

Review Article

Factors affecting self-efficacy against hypertension self-care in hypertension patients: a scoping review

Noni Widiawatie^{1*}, Fitria Handayani¹, Mochamad Ali Sobirin²

¹Department of Nursing, Faculty of Medicine, Diponegoro University, Indonesia

²Department of Medicine, Faculty of Medicine, Diponegoro University, Indonesia

Received: 11 January 2021

Accepted: 08 February 2021

*Correspondence:

Noni Widiawatie,

E-mail: noniwidiawatie@gmail.com

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

Hypertension is called the "silent killer" some individuals with hypertension are not aware of this problem and may even have no warning signs or symptoms. Low self-efficacy has referred to chronic disease self-care that individuals engage in various forms of hypertension self-care behavior. This scoping review aims to determine the factors that affect self-efficacy of hypertension self-care in hypertension patients. This study used a scoping review to identify factors that influence self-efficacy on hypertension self-care in hypertensive patients. Search relevant studies using a database: CINAHL, MEDLINE, Academic Search Ultimate, Francies Taylor, Scencedirect and Google scholar. Inclusion criteria patient with hypertension, age >40 years with a span of 2011 to 2020. Factors that influence self-efficacy are intentional non-adherence, ($\beta=-0.02$, $p=0.031$), low adherence to treatment ($\beta=-0.05$, $p=0.017$), effectiveness of doctor communication ($\beta=0.11$), $p<0.001$), positive beliefs about treatment ($\beta=0.13$ $p<0.001$), and social support ($\beta=0.05$, $p<0.001$). These factors serve as basic data in the development of further research in the prevention of stroke risk, with hypertension management capabilities.

Keywords: Self-efficacy, Hypertension, Hypertension self-care

INTRODUCTION

Increased hypertension as the main risk for premature death, stroke and heart disease in the world.¹ Hypertension is called the "silent killer" some individuals with hypertension are not aware of this problem and may even have no signs or warning symptoms.² Prevalence of >15 years of age hypertension in Indonesia.³ According to the World Health Organization (WHO) the symptoms that appear can include morning headaches, nosebleeds, irregular heart rhythms, changes in vision and ringing in the ears. Hypertension can cause rupture or blockage of arteries that supply blood and oxygen to the brain which can lead to stroke.⁴ Predictive factors for stroke risk include age, history of cardiac arrhythmia/atrial fibrillation, history of coronary heart disease/myocardial infarction, history of deep venous thrombosis/pulmonary

embolism, history of migraines, history of hypertension, blood pressure grade 1, blood pressure grade 2, blood pressure grade 3, taking antihypertensive medication, taking anticoagulant treatment, and being active smokers.⁵ However, high blood pressure grade 3 is considered the highest risk of stroke. This is in line with the results of the meta-analysis study that hypertension is a high risk for stroke with a pooled odds ratio (OR) of 3.50 (95% Confidence Interval (CI) = 3.18-3.85).⁶

Hypertension or high blood pressure continues to be a major public health challenge, this is because untreated hypertension can lead to heart disease and stroke.^{7,8} Several studies have shown a strong association between uncontrolled severe hypertension leading to certain types of stroke, namely Intracerebral hemorrhage, intracranial atherosclerotic ischemic stroke and grafting ischemic stroke in black people.⁹⁻¹¹ Treatment of hypertension to

prevent the first episode and recurrence of stroke needs to be done early. Individuals with hypertension were about 69.9% who underwent pharmacological treatment but about 45.8% were in good controls.^{12,13} Based on current clinical policy, the Joint National Committee on Prevention, Detection, Evaluation and Treatment of High Blood Pressure (JNC7) recommends that each individual with hypertension be involved in six self-care activities.¹⁴ However, the level of involvement in self-care in individuals with hypertension is relatively low.^{15,16} Low self-efficacy has been associated with chronic disease self-care which requires individuals to perform various forms of hypertensive self-care behavior.¹⁷ Self efficacy serves as an indirect predictor in individuals with hypertension that is mediated by physical and mental health.¹⁸

Based on the results of interviews with five hypertensive patients who were undergoing outpatient care in one of the hospitals in Semarang, they said that "I rarely checked myself to the hospital because of the distance from the house, and when the examination was only given medicine and then checked the tension, I sometimes forgot to take my antihypertensive medication". An interview with one of the stroke nurses said that treating patients with hypertension was only carried out by checking blood pressure and providing anti-hypertensive drugs, sometimes giving counseling about hypertension. Currently, antihypertensive therapy has developed, but there are still more than half of hypertensive patients whose blood pressure has not reached a good level of control.¹⁹

