ORIGINAL ARTICLE

Social Support and Self-care Practice Among Patients With Hypertension in a Teaching Hospital

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ABSTRACT

Introduction: Hypertension affects most people worldwide and is the primary cause of illness and death. Social support is the functional relationship that provides emotional and physical help commonly with chronic diseases, including hypertension. Self-care practices among hypertension patients, such as lifestyle modifications, physical activity, and nutrition, are important for hypertension management. Thus, this study aims to determine the level of social support, self-care practice, and the relationship between socio-demographic characteristics and self-care practice among hypertension patients. **Methods:** A cross-sectional study was conducted among 161 hypertensive patients from a teaching hospital in Sungai Buloh from April to June 2021. A self-administered questionnaire consisting of the Multidimensional Scale of Perceived Social Support (MPSSS) and Hypertension Self-Care Profile (HTN-SCP) was used to evaluate social support and self-care practice among hypertensive patients, respectively. **Results:** Most patients demonstrate poor social support (n=84, 52.2%) and good self-care practices (n=89, 55.3%). Social support has a significant relationship with marital status (x^2:12.03; p-value:0.002) and duration with hypertension (x^2:8.52; p-value:0.009). Hypertension self-care practice has a significant relationship with religion (x^2:15.18; p-value:0.001), race (x^2: 14.18; p-value<0.001), monthly income (x^2:6.77; p-value:0.034), source of information (x^2:9.87; p-value:0.011) and existence of a place for exercise (x^2:4.74; p-value:0.030). **Conclusion:** The findings highlighted that social support and self-care practice are useful elements among hypertensive patients. However, future multicentre studies were recommended to investigate the perceived social support and self-care practices in a larger population of hypertensive patients.
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INTRODUCTION

Hypertension is a global health issue and is well known as a significant burden of chronic disease in general primary care clinics (1, 2). The Global Burden of Disease research proves that this blood pressure issue has been the major risk factor leading to global burden and related to global mortality causes up to 9.4 million been killed, and 212 million lost healthy life years, which is equivalent to 8.5% over the worldwide total each year (3). About 1.13 billion people worldwide had hypertension in 2015 (4). Some researchers assume that, by 2025, the prevalence of hypertension among the adult population may rise to 29% globally, equivalent to 1.56 billion (5) . However, according to the National Health and Morbidity Survey (2019), three out of ten adults, or 6.4 million people in Malaysia, have hypertension.

Hypertension is called a "silent killer" because it as an asymptomatic disease that will increase the mortality rate (6). Uncontrolled blood pressure is one of the significant risk factors for cardiovascular diseases (CVDs) such as ischemic heart disease, stroke, and heart failure (2). Worse, about 12.9 million people worldwide died in 2010 due to this complication (7). The statement shows how severe this epidemic disease is and needs to be managed well to reduce its morbidity and mortality rate. Several studies mention that social support was crucial in facing this chronic condition more satisfactorily. Usually, social support refers to either the assumed availability or the actual extent of acceptance of social partners

to perform particular tasks (e.g., supplying available assistance or emotional support) (8). Social support may have significant psychological and physiological effects, including improved self-determination, and a longer life expectancy (9). As highlighted in many studies, social support was strongly related to self-care practice (10). External sources of social support from relatives, friends, and health care providers, promote self-care, providing knowledge, mental, emotional, and tangible support helps patients sustain their medication and nutritional therapy (10).

Self-care practice as a human need to care for oneself is performed continuously by the individual to fulfil the necessity of preserving health, life, and well-being in a healthy and ill state (11). Therefore, the self-care practice of patients plays a significant role in the management of hypertension. Daily drug usage and dietary improvements, such as diet regulation (a low-sodium and low-fat diet); frequent physical activity; alcohol intake restriction; nicotine cessation; weight management; blood pressure self-monitoring; stress reduction; and regular doctor visits, are the primary aspects of self-care practice in hypertension (1). Hypertension Self-Care Profile (HTN-SCP) is an instrument designed to evaluate self-care practice among hypertensive patients. However, HTN-SCP were not widely used in Malaysian research (12). Hence, there are limited data from the previous study. In addition, this showed that there was little concerning hypertension self-care practice in Malaysia.

