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Health Behaviours According to the "Six Categories Policy" for the People in the Community of Moo 7, Baan Langkhao, Muaklek Subdistrict, Muaklek District, Saraburi Province, Thailand

Pornpan Saminpanya, Ampaiwan Toomsan, Supatcharee Makornkan and Poomarin Intachai

Abstract

The "Six Categories Policy" includes physical exercise, food consumption, emotional management, disease and injury prevention, environmental management, and smoking and drinking behaviours. A questionnaire from the Health Education Division, Health Service Support Department, Ministry of Public Health was used with 244 respondents aged ≥ 15 years old. This questionnaire has a reliability of 0.70. Descriptive statistics was used to analyse the responses and results indicated that respondents lack compliance in most of the subcategories of the "Six Categories Policy." Relevant agencies such as local health district office could assist the villagers to achieve healthy living by local educational campaigns in all categories.

Keywords: Health Behaviours, Six Categories Policy

Introduction

On August 7-11, 2005, Thailand was honoured by the World Health Organisation (WHO) to host the 6th International Conference on Health Promotion. Following the guidelines of the 1988 Ottawa Charter, the Thai Ministry of Public Health developed the Healthy Thailand policy based on the "Six Categories Policy." The implementation of the Healthy Thailand Policy requires all sectors and people participating to accomplish the goals. It involves pulling together the resources of all sectors: government, academic, private and public in all localities: villages, sub-districts, districts and provinces. The Ministry of Health alone cannot accomplish all dimensions of the health policy, but by integrating the resources of all sectors and people the Healthy Thailand policy will work. (Division of Health, Department of Health Service Support, Ministry of Public Health, 2005)

Assessment of the health and social status of the Thai people found that the number of preventable illness and disease has steadily increased. This is due to Thai people being involved in health risk behaviours in both consumption and lifestyle. Complications such as hypertension, diabetes, heart disease and cancer rates continue to increase to at 18.4%, 14.2%, 13.4% and 4% respectively. (National Economic and Social Development Plan No. 10, 2005. Based on the Ministry of Public Health report, the main causes of death during 2005- 2009 are cancer, accidents and stroke and hypertension. Unhealthy behaviours have been found to be the direct cause of these diseases (Health information group, Office of Policy and Strategy, 2005).

From the above information the Ministry of Health strategized to implement the "Six Categories Policy" with the theme, "Power to Create Health". This effort aims to bring people together for health promotion by encouraging physical exercise, healthy food consumption, emotional well-being, environmental management, disease and injury avoidance and reducing smoking and alcoholic drinking behaviours during 2004-2005 (Division of Health, Department of Health Service Support, Ministry of Public Health, 2006). Furthermore, health risk behaviours can be reduced by strengthening the comprehensive health system to emphasise a healthy body and mind with a focus on preventive health care, physical and mental rehabilitation, and strengthening food security and food safety. (National Economic and Social Development Plan No. 10, 2005)

A preliminary survey was conducted by the researchers and students of the Mission Faculty of Nursing,

Asia-Pacific International University (AIU). The survey assessed the public health of 188 families, in the months of June to August, 2012, in Moo 7, Baan Langkhao, Muaklek Subdistrict, Muaklek District, Saraburi Province. The survey found the following risks and health problems: in the age group of 35 and above, 12.50% of the subjects reported experiencing hypertension and 20% had diabetes mellitus. Moreover, 58.14% of reproductive age had not been checked for breast cancer and 37.21% had not have a pap smear to check for cervical cancer. Furthermore, the survey found that 30.56% of the households had Aegypti mosquito larvae in their water supply. A total of 14.98% respondents reported using over-the-counter drug combinations without understanding the effects of the medication. In terms of food consumption, 27.85% do not select food with the Food and Drug Administration (FDA) label while only 18.75% purchase food with safety considerations. Finally, 1.72% of the surveyed houses were cluttered and not clean.