Treatment and control of hypertension is very important for prevention of the consequences of heart disease and stroke. The management of hypertension consists of pharmacological management that has progressed, however, hypertension sufferers do not experience a significant decrease even though they have taken medication so that non-pharmacological management is needed.²⁰ Self efficacy in hypertensive patients is still low, patients tend to think that hypertension is enough to take medication so that blood pressure returns to normal.²¹ There are a variety of factors that affect self-efficacy, including information related to health, communicating with doctors, taking medication, diet and Sports. Therefore, this scoping review aims to determine the factors that influence self-efficacy of hypertension self-care in hypertensive patients.

METHODS

The scoping review The scoping review is based on the five-stage Arksey and O'Malley framework.²² Identified research questions, identified relevant studies, selected studies according to inclusion criteria were adult patients with hypertension, age >40 years, gender men and women, written in Indonesian and English, published in 2011-2020, cross sectional or longitudinal methodology with bivariate and multivariate statistical tests. Graphing the data, and compiling, summarizing and reporting the results. There are three subsections of this stage, namely analyzing the data, reporting the results, and interpreting the results.

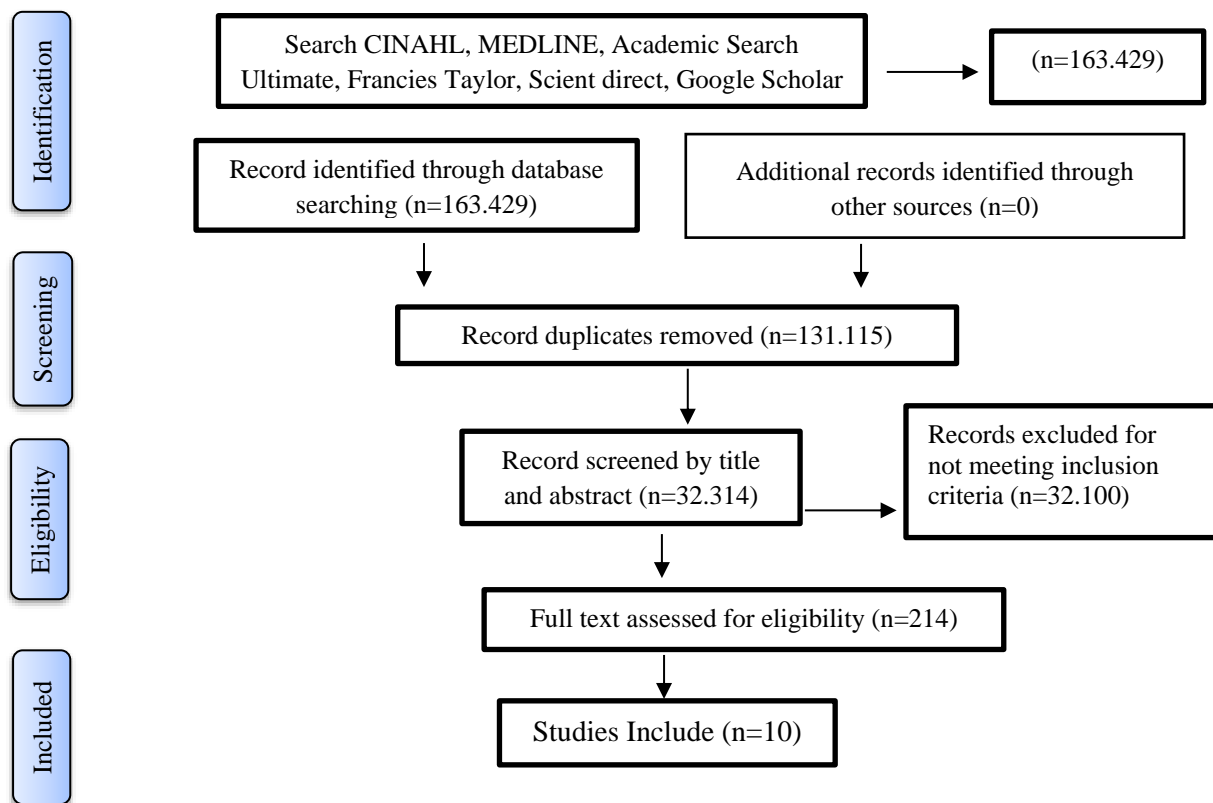


Figure 1: Study retrieval and selection progress.

