



## THE INFLUENCE OF HEALTH COACHING BASED ON THEORY OF HEALTH BELIEF MODEL TOWARDS BLOOD PRESSURE IN SELANTANG BERSINAR

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Article info	ABSTRACT
<p><b>Corresponding Author:</b></p> <p>Norma Cahyani  <a href="mailto:normacahyani20@gmail.com">normacahyani20@gmail.com</a>            Universitas Kadiri, Kediri</p>	<p>Hypertension is a chronic disease that causes complications of deadly diseases. Hypertension in the elderly is associated with the aging process that occurs in the body. Hypertension management is carried out pharmacologically and non-pharmacologically. Non-pharmacological management with lifestyle modification, diet, exercise and stress management. Hypertension management information can be through continuous health education with an approach to individuals in accordance with theory of Health Belief Model that health coaching can change behavior and improve the quality of elderly life. The objective was to determine the influence of health coaching towards reducing blood pressure to elderly in accordance with theory of Health Belief Model. Research method used a quasi-experimental pre and posttest without control group. The study was conducted in conjunction with the Selantang Bersinar learning process activities in Ngronggo Village from May to November 2023 with 25 elderly respondents using a purposive sampling technique. Health education was carried out through an approach to elderly individuals directly. The result of the normality test was normal, the statistical test used Paired sample t-test. The results of univariate analysis showed that the average difference in pretest and posttest systolic blood pressure was 16.36 and the difference in pretest and posttest diastolic blood pressure was 6.8. Using Paired sample t-test, the results of the bivariate analysis showed that there was an influence of health coaching based on theory of Health Belief Model towards systolic blood pressure and diastolic blood pressure with p value of 0.00. In conclusion, there was an influence of health coaching based on theory of Health Belief Model towards reducing blood pressure in Selantang Bersinar, Ngronggo Village. Furthermore, the elderly who have received health coaching can implement healthy lifestyle, hypertension management for the purpose of managing hypertension cases in the community and can transmit good knowledge to families and community to improve health of Indonesian people.</p> <p><b>Keywords:</b> <i>Hypertension, Selantang, Health Belief Model.</i></p>
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### INTRODUCTION

Law Number 13 of 1988 defines elderly as someone who has reached the age of 60 (sixty) years and over. The increase in the elderly population is in line with advances in the

health sector which is marked by increasing life expectancy and decreasing mortality rates. The growth in the number of elderly people can be a potential for development. The growth of the elderly population in Indonesia in 2020 is estimated to reach more than 10 percent and in 2045 the number of elderly people in Indonesia will reach one-fifth of the total population of Indonesia. The data above is based on the Elderly School Guidebook in the BKL Group, Directorate of Family Resilience Development for the Elderly and Vulnerable, National Population and Family Planning Agency.

The Health Belief Model is a concept that reveals the reasons for individuals to want or not want to live a healthy life (Becker 1974) HBM states that health behavior is influenced by individual beliefs about health risks and benefits (Ngakan, 2023). Not all hypertension sufferers can regulate their lifestyle. Regarding complying with the advice of health workers, hypertension patients will assess their health condition. Differences in the perception of the disease suffered by hypertensive patients are related to the patient's assessment of the threat of a disease. Based on the Health Belief Model, the possibility of someone taking preventive measures depends on the results of their health beliefs or assessments (Priyoto, 2014). Patients will take action to prevent, reduce, or control health disorders based on six components of the Health Belief Model Theory, namely the belief in perceived susceptibility, belief in severity, belief in perceived benefits, belief in barriers, belief in acting (perceived self-efficacy) and the urge to act (cues to action). There is a close relationship between the components in this health belief model theory, which will be a factor in determining the level of compliance of individuals to act because it will provide benefits for the individual. This is in line with one of the components of the health belief model, namely the belief in the perceived benefits of the activities carried out in Selantang Bersinar class in Ngronggo Village, encouraging the elderly to comply with the preventive measures for hypertension that have been conveyed by each speaker, so that compliance behavior is formed.