Using the information obtained from the preliminary survey, the nursing students prepared short-term projects to help eliminate Aegypti larvae, organized a health promotion poster exhibition and activities such as exercise programs, food safety and breast self-examination. Home visits were also conducted to educate the public about the diseases found in the community, and to provide appropriate nursing interventions.

After the projects concluded, the researchers wanted to ascertain how well the local people understood healthy behaviours. Hence, further research was conducted not only to investigate whether their initial efforts had succeeded, but also to assist the local health authorities in providing appropriate interventions and health programs that will be sustained and will be evaluated by evidence-based health improvements in the villages.

Research Objective

As discussed, this study is to investigate the health behaviours of the community of Moo 7, Baan Langkhao, Muaklek Subdistrict, Muaklek District, Saraburi Province, according to the "Six Categories Policy".

Methodology

The researchers used the "Six Categories Policy" concept, theory and related research as the methodological basis to study the health behaviours of the villagers. The research sample consists of the population of Moo 7, Baan Langkhao, Muaklek Subdistrict, Muaklek District, Saraburi Province.

The village population was made up of 487 individuals who were 15 years old and above. Yamane's formula was used to determine the sample size with a margin of error of less than 0.05 (1970) and it gave 244 respondents based on a purposive sampling method. The survey was conducted in June 2013.

Research Tools

A questionnaire from the Health Education Division, Health Service Support Department (Reliability = 0.70) was used (Department of Health, Department of Health Service Support. Ministry of Public Health, 2006). There were 7 parts in this questionnaire:

Part 1 General demographic data such as gender, age, and education level
Part 2 Physical exercise behaviours
Part 3 Food consumption behaviours
Part 4 Emotional behaviours
Part 5 Disease prevention behaviours
Part 6 Environmental health behaviours
Part 7 Smoking and drinking behaviours

Research Results

The data was analysed based on descriptive statistics, specifically with the use of percentages. In terms of the population demographics, 64.75% of the sample group were female. Furthermore, 12.71% of the sample (men and women) was in the age group of 50-54. About half of the population, 52.86%, had completed elementary education. A majority (36.48%) of the sample had unspecified casual employment, while 27.05%

had an average yearly income of 5,001- 10,000 baht. Finally, 31.97% revealed that they have self-identified as having a chronic disease and 51.65% reported having hypertension.

The results of the survey indicating the health behaviours according to the "Six Categories Policy" for the People in the Community of Moo 7, Baan Langkhao, Muaklek Subdistrict, Muaklek District, Saraburi Province are shown in Table 1.

Table 1 *Health Behaviours According to the "Six Categories Policy" for the People in the Community of Moo 7, Baan Langkhao, Muaklek Subdistrict, Muaklek District, Saraburi Province.*

Behaviour Category	**Respondent Numbers**	**Percentages**
1. Physical exercise (N= 244)		
- regular exercise	86	35.25
- do not exercise	158	64.75
2. Food consumption (N= 244)		
- ate undercooked food	57	23.36
- ate high-fat food	189	77.46
3. Emotional management		
3.1 Stress in the past 3 months (N= 244)		
- experienced stress	118	48.36
3.2 Self management of stress (N= 188)		
- Watch movies/television, Listen to music/sing songs	46	24.48
3.3 Stress management with help of others (N= 133)		
- No consultation with others	60	45.11
- Consult with parents, children, or relatives	73	54.89
3.4 Causes of stress (N= 188)		
- financial reasons	49	29.34
- family reasons	58	31.20
4.1 Had hypertension check-up (N= 244)		
- Yes	199	81.56
4.2 Had blood sugar test (N= 244)		
-Yes	181	74.18
4.3 Women age 15-49 who have received pap smears (N=158)		
- received pap smears	91	57.60
4.4 Women age 15-49 who have performed self-breast examination (N=158)		
- performed self-breast examination	118	74.68
4.5 Wearing a helmet while riding motorcycle (N= 129)		

Behaviour Category	Respondent Numbers	Percentages
- Not wearing helmet	18	13.95
- wearing helmet	58	44.96
4.6 Motorcycle passenger wearing helmet (N= 129)		
- Not wearing helmet	55	42.64
5. Environmental health (N= 244)		
- Sanitary disposal of waste	244	100.00
- Sanitary disposal of sewage.	230	94.26
- Participated in environmental care activities	108	44.26
6. Smoking and drinking behaviours (N= 244)		
- Regularly smokes	41	16.80
- Regularly drinks alcohol	54	22.13

Behaviour Category Discussion

Category 1: Physical Exercise. From the sample, 158 people (64.75%) indicated they did not exercise at least 30 minutes, 3 times a week, while 60 individuals (37.97%) responded that they do not need to exercise because they are involved with house work every day.

Category 2: Food Consumption. From the sample, 57 people (23.36%) reported that they consume under-cooked meat and food 1-3 times a month and 189 people (77.46%) consume high cholesterol foods 1-3 times a month.

Category 3: Emotional Management. In the past three months up to the point when the survey was conducted, 118 individuals (48.36%) reported experiencing stress. Out of this number, 46 (24.48%) managed their stress by watching television and movies or singing songs and listening to music. In terms of causes of stress, 49 (26.34%) experienced financial-related stress and 58 (31.20%) were stressed because of family problems.

Category 4: Disease and injury Prevention. A total of 199 (81.56%) reported having their blood pressure checked regularly for hypertension and 181 (74.18%) received diabetes mellitus testing. Furthermore, 57.60% of women aged 15-49 received pap smears, while 74.68% performed self-breast examination. A total of 52.87% used motorcycles in their daily life. Though 44.96% reported wearing a helmet when driving a motorcycle, 42.64% of the motorcycle drivers did not offer their passengers a helmet. Only 29.10% drove cars, and of this number, only 57.75% reported wearing a seat belt.

Category 5: Environmental Health. All the respondents reported disposing of waste. Of this total, 145 (55.14%) dispose waste through municipality-run services, such as the trash collecting truck. On the other hand, 230(94.26%) are involved in the disposal of waste water with 152 (62.55%) doing so by pouring their water waste on the ground. A total of 44.26% participated in community environmental activities such as road sweeping and market site cleaning.

Category 6: Smoking and Drinking Behaviours. Forty-one (16.80%) reported having smoked cigarettes. Of this number, 38 (92.68%) have smoked for more than 2 years, and 23 (56.10%) reported a desire to permanently stop smoking. On the other hand, 54 (22.13%) drink alcohol, wherein 33 (61.11%) reported drinking 1-2 times a week and 13 (24.08%) had drunk at least an hour before driving a car or motorcycle.

Discussion

Physical exercise. The survey found that 64.75% of the respondents do not exercise for at least 30 minutes, 3 times each week. This agrees with the study of Comfaeng (2008) which found that 68.50% of the respondents

lack physical exercise. A 2005 study by Rammasoot et al., also found that only 16.71% of those surveyed participated in physical exercise.

Food consumption. According to the survey data, 21.31% of the villagers in the study consumed undercooked foods 1-3 times a month, and 50.41% eat high cholesterol foods 1 – 3 times a month. The study by Rammasoot et al., (2005) found that 71.42% have inappropriate food consumption behaviour. The implication is that people like to eat readily available convenient food and under-cooked food. The results concur with the study of Comfaeng (2008) which found that 70.4% of the participants eat half-cooked food.

Emotional management. The study found that in the last 3 months up to the point when the survey was conducted, 48.36% reported experiencing stress, of this, 45.11% did not consult with others when stressed. This echoes the study of Rammasoot et al., (2005) which found that only 0.53% do not cope with stress appropriately. The main causes of stress are family problems (31.20%) and financial problems (26.34%). Comfaeng (2008) found that 36.6% experienced stress caused by economic and income problems. Out of this number, 35.9% experienced family problems. Furthermore, 92.6% of this sample self-managed their stress. For those who consulted with others, most of them (67.1%) consulted with friends, while 50.2% consulted with parents and 20.4% practiced meditations and prayers. The study by Tansakool (2009) found that most of the sample experienced stress caused by the disappointment for not reaching their life goals. Those experiencing the highest level of stress were 19.3%, and those with an average level of stress was 44.3%. Stress caused by financial and employment problems was 17.1% at the above average level and 50% at average level. Stress caused by political/financial problems at above average level was 20.7%.