Search and filter

A search of 6 online databases in September 2020 yielded 163,429 articles. Researchers exported to Mendeley's reference management toolkit where 131,115 duplicates were removed. Title and abstract screening resulted in the exclusion of 32,314 articles being excluded and a review of the remaining 214 articles in full. In total, from the screening results, 10 articles were reviewed and identified. Figure 1 maps the search, filter and exclusion results in detail with a PRISMA diagram.

RESULTS

A total of 163,429 potential studies were identified, of which 10 were included in the final review (Figure 1). The study was mostly conducted in various countries, namely, (n=1) from the United States, (n=2) Korea, (n=1) Italy, (n=1) Nigeria, (n=1) Japan, (n=1) Saudi Arabia, (n=1) USA and (n=2) from Indonesia. The study design used a cross-sectional study in a population of hypertensive patients, aged >18 to >65 years with a duration of hypertension >6 months with systolic blood pressure >140mmHg and diastolic >90mmHg and using antihypertensive drugs. Factors that influence self-efficacy on hypertension self-care in hypertensive patients.

Self-efficacy is a predictor factor in patient compliance with self-care behavior.²¹ Has a very strong relationship between self-efficacy and lifestyle of hypertensive patients with value (p value = 0.001) with a power of $r = + 0.891$. There are several factors that affect self-efficacy on hypertension self-care, namely:

Finding 1: Intentional non-compliance

Non-adherence to treatment was the cause of uncontrolled hypertension with a score ($\beta = -0.02$, $p = 0.031$).²⁸ Nine studies did not mention that there was intentional non-adherence to factors affecting self-efficacy in hypertension treatment.^{21,23-27,29,30}

Finding 2: Low adherence to treatment

The role of motivation is needed in this case, namely to encourage patients to adhere to treatment and maintain an increase in health behavior.²⁸ Improved health behavior is influenced by exercise, depression, anger, and religion.²⁶

Finding 3: The effectiveness of physician communication

Positive perceptions of doctor communication as an independent factor of self-efficacy with a value ($\beta = 0.11$, $p < 0.001$).²⁸ Nine studies did not reveal the effectiveness of doctor communication as a factor affecting self-efficacy.^{21,23-27,29,30}

Finding 4: Positive beliefs about treatment

According to Manhunting, there was no relationship between belief in hypertension care activities, $p = 0.647$, with a long period of suffering from hypertension, namely 1 to 2 years, about 50% for women, about 86%. However, the role of belief is influenced by the existence of positive belief in treatment with a value ($\beta = 0.13$ $p < 0.001$).^{27,28}

Finding 5: Social support

Social support and self-efficacy were found to be significant for physical activity with a value of $p < 0.01$, = 0.45) and social support $p < 0.01$, ($\beta = 0.05$, $p < 0.001$).²³ This concurs with the results of Hu's research which revealed that support Social family had a relationship with medication adherence and blood pressure measurement with an odds ratio (OR) of 1.39 (95% confidence interval (CI) 1.03-1.87), odds ratio (OR) 1.33 (95% confidence interval (CI) (1.02-1.74)).²⁸⁻³⁰ In contrast to the results of the study according to Susanto, the factors that influence self-efficacy based on systolic and diastolic hypertension consist of spiritual activity, length of stay, education, work before entering rehabilitation, dementia, daily activities, risk of falling, pain, depression, anxiety. and stress with a value ($p < 0.05$).²⁵

DISCUSSION

This study was conducted to determine the factors that influence self-efficacy with hypertension self-care in hypertensive patients. After reviewing 10 studies in the same population some findings were found. The role of nurses is needed in building self-confidence and motivating patients to carry out healthy living behaviors. Psychosocial and behavioral factors have a positive influence on self-efficacy related to treatment adherence to hypertensive patients. Sufficient social support and information delivery from doctors about hypertension can lead to awareness and positive attitudes for hypertension treatment. An attitude of empathy is an important feature of self-efficacy and trust, this is in line with Findlow et al. Which states that self-efficacy can be used as a predictor to determine patient compliance in self-care behavior.²¹

This is supported by Bandura who explains that self-efficacy is the belief in his ability to succeed in doing something.³¹ Self-success can be obtained, changed, or enhanced through one of the factors of performance achievement level, representative experience, verbal persuasion, and emotional arousal.¹⁷ Self efficacy for managing hypertension has been associated with five of the six self-care activities that JNC7 recommends for managing high blood pressure. Based on the analysis of the reviews conducted in the research that has been conducted, there are instruments or measuring instruments to measure hypertension self-care profile that are valid and suitable for use in hypertensive patients.