Compliance behavior can be interpreted as an effort made by patients in the form of following medical rules, following a diet or lifestyle changes in accordance with medical advice (Sarafino, 2011). With health coaching in the form of health coaching in the form of evidence-based consultations, clinical interventions and strategies to actively and safely involve clients / patients in changing health behavior, clients' healthy behavior can be changed based on the Health Belief Model. This HBM component is very suitable for addressing behavioral problems that have consequences for health problems (eg: consumption of unhealthy foods, lack of physical activity). HBM has been widely adapted and successfully applied in health intervention design (Orji, Mandryk, & Vassileva, 2012). Health Coaching in line with the Government's activities here is in the form of the Resilient Elderly School. The Resilient Elderly School (Selantang) is a collaborative program between the Kediri City government and the National Population and Family Planning Agency (BKKBN) located in Ngronggo Village.

The Elderly School is one of the non-formal education efforts carried out throughout life for the elderly. Bina Keluarga Lansia, hereinafter abbreviated as BKL, is a forum for community activity groups consisting of elderly families that aim to improve the knowledge, attitudes and behavior and skills of elderly and pre-elderly families to improve the quality of life and life of the elderly and pre-elderly. Resilient elderly are elderly who are healthy, active, independent and productive and dignified through the application of 7 (seven) dimensions of resilient elderly, namely: spiritual, intellectual, physical, emotional, social,

community, professional vocational and environmental dimensions. The integration of elderly schools and BKL is one of the non-formal education efforts carried out throughout life for the elderly to improve the knowledge, attitudes, behaviors and skills of the elderly's families in improving the quality of life and the lives of the elderly in realizing resilient elderly who are SMART (Healthy, Independent, Active and Productive). Therefore, the researcher is interested in examining the Effect of Health Coaching Based on theory of Health Belief Model towards Blood Pressure in Selantang Bersinar

## METHOD

The research method used is a quasi-experimental pre and posttest without control group. This study was conducted in May - November 2023 with a sampling technique, namely purposive sampling technique, the population is 33 elderly respondents in Ngronggo Village who participated in the health coaching learning process of the Resilient Elderly School (Selantang) Bersinar and who met the inclusion criteria, namely people with pre-hypertension and hypertension, active in the learning process of the Resilient Elderly School (Selantang) Bersinar with 100% attendance. Data collection was carried out by measuring blood pressure before and after health education was carried out through the Selantang Bersinar learning process activities in Ngronggo Village. Blood pressure measurement before health education was carried out as a pre-test on May 24, 2023 and then for 6 months respondents received health education materials, namely: the concept of aging, psychological disorders in the elderly, healthy living efforts, introduction to hypertension, introduction to stroke and physiotherapy, bone system diseases in the elderly, introduction to coronary heart disease (CHD), skills and sports, introduction to diabetes mellitus (diabetes), dental and oral health in the elderly, fall prevention in the elderly and nutrition in the elderly, then the last blood pressure measurement was carried out as a post on November 8, 2023. The dependent variable is the blood pressure of the elderly who took part in the health coaching learning process of the Resilient Elderly School (Selantang) Bersinar, Ngronggo Village, the period of 2023.

## RESULT AND DISCUSSION

### Finding

Table 1. Characteristics of Research Subjects

Characteristics	n	(%)
<b>Genders</b>		
Male	5	20
Female	20	80
<b>Education of Elderly</b>		
Elementary	5	20
Junior High School	2	8
Senior High School	7	28
Diploma III	1	4
Bachelor	9	36
Magister	1	4

Based on table 1, it showed that of the 25 research subjects, most of the elderly were female (80%). Most of the research subjects had a bachelor's degree (36%).

Table 2. Results of analysis of systolic and diastolic blood pressure pretest posttest

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Sistole_pre	146,12	25	15,006	3,001
	Sistole_post	129,76	25	15,390	3,078

  

Paired Samples Correlations				
		N	Correlation	Sig.
Pair 1	Sistole_pre & Sistole_post	25	,265	,201

  

Paired Samples Test									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Sistole_pre - Sistole_post	16,360	18,432	3,686	8,752	23,968	4,438	24	,000

  

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Diastole_pre	81,00	25	7,599	1,520
	Diastole_post	74,20	25	7,751	1,550

  

Paired Samples Correlations				
		N	Correlation	Sig.
Pair 1	Diastole_pre & Diastole_post	25	,419	,037

  

Paired Samples Test									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Diastole_pre - Diastole_post	6,800	8,276	1,655	3,384	10,216	4,108	24	,000

Based on table 2, the results of the normality test where normal then the statistical test used is the Paired sample t-test. The results of the univariate analysis show the difference in the average systolic blood pressure pretest and posttest is 16.36 and the difference in diastolic blood pressure pretest and posttest is 6.8. By using the Paired sample t-test, the results of the bivariate analysis show the effect of health coaching based on the Health Belief Model on systolic blood pressure and also diastolic blood pressure with a p value of 0.00.