The previous study has found that various characteristics in adults with hypertension have affected self-care practice, such as demographic and social support (1). One of the most well-documented psychosocial variables of physical health effects, including hypertension, is social support (13). However, the influences between social support towards self-care practice were not yet determined in Malaysia (14). Hence, a specific study needs to reveal the association between social support and self-care practice for hypertension. Thus, this study is conducted to determine the level of social support, self-care practice, and their relationship among patients with hypertension. In addition, the relationship between socio-demographic and both variables are also being assessed in this study.

MATERIALS AND METHODS

Sample
A cross-sectional study was applied to this research. The proposed study was conducted at a teaching hospital in Klang Valley. The participants involved were from inpatient and outpatient. The inpatients' respondents were from four wards that provide medical discipline, cardiology discipline, preoperative and postoperative patients for cardiac surgery. Meanwhile, the outpatients'

respondents were from Clinic 1. Clinic 1 provides health screening for patients under cardiology discipline with appointments. A purposive sampling method was chosen using Krejcie & Morgan, 1970 to estimate the research sample size. The population of this study were 275, and the formula suggested 161 patients with hypertension should be recruited as a sample size. Thus, the respondents were included in this study if they met the following criteria: documented diagnosis of hypertension, 18 years old and able to communicate. However, the respondents were excluded if they were critically ill patients, those with neurological disorders, and individuals with any mental disorder.

Instruments
A self-administered questionnaire was used to measure the study variables. The sociodemographic characteristics collected including age, gender, religious affiliation, residence place, ethnicity, marital status, educational status, occupation, and monthly income. The duration of the patient diagnosed as hypertensive and sources of information about hypertension was measured using multiple-choice type items. One dichotomous item was used to measure the availability of convenient places to perform physical activity.

This study used the Malay and English versions of the Multidimensional Scale of Perceived Social Support (MSPSS) (15) to assess the level of social support among hypertensive patients. The Malay version of this questionnaire (MSPSS-M) has been validated by the previous study in 2010 (16). There are 12 items measured using a 7-point self-rating Likert scale (ranging from 1 = very strongly disagree to 7= very strongly agree). The scoring was done by summing the total score, ranging from 12 to 84. In this study, the level of social support was categorized according to the means obtained from the total social support score. The score that showed below the means represented poor social support. Meanwhile, the equal total score and above the means expressed good social support. The MSPSS-M was tested with Cronbach's α of 0.89, which showed the high internal consistency of the instruments.

The second instrument is Hypertension Self-Care Profile (HTN-SCP), was used to evaluate self-care practice among hypertensive patients in this study. This instrument is used in original English (17) while the Malay version used in this study has been validated in an Asian country, Singapore (18). The HTN-SCP consists of 20 items which each question has a 4-point ordinal scale: not at all=1, sometimes=2, often=3, and always=4. A total score ranges from 20 to 80, with a higher score indicating a higher level of hypertension self-care practice. The level of hypertension self-care practice was categorized according to the means of the total score. The score below the means exhibits poor hypertension self-care practice. While the score that equal and above the means displayed a good

hypertension self-care practice as suggested by the author. The HTN-SCP-M has an internal consistency of 0.851, which indicates good reliability For both scales, the validated Malay versions were used (16, 18).

Data Collection
The data was collected after screening for the eligibility of the respondents according to inclusion and exclusion criteria. The researchers have then explained the objectives of this study. The respondents were required to answer the sociodemographic characteristics, the MSPSS and the HTN-SCP questionnaires. Upon completion, the questionnaires were returned, and the collected data were entered into Statistical Package for the Social Sciences (SPSS) version 25.

Ethical Consideration
Ethical approval to conduct the study was obtained from Universiti Teknologi MARA (UiTM) Research Ethics Committee in UiTM Shah Alam with referral number 600- TNCP (5/1/6) and the permission from UiTM Medical Specialist Centre Sungai Buloh (UiTMMSC) with referral number 500-HUiTM (PT. 8/3/1). The data collection was done after getting the research approval from the hospital.

RESULT

Demographics
The sample consisted of 161 respondents who had been diagnosed with hypertension. The questionnaire is checked before being collected. All the data required in the questionnaire is completed and has a 100% response rate. Table I represents the demographic characteristics of respondents involved in the study. The mean age of the respondents was 60.23 ±17.045, with the majority ranging from 40 to 60 years old, accounting for 84 respondents (52.2%). The 81 respondents (50.3%) were female, while the remaining 80 respondents (49.7%) were male. There was a predominance of Muslim respondents with 132 respondents (82.0%), and almost three-quarters of the respondents in this study were urban residents, with 114 respondents (80.1%). The number of respondents participating in this study was dominated by the Malay population, with 129 respondents (80.1%), and there were 134 respondents (83.2%) who were married in this study. Furthermore, 57 respondents (35.4%) and 45 respondents (28.0%) had secondary and tertiary education, respectively. Besides, about 56 respondents (34.8%) worked in the government sector, while the remaining from the private sector were housewives and retirees. About 38 respondents (23.6%) come from a low socio-economic population with a monthly income of less than RM1000. However, most of the respondents, n=69 (42.9%), had household income around RM1000-RM3000 monthly income or were categorised as a middle socio-economic population. In addition, there were 54 respondents (33.5%) having a monthly income of more than RM3000 is classified as a high socio-

economic population. Moreover, 147 respondents (91.3%) had a family history of hypertension, and 138 respondents (85.8%) had hypertension self-care practice information from the healthcare worker. About 127 out of the total respondents (78.9%) had hypertension for more than two years. Meanwhile, more than half of the total respondents, n=102 (63.4%), had a convenient place for exercise.

Table I: Socio-Demographics Characteristics of Respondents (n=161)

Variable		Frequency ()	Percentage ()
Age	<40	13	8.1
	40-60	84	52.2
	>60	64	39.8
Gender	Male	80	49.7
	Female	81	50.3
Religion	Muslim	132	82.0
	Buddha	6	3.7
	Hindu	9	5.6
	Christian	13	8.1
	Other	1	0.6
Residence place	Urban	114	80.1
	Rural	47	29.2
Race	Malay	129	80.1
	Indian	9	5.6
	Chinese	23	14.3
Marital status	Single	17	10.6
	Married	134	83.2
	Divorced	9	4.3
	Other	3	1.9
Educational status	Primary school	54	33.5
	Secondary school	57	35.4
	University	45	28.0
	Other	5	3.1
Occupation	Government sector	56	34.8
	Private sector	37	23.0
	Other	68	42.2
Monthly income	<RM1000	38	23.6
	RM1000-3000	69	42.9
	>RM3000	54	33.5
Family history	Yes	147	91.3
	No	14	8.7

CONTINUE

Table I: Socio-Demographics Characteristics of Respondents (n=161) (cont.)

Variable		Frequency ()	Percentage ()
Source of information regarding hypertension	Book	2	1.2
	News	11	6.8
	Healthcare worker	138	85.8
	No information	10	6.2
Duration with hypertension	< 6 months	4	2.5
	6 months - 2 years	30	18.6
	> 2 years	127	78.9
Place for exercise	Yes	102	63.4
	No	59	36.6

Social Support

The MSPSS questionnaire inquired about the respondent's level of social support. The overall mean (SD) for social support was 62.05 ±8.95. The score that showed below 62.05 represented poor social support. Meanwhile, the total score of 62.05 and above are documented as good social support. From the total 161 respondents in this study, 84 respondents (52.2%) resulted as poor social support and 77 respondents (47.8%) showed good social support.

Self-Care Practice

The HPT-SCP questionnaire required respondents to rate their hypertension self-care practice. The overall mean for the self-care practice was 50.40 ±8.16. A score below 50.40 is recorded as a poor self-care practice. However, an equal score above 50.40 is signed as a good self-care practice. From the total population, 89 respondents (55.3%) reported a good level of self-care practice, while the remaining 72 respondents (44.7%) reported a poor level of self-care practice among patients with hypertension.

Relationship Between Social Support and Self-Care Practice

The data in this study is in categorical form, thus the Chi-square test provides information regarding the relationship between social support and self-care practice. Table II displays the relationship between social support and self-care practice among patients with hypertension. Since the p-value=0.085, there was no relationship between social support and self-care practice (p-value>0.05). Thus, the study accepts the null hypothesis of no significant relationship between social support and self-care practice among patients with hypertension.

Table II: The relationship between social support and self-care practice among patients with hypertension

		Self-Care Practice		Statistics (df)	Statistical test (p-value)	Phi and Cramer's V
		Poor, n (%)	Good, n(%)			
Social Support	Poor, n (%)	43 (51.2%)	41 (48.8%)	2.974 (1)	0.085[b]	0.136
	Good, n (%)	29 (37.7%)	48 (62.3%)			

[b]= Pearson Chi-Square

Relationship Between Socio-Demographic characteristics and Social Support

Table III represents the association between socio-demographic characteristics and social support among patients with hypertension. There was a significant association between the marital status of the respondent and their social support (x^2:12.03; p-value=0.002). On the other hand, the study found a relationship between the duration of hypertension and social support (x^2:8.52; p-value=0.009). Moreover, the study found no relationship between good social support with the respondent's age, gender, religion, residence place, race, educational status, occupation, monthly income, family history of hypertension, source of information, and existing place for exercise.

Table III: Relationship between socio-demographic characteristics and social support among patients with hypertension

Variable		Social support		Statistical test (df)	p-value	Phi and Cramer's V
		Poor (n)	Good (n)			
Age	<40	9	4	3.05(2)	0.217[a]	0.138
	40-60	39	45			
	>60	36	28			
Gender	Male	40	40	0.30(1)	0.583[b]	0.043
	Female	44	37			
Religion	Muslim	69	63	2.44(4)	0.704[a]	0.123
	Buddha	2	4			
	Hindu	4	5			
	Christian	8	5			
	Other	1	0			
Residence place	Urban	60	54	0.03(1)	0.856[b]	0.014
	Rural	24	23			

Table III: Relationship between socio-demographic characteristics and social support among patients with hypertension (CONT.)

Variable		Social support		Statistical test (df)	p-value	Phi and Cramer's V
		Poor (n)	Good (n)			
Race	Malay	67	62	0.39(2)	0.826[a]	0.049
	Indian	4	5			
	Chinese	13	10			
Marital status	Single	15	2	12.03 (3)	**0.002[a]**	0.273
	Married	62	72			
	Divorced	5	2			
	Other	2	1			
Educational status	Primary school	32	22	1.93(3)	0.609[a]	0.110
	Secondary school	27	30			
	University	23	22			
	Other	2	3			
Occupation	Government sector	28	28	1.02(2)	0.600[b]	0.080
	Private sector	22	15			
	Other	34	34			
Monthly income	<RM1000	26	12	6.85(2)	0.330[b]	0.206
	RM1000-3000	36	33			
	>RM3000	22	32			
Family history	Yes	76	71	0.15(1)	0.697[b]	-0.031
	No	8	6			
Source of information	Book	2	0	2.22(3)	0.685[a]	0.117
	News	6	5			
	Healthcare worker	70	68			
	No information	6	4			
Duration with hypertension	< 6 months	0	4	8.52(2)	**0.009[a]**	0.230
	6 months - 2 years	21	9			
	> 2 years	63	64			
Place for exercise	Yes	49	53	1.91(1)	0.167[b]	-0.109
	No	35	24			

[a]= Fisher Exact Test, [b] = Pearson Chi-Square

Relationship Between Socio-Demographic characteristics and Self-Care Practice

Table VI shows the relationship between socio-demographic characteristics and self-care practice among hypertension patients. This study reported that there was a relationship between religion (x^2:15.18; p-value<0.001) and race (x^2:14.18; p-value<0.001) of the respondents with the hypertension self-care practice. Furthermore, the respondents' monthly income was also found to have a relationship with the level of hypertension self-care practice (x^2:6.77; p-value=0.034). This study also discovered a significant relationship between sources of information about hypertension self-care practice with the level of self-care practice (x^2:9.87; p-value=0.011). In addition, there was a relationship between the existing place for exercise and the level of self-care practice (x^2: 4.74; p-value=0.030). Nevertheless, this study reported no relationship between the level of hypertension self-care practice with the age of the respondents, gender, residence place, marital status, educational status, occupation, family history, and duration with hypertension.

Table IV: Relationship between socio-demographic characteristics and self-care practice among patients with hypertension

Variable		Self-care practice		Statistical test (df)	p-value	Phi and Cramer's V
		Poor (n)	Good (n)			
Age	<40	5	8	0.34(2)	0.843[b]	0.046
	40-60	37	47			
	>60	30	34			
Gender	Male	41	39	2.74(1)	0.098[b]	-0.131
	Female	31	50			
Religion	Muslim	65	67	15.18(4)	**0.001[a]**	0.307
	Buddha	1	5			
	Hindu	5	4			
	Christian	0	13			
	Other	1	0			
Residence place	Urban	52	62	0.13(1)	0.722[b]	0.028
	Rural	20	27			
Race	Malay	65	64	14.18(2)	**<0.001[a]**	0.297
	Indian	5	4			
	Chinese	2	21			
Marital status	Single	6	11	2.06(3)	0.604[a]	0.113
	Married	62	72			
	Divorced	2	5			
	Other	2	1			

CONTINUE

Table IV: Relationship between socio-demographic characteristics and self-care practice among patients with hypertension (CONT.)

Variable		Self-care practice		Statistical test (df)	p-value	Phi and Cramer's V
		Poor (n)	Good (n)			
Marital status	Single	6	11	2.06(3)	0.604ᵃ	0.113
	Married	62	72			
	Divorced	2	5			
	Other	2	1			
Educational status	Primary school	27	27	3.60(3)	0.299ᵃ	0.150
		27	30			
	Secondary school	15	30			
	University	3	2			
	Other					
Occupation	Government sector	20	36	4.03(2)	0.134ᵇ	0.158
		21	16			
	Private sector	31	37			
	Other					
Monthly income	<RM1000	22	16	6.77(2)	**0.034ᵇ**	0.205
	RM1000-3000	33	36			
	>RM3000	17	37			
Family history	Yes	64	83	0.96(1)	0.328ᵇ	-0.077
	No	8	6			
Source of information	Book	1	1	9.87(3)	**0.011ᵃ**	0.248
	News	8	3			
	Healthcare worker	55	83			
		8	2			
	No information					
Duration with hypertension	< 6 months	3	1	2.32(2)	0.336ᵃ	0.120
	6 months - 2 years	11	19			
		58	69			
	> 2 years					
Place for exercise	Yes	39	63	4.74(1)	**0.030ᵇ**	-0.171
	No	33	26			

ᵃ = Fisher Exact Test, ᵇ = Pearson Chi-Square

DISCUSSION

In this study, researchers explored the level of social support among patients with hypertension in a teaching hospital. According to the results collected using the MSPSS, more than half of the respondents showed poor social support. In contrast with this study, the previous study at public health facilities of Ethiopia reported a good level of social support among hypertension patients (19). Meanwhile, this finding was in line with the antecedent study where South Asian patients have poor emotional and informational support (20). Emotional support helps in increasing the desire to participate in the care as they receive encouragement and spirit from their loved ones (21). However, having a lack of this support can be concluded as poor social support perceived. In this study, the majority of the patient strongly disagreed when answering the related question regarding emotional help and support from the family. This situation may occur due to loss of contact with other family members who work far away from their parents. For as long as society has been, people have relied on families, significantly younger family members, to provide emotional support and care for ageing relatives and other family members (21). Moreover, some respondents tend to conceal their illness from other family members because they do not want to burden them. This stigma of thought needs to be discarded from the mind as the value of the family in promoting intervention to the ill member was very significant. Consequently, integrating patient and family management strategies should improve patient and family health outcomes (22).

Furthermore, the data collected using the HPT-SCP questionnaire reveals that more than half of the patients demonstrated a good self-care practice. The results of this study are parallel with the previous study in Selangor, where the findings state that hypertensive patients have lower behaviour of self-care practice (12). The majority of the respondents in this study have good medication adherence and attend the appointment as scheduled. This may happen because most of the patients are with disease duration of more than two years. The researchers believe that adhering to medication and attending appointments has become life routine. Adhering to hypertensive medications lower the risk for CVDs (23). Moreover, almost all patients had stopped smoking and drinking alcoholic beverages, which were an essential aspect of self-care practice among hypertensive patients. Smoking produces a rapid rise in systolic and diastolic blood pressure and heart rate that lasts for more than 15 minutes following a cigarette compared to non-smokers (24). However, most respondents face difficulty adapting to recommended dietary intake, performing physical activity, and maintaining ideal weight. Even though most preparations have restrictions on the use of salt, most users may have taken artificial seasonings. This may happen because of the lack of guidelines on artificial seasoning use and the necessity for nutritional

advice. Besides that, most people still had thought that physical activity or exercise might worsen their health and decided to stay at home without performing any activities. However, physical exercise was frequently suggested as an important lifestyle change to help control high blood pressure. Thirty minutes of physical activity five days a week are the best recommendation for blood pressure prevention and management (25). Other than that, physical activity also influenced involvement in recreational and leisure activities and physical health and well-being (26). Also, there was a lack of assessment for managing weight through dietary practices such as portion control, food replacements, and exercising to reduce weight. Previous studies stated that weight loss might decrease systolic and diastolic blood pressure and eradicate high blood pressure (27). Intervention should be initiated to overcome these issues and promotes good self-care practice.