Tebal 1: Matriks Analisis.

No.	Title/years/country	Settings	Population and sample	Instrument	Method and statistic	Result
1.	Physical inactivity is associated with low self-efficacy and social support among patients with hypertension in Nigeria ²³ /2012/ Nigeria	In hospital	Patient hypertension the sample 250 respondents	- International Physical Activity Questionnaire, - Exercise SelfEfficacy Scale, - Medical Outcomes Social Support Scale and - Exercise Benefits and Barrier Scale respectively.	Desain cross sectional with statistic analisis multiple regression	Multiple regression pada variabel predictors: 1. Self-Efficacy ($\beta = 0.246$, $p=0.001$) 2. Social Support ($\beta = 0.491$, $p= 0.001$) Self efficacy dan social support signifikan of physical activity with value $p < 0.01$, $=0.45$) and social support $p < 0.01$, $=0.64$).
2.	Depression and medication adherence among older Korean patients with hypertension: Mediating role of self-efficacy ²⁴ /2016/ Korea	In hospital	Patient elderly with hypertension the sample 255 respondents	- The Geriatric Depression Scale (GDS) - The 13-item Self-Efficacy for Appropriate Medication Use Scale (SEAMS) - The 8-item Morisky Medication Adherence Scale (MMAS-8)	Approach using Pearson correlation with statistical analysis. Hierarchical liner regression	Influencing factors self-efficacy, including depression and medication adherence in patients with hypertension. - Self-efficacy as a significant predictor of treatment adherence ($\beta = .55$, $P < .001$).
3.	Prevalence of hypertension and predictive factors of self-efficacy among elderly people with hypertension in institutional-based rehabilitation in Indonesia ²⁵ /2018/ Indonesia	In hospital	Patient elderly With hypertension The sample 65 respondent, age >55 years	- Katz Index of Independence in Activities of Daily Living (ADL), - Short Portable Mental Status Questionnaire (SPMSQ) The Mini Mental State Examination (MMSE), - APGAR Family, Beck's Depression Scales (BDS), - Mini Cognitive, Daily Spiritual Experience Scale (DSES), - Depression Anxiety Stress Scale 42 (DASS-42), - Depression Anxiety	Approach using cross sectional statistical linear regression analysis multivariate	The factors that influence self-efficacy based on systolic and diastolic hypertension are spiritual activity, length of stay, education, work before entering rehabilitation, dementia, daily activities, risk of falling, pain, depression, anxiety and stress with a value ($p < 0.05$).).

Continued.

No.	Title/years/country	Settings	Population and sample	Instrument	Method and statistic	Result
				Stress Scale 14 (DASS14), - Pain Numeric Rating Scale (NRS), Morse Fall Scale and General Self efficacy		
4.	Effects of Self Efficacy, Depression, and Anger on Health Promoting Behaviors of Korean Elderly Women with Hypertension ²⁶ /2020/Korea	In community	Patient woman with hypertension, total sample 208 respondent age>65 years	Self-efficacy developed by Park, Geriatric Depression Scale Short Form Korea Version (GDSSFk) by Kee and version Geriatric Depression Scale (GDS) developed by Ysavage and Sheikh, State-Trait Anger Expression Inventory (STAXI-K) yang diadaptasi dari State-Trait Anger Expression Inventory developed by Spielberger, Health Promoting Lifestyle Profile II (HPLP-II) developed by Walker	Approach using cross Sectional with statistical hierarchical regression analysis	Self-efficacy has an effect on the behavior of improving health with a value ($\beta = 0.18$, $p = 0.003$). Exercise has a major influence on health-enhancing behavior with values ($\beta = 0.36$, $p < 0.001$).
5.	Self-Efficacy and Lifestyle patient with hypertension ²⁰ /2018/ Indonesia	In community	Patient hypertension Total sample 130 respondents, aged a >42 years	Self-efficacy questionnaire	Approach using cross sectional statistic with the Spearman correlation test	Self-efficacy has a relationship with lifestyle (p -value = 0.001) with a value of $r = + 0.891$ which means that the strength of the relationship is very strong.
6.	Relationship between self-confidence and self-care activities of hypertensive patients in the working area of Pahandut Public Health Center, Palangka Raya ²⁷ / 2012	In community	Patient hypertension total sample 50 respondents	Self-Efficacy to Manage Hypertension (SEMH) dan Hypertension Self Care Activity Level Effects (H-SCALE)	Desain cross sectional with statistic Pearson Chi Square	Most of the hypertensive patients have a sufficient level of self-care activity that is equal to 58% with a long period of suffering from hypertension, namely 1 to 2 years, about 50% in gender women around 86%. - There is no relationship between self-confidence and self-care activities of hypertensive

