

CHAPTER V

SUMMARY AND DISCUSSION

Summary

A cross section, descriptive study to explain physical fitness and physical activities of Family Health Leaders (FHLs) in Huaiyot District of Trang Province in southern Thailand, and to identify its affecting factors. Of a total of 13,326 FHLs in the district, 400 volunteers were identified, using multistage sampling technique, and interviewed. Data was collected using a questionnaire developed by the researcher, based on the PRