KNOWLEDGE, ATTITUDE, AND RISK BEHAVIORS OF STROKE ELDERLY WITH HYPERTENSION IN KHLONG KHON, MUANG SAMUT SONGKHAM, SAMUT SONGKHRAM PROVINCE.

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ABSTRACT

This research is descriptive research with the objective to study knowledge, attitude, and risk behavior on cerebrovascular disease or stroke or paralysis among elderly hypertensive patients in Khlong Khon, Muang Samut Songkham, Samut Songkhram Province. The questionnaire had been distributed across 213 patients (N = 213). Four main parts of questionnaire consisted of demographic data, knowledge, attitude, and behavioral risk on cerebrovascular disease or stroke. Descriptive statistics were applied for analysis data. The result showed that a majority participant was female (64.0%), uneducated (56%), unemployment (58%), and monthly income lower than 5,000 baht. Most of them do not have relatives such as parents or siblings. Moreover, they had been diagnosed as high blood pressure/stroke/cerebrovascular disease/paralysis. Measurement of knowledge and attitude on cerebrovascular disease/stroke revealed low knowledge and poor attitude as well as the highest percent (56% and 52%, respectively). However, their behaviours presented moderate level (48%) of risk to these particular diseases. Therefore, Health officers should encourage, promote, and contribute knowledge on disease prevention across not only the elderly group but also all ages population. As a result, elderly or risk group may raise their awareness and emphasise the serious outcome of these particular diseases, and to sustainably improve their quality of life.

Keywords : knowledge, attitude, risk behaviors, cerebrovascular disease, stroke, elderly with hypertension

INTRODUCTION

Cerebrovascular disease or Stroke or paralysis is a major global health problem that can occur at any ages. World Paralysis Organization Globally, stroke is the 2nd leading causes of death which approximate 17 million people are suffering by stroke and death about 6.5 million in world population (World Stroke Organization: WSO, 2559). For Thailand, it was found that stroke mortality rates per hundred thousand people in 2014 - 2016 were accounted for 38.63%, 43.28% and 43.54% respectively. Each year, the mortality rate of stroke is increasing and reveals 1.5-2.0-fold mortality rate than accountable in diabetes and Ischemic heart disease. Nevertheless, the survivors of stroke become disable and commit low quality of life [1][2].

Regarding current literature review, the evidences showed that stroke or paralysis may be an adverse outcome of unhealthy lifestyle such as consume high-fat-high-sugar diet, salty diet, high cholesterol diet, lack of fruit and vegetable consumption, smoking, drinking alcohol, physical inactivity, and stress. People who engage with these long-term unhealthy behaviours may take high risk for chronic disease conditions such as hypertension, diabetes, dyslipidemia, and stroke. A report from Prasat Neurological Institute and Thai Stroke Association indicated that hypertensive patients are taking a higher risk for stroke[3].

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Therefore, it would be great to raise the stroke prevention issue and modifiable behaviours as well as 3_{θ} . 2_{π} . by engage in physical activity, eat healthy diet, reduce alcohol consumption, stop smoking, and self-mood adjustment [4].

According to the Ministry of Public Health's health data report in 2013 - 2017, the situation of hypertension and stroke in Thailand reported revealed that 68.0, 70.48, 70.32, 70.59, 73.7 percent of population have been diagnosed hypertension, respectively. Moreover, the percentage of cerebrovascular disease illustrated 2.43%, 2.78, 2.59, 2.68, 2.81% from 2013 - 2017, respectively. In addition, the given information was not only limited in teenage population but also showed the highest number across the elderly population. Note that, this information had excluded Bangkok population against the survey [4].

Samut Songkhram province (Health Region 5) had reported the highest number of elderly patients with hypertension, from year 2013 - 2017 with 56.70%, 54.00%, 51.13%, 54.40% and 55.36%, respectively. Moreover, the elderly with stroke were in the 4th rank for Health Region 5 which range from 2.88%, 2.71%, 2.63%, 2.77% and 3.10%, respectively. In 2017, the report found that the incident rate of cerebrovascular disease becomes the highest number. Therefore, our study aimed to assess the knowledge, attitude and behavior of the stroke of the elderly hypertensive patients across Khlong Khon Subdistrict, Mueang District, Samut Songkhram Province. The benefits of this report would be the evidence and given advance information for relevant agencies for further plan such as health education, health literacy, attitudes and behavioral changes in stroke prevention, in order to be aware of the violence which can affect both the physical, mental, social, and primary prevention before vascular disease, reduce the incidence of disease, disability, or death, and reduce the cost of treatment [5]–[7].

OBJECTIVE

The study aims to study 3 area which may affect the occurrence of stroke risk behavior in elderly people with hypertension from Khlong Khon Subdistrict, Mueang District, Samut Songkhram Province, i.e., personal factors, health knowledge, and health attitudes.

METHODOLOGY

This study was a descriptive study which emphasised on knowledge, attitudes, and risk behaviors of cerebrovascular disease. The participants were elderly with hypertensive condition and live in Khlong Khon Subdistrict, Mueang District, Samut Songkhram Province

Data collection

The participants were over 60 years old and both genders were recruited. Sample size were calculated following Taro Yamane's formula in which resulted to 213 numbers of subjects (N = 213).

Inclusion criteria

- 1. Elderly patient with hypertensive condition (SPB > 140 mmHg) and lives in Khlong Khon Subdistrict, Mueang District, Samut Songkhram Province
- 2. Subject People with completely conscious, presented reading, writing, and verbal ability.
- 3. Participant must voluntarily consent prior being recruited as part of this project.

Questionnaire

A set of questionnaires had been applied as a research tool which consisted of 4 parts, i.e., demographic data,

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<u>Part 1 Demographic data</u>: gender, age, status, occupation, educational level, income, duration of hypertension, Family history illness. This part contained 8 questions with either check list or open-ended answer. The questionnaire was modified from Kamphilo[8].

Part 2 Knowledge of diseases and risk behaviors of cerebrovascular disease among elderly people with hypertension: this part consisted of 12 items that modified from Kamphilo[8].

Part 3 Attitude for/against cerebrovascular disease and risk behaviors: the 9 items emphasized on the assessment of attitude on the risk of disease (modified from[9], [10])

<u>Part 4 the risk of behavior to cerebrovascular disease/stroke (20 items)</u>: all items in this part were modified from 'Health behavior surveillance for change in normal, risk, and diabetes/hypertensive patient form' which originally created by the Health Education Division, Department of Health Service Support, Ministry of Public Health (2013). This combined with adapted items from Kamploo[8].

Statistical analysis

The questionnaire had been tested for 'content validity' in which were examined by 3 particular expertise (IOC = .95 and the alpha coefficient = 0.7). The data were analysed for descriptive statistic (frequency, percentage, mean and standard deviation) by Statistical Package for Social Science (SPSS) version 25.0.

RESULTS

The study found that majority of participants were female (69%), age between 70-79 y (44%), married (64%), uneducated (56%), unemployed (58%), monthly income lower than 5,000 baht. Most of them reported no parental line and/or sibling, and had been diagnosed as hypertension/cerebrovascular disease/stroke/paralysis.

Distinctively, participants presented low level of both knowledge (56%) and attitude (52%) on particular diseases, a moderate level of risk behavior (48.0%), potential rejected medication plan/prescription.

The level of knowledge on cerebrovascular disease and its behavioral risk were low (n = 119, 56.0%), moderate (n = 66, 31.0%), and high (n = 28, 13.0%), respectively From Table 1.

Level of Knowledge of diseases and risk behaviors	Sample size	Percentage (%)
in stroke patients	(n)	
Low	119	56.0
Moderate	66	31.0
High	28	13.0
Total	213	100.0

Table 1Sample size and percentage of measurement of Knowledgeof the risk behavior for cerebrovascular disease (N = 213)

The level of attitude on particular diseases were poor (n = 111, 52.0%), moderate (n = 98, 46.0%), and good (n = 4, 2.0%), respectively From Table 2.

A number of participants and percent which were measured on attitude on cerebrovascular disease ($N = 213$)			
The level of attitude on cerebrovascular disease	Sample size	Percentage	
Poor	111	52.0	
Moderate	98	46.0	
Good	4	2.0	
Total	213	100.0	

Table 2

A measurement of risk behavior for stroke among elderly hypertensive patients (N =213) revealed that their behavior was taking the risk at moderate level (n = 102, 48%), low level (n = 100, 47%), and high level (n = 11, 5%), respectively From Table 2.

Table 3A measurement of risk behavior for stroke (N = 213)			
The level of risk	Sample size	Percentage	
behaviors of elderly stroke patients	(n)	(%)	
Low risk	100	47.0	
Moderate risk	102	48.0	
High risk	11	5.0	
Total	213	100.0	

CONCLUSION AND FUTURE WORK

Current report found that elderly hypertensive people presented their knowledge and attitude on particular diseases at low level whereas their risk behavior demonstrated moderate level. The knowledge level was different from other study which showed moderate level[11]. However, the risk behavior is similar to other study[11]. The result indicated a serious issue that government agencies should urgently implement any specific program across elderly population. For example, the health officers and/or staff in the community should contribute the knowledge and educate not only elderly patients but also all age of people by implementing 3 o 2 r as well as a convenient way to remember and provide proper activities [12]. The similar study which contribute on 30 2a through elderly population reported that health officers as well as a key person promoted regularly physical activities. Also, they should educate and instruct people about appropriate type of exercise and promote proper attitude on cerebrovascular disease. We could recommend the future works as follow[1]:

- 1. There should be an extension of studies in other risk populations across other areas for comparison, further information, provide knowledge, and raise the awareness about serious outcome of disease.
- 2. There should perform particular studies or experiments to provide
- 3. Should applied innovative method of learning across elderly population for early risk management as described in other study[13].

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REFERENCES

- [1] S. Jitrabiab, "Co-risk behaviours for NCDs among Thai population: Policy Intervention for NCD strategic development," *J. Dep. Dis. Control*, vol. 38, no. 4, pp. 263–279, 2555.
- [2] Prasat Neurological Institute, *Handbook of Cerebrovascular disease (stroke and paralysis)*, 3rd ed. Bangkok: Prasat Neurological Institute, 2556.
- [3] Thai Hypertension Society, *General Medical Guideline for Hypertensive treatment*. Bangkok, 2558.
- [4] D. of D. C. Section of Health System Development, Bureau of Noncommunicable Diseases, "Key messages for Stroke World Stroke Day," นนทบุรี, 2560.
- [5] U. Saeko and C. Jitpanya, "A Study of Stroke Awareness among Patients at Risk of Stroke in Bangkok Metropolitan," 2552.
- [6] C. Kivunja and C. Kivunja, "Why Students Don't Like Assessment and How to Change Their Perceptions in 21st Century Pedagogies," *Creat. Educ.*, vol. 06, no. 20, pp. 2117– 2126, Nov. 2015.
- [7] W. R. Dillon and A. Kumar, "Attitude organization and the attitude-behavior relation: A critique of Bagozzi and Burnkrant's reanalysis of Fishbein and Ajzen.," J. Pers. Soc. Psychol., vol. 49, no. 1, pp. 33–46, Jul. 1985.
- [8] N. KOMPILO, KNOWLEDGE, ATTITUDE AND RISK BEHAVIORS OF STROKE AMONG PEOPLE WITH HYPERTENSION IN MAETA HOSPITAL, MAETA DISTRICT, LAMPANG PROVINCE. Patumthani: Thammasart University, 2559.
- [9] J. Songtae, Alternative : Health behaviors contributing to risks of coronary heart disease among Thai Muslim in the Meesuwan 3 community. Bangkok: Thammasart University, 2525.
- [10] P. Laloon, N. Madhyamankura, and A. Malarat, *Self care behavior of hypertensive patients at out patient department of HRH Princess Maha Chakri Sirindhorn Medical Center*. Bangkok: Srinakharinwirot University, 2554.
- [11] J. Sudsawart, K. Pochanakul, and K. Ritkumrop, "THE STUDY OF HEALTH CARE BEHAVIOR OF THE ELDERLY PEOPLE INTRAT MUNICIPALITY," Int. J. Adv. Sci. Eng. Technol., vol. 5, no. 2, pp. 59–62, 2017.
- [12] S. Kongjarern, C. Wattana, and T. Harnirattisai, "Self-Regulation Program, Hypertension, Self-Regulation Behaviors, Stroke Risk, Thai Muslim People," *Nurs. J.* (*Manila*)., vol. 40, no. 1, pp. 23–33, 2012.
- [13] I. Sudsawart and K. Pochanakul, "THE LEARNING OUTCOMES OF THE ACTIVITIES TO COMMUNITY DIGITAL TECHNOLOGY TRANSFER TO THAILAND 4.0 FOR THE ELDERLY PEOPLE OF PATHUMTHANI PROVENCE," *Eurasian J. Anal. Chem.*, vol. 13, no. 3, pp. 326–334, 2018.