

Personal Mastery Model on the Ability to Self Care in the Primary Hypertension

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Abstract

Elderly was someone who has reached 60 years and over. One of the factors that affect the physical condition of the elderly is the cardiovascular problem that most suffered by the elderly. As a result of the aging process the blood vessels become stiff and cause the left ventricular wall to decrease its elasticity, resulting in a progressive increase in pressure progressively. Increased peripheral vascular resistance due to vasoconstriction or constriction of blood vessels is a factor in the occurrence of hypertension. Physically someone who has entered the old age all the function of the organs will decrease, so it will affect the daily activities of the elderly. A person who enters the elderly and suffers from hypertension will experience a decrease in physical function so that it will disturb the elderly in meeting their daily needs (Activity Daily Living). The purpose of this research was to develop the elderly Personal Mastery approach model on the ability of elderly self care with primary hypertension. This type of research uses a cross sectional approach. This research was conducted in community health center of Jember Regency in 2017. This research uses rule of thumb, so it needs sample of 100-155 respondents or 5-10 times indicators (observed variables) in the model used is 150 elderly. Instrument collected data with questioner. Analyzed data used PLS. The result of this research showed that elderly factor, nurse factor, family factor, Integrated Coaching Post service factor, personal mastery, self efficacy, self care agency have an effect on the improvement of self-care ability in Elderly with Primary Hypertension.

Keywords: *Personal Mastery, Self Care, Ability, Elderly.*

Introduction

Aging according to Law No. 13 of 1998 is someone who has reached 60 years and over. In 2050 it is predicted that the elderly will amount to 434 million people. Data from the Central Bureau of Statistics shows that the elderly population in Indonesia in 2000 was 14,439,967 (7.18%), in 2010 it increased to 23,992,553 people (9.77%). Physically someone who has entered the old age all the function of the organs will decrease, so it will affect the daily activities of the elderly¹. One of the factors that affect the physical condition of the

elderly is the cardiovascular problem that most suffered by the elderly. As a result of the aging process the blood vessels become stiff and cause the left ventricular wall to decrease its elasticity, resulting in a progressive increase in pressure progressively². Increased peripheral vascular resistance due to vasoconstriction or constriction of blood vessels is a factor in the occurrence of hypertension. A person who enters the elderly and suffers from hypertension will experience a decrease in physical function so that it will disturb the elderly in meeting their daily needs (Activity Daily Living)³. The problem that arises in the elderly with hypertension is a discrepancy between expectations and reality, namely the physical condition that occurs due to weakness due to hypertension⁴. Then the elderly are required to choose between healed or still suffering from hypertension. Hypertension in the elderly tends to increase at the age of 55-64 years reaching 45.9%, aged 65-74 years reaching 57.6% and in the age group > 75 years reaching 63.8%⁵.

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Indonesia ranks fourth in the world with 24 million elderly people at 4.24%. Jember Regency was ranked 2nd with the highest number of elderly population at 308,792, after Malang Regency was ranked first. In the theory of Personal Mastery emphasizes how the elderly continue to strive in improving the quality of health by way of determining personal vision, self-awareness, empathy and communication. So that the elderly can improve the Self Efficacy they have that aims to fulfill Activity Daily Living (ADL) with the help of the Self-Care Agency owned by the elderly⁶.

Method

The type of this research approach is cross sectional.

The first stage in this study collected data about the factors of elderly, nurse factors, family factors, Integrated Counseling Post service factor, interpersonal factor elderly and self-care fulfillment in elderly primary hypertension. This research was conducted at community health center of Jember Regency 2017. This research uses rule of thumb, so that the number of samples at least 100-155 respondents or 5-10 times indicators (observed variables) in the model used is 150 elderly. Results from the analysis using PLS which is a variance-based Structural Equation Analysis. Simultaneously this method can do model testing. Structural model testing in PLS is done with the help of Smart PLS software version 2 for windows.

Results

Table 1: Hypothesis Test on the Model

No	Influence	Koef Original	(Bootstrap n = 1000)			Information
			Koef.	T Statistik	T Table	
1	Factors of the elderly → Personal Mastery	0,001	-0,001	1,367	1,96	Not significant
2	Nurse factor → Personal Mastery	0,023	0,016	1,416	1,96	Not significant
3	Family factor → Personal Mastery	0,244	0,309	4,087	1,96	Significant
4	Integrated post coaching service factor → Personal Mastery	0,426	0,373	3,804	1,96	Significant
5	Personal Mastery → Self care agency	0,103	0,126	4,267	1,96	Significant
6	Personal Mastery → Self efficacy	0,512	0,511	1,583	1,96	Significant
7	Self Efficacy → Self care agency	0,372	0,364	5,643	1,96	Significant
8	Self care agency → Self care activity daily living	0,316	0,312	5,096	1,96	Significant

After to do validity and reliability tests on all valid and reliable latent variables, the bootstrap sample test B = 1000 gives significant results, then continued in the model analysis with the diagram form presented as follows on table 1 shows that:

1. Factors of the elderly have no effect on personal mastery. This can be seen from the value of Statistics T of 1.241 which is smaller than T-table = 1.96. There is no relationship between elderly and personal mastery.
2. The nurse factor does not affect the personal mastery. This can be seen from the Statistics T value of 0.989 which is smaller than T-table = 1.96. The nurse factor has nothing to do with the personal mastery. This means that the nurse factor does not significantly influence the personal mastery
3. Family factors have a significant and significant influence on Personal mastery. This can be seen

from the path coefficient that has a positive sign of 0.244 with a statistical value of T of 3.290 which is greater than T-table = 1.96. Family factors directly affect the personal mastery of 3,290, which means that any increase in family factors will increase personal mastery of 3,290. This means that family factors significantly influence the personal mastery.

4. Integrated coaching post service factors have a significant and significant personal mastery. This can be seen from the path coefficient which is positively marked by 0.426 with a statistical value of T of 9.078 which is greater than the T-table = 1.96. Integrated Coaching Post service factor directly affects the personal mastery of 0.426, which means that if there is an increase in the Integrated Coaching Post service factor, it will increase the personal mastery by 0.426. This means that the Integrated Coaching Post service factor significantly influence the personal mastery.

5. Elderly factors have an effect on and significance to self efficacy. This can be seen from the path coefficient which is positively marked by 0.041 with the value of Statistics T of 2.026 which is greater than T-table = 1.96. There is a relationship between elderly factors and self efficacy.
6. Factor nurses have an effect on and significance to self efficacy. This can be seen from the value of Statistic T of 5,519 which is bigger than T-table = 1.96. The nurse factor is not related to personal mastery. This means that the nurse factor has a significant effect on self efficacy.
7. Positive and significant family factors for self efficacy. It can be seen from the coefficient of positive sign of 0,512 with the value of Statistic T equal to 5,839 which is bigger than T-table = 1,96. Family factors are effective on self efficacy of 0.512, which means that there is an increase in family factors, it will increase self efficacy by 0.512. That is, the factors of significance to self efficacy.
8. Positive counseling postal service factor and significant self efficacy. This is evident from the coefficient of the path marked positive by 0.372 with the value of Statistics T of 5.845 is greater than T-table = 1.98. Integrated counseling service post directly on self efficacy of 0.372, which means there are some integrated coaching post service factor then it will raise the self efficacy of 0.372. Factors that positively affect self efficacy.
9. Self efficacy, positive and significant towards personal mastery. This is evident from the coefficient of the path marked positive by 0.363 with the value of Statistic T of 3.371 is greater than T-table = 1.98. Direct self efficacy on personal mastery is 0.316 which means that every self efficacy will increase personal mastery by 0.316. This means that self efficacy has a significant effect on personal mastery.
10. Personal mastery has a positive and significant effect on daily self-care activities. This can be seen from the path coefficient which is positively marked by 0.803 with the value of Statistics T of 5.576 which is greater than T-table = 1.98. Personal mastery directly on the daily self-care activities of 0.803, which means any increase in personal mastery will increase the daily self-care activities by 0.803. This means that personal mastery significantly influence the ability of self-care fulfillment.