## **Discussion**

According to Brookes (2007) what needs to be done by patients with grade I hypertension is to make lifestyle changes as the first choice for treatment. In addition, medication is also needed to control blood pressure if it starts to get out of control. Lifestyle adjustments can be done for 1 month before treatment (Directorate General of PP & PL, 2006). In this study, the results of the normality test were normal then the statistical test used was the Paired sample t-test. The results of the univariate analysis showed the difference in the average systolic blood pressure pretest and posttest was 16.36 and the difference in diastolic blood pressure pretest and posttest was 6.8. By using the Paired sample t-test, the results of the bivariate analysis showed the influence of health coaching based on the Health Belief Model on systolic blood pressure and diastolic blood pressure with a p value of 0.00. This is in line with the provision of health coaching interventions with the Health Belief Model approach which aims to motivate hypertension sufferers to change compliance behavior in the form of regulating diet and physical activity through the materials obtained, namely: health education materials, namely: the concept of aging, psychological disorders in the elderly, healthy living efforts, introduction to hypertension, introduction to stroke and physiotherapy, bone system diseases in the elderly, introduction to coronary heart disease (CHD), skills and sports, introduction to diabetes mellitus (diabetes), dental and oral health in the elderly, fall prevention in the elderly and nutrition in the elderly.

Controlled compliance behavior can lower blood pressure or maintain it within the normal range. The same range of blood pressure values in the results of the study also showed similarities in the gender of respondents, most of whom were women with postmenopausal age. As mentioned by Udjianti (2011) that some supporting factors for hypertension are female gender with postmenopausal age. Also, in line with Martiningsih's research (2011) which analyzed factors related to the occurrence of hypertension, it was found that most of the study respondents were elderly women (80%) with an age above 46 years which is the age of menopause. It was also reported by Thomas (2007) that the percentage of hypertension cases increased in women over 49 years old. The respondents were mostly with a bachelor's degree, 36%, followed by high school, 28%. This is in line with the factors that influence the level of knowledge according to Abdul Rosid (2011: 2). The knowledge possessed by a person will be influenced by several things, one of which is the level of education. It also determines how easy it is for a person to absorb and understand the knowledge they gain. In general, the higher a person's education, the better their knowledge.

## **CONCLUSION**

This study has explained that there is an influence of health coaching with the Health Belief Model approach on systolic and diastolic blood pressure in hypertensive elderly at the Tangguh Bersinar Elderly School, Ngronggo Village with  $\alpha = 0.000$ . Development of research on health behavior needs to be carried out by further researchers so that behavioral changes can be explored in more depth in order to plan a health behavior change program to improve government programs in the health sector.

## **BIBLIOGRAPHY**

Dahlan, M. (2013). Besar Sampel dan Cara Pengambilan Sampel dalam Penelitian Kedokteran

dan Kesehatan. Jakarta: Salemba Medika.  
Direktorat Jenderal PP & PL, Departemen Kesehatan RI. (2006). Pedoman Teknis Penemuan dan Tatalaksana Penyakit Hipertensi. Jakarta: Departemen Kesehatan RI.  
Guyton, A. (2007). Buku Ajar Fisiologi Kedokteran. Jakarta : EGC. Harrison. (2000). Prinsip-prinsip Ilmu Penyakit Dalam. Jakarta : EGC.  
Nursalam. (2014). Metodologi Penelitian Ilmu Keperawatan. Jakarta: Salemba Medika.  
Ngakan P.A.H. (2023). Perilaku Kesehatan: Kumpulan Teori dan Penerapan. Denpasar  
Udjianti, W. J. (2011). Keperawatan Kardiovaskuler. Jakarta: Salemba Medika