



PROCEEDING

The 4th International Nursing Conference

"Life Cycle Approach for Successful Aging"

Ahmad Zainuri Hall
September 7th, 2019

ISBN 978-602-6988-78-2

Institution of Reseach and Community Service
University of Muhammmadiyah Jember

PROCEEDING
THE 4th INTERNATIONAL NURSING CONFERENCE
“LIFE CYCLE APPROACH FOR SUCCESSFUL AGING”

AHMAD ZAINURI HALL
UNIVERSITY OF MUHAMMADIYAH JEMBER
September, 7 2019

Presented by



In Collaboration With



Published by:

RESEARCH AND COMMUNITY SERVICE INSTITUTION
UNIVERSITY OF MUHAMMADIYAH JEMBER

PROCEEDING
THE 4th INTERNATIONAL NURSING CONFERENCE

THEME :
“LIFE CYCLE APPROACH FOR SUCCESSFUL AGING”

SUB THEME :
MEDICAL SURGICAL NURSING
MATERNITY NURSING
PEDIATRIC NURSING
COMMUNITY NURSING
FAMILY HEALTH NURSING
GERONTOLOGY NURSING
PSYCHIATRIC NURSING
MANAGEMENT OF NURSING
PALLIATIVE NURSING

AHMAD ZAINURI HALL
UNIVERSITY OF MUHAMMADIYAH JEMBER
September, 7 2019

Published by :
RESEARCH AND COMMUNITY SERVICE INSTITUTION
UNIVERSITY OF MUHAMMADIYAH JEMBER



**PROCEEDING
THE 4th INTERNATIONAL NURSING CONFERENCE
"LIFE CYCLE APPROACH FOR SUCCESSFUL AGING"**

**Faculty of Health Science
University of Muhammadiyah Jember
East Java, Indonesia**

Patron	: Dr. Ir. Muhammad Hazmi, D.E.S.S
Advisor	: Ns. Awatiful Azza, M.Kep., Sp. Kep. Mat Diyani Indriani, M.Kep., Sp. MAT
Steering Committee	: Dr. Nurul Qomariah, MM
Chairman	: Ns. Sofia Rhosma Dewi, M.Kep
Chief Executive	: Ns. Susi Wahyuning Asih, M.Kep
Vice Chairman	: Ns. Cahya Tri Bagus Hidayat, S.Kep., M.Kes
Secretary	: Ns. Sri Wahyuni Adriani, M.Kep., Sp. Kep. Kom
Treasurer	: Ns. Zuhrotul Eka Yulis Anggraeni, S.Kep., M.Kes
Programmer Section	: Ns. Mohammad Ali Hamid, S.Kep., M.Kes Ns. Dwi Yunita Hariyanti, S.Kep., M.Kes
Funding Section	: Ns. Komarudin, M.Kep., Sp.Kep. J Wahyudi Widada, S.Kp., M.Ked
Scientific Section	: Ns. Sasmiyanto, S.Kep., M.Kes Ns. Ginanjar Sasmito Adi, M.Kep., Sp. Kep. MB Ns. Mad Zaini, M.Kep., Sp. Kep. J
Logistic Section	: Priyo Widodo, M.Pd Saipul Wakit, M.Pd
Public Relation Section	: Ns. Hendra Kurniawan, S.Kep., .Ked. Trop Ns. Resti Utami, M.Kep
Refreshment Section	: Ns. Yeni Suryaningsih, M.Kep Mainitha Eka S, SE
Accommodation Section	: Ns. Nikmatur Rohmah, M.Kes Ns. Luh Titi Handayani, M.Kes
Editor	: Ns. Sri Wahyuni Adriani, M.Kep., Sp. Kep. Kom Assoc. Proff. Dr. Rosediani Binti Mohammad
Reviewer	: Leonard Ivan T. Melana, RN., MAN., PhD.c Assoc Proff. Dr. Kanitta Nuntaboot Dra. Junaiti Sahar, S.Kp., M.Appp. Sc. Ph.D
ISBN	: 978-602-6988-72-2

Publisher :

INSTITUTION OF RESEARCH AND COMMUNITY SERVICE

University of Muhammadiyah Jember

Jl. Karimata No. 49 Jember, Telp. (0331) 336728 – Fax. (0331) 337957 Jember 68121

Email: panitiaseminterumj2019@gmail.com



FOREWORD

The success of health development in Indonesia are affecting on reduction of birth rate, morbidity, mortality and at the same time increasing life expectancy. Life expectancy of Indonesia were 68.6 years in 2004 then become 69.8 years in 2010. In 2015 the life expectancy are growing to 70.8 years and it projected to keep growing at the future resulting an increase of the number of senior citizens in the future significantly. Indonesia are become one of the top five countries with the highest proportion of senior citizens in the world. The population census in 2010 stated that there were 18.1 million of elderly or 7.6% of the total population and it continue to grow. According to The Central Bureau of Statistic in 2013 the number of senior citizens are predicted to grow up to 27.1 millions of people in 2020, then become 33.7 millions in 2025 and keep growing up to 48.2 millions in 2035.

