



PARTICIPATORY HEALTH CARE MODEL OF HYPERTENSION PATIENTS BY USING SIX ACTIVITIES IN PRATUCHANGTOK COMMUNITY, THAIBURI SUB-DISTRICT, THASALA DISTRICT, NAKHON SI THAMMARAT PROVINCE

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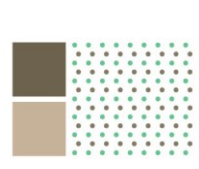
Abstract

This study aimed to explore Changtok community's health problem by using community participatory health care model. The process of study was divided into 2 phases; phase 1 was step of studying general data and health problem in community and phase 2 was step of problem solving by community participation. The first phase sample of this study was people living in the community numbering 394 cases and second phase was people with hypertension numbering 35 cases. The statistic using for presentation in this study was percentage, mean, standard deviation and pair-t test. The results in phase 1 revealed that the people in community had health problem following they had hypertension problem was 37.29, diabetes mellitus (DM) was 10.29, severe hypercholesterolemia was 10.17, muscle pain was 10.17 and mosquito was 97.32. When they were set priority was found that hypertension problem should be rapidly solved by developing model of participatory health care among hypertension patients with 6 activities. After intervention found that they had knowledge and practice in health care was better than pre-intervention with statistical significance at $p\text{-value} < 0.05$.

Keyword: Participatory Health Care Model, Hypertension, Six Activities

Introduction

Hypertension is the technical term for high blood pressure, a condition that affects millions of people around the world (Lenz & Monaghan, 2008). Hypertension is known as a silent killer because often people have no symptoms and are unaware that their blood pressure is too high - almost one third of people with high blood pressure do not know that they have it and anyone, including children, can develop high blood pressure (Carretero & Oparil, 2000). Currently hypertension is a major problem because over a period of time, raised blood pressure can cause gradual damage to many organs in the body damage which can be serious and irreversible, if untreated, high blood pressure can cause many different types of cardiovascular disease, blood clot or aneurysm (a swollen, or burst, blood vessel) and can also result in damage to the eyes, to kidney disease and kidney failure (Chobanian et al, 2011).



Hypertension is one of the main cause of stroke, heart disease, and kidney failure and it is essential that high blood pressure is detected and kept in check and the earlier the age at which it is detected and treated, the less the likelihood of damage. Older people especially should have their blood pressure measured regularly and treated if it is too high, it is estimated that about 90% of middle-aged adults will develop high blood pressure in the remainder of their lifetime thus it is important to say that levels of maternal obesity in Thailand are low by global standards, but obesity is projected to increase over the next two decades (Carretero & Oparil, 2000).

In Thailand, hypertension disease situation was commonly found and showed high number of patient from 259 to 1,349 cases (from 2000 to 2010). When considered in community also found that various communities in Thailand had increase of hypertension patient especially in Pratuchang-Ok community, Thaiburi sub-district, Thasala District, Nakhon Si Thammarat Province. There are health problem relating to hypertension disease about 37.29 %. People in this community confronted this problem without a way of solving and also found that they have stress problem about 47.62% and lacked of exercise 28.57%, lacked of good knowledge about good nutrition. These are causation of problem leading to hypertension disease that we should pay attention to solve.

From the above data, author is interested to solve this problem that can help people's problem in community. Thus this health care model by applying the six activities would be a good guideline for hypertension patients that consist of exercise, allurements, nutrition, emotion, disease, environmental health. This study aimed to study health problem of people and try out a health care model for hypertension patient by using principle of six activities in Pratuchang-Ok community, Thaiburi sub-district, Thasala District, Nakhon Si Thammarat Province.

Methodology

This research was a quasi-experimental study which employed one group of sample. The principle of six activities was used being model of health care with hypertension patients in Pratuchang-Ok community Thaiburi sub-district, Thasala District, Nakhon Si Thammarat Province. The study was conducted during May, 2015 to August, 2015.

Population and Sample

Population of this study was people living in Pratuchang-Ok community, Thaiburi sub-district, Thasala District, Nakhon Si Thammarat Province, numbering 394 samples. Sample was hypertension patients or hypertension patient care givers living in Pratuchang-Ok community, Thaiburi sub-district, Thasala District, Nakhon Si Thammarat Province. The hyperstension patients were screened by taking blood pressure and 35 care givers who were willing to participate in the program.



Steps and research process

First phase was a process to survey general data and health problem in Pratuchang-Ok community, Thaiburi sub-district, Thasala District, Nakhon Si Thammarat Province. After completed the data survey, the civil society forum was setting up for diagnosing the real problem in community and found that most important problem was hypertension problem.

Second phase was a process to solve problem the people in community. An intervention program was done for enhancing good knowledge for people. The main process consisted of; screening hypertension level and inputting intervention program by applying the six activities; exercise, allurements, nutrition, emotion, disease, environmental health. In this process, the participants were done with pre- and post-tests.

Research instruments

1. Health care model for hypertension patients by using principle of six activities.
2. Data collection instruments for this research used questionnaire for (general data and health care knowledge relating principle of six activities data)

Data analysis

Descriptive statistics were presented; frequencies, percentage, mean and standard deviation and inferential statistic was presented; paired simple t-test. This statistic was shown mean score pre and post test.