Continued.

No.	Title/years/country	Settings	Population and sample	Instrument	Method and statistic	Result
						patients with a p value of 0.647.
7.	Psychosocial Predictors of SelfEfficacy Related to Self-Reported Adherence in Older Chronic Patients Dealing with Hypertension: A European Study ²⁸ /2020/Italy ²⁸	In hospital	Patient elderly with hypertension total sample 458 respondent, age >65 years	Morisky Green Levine Scale (MGLS) - Adherence to Refills and Medications Scale (ARMS) Intentional Non-Adherence Scale (INAS) - Antecedents and Self-efficacy on Adherence Schedule (ASonA-SE, Self-efficacy subscale) - Beliefs about Medicines Questionnaire (BMQ-10) - Communication Assessment Too (CAT) - Multidimensional Scale of Perceived Social Support (MSPSS)	Desain cross-sectional, observational and multicentre study	Factors affecting self-efficacy are low intentional non-adherence, ($\beta = .02$, $p = 0.031$), low adherence to treatment. ($\beta = -0.05$, $p = 0.017$), doctors' communication perceptions ($\beta = 0.11$, $p < 0.001$), positive belief about treatment ($\beta = 0.13$, $p < 0.001$), and social support ($\beta = 0.05$, $p < 0.001$).
8.	Mediating role of self-efficacy in the relationship between family social support and hypertension self-care behaviours: A cross-sectional study of Saudi men with hypertension ²⁹ /2019/ Saudi Arabia	In community	Male patient with hypertension	Hypertension Self-Care Profile (HTN-SCP) 60 item: 1. Behavior scale 2. Motivation scale 3. Self-efficacy scale Social Support from Friends and Family (FSS) Scale 20 item	Desain cross-sectional with statistic <i>bivariate and multivariate regresion</i>	Following are the factors that influence hypertension self-care: 1. Household member with HBP (pvalue.158) 2. Region (pvalue = .198) 3. Time from HBP diagnosis (pvalue = .359) 4. Level of income (pvalue = .576) 5. Marital status (pvalue = .581) 6. Employment status (pvalue = .806) 7. Education leve Continued. 8. Location of completing the survey (pvalue = 0.919) 9. Number of wives (p=0.944) Multivariate regression: 1. Self-efficacy (pvalue = .000) 2. Family social support

Continued.

No.	Title/years/country	Settings	Population and sample	Instrument	Method and statistic	Result
						(pvalue = 0.082) 3. Household member with HBP (pvalue = 0.168) 4. Education level (pvalue = 0.232) 5. Duration of hypertension (pvalue = 0.248) 6. Level of income (pvalue = 0.275) 7. Multiple wives (pvalue = 0.355) 8. Location of survey completion (pvalue = 0.499) 9. Age (pvalue = 0.870) 10. No wife (pvalue = 0.912) 11. Employment status (pvalue = 0.918) 12. Region (pvalue = 0.945)
9.	The Association Between Self Efficacy and Hypertension Self-Care Activities Among African American Adults ²¹ /2012/USA	In community	Patient adult with hypertension	Hypertension Self-Care Activity Level Effects (H-SCALE)	Desain cross-sectional with statistic Bivariate and Multivariate	Self-efficacy as a predictor to determine patient compliance in self-care behavior.
10.	The association of family socialsupport, depression,anxiety and selfefficacy with specific hypertension self-care behaviours in Chinese local community ³⁰ /2015/Japan	In community	Patient hypertension	Hypertension self-care behaviours dan Chinese Family Support Scale	Desain cross sectional with statistic bivariate and model multivariate	- Family social support was associated with medication adherence and blood pressure measurement with an odds ratio (OR) of 1.39 (95% confidence interval (CI) 1.03-1.87), odds ratio (OR) 1.33 (95% confidence interval (CI) (1.02) –1.74) - Self efficacy has a relationship with physical activity with the odds ratio (OR) 1.25 (95% confidence interval (CI) (1.04-1.49).