In addition, this study found no significant relationship between social support and self-care practice among patients with hypertension. However, most studies claim that social support and self-care practice have statistically significant relationships (19). From this study, those with good social support do not ensure good self-care practice and vice versa. These findings also reveal that people with poor social support can also have good self-care practices. This situation may happen because most of the respondents are middle-aged, so they are more isolated and have less socially supported (28). However, their self-care practice is good as they are highly aware of their health regardless of social support factors. As people become more aware of their health, they will be more engaged in their treatment needs (29). The previous study has shown a link between limited social support and higher comorbidity. Physical comorbidity may improve hypertension patients' understanding of numerous illnesses, enhancing their health literacy (30). As a result, patients' adherence to prescriptions, participation in physical activities, and many other self-care practise improved, resulting in good self-care practice.

Researchers also found that marital status and duration with hypertension showed a relationship with social support. A previous study highlighted that marital status was related to assessing social support (31). Throughout the study, good social support was primarily scored by married patients, compared to single, divorced, and other categories. Social support was more available to the partnered people (32). The presence of spouses or partners or significant others living together creates strong social support (28). Previous study remarks that the spouse is best positioned to give comprehensive emotional, psychological, and material assistance (33). Besides that, this study finding shows that most patients with more than six months of disease recorded poor

social support. Some studies highlighted that as the duration of the disease increases, the social support received by individuals suffering from the disease decreases (34, 35). However, a prior study reported that a longer duration of the disease provides positive social support (36). The researcher believes that when people live with the condition for a longer time, they will be more inclined to adapt and accept the existing disease; thus, social support is less required.

Moreover, this study identified that religion, race, stable monthly income, adequate information sources, and convenient exercise places have statistically related hypertension self-care practices. Compared to other religions and races, Muslim and Malay respondents reported higher compliance among the participants and had a good hypertension self-care practice. People presumed that religious belief could help manage chronic diseases through support, trust, and hope (37). Moreover, trust towards healthcare is culturally built and affects the treatment decisions making. These beliefs may impact how people perceive and understand how to manage self-care to increase health (38). Besides that, the study found that stable and adequate financial support influenced the level of self-care practice. The higher the monthly income, the higher the level of self-care practices among patients with hypertension. Other studies also reported the positive relationship between financial and hypertension self-care practice (39, 40). This might be because the people from the higher income may afford to get blood pressure monitoring devices and thus can practice self-monitoring of their blood pressure at home without trouble instead of those in lower-income groups. Furthermore, the lack of knowledge and information about self-care practice among patients with hypertension may challenge the effort to control blood pressure. In this study, the source of information about self-care practice probably showed association with the self-care practice among hypertensive patients. The healthcare workers played the leading role in providing adequate information about the self-care practice toward hypertensive patients. Moreover, patients should be educated on lifestyle modifications and self-care practices when visiting their health institution (41). In addition, the existence of places for doing exercise was also a significant predictor to encourage a good hypertension self-care practice. These findings work with the previous study that a safe, easily accessible, and aesthetically pleasing physical environment positively affects those involved in physical activity (42). Therefore, environmental improvements design and policy reform were needed for encouraging physical activity among hypertensive patients. It also could need a sense of community about the necessity of changes to the aesthetic character of the local environment such as walks and pathways, increased accessibility, and a reduction in vehicle traffic for health.

CONCLUSION

In conclusion, this study show hypertensive patients have poor social support and good self-care practice. However, a patient's self-care practice is not affected by social support and is in reverse. Some of their socio-demographic backgrounds affect patients' social support and self-care practices. Although this study shows patients with hypertension have good self-care practices, promoting healthy lifestyles and blood pressure monitoring is still important. The majority of the patient with hypertension in this study has poor social support. This shows that one health-related program should be intensified to increase family members and spouses understanding of patients' problems. Moreover, this study was a clinical-based survey and did not represent the national population. Thus, the data obtained cannot be used to conclude in a nationwide setting. In contribution, this study provides a baseline idea for social support and self-care practice among hypertensive patients. However, the small sample size limits the ability of the study to extend the theory. Further research using interventional studies that include the stages of hypertension is advisable to evaluate the social support and hypertension self-care practice.

ACKNOWLEDGEMENTS

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