Discussion

Model simulation is done in an effort to solve problems by providing intervention in the form of knowledge in the form of counseling and group discussion involving elderly and family as well as health workers. When elderly difficult to meet the needs of self care then the action to be done is with the level of elderly personal mastery and self-efficacy that will increase the ability of elderly to do self care agency to meet the self care activity daily living⁷.

Nursing care for the elderly with a personal mastery and self efficacy approach helps the elderly in fulfilling self care activity daily living which includes food diet, stress coping and activities. Elderly with high personal mastery will be easier to do self care. Elderly and family will be assisted with a structured module that aims to make the elderly know and understand the importance of improving personal mastery⁸. And in the module there are also materials that can be a guide in maintaining the self care activity daily living. In addition, health workers will continue to work so that the elderly continue to be actively present in integrated coaching post activities, because Integrated Coaching Post is one of the means to do positive activities and control blood pressure routinely. Hypertension is one of the blood vessel disease, known as Silent Killer, because it often does not cause symptoms. The majority of hypertensive patients in Indonesia are not detected, generally unaware of the condition of the disease and only a small proportion are treated regularly⁹. By 2025 around 29% of adults worldwide will suffer from hypertension. Cardiovascular disease ranks 4th or 15% of causes of death¹⁰. Therefore need serious attention to reduce the number of elderly hypertension. The theory explains that the occurrence of hypertension is caused by several factors that influence each other, where the main factors that play a role in pathophysiology are genetic factors and at least three environmental factors, namely salt intake, stress, and obesity¹¹. In general, people with hypertension are people-people aged over 40 years, but currently does not close the possibility suffered by young people. Most primary hypertension occurs at the age of 25-45 years and only in 20% occurs below the age of 20 years and over 50 years.

The result of this study is that the variable self-care agency has a positive effect on self care activity daily living. Although the activity indicator is still in the less category. But the whole contains significant value. The

ability of the elderly to do self care is shown by the ability of the elderly to maintain and choose good for the body, the elderly are also able to control emotions when there are problems, and the elderly are able to do light activities that are very beneficial for the body and keep blood pressure stable. Therefore, modules that have been prepared can be used in implementing nursing care, so the target of nursing care is easy to reach

Findings: Integrated Coaching Post service factor, personal mastery, self efficacy, self care agency have an effect on the improvement of self-care ability in Elderly with Primary Hypertension.

Conclusion

Based on the results of research and discussion that has been done can be concluded that:

- a. Family support factors consisting of instrumental support, informational support, assessment support, and emotional support have an effect on increasing elderly hypertension personal mastery.
- b. The role of integrated coaching post service is very helpful in improving elderly personal mastery which includes facilities, financial officer, nurse communication.
- c. Personal mastery is the main basis in improving the ability of the elderly in the process of self care activity daily living. Personal mastery is the main focus in helping elderly people to do self care.
- d. Self care agency is one component in nursing theory. The self care agency focuses on the ability of the elderly formed from the knowledge and motivation of the elderly.
- e. Daily living self care activities become the main target in this study which includes food diets which means that the elderly are able to maintain and choose foods that are not at risk for increased blood pressure. Mild exercise is one solution besides being able to maintain stable blood pressure can also help bone health

Suggestion: Elderly with good personal mastery will always learn to achieve life goals in this case the elderly can recover from high blood pressure. Self awareness, knowledge and motivation become the main capital in improving self-care abilities. This is what attracts researchers to take personal mastery in elderly hypertension. The theoretical review states that the

central role of personal mastery is to achieve a personal vision by continuing to learn from a life. The application of personal mastery is expected to be applied anywhere and in any condition.

Ethics approval and consent to participate: The experimental procedures on responden were approved by institutional ethics committee of Public Health Faculty, Airlangga University Indonesia.

Informed Consent: Informed consent was given to the respondent along with the explanation that the research included anonymity and confidentiality

Conflict of Interest: The authors declare that they have no competing interests. We have no conflicts of interest to disclose. It as nil

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