The limitations of this study are firstly difficult to generalize the results because male and female respondents with hypertension from several countries and the results differ depending on culture and ethnicity.

The results of this study can be used as basic data in the development of further research. It can be concluded that the factors that influence self-efficacy towards hypertension self-care such as intentional non-adherence, low adherence to medication, effectiveness of doctor communication, positive beliefs about treatment, and social support. Nursing intervention strategies are needed to pay attention to these factors to improve hypertension patient adherence to stroke risk prevention, with the ability to manage hypertension.

CONCLUSION

Conclusion of this study be used as basic data for further research development. It can be ignored that the factors that influence self efficacy towards hypertension self care such as non-adherence, the lowest for treatment the strongest from doctors, positive beliefs about treatment and social support. Nursing intervention strategies are needed by paying attention to the factors influence self efficacy in self care with hypertension in the risk of stroke.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: Not required

REFERENCES

- Joffres M, Falaschetti E, Gillespie C, Robitaille C, Loustalot F, Poulter N, et al. Hypertension prevalence, awareness, treatment and control in national surveys from England, the USA and Canada, and correlation with stroke and ischaemic heart disease mortality: a cross-sectional study. 2013;1-9.
- Avan A, Digaleh H, Di Napoli M, Stranges S, Behrouz R, Shojaeianbabaie G, et al. Socioeconomic status and stroke incidence, prevalence, mortality, and worldwide burden: An ecological analysis from the Global Burden of Disease Study 2017. *BMC Med.* 2019;17(191):1-30.
- Peltzer K. The Prevalence and Social Determinants of Hypertension among Adults in Indonesia: A Cross-Sectional Population-Based National Survey. *Int J Hypertens.* 2018;2018.
- England NHS, Improvement NHS. A Strategic Framework for Advancing Stroke Services in the West Midlands. 2019:1-67.
- El-hajj M, Salameh P, Rachidi S, Al-hajje A, Hosseini H. Development of a risk of stroke score in the Lebanese population. *Clin Epidemiol Glob Heal [Internet].* 2019;7(1):88-97. Available at: <https://doi.org/10.1016/j.cegh.2018.02.003>.
- Wang J, Wen X, Li W, Li X, Wang Y, Lu W. Risk Factors for Stroke in the Chinese Population: A Systematic Review and Meta-Analysis. *J Stroke Cerebrovasc Dis [Internet].* 2017;26(3):509-17. Available at: <http://dx.doi.org/10.1016/j.jstrokecerebrovasdis.2016.12.002>.
- Bolin LP, Crane PB, Powell JR, Horne CE, Floegel TA. Factors associated with physical activity in African Americans with hypertension. *Appl Nurs Res [Internet].* 2018;41(March):62-7. Available from: <https://doi.org/10.1016/j.apnr.2018.04.003>.
- Benjamin EJ, Blaha MJ, Chiuve SE, Cushman M, Das SR, Deo R, et al. Heart Disease and Stroke Statistics'2017 Update: A Report from the American Heart Association. *Circulation.* 2017;135:146-603.
- White H, Boden-Albala B, Wang C, Elkind MSV, Rundek T, Wright CB, et al. Ischemic stroke subtype incidence among whites, blacks, and Hispanics: The northern Manhattan study. *Circulation.* 2005;111(10):1327-31.
- Flaherty ML, Woo D, Haverbusch M, Sekar P, Khoury J, Sauerbeck L, et al. Racial variations in location and risk of intracerebral hemorrhage. *Stroke.* 2005;36(5):934-7.
- Markus HS, Khan U, Birms J, Evans A, Kalra L, Rudd AG, et al. Differences in stroke subtypes between black and white patients with stroke: The South London Ethnicity and Stroke Study. *Circulation.* 2007;116(19):2157-64.
- Dubow J, Fink ME. Impact of Hypertension on Stroke. *Curr Atheroscler Rep.* 2011;13:298-305.
- Wajngarten M, Silva GS. Ischaemic Heart Disease, Stroke and Risk Factors Hypertension and Stroke: Update on Treatment Ischaemic Heart Disease, Stroke and Risk Factors. *J Eur Cardiol Rev.* 2019;14(2):111-5.
- Chobanian AV, Bakris GL, Black HR, Cushman WC, Green LA, Izzo JL, et al. The Seventh Report of the Joint National Committee on Prevention, Detection, Evaluation, and Treatment of High Blood Pressure: The JNC 7 Report. *J Am Med Assoc.* 2003;289(19):2560-72.
- Ndumele CD, Shaykevich S, Williams D, Hicks LRS. Disparities in adherence to hypertensive care in urban ambulatory settings. *J Health Care Poor Underserved.* 2010;21(1):132-43.
- Kressin NR, Wang F, Long J, Bokhour BG, Orner MB, Rothendler J, et al. Hypertensive patients' race, health beliefs, process of care, and medication adherence. *J Gen Intern Med.* 2007;22(6):768-74.
- Flammer A. Self-Efficacy. In: *International Encyclopedia of the Social and Behavioral Sciences: Second Edition.* Second edi. 1994:1-15.
- Lee MJ, Romero S, Guang Jia H, Velozo CA, Ann L, Gruber-Baldini LMS. Self-efficacy for managing hypertension and comorbid conditions. *World J Hypertens.* 2019;9(3):30-41.