Disease and injury prevention. Most of the participants were checked for hypertension (81.56%). In Comfaeng (2008), 88.2% of the participants never had a hypertension check-up. Within the population at Moo 7, Baan Langkhao, 74.18% had their blood sugar tested for diabetes mellitus. Furthermore, 37.60% of women aged 15-49 had a pap smear test for cervical cancer, and 74.68% had done a self-breast examination. A total of 52.87% used a motorcycle in their daily life with 86.25% reporting that they wore a helmet when driving a motorcycle. However, if there was a passenger, 42.64% of the motorcycle drivers did not offer the passenger a helmet. If the driver becomes a passenger they do not wear a helmet 37.98% of the time. Most of the respondents rely on motorcycles with 70.90% reporting not using cars. Only 29.10% use cars. However, only 57.75% of those who drive cars wear seat belts. Rammasoot et al., (2005) found that 52.68% of the participants wore a helmet each time they rode a motorcycle, 39.85% wore a helmet when they are a passenger. A total 57.61% of those surveyed had inappropriate safety riding behaviours.

Environmental health. Every person had access to waste disposal by means of garbage collection organized by the municipaltiy (55.14%). Furthermore, 94.26% had water waste disposal, with 62.55% disposing waste water by pouring on the ground. Less than half, 44.26%, participated in community environmental activities such as road sweeping and market site cleaning. A further 38.13% participated in environmental campaigns. Relevant to these results is the study of Rammasoot et al., (2005) which found that 96.05% of the people embraced the behaviour of caring for the environment and the study by Comfaeng (2008) which found that 98.1% of the households had waste disposal available in their housing.

Smoking and drinking behaviours. Only 16.80% of the participants reported being smokers and had smoked for more than 24 months. Of this number, 56.10% indicated a need to permanently stop smoking. Moreover, 22.13% drink alcohol. Of this number, 61.11% drink 1-2 times a week and64.81% do not consume alcohol one hour before driving. However, 24.08% reported drink alcohol at least an hour before driving. This group drinks 1-2times a month. The study of Tansakool (2009) found that 19.30% are smokers and smoke regularly, this also concurs with the study of Comfaeng (2008) which found that 19.9% of the sample are smokers, 33.2% drink alcohol.

Conclusions and Recommendations

The study found that most of the people lack appropriate health behaviours. The findings of this study parallel that of a report by the Division of Health, Department of Health Service Support (2005). Based on

the observation of the researchers, and the results of this study, recommendations which can be useful for public health personnel and agencies involved in planning and implementing public health interventions for the people of the area are as follows:

1. **Exercise.** Exercise programs should be implemented to encourage ongoing physical activity within the village population. There should be incentives to exercise correctly and consistently for people of all ages. Proper exercise and healthful living promotes health and longevity.
2. **Food Consumption.** There should be dissemination of knowledge on the dangers of eating unhealthy food, undercooked and improperly prepared food, and food high in cholesterol and replacing those foods with healthy foods such as fresh fruit and vegetables.
3. **Emotional Management.** Research has found that almost half of the people experience stress, stress mostly related to family problems. Development of programs that facilitate family communication and problem solving will promote good family relationships and build mental health.
4. **Environmental Health.** The survey found that 100% of the samples had adequate waste disposal available. With this understanding the public health system can develop programs to promote waste separation by recycling and use of composting of organic materials. Starting with families and schools and with the support of the local governments waste management will help promote a clean environment.
5. **Disease and injury Prevention.** Motorcycle safety is an important aspect of accident prevention. Enforcement of helmet laws will decrease serious injuries. The research found that fewer than 50% of motorcycle operators wear helmets and 42.64% of motorcycle passengers do not wear a helmet. It is recommended that a campaign to raise awareness and enforce helmet safety be implemented.
6. **Smoking and Alcohol Cessation.** Smoking and alcohol consumption is a serious health and social problem. There should be ongoing campaigns to build public health awareness in all age groups of the health dangers of smoking and drinking alcohol. The white project in industry, schools and street initiatives are a means to lower of the drinking and smoking rate of disease and injury. Strong village and district community management can regulate to sale and use of alcohol.

Through health education, people can learn to have better health behaviours. Through health education, healthy decisions can change from “cannot” to “can” or “can do better.” Furthermore, health education is an important activity that can be practiced anywhere – in a hospital, in schools and in the community.

Heath education is a primary responsibility of all health practitioners, including professional nurses. The public respects nurses as health care resources and seek counselling from them in a variety of setting such health facilities, community health centres, schools, industry, businesses, offices and homes. The counselling role of the nurse is to provide appropriate health resources and information to family members and the community with the objective to promote the use of self-abilities to have a healthy, stronger and happy life. By having life style and healthful change people are empowered to achieve further success and to live stronger and healthier.

Nurses are skilled leaders who can bring people together to support health in communities and build strong networks. Many disciplines working together and contributing their skills can provide a strong community resource. Through collaborative networks many coordinated activities such as use of traditional herbs, exercise and massage can work with health care systems to provide a more healthful living environment. Illness such as AIDS, drug and alcohol abuse and childhood diseases can be managed at the local level through a coordinated effort by social support systems and health care networks. The community can be strengthened by nurses conducting seminars, providing lectures and demonstration on health issues of interest to the all age groups within the community.

In conclusion, nurses have a significant role in empowering people to live more healthfully by helping, supporting, counselling and educating citizens to achieve the goals of the Healthy Thailand policy. Nurses have the body of knowledge to know health care assets and help people find the beneficial resources for good health and a good environment. As people experience the benefits of healthful living they will be empowered with the attitude that “I can do better” and seek further self improvement.

References

Comfaeng C. (2008, July 7 – 8). *Six Categories health behavior of people in the area of Kut Khaopun subdistrict, Kut Khaopun district, Ubon Ratchatani Province.* Paper from the 8th Prevention of Suicide Conference:

"Life-enhancing Global warming crisis". Little Duck Hotel, Chiang Mai Province (p. 211).
Division of Health, Department of Health Service Support, Ministry of Public Health. (2005). *The State Health Survey According to Six Categories Policy.* Group members of the health club: Nonthaburi.
Division of Health, Department of Health Service Support, Ministry of Public Health. (2006). *The State Health Survey According to Six Categories Policy*. Group members of the health club: Nonthaburi.
Office of the National Economic and Social Development. (2005). *National Economic and Social Development PlanNo10.* Retrieved May 3, 2010 from www.nesdb.go.th/Default.aspx?tabid=139
Rammasoot , P. et.al. (2005). *The State of Health Behavior Survey Report of the Group members of the health club According to Six Categories Policy*. Retrieved May 3, 2010 from http://www.thaihed.com/html/show.php
Tansakool, P. (2009). *Networking Village Health Volunteers and Health Behavior Awareness of the people in Kham Riang subdistrict, Kantharawichai district, Maha Sarakham Province.* Maha Sarakham: Faculty of Public Health, Chalermkarnchana College.
Yamane, Taro. (1970). *Statistics: An Introductory Analysis* (2nd ed.). New York : Harper and Row.

About the Authors

Pornpan Saminpanya, PhD, is senior lecturer in the Faculty of Nursing at Asia-Pacific International University, Thailand.

Ampaiwan Toomsan, MSc, is lecturer in the Faculty of Nursing at Asia-Pacific International University, Thailand.

Supatcharee Makornkan, MS, is lecturer in the Faculty of Nursing at Asia-Pacific International University, Thailand.

Poomarin Intachai, MNS, is instructor in the Faculty of Nursing at Asia-Pacific International University, Thailand.