This situation needs an attention from the government. The goverment of Indonesia has take several action to ensure the good health and welfare of senior citizens. It is all began at 1996 where the goverment determine that May 29th is the day for seniors. Furthermore, in 1998 the goverment issued the 13th Legislation which known as Senior's Welfare Act as a legal basic where the seniors were aknowledge. At 2009 the goverment issued the 36th Legislation about The Act of Health which stated that the efforts to improve and maintain public health carried out based on the principle of non discriminatory, participatory and sustainable. The efforts to maintain health care for elderly are intended to ensure that the elderly remain healthy, independent, active and productiver socially and economically. To achieve this goal the goverment is obliged to ensure the availability of health care facilities and facilitating the development of senior's community.

As the senior citizens grow older, the more likely they are facing problems such as physical, mental, spiritual, economic and social one. The fundamental problems faced by the seniors are health problem caused by degenerative process which is indicated by disease data pattern of elderly. Based on basic medical research (Risksedas) in 2018 the most prevalent diseases in elderly are non communicable disease such as hypertension, osteoarthritis, dental – mouth problems, Chronic Obstructive Pulmonary Disease (COPD) and Diabetes Mellitus (DM).

In the other hand, aging process experienced by seniors lead to a condition called geriatric syndromes. Geriatric syndromes include a number of condition typical of, if not spesific to, aging such as dementia, depression, delirium, incontinence, vertigo, falls, spontaneous bone fractures, failure to thrive, and neglect and abuse. Geriatric syndromes are associated with poor quality of life and reduced life expectancy.

The main problem for the elderly is the fulfillment of health care needs. Therefore it is necessary to develop health services that prioritize the improvement, prevention, and health care maintenance in addition to healing and recovery efforts. Long term purpose of this efforts are to gain better quality of life of the seniors.

Therefore as an efforts to support the success of the National Medium Term Development Plan (RPJMN) in 2019, the nurse as a part of health worker are play important roles. The nurse should be aware of this issue. Based on the above mentioned background, Faculty of Health Science University of Muhammadiyah Jember would conduct an International Seminar and



Workshop of Gerontology Nursing with the theme "Resolving Geriatric Syndromes Through Elderly Health Services".

Jember, September 2019

Comitte of The 4th International Nursing Conference and Workshop
Faculty of Health Science, University of Muhammadiyah Jember



TABLE OF CONTENT

Cover	i
Title Page	ii
Editorial Board	iii
Foreword	v
Table of Content	vii
Endar Timiyatun	1
Yeni Suryaningsih.....	10
Nur Rohmat	16
Elizabeth Yosephina Gunawan.....	22
Susi Wahyuning Asih	31
Ariani Sulistyorini	36
Andri Setyorini	45
Niken Setyaningrum	55
Dian Nur Adkhana	60
Diana Rachmania	67
Diyan Indriyani.....	74
Moch. Maftuchul Huda.....	81
Eita Muslima Isnanda Putri	88
Hanim Mufarokhah	93
Suryati	102
Resti Utami	110
Sasmiyanto	117
Zakiyah Yasin	125
Nunung Ernawati	131
Sofia Rhosma Dewi	138
Fika Indah Prasetya.....	145
Widyasih Sunaringtyas	149
Awatiful Azza	155
Eka Suraningtyas	160
Hendrik Probo Sasongko.....	165
Zuhrotul Eka Yulis	173
Yuana Dwi Agustin	178
Cahya Tri Bagus Hidayat	185
Ginjar Sasmito Adi	190
Firdawzy Nuzula	196
Sri Wahyuni	202
Luh Titi Handayani.....	211



EFFECT OF HEALTH COACHING BASED ON HEALTH BELIEF MODEL THEORY TO PHYSICAL ACTIVITY IN ELDERLY WITH HYPERTENSION

Hanim Mufarokhah*, Apriyani Puji Hastuti*

*Nursing Study Program- Poltekkes RS dr Soepraoen Malang

Email: ns.apriyani@gmail.com

ABSTRACT

BACKGROUND : Most people with hypertension assume that consumption drugs can control their blood pressure. In fact, lifestyle factor such as physical activity contribute to the burden of account for substantial morbidity, mortality, and rising in hypertension, highlyly the much for prevention afford to curb public health epidemic. Health coaching was one way for the nurse to improve motivation and patient's beliefs concerning their disease so that they would show good compliance behavior. Objective of this study was to analyze the effect of health coaching toward physical activity.