19. Mills KT, Bundy JD, Kelly TN, Reed JE, Kearney PM, Reynolds K, et al. Global disparities of hypertension prevalence and control. *Circulation.* 2016;134(6):441-50.
20. Amila A, Sinaga J, Sembiring E. Self-Efficacy dan Gaya Hidup Pasien Hipertensi. *J Kesehat.* 2018;9(3):360.
21. Warren-Findlow J, Seymour RB, Huber LRB. The association between self-efficacy and hypertension self-care activities among African American adults. *J Community Health.* 2012;37(1):15-24.
22. Arksey H, Malley LO, Arksey H, Malley LO. Scoping studies: towards a methodological framework *Scoping Studies: Towards a Methodological Framework.* 2007;5579.
23. Idowu O, Adeniyi A, Atijosan O, Ogwumike O. Physical inactivity is associated with low self-efficacy and social support among patients with hypertension in Nigeria. *Chronic Illn.* 2012;9(1):156-64.
24. Jung Y, Rn S. Depression and medication adherence among older Korean patients with hypertension: Mediating role of self - efficacy. *Int J Nurs Pract.* 2017;1-8.
25. Susanto T, Rasny H, Susumaningrum LA, Yunanto RA, Nur KRM. Prevalence of hypertension and predictive factors of self-efficacy among elderly people with hypertension in institutional-based rehabilitation in Indonesia. *J Nurs Soc Sci Relat to Heal Illn Orig.* 2019;21(1):14-21.
26. Kim AS, Jang MH, Park KH, Min JY. Effects of Self-Efficacy, Depression, and Anger on Health-Promoting Behaviors of Korean Elderly Women with Hypertension. *Int J Environ Res Public Heal Artic.* 2020;17.
27. Manuntung A. Hubungan Keyakinan Diri dan Aktivitas Perawatan Mandiri Pasien Hipertensi di Wilayah Kerja Puskesmas Pahandut Kota Palangka Raya. *J Ilmu Kesehat.* 2018;7(1):199-209.
28. Zanatta F, Nissanova E, Pierobon A, Callegari G, Olmetti F, Felicetti G, et al. Psychosocial Predictors of Self-Efficacy Related to Self-Reported Adherence in Older Chronic Patients Dealing with Hypertension: A European Study. *Patient Prefer Adherence.* 2020;14:1709-18.
29. Bahari G, Scafide K, Krall J, Mallinson RK, Weinstein AA. Mediating role of self-efficacy in the relationship between family social support and hypertension self-care behaviours: A cross-sectional study of Saudi men with hypertension. *Int J Nurs Pract.* 2019;25(6):1-8.
30. Hu H, Li G, Arao T. The association of family social support, depression, anxiety and self-efficacy with specific hypertension self-care behaviours in Chinese local community. *J Hum Hypertens.* 2015;29(3):198-203.
31. Bandura A. Self-efficacy: Toward a Unifying Theory of Behavioral Change. *Psychol Rev.* 1977;84(2):191-215.

Cite this article as: Widiawatie N, Handayani F, Sobirin MA. Factors affecting self-efficacy against hypertension self-care in hypertension patients: a scoping review. *Int J Res Med Sci* 2021;9:914-22.