Results

The general data of participants

The results illustrated that most people participating this program was female (69.05%) followed by male (30.95). Age between 41-60 years old was highest group followed by over 60 years old (35.72), age between 21-40 years old (16.66) and less than 20 years old (20.00% and 1.19%) respectively. Regarding marital status was revealed that most of them was couple (82.15%) followed by single 16.66%) and devoice (1.19%) respectively. Regarding education level found that they had primary (80.90%) , followed by secondary school (13.28%), bachelor degree or higher (13.28%) and lower primary school (2.20%) respectively. Regarding occupation was found that most of them were agriculturist (39.28%) followed by employee (26.19%), merchant (20.24%), unemployed (13.09%) and private employee (1.20%) respectively. Regarding income found that they had income between 5,001-10,000 Baht (53.57%) followed by lower than 5,000 Baht (35.71%), 10,001-15,000 Baht (7.14%), 15,001-10,000 Baht (2.38%) and also found that they had income higher than 20,000 Baht (1.20%). Regarding exercise found that they exercised 2-3 times a week (32.14%) followed by did not exercise (28.57%). The result also found that some group of participants exercised every day (27.38%), 4-6 times a week (11.91%). Regarding health problem found that they were hypertension (37.29%) followed by mosquito problem (31.84%) and diabetes mellitus, Hypercholesterolemia and muscle pain (10.29) respectively.

Table1: Percentage of variables; age, education level, occupation, income, exercise and health problem.

	Variables	n	%
Gender	Male	122	30.95
	Female	272	69.05
Age	Less than 20 years	5	1.19
	21-40 years	66	16.66
	41-60 years	183	46.43
	Over 60 years	140	35.72
Marital status	Single	66	16.66
	Couple	323	82.15
	Devoice	5	1.19
Education level	Lower than primary school	9	2.20
	Primary school	318	80.90
	Secondary school	53	13.28
	Bachelor degree or hugher	14	3.57
Occupation	Agriculturist	155	39.28
	Employee	103	26.19
	Merchant	80	20.24
	Unemployed	51	13.09
	Private employee	5	1.20
Income	Less than 5,000 Bahts	141	35.71
	5,001-10,000 Bahts	211	53.57
	10,001-15,000 Bahts	28	7.14
	15,001-10,000 Bahts	9	2.38
	Over 20,000 Bahts	5	1.20
Exercise	Everyday	108	27.38
	2-3 times a week	127	32.14
	Never exercise	112	28.57
	Others (4-6 time a week)	47	11.91
Health problem	Hypertension	147	37.29
	Diabetes Millitus	40	10.29
	Hypercholesterolem อากาโรปวด	40	10.29
	Muscle pain	40	10.29
	Mosquito	127	31.84

Table 2: Comparison on health problem knowledge's means score before and after intervention program

Health problem knowledge's mean score	N	X	SD	T	df	p-value
Pre-test	35	65.14	26.72			
				-4.25	34	0.00
Post-test	35	85.14	17.04			

As shown in Table 2 found that health problem knowledge's mean score by using principle of six activities before intervention was 65.14 and standard deviation was 26.72 and after invention was found that mean score was 85.14 and standard deviation was 17.04. When compared to before and after intervention found that mean score on after intervention was higher than before intervention with statistically significance at $p < 0.05$.

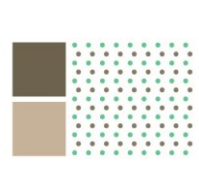
Discussions and conclusion

The results of community study in Pratumchang-Ok community, Thaiburi sub-district, Thasala District, Nakhon Si Thammarat Province. After participate in community found that most of people in this community was female (69.05%), age between 41-60 years old (46.43%), marital status was couple (82.15%), most of them had education level was primary school (80.90%). Most of them were agriculturists (39.28%) and income between 5,001-10,000 Baht (53.57%). Regarding their exercises found that they exercised 2-3 times a week (32.14%) and health problem was hypertension (37.29%). This result was consistent with the study of Lanoi et al (1999) finding that modifying behavior among hypertension patients would be support with good knowledge that able to stimuli them have empowerment to modify behavior.

In this study supporting health care model for hypertension patient by applying a principle of six activities found that they had mean score was 65.14 and standard deviation 26.72 but after intervention program found that they had mean score was 85.14 and standard deviation 17.04. When compared to before and after interventions was found that after intervention program they had mean score was higher than before intervention program with statistically significance at $p\text{-value} < 0.05$. This may be due to they received knowledge on self-practice and building empowerment thus they could apply those practice for activity in daily. This result was also consistent with the study of Charoenyut (2010) studied effectiveness on health promotion among elderly with hypertension and found that they could take care themselves after they had undergone health care program and positively modified their behaviors and also consistent with the study of Phanthajuk (1999) studied effectiveness on health education program among hypertension patient at Phayuhakiri Hospital found that they had positive behavior after they had received and been trained with principle of six activities as well.

Recommendations

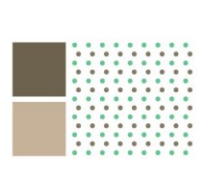
Hypertension is severity disease and a risk factor for cardiovascular and cerebrovascular diseases that affected over 1 billion individuals worldwide (Carretero and Oparil, 2000; Chobanian, 2003). The six guideline for treating and preventing hypertension stress the importance of implementing the lifestyle modification strategies of weight loss, proper



nutrition through the acting plan and physical activity especially exercise (Lenz & Monaghan, 2008). Thus after finish the health promoting hospital program in community should promote continually hypertension project with the six activities due to the project can respond to modifying behavior among hypertension patients.

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