) had less self-efficacy, and of the 7 respondents with the degree of hypertension level III almost all (85.7%) and had less self-efficacy.

Self-efficacy with the degree of hypertension was related. The poorer the self-confidence of hypertension sufferers to be able to prevent and control their disease, the higher the degree of hypertension or the severity of the disease and vice versa, but in this study data obtained that respondents who had self-efficacy believed in the degree of hypertension 2 as many as 7 respondents (19.4%) and respondents with self-efficacy who believe in the degree of hypertension 3 as many as 4 respondents (11.1%). From the research results (Bin Mohd Arifin & Weta, 2016) suggested that in Indonesia, at the age of 25-44 years the prevalence of hypertension was 29%, at the age of 45-64 years was 51% and at the age of >65 years was 65%. These data proved that the elderly aged 65 years and over are more at risk of developing hypertension. This happens because at that age the large arteries lose their flexibility and become stiff because of that blood at each heartbeat is forced to pass through the blood vessels that are narrower than usual and cause the rise of blood pressure.

One of the factors that affect respondents self-efficacy is the nature of the task faced by the individual; Self-efficacy is contrary to the individual perception of the nature of the task. Individuals perceive that if the tasks carried out are few with very easy task levels then it has an impact on their self-efficacy. Individuals have a tendency to give low ratings of self-efficacy. Furthermore, there are several factors that cause the increase of blood pressure confident among others age, gender, education level and self-efficacy, such as lifestyle and a low-fat and salty diet. It affects the variables in this study with the theory people with high confident self-efficacy usually have low hypertension, but in this research, it was found that from 36 respondents, 7 respondents had self-efficacy, but hypertension was grade 2, even though they already had confident self-efficacy. blood pressure confident remains high because foods high in salt and fat can cause peripheral resistance and increase blood pressure confident (Susanto, Purwandari, & Wuri Wuryaningsih, 2016). The frequency of high salt and high cholesterol food, and seasonings (MSG), as well as milk and its products may trigger hypertension (Astuti, 2017)

CONCLUSION

The respondent self-efficacy at the Dempet Health Center, Demak Regency, showed that as many as 15 respondents (41.7%) were categorized as not confident, the hypertension degree study showed that as many as 15 respondents (42.8%) who suffered from hypertension were found to be mostly in the category of hypertension grade 3. The results showed that there was a relationship between Self Efficacy and the Degree of Hypertension in the Elderly at the Dempet Health Center, Demak Regency, based on Spearman Rank correlation test with $p\text{-value} < (0.000 < 0.05)$.

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