SUBJECT AND METHODE : This study used quasy experiment design with pre-post test control group design. Sample collection technique was by purposive sampling. The amount of sample was 26 person for each group. There were two variables, the dependent and independent variables, the dependent variable was physical activity and the independent variable was health coaching. The location in the work Pandanwangi Public Health Center and the time was April 4th – June 7th , 2019. Statistic analysis used Wilcoxon Signed Rank Test and Mann Whitney.

RESULTS : Health coaching has effect toward physical activities. Difference test in treatment group using Wilcoxon obtain p value 0,025, while differece test with Mann Whitney obtain p value 0,000.

DISCUSSION : There is physical activity differences between treatment and control group. furthermore, physical activity as a management of hypertension. It is expected hypertension patients should be always doing physical activity that has been recommended.

Keywords : health coaching, hypertension, physical activitys, dietary, blood pressure

INTRODUCTION

Ignorance of hypertensive patients about the dangers and complications of hypertension makes patients with 1st grade hypertension rise to grade 2nd hypertension. Hypertension patients assume that taking medication alone is enough to control their blood pressure. In patients with first-degree hypertension who are able to regulate their behavior such as controlling diet and exercise, it is less likely to increase their degree of hypertension. When someone is diagnosed with hypertension, health workers will ask the patient to adjust his lifestyle. Starting from adjusting eating patterns, natrium intake, limiting coffee and alcohol consumption, increasing physical activity or sports, stopping smoking, managing stress or anger conditions, and following treatment programs. Counseling that has been given so far by health workers does not have a visible effect on changes in compliance behavior of hypertension sufferers because there is no feedback or opportunity for hypertensive sufferers to express what information they really need about their health. Changes in behavior using coercive strategies also cannot be applied to rural communities. Another strategy that can be carried out by force or regulation, but so far there has never been a law in the community both written and unwritten that focus on health issues. Therefore of information and assistance in changing compliance behavior was chosen as an intervention for the hypertension community.

In fact, not all patient with hypertension can adjust their lifestyle. Related to following the advice of health workers, hypertensive patients will conduct an assessment of their health conditions. The difference will appreciation of the disease suffered by hypertensive patients, related to the patient's assessment of the threat of a disease. Based on the Health Belief Model, the likelihood that someone will take precautionary



measures depends on the results of their beliefs or health assessments (Priyoto, 2014). Patients will take actions to prevent, reduce, or control the condition of health problems based on the seven components of the expected health belief model. Behavior compliance can be interpreted as an effort made by the patient in the form, following medical rules, following a diet or lifestyle changes in accordance with medical advice (Sarafino, 2011).

From the results of a preliminary study conducted in the Pandanwangi Public Health Center, the number of hypertension sufferers was 1060 visitors. In fact shows that 23.7% of the population aged 10 years and over smoke every day. Consumption of salt and salty foods in the community is still high, which is 15 grams per person per day, far from the recommended maximum limit of 6 grams per person per day, and as many as 24.5% of people over the age of 10 consume salty food every day. As many as 93.6% of the population consumed less fruits and vegetables (Ministry of Health, 2013). The result shows the proportion of physical activity of the population which is classified as less active in Indonesia by 26.1%. From all provinces in Indonesia there are 22 provinces whose physical activity of the population is classified as less active with a proportion above the national average, including in East Java Province by 33.9% (Ministry of Health, 2013). As well as data from NHANES 2007-2010, there were 47.5% of hypertension sufferers who did not control their blood pressure (American Heart Association, 2013). Hypertensive patients who have poor compliance behavior can increase the degree of hypertension and lead to complications including myocardial infarction, stroke, kidney failure, and death if not detected early and treated appropriately (James, et al., 2014).

The results of studies on the use of health coaching techniques in several previous studies varied including: providing positive experiences for participants, giving maximum results perceived by Priyoto (2014), namely perceived vulnerability (Perceived susceptibility), perceived danger / pain (Perceived severity)), perceived benefits (Perceived benefit), perceived obstacles (Perceived barrier), modification variables (Modifying variables), cues to action (Cues to action), and one's beliefs about the ability he has to do something (Self Efficacy). This HBM component is perfect for overcoming behavioral problems that have consequences for health problems (for example: consumption of unhealthy foods, lack of physical activity). HBM has been widely adapted and successfully applied in the design of health interventions (Orji, Mandryk, & Vassileva, 2012).

METHODS

This study used quasy experiment design with pre-post test control group design. Sample collection technique was by purposive sampling. The amount of sample was 26 person for each group. There were two variables, the dependent and independent variables, the dependent variable was physical activity and the independent variable was health coaching. The location in the area Pandanwangi health public care and the time was April 4th – June 7th , 2019. Statistic analysis used Wilcoxon Signed Rank Test and Mann Whitney.

RESULT AND DISCUSSION

Pandanwangi Public Health Center in Malang is the First Level Health Health BPJS in Malang with Non-Inpatient type, located at Jalan Laksamana Adi Sucipto No. 315, Pandanwangi, Blimbing, Malang City, East Java, with the working area of the Pandanwangi Public Health Center. Health service facilities available at the Pandanwangi Health Center include: Medical, Dental, MCH (Mother and Child Health) Centers, Pharmacies, Laboratories, and Emergency Room (Emergency Unit).

The management of hypertension patients at the Pandanwangi Public Health Center in Malang according to the public health center operational standards in December 2018 namely when new patients are found with blood pressure reaching 140/90 mmHg patients are given education and are encouraged to make lifestyle changes both in dietary settings, increased physical activity, weight loss, limiting even quitting smoking, and stress management for one month. Furthermore, patients are asked to come back to the



health center control, if blood pressure is obtained at a fixed or increased value then proceed to the treatment program. When blood pressure drops, lifestyle arrangements continue at home and are asked to return the following month.

The results of general data analysis that researchers got in this study based on gender, age, education, occupation, history of hypertension, and history of kidney disease are as follows:

Table 4.1 Results of general data analysis (Source: Primer Data, 2019)

Respondent characteristic	Intervention group		Control group		Total	
	f	%	f	%	n	%
Gender						
Male	8	30,8%	6	23,1%	14	26,9%
Female	18	69,2%	20	76,9%	38	73,1%
Age						
36-45	4	15,4%	0	0%	4	7,7%
46-55	22	84,6%	26	100%	48	92,3%
Education						
Elementary school	6	23%	12	46,1%	18	34,6%
Junior high school	10	38,5%	6	23,1%	16	30,8%
Senior high school	10	38,5%	6	23,1%	16	30,8%
Bachelor	0	0%	2	7,7%	2	3,8%
Occupation						
Housewife	12	46,2%	16	61,5%	28	53,8%
Private employee	12	46,2%	4	15,4%	16	30,8%
Civil servants	0	0%	4	15,4%	4	7,7%
Entrepreneur	2	7,6%	2	7,7%	4	7,7%
Hypertension history						
Yes	10	38,5%	10	38,5%	20	38,5%
None	16	61,5%	16	61,5%	32	61,5%
Kidney diseases history						
Yes	0	0%	0	0%	0	0%
None	26	100%	26	100%	52	100

Based on table 4.1, it can be seen that in the treatment group in this study the majority were female, with 18 respondents (69.2%) with almost 46-55 years of age (84.6%) and almost half of the education level, namely junior high and high school. with the same number each of 10 respondents (38.5%), almost half of the types of work are housewives and private employees with the same number each of 12 respondents (46.2%), and most have a history of hypertension (61.5%). Whereas in the control group almost all respondents were female as many as 20 respondents (76.9%), with a total age range of 46-55 years (100%), the level of education was almost half as elementary as 12 respondents (46.1%), type Most occupations as housewives were 816 respondents (61.5%), and most had a history of hypertension (61.5%).

Table 4.2 Physical Activity *pre test post test* intervention group and control group in area Pandanwangi Public Health Center

category	Intervention group		Control group		Mann Whitney	
	Σ	%	Σ	%		
Pre Test	Mild	14	53.8	12	46.1	α=0.985
	Moderate	6	23.1	10	38.5	
	Heavy	6	23.1	4	15.4	
Post Test	Mild	0	0	12	46.1	α=0.000
	Moderate	8	30.8	10	38.5	



Heavy	18	69.2	4	15.4
	Z = -4.463		Z = -2.236	
	$\alpha=0.0000$		$\alpha=0.025$	

Based on table 4.2 above, it was found to regulate eating behavior in the treatment group of 16 respondents migrating in the moderate and severe categories and none of the respondents were in the poor category. Whereas in the control group physical activity carried out by the permanent group.

While in the control group there were no significant changes because the results obtained were the same. from the table above it can be stated that the value of $\alpha = 0.000$ means that H_0 is rejected or the hypothesis is accepted so that there is a difference between the treatment group and the control group on the physical activity of hypertensive patients given health coaching with the theory of health belief model approach.

Based on table 4.5, the test results obtained with Wilcoxon in the treatment group were found to be different between the pre-test and post-test physical activities after the health coaching action. The results of the post test in the treatment group did not get one respondent in the less category, this indicates an increase in the category, respondents migrated in the moderate and severe categories. During the research process the booklet filling process of physical activity has largely been filled in correctly according to the column, organized, neat, routine, and filled in consciously not feeling burdensome. Some respondents who are not good at writing, took the initiative to ask for help from the family to write down the physical activities they do every day. Respondents themselves also felt helped by filling out this booklet because it could automatically regulate what activities were carried out.

Changes in behavior in this study are physical activities including daily activities and heavier activities with about 30 minutes carried out every day based on DASH activity. In this study, most respondents regularly fill in the booklet for attaining behavior change because they feel helped, respondents can also manage their physical activity. Respondents who are more concerned about their disease are more likely to accept changes in physical activity that must be done to reduce the increase in the degree of hypertension and complications. In this study, most respondents regularly fill out booklets because they find it helpful, respondents can also see what activities have been carried out during the 3 week filling process. Health coaching conducted in this study by increasing the understanding and confidence of patients about the disease that the danger of hypertension that threatens is very dangerous and even lead to death if not followed up with changes in physical activity behavior. Increase respondents' confidence and enthusiasm that there is still time and be able to make changes. Activities undertaken include the selection of recommended physical activities and regular monitoring of physical activity by involving the family.

Based on table 4.4, the test with Wilcoxon in the control group showed no difference in physical activity in the control group before and after the health coaching intervention. The absence of this difference can be seen from the still number of each category at the time of the pre test and post test. This can occur because a person will behave in accordance with the knowledge he has, changes in physical activity also depend on the quality of stimuli or stimuli provided, meaning that the quality of the communication source also determines the success of physical activity changes (Notoatmodjo 2014)

There is no increase in changes in physical activity in the control group because there is no interaction between respondents in the treatment and control groups that can increase respondents' knowledge in the control group. The results of observations of changes in physical activity of the control group were still obtained by respondents with less behavior categories. This can occur because respondents did not get assistance in regulating physical activity.

The results showed the data that most of the sex of the respondents were women with postmenopausal age. As mentioned Udjianti (2011) that several factors supporting the occurrence of hypertension are the sex of women with postmenopausal age. In line with the study of Martiningsih (2011) who analyzed the factors associated with the occurrence of hypertension, it was found that more than half of the study respondents were women with age mostly above the age of menopause. Also reported by Thomas (2007) that the percentage of the incidence of hypertension increased in women over 49 years.



After the age of 45 years, the walls of the arteries will experience thickening due to the accumulation of collagen in the myovascular system, so that the blood vessels will gradually become stiff. Systolic blood pressure increases because the flexibility of large blood vessels decreases with age until the seventh decade while diastolic blood pressure rises until the fifth and sixth decades and then settles or tends to decrease. Along with increasing age, it will cause some physiological changes, such as increased peripheral resistance and catecholamine activity, decreased sensitivity to blood pressure regulation namely baroreceptor reflexes and the role of the kidneys has also been reduced where renal blood flow and glomerular filtration rate have decreased. This causes the kidneys to not be able to eliminate the salt load adequately resulting in salt and water resistance which will cause an increase in plasma volume (Sherwood 2011). In addition, if the kidney filtration rate decreases, apartus granular cells in the kidneys will release the hormone renin which will activate angiotensinogen in the plasma into angiotensin I which then passes through the pulmonary circulation and is converted by Angiotensin Converting Enzyme (ACE) to angiotensinogen II which is a strong vasoconstrictor. In addition, angiotensin II will stimulate the release of aldosterone from the adrenal cortex which will cause an increase in sodium retention resulting in an increase in plasma osmolality which is then offset by an increase in water absorption. This will cause an increase in cardiac output which will then increase arterial blood pressure (Guyton 2007).

The prevalence of hypertension in men is less than in women. But women are protected from cardiovascular disease before menopause. Women who have not experienced menopause are protected by the hormone estrogen which plays a role in increasing levels of High Density Lipoprotein (HDL). High levels of HDL cholesterol are a protective factor in preventing the process of atherosclerosis. The protective effect of estrogen is thought to be an explanation of a woman's immunity at premenopausal age. In premenopausal women begin to lose little by little the hormone estrogen which has been protecting blood vessels from damage. This process continues where the hormone estrogen changes in quantity according to a woman's natural age, which generally begins to occur in women aged 45-55 years. Women over the age of 50 who have experienced menopause have several physical, hormonal, and mental changes. Accompanied by several complaints such as fatigue, nervousness, headaches, insomnia, depression, irritability, joint and muscle pain, dizziness, and palpitations. Unstable emotions can also cause sleep disorders.

Some things that were encountered during the research that could be used as a cause were psychological problems from respondents who caused stress, such as the presence of one family member who was sick, affected by a disaster, sudden economic needs, problems with work and problems with children. This condition appeared at the last study, causing a rise in blood pressure from several respondents.

Stress increases peripheral vascular resistance, cardiac output and parasympathetic central nervous system activity. Stressors can be a variety of things, busyness, infection, trauma, obesity, old age, psychological disorders, drugs, illness, surgery and medical therapy that can cause stress. Stress occurs through the activity of sympathetic nerves (nerves that work when we move). Increased sympathetic nerve activity results in increased blood pressure intermittently. Affirmed by Muhammadun (2010) stress can stimulate the adrenal glands to release the hormone adrenaline and stimulate the heart to beat faster and stronger so that blood pressure will increase.

This can happen because most of the respondents' work is housewives who do the same routine every day, do the same work, and focus on the family and family problems that exist without any distraction of entertainment with a workload for 24 hours. When family problems come, it will become the focus of thought for respondents. This can be a stressor and cause stress for the respondent which can increase the respondent's blood pressure.

In the booklet filling process the achievement of changes in physical activity most of the respondents can consciously and independently fill in the booklet, but a small proportion of respondents are still less consistent in filling booklets, such as not routinely every day with the excuse of forgetting, waiting for researchers to write, other family members all work so no one wrote it down, and there were also some



respondents who felt burdened in filling out this booklet because respondents still worked every day from morning to evening.

Overall, the booklet filling process, the method of writing physical activity activities such as this diary provides great benefits for people with hypertension. People with hypertension are more responsible for organizing activities that are done daily. This method can be applied by people with hypertension to control their blood pressure. Documentation like this is also useful for health workers to find out what factors affect hypertension sufferers' blood pressure.

CONCLUSIONS AND RECOMMENDATIONS

Conclusion

There is an effect of providing health coaching with the health belief model approach to physical activity in the elderly who have hypertension with $\alpha = 0,000$.

Suggestion

People with hypertension are expected to have a blood pressure to control it. The results of this study can be used by nurses to modify nursing interventions by utilizing the diary method to improve the compliance behavior of patients with hypertension. Especially documentation of dietary settings because of the diversity of foods commonly consumed by people with hypertension. Nurses can increase the self efficacy of hypertension sufferers through public health center programs that involve hypertension sufferers such as the elderly public health center. By giving booklets as media promotion can be the one of choices to improve quality of health of hypertension patients. Public health center can be used as a basis for program development by forming a support group to care for hypertension sufferers and involving cadres in it. In further research, health coaching can be done in a more structured, routine, and scheduled manner in hypertensive patients so that results are more optimal.

REFERENCE

- Abdi, Z. (2015). *Analisis Pengaruh Perilaku Pencegahan Hipertensi Berdasarkan Konsep Health Belief Model dan Dukungan Sosial pada Masyarakat Desa Baruh Jaya Propinsi Kalimantan Selatan*. Surabaya: Fakultas Kesehatan Masyarakat Universitas Airlangga.
- Ahmed, K., Khaliq, M., Shah, S., & Anwar, W. (2008). Compliance to Antihypertensive Drugs, Salt Restriction, Exercise and Control of Systemic Hypertension in Hypertensive Patients at Abbottabad. *J Ayub Med Coll Abbotabad*, 2, 20.
- American Heart Association. (2013). *High Blood Pressure*. United States: American Heart Association.
- Ammentorp, J., Thomsen, J., & Kofoed, P. (2013). Adolescents with Poorly Controlled Type 1 Diabetes can Benefit from Coaching: A Case Report and Discussion. *J Clin Psychol Med Settings*.
- Axelrod, R., Zimbro, K., Chetney, R., Sabol, J., & Ainsworth, V. (2001). A Disease Management Program Utilizing "Life Coaches" for Children with Asthma. *JCOM*, 8 (6).
- Azam, M. (2005). *Prevalensi Hipertensi berdasarkan Riwayat Hipertensi dalam Keluarga*. Jakarta: Erlangga.
- Bennett, H., Coleman, A., Parry, C., Bodenheimer, T., & Chen, E. (2010). *Health Coaching for Patients*. Retrieved January 2016, from The Family Practice management Web Site: <http://www.aafp.org/fpm>
- Brookes, L. (2007). *ESH '07: New Consensus Hypertension Guidelines From the European Society of Hypertension/Euroean Society of Cardiology (ESH/ESH)*. Medscape Cardiology.
- Carpenter, C. (2010). A Meta-analysis of The Effectiveness of Health Belief Model Variabels in Predicting Behavior. *Health Communication*, 25 (8), 661-9.



- Chobanian, A., Bakris, G., Black, H., Cushman, W., Green, L., Izzo, J., et al. (2003). The Seventh Report of The Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure. *JAMA*, 289 (19), 2560-2572.
- Conner, M. (2010). *Cognitive Determinants of Health Behavior Handbook of Behavioral Medicine Methods and Applications*
- Dahlan, M. (2013). *Besar Sampel dan Cara Pengambilan Sampel dalam Penelitian Kedokteran dan Kesehatan*. Jakarta: Salemba Medika.
- Departement of Health and Human Service, U. (2003). *Your Guide to Lowering Blood Pressure*. NIH Publication.
- Dharma, K. (2011). *Metodologi Penelitian Keperawatan: Panduan Melaksanakan dan Menerapkan Hasil Penelitian*. Jakarta: CV. Trans Info Media.
- Direktorat Jenderal PP & PL, Departemen Kesehatan RI. (2006). *Pedoman Teknis Penemuan dan Tatalaksana Penyakit Hipertensi*. Jakarta: Departemen Kesehatan RI.
- Erkoc, S., Isikli, B., Metintas, S., & Kalyoncu, C. (2012). *Hypertension Knowledge-Leel Scale (HK-LS): A Study on Development, Validity and Reliability*. *International Journal of Environmental Research and Public Health*, 9, 1018-1029.
- Galantino, M., Schmid, P., Milos, A., Leonard, S., Botis, S., Dagan, S., et al. (2009). Longitudinal Benefits of Wellness Coaching Interventions for Cancer Survivors. *the International Journal of Interdisciplinary Social Sciences*, 4 (10).
- Glanz, K., Rimer, B., & Viswanath, K. (2008). *Health Behavior and Health Education: Theory, Research, and Practice* (4 ed.). San Francisco: Jossey-Bass.
- Guyton, A. (2007). *Buku Ajar Fisiologi Kedokteran*. Jakarta : EGC. Harrison. (2000). *Prinsip-prinsip Ilmu Penyakit Dalam*. Jakarta : EGC.
- Hay, J., Ford, J., Klein, D., Primavera, L., Buckley, T., & Stein, T. (2003). Adherence to Colorectal Cancer Screening in Mammography-adherence Older Women. *Journal of Behavior Medicine*, 26, 553-76.
- Hodge, B. (2013, May/ June). *American Academy of Family Physicians*. Retrieved January 26, from The Family Practice Management Web Site: <http://www.aafp.org/fpm>
- Huffman, M. (2007). *Health Coaching: A New and Exciting Tehnique to Enhance Patient Self-Management and Improve Outcomes*. California: Home Healthcare Nurse.
- Izumi, S., Ando, K., Ono, M., Suzukamo, Y., Michimata, A., & Fukuhara, S. (2007). Effect of Coaching on Psychological Adjustment in Patient With Spinocerebellar Degeneration: A pilot Study. *Clin Rehabil*, 21 (11), 987-996.
- James, P., Oparil, S., Carter, B., Cushman, W., Dennison-Himelfarb, C., Handler, J., et al. (2014). 2014 Evidence-Based Guideline for The Management og High Blood Pressure in Adults Report From The Panel Members Appointed to The Eight Joint National Committee (JNC 8). *JAMA*, 311 (5), 507-520.
- Kamal, M., Kusmana, D., Hardinsyah, Setawan, B., & Damanik, R. (2013). Pengaruh O lahraga jalan Cepat dan Diet terhadap Tekanan Darah Penderita Prahipertensi Pria. *Jurnal Kesehatan Masyarakat Nasional*, 7 (6).
- Kamran, A., Shekarchi, A., Sharifirad, G., Sharifian, E., & Shekarchi, L. (2015). Evaluating Dietary Perceptions Education Program among Rural Hypertensive Patients on Commitment and Adherence to Healthy Diet. *Journal of Human Health*
- Kementrian Kesehatan Republik Indonesia. (2013). *Riset Kesehatan Dasar*. Jakarta: Badan Penelitian dan Pengembangan Kesehatan Kementrian Kesehatan RI.
- Khan, M., Banawy, F., Mirza, A., Hussain, M., Khan, A., & Lashari, M. (2014). Frequency and Predictorsof Non compliance to Dietary Recommendations Among Hypertensive Patients. *J Community Health*, 39, 732-736.



- Krishnan, A., Garg, R., & Kahandaliyanage, A. (2013). Hypertension in the South-East Asia Region: an overview. *Regional Health Forum*.
- Kurniawan. (2002). *Hipertensi dan Penyebabnya*. Jakarta: Rineka Cipta.
- Lawrence, J. (2009). Dietary Approaches to Lower Blood Pressure. *The Journal of Clinical Hypertension*, 11 (7).
- Li, C., Unger, J., Schuster, D., Rohrbach, L., Howard-Pitney, B., & Norman, G. (2003). Youths Exposure to Environmental Tobacco Smoke (ETS) Associations with Health Belief and Social Pressure. *Addictive Behaviors*, 28, 39-53.
- Linden, A., Butterworth, S., & Prochaska, J. (2010). Motivational Interviewing- based Health Coaching as a Chronic Care Intervention. *Journal of Evaluation in Clinical Practice*, 16, 166-174.
- Macadam, C. (2014). *Health Coaching-A Powerful Approach to Support Self Care*. United Kingdom: British Medical Association.
- Mallion, J., & Schmitt, D. (2001). Patient Compliance in The Treatment of Arterial Hypertension. *European Society of Hypertension Scientific Newsletter: Update on Hypertension Management*, 2 (7).
- Manjoer, A. (2000). *Kapita Selektta Kedokteran*. Jakarta: Media Aesculapius.
- Marvyn, L. (1995). *Hipertensi Pengendalian Lewat Vitamin, Gizi, dan Diet*. Jakarta: Arcan.
- Masud, I. (1989). *Dasar-dasar Fisiologi Kardiovaskuler*. Jakarta: EGC.
- Mattila, E. (2010). Design and Evaluation of Mobile Phone Diary for Personal Health Management. *Thesis*. Tampere, Finland: Tampere University og Technology.
- Mau, M., Glanz, K., Severino, R., Grove, J., Johnson, B., & Curb, J. (2001). Mediators of Lifestyle Behavior Change in Native Hawaiians: Initial Findings from the Native Hawaiian Diabetes Intervention Program. *Diabetes Care*, 24 (10), 1770-5.
- Muhammadun, A. (2010). *Hidup Bersama Hipertensi*. Jogjakarta: In-Books.
- Ngo, V., Hammer, H., & Bodenheimer, T. (2010). Innovation and Improvement: Internal Examination Health Coaching in The Teamlet Model: A Case Study. *J Gen Intern Med*, 25 (12), 1375-8.
- NHS. (2014). *NHS Improving Quality*. Retrieved from Long Term Conditions Programmes: <http://www.nhs.uk>
- Notoatmodjo, S. (2014). *ilmu Perilaku Kesehatan*. Jakarta: Rineka Cipta.
- Nursalam. (2014). *Metodologi Penelitian Ilmu Keperawatan*. Jakarta: Salemba Medika.
- Orji, R., Mandryk, L., & Vassileva, J. (2012). Towards A Data-driven Approach to Intervention Design: A Predictive Path Model of Healthy Eating Determinants. *Persuasive*, 203-214.
- Ossman, S. (2004). Motivational Interviewing: A Process to Encourage Behavioral Change. *Nephrology Nursing Journal*, 31 (3), 346.
- Perhimpunan Dokter Spesialis Kardiovaskuler Indonesia. (2015). *Pedoman Tatalaksana Hipertensi pad Penyakit Kardiovaskuler*. Jakarta.
- Perry, A., & Potter, P. (2010). *Clinical Nursing Skills and Techniques*. Canada: elseiver.
- Schneider, J., Hashizume, J., Heak, S., Maetani, L., Ozaki, R., & Watanabe, D. (2011). *Identifying Challenges, Goals and Strategies for Success for People with iabetes through Life Coaching*. Honolulu, HI, USA: University of Hawai at Manoa.
- Sherwood, L. (2011). *Fisiologi Manusia*. Jakarta: EGC.
- Steventon, A., Tunkel, S., Blunt, I., & Bardsley, M. (2013). Effect of Telephone Health Coaching (Birmingham OwnHealth) on Hospital Use and Associated Cost: Cohort Study with Matched Controls. *BMJ*, 347.
- Sumarman. (2010). *Penderita Hiptensi Primr: Pengetahuan tentang Diet Rendah Garam, Kepatuhan dan Kendalanya*. Surakarta: Tesis, Program Pascasarjana, Universitas Sebelas Maret.
- Sustrani, L., & Alam, S. (2004). *Hipertensi*. Jakarta: PT Gramedia Pustaka Utama.
- Thom, D., Ghorob, A., Hessler, D., Vore, D., Chen, E., & Bodenheimer, T. (2013). Impact of Peer Health Coaching on Glycemic Control in Low- Income Patient with Diabetes: A Randomized Controlled Trial. *Ann Fam Med*, 11, 137-144.



- Thomas, M. (2007). *Hypertension: Clinical Features and Investigations*. Perth Australia Western: Hospital Pharmacist.
- UCSF Center for Excellence in Primary Care. (2014). *Health Coaching in Primary Care-Intervention Protocol*. California: The Regents of the University of California.
- Udjianti, W. J. (2011). *Keperawatan Kardiovaskuler*. Jakarta: Salemba Medika.
- Viney, R., & Paice, E. (2010). *The First Five Hundred: A Report on London Daenary's Coaching and Mentoring Service 2008-2010*. London: London Daenary Coaching and Mentoring .
- Wallace, L. (2002). Osteoporosis Prevention in College Women: Application of The Expanded Health Belief Model. *American Journal of Health Behavior*, 26, 163-72.
- WebMD. (2013). *The Essential Guide to Health Coaching*. WebMD Health Service.
- Wheeler, M. (2015). Health Coaching: a Natural Fit for Nurses. *Canadian Nurses Association* .
- Whitley, S. (2013). Group Coaching as Support for Changing Lifestyle for those Diagnosed with A Long - Term Condition. *International Journal of Evidence Based Coaching and Mentoring* (7), 82.
- Wolever, R., Dreusicke, M., Fikkan, J., Hawkins, T., Yeung, S., Wakefield, J., et al. (2010). Integrative Health Coaching for Patients with Type 2 Diabetes: A Randomized Clinical Trial. *Diabetes Educ*, 36 (4), 629-39.
- Wong-Rieger, D. (2011). *Health Coaching for Chronic Conditions Engaging and Supporting Patients to Self Manage*. Canada: Institute for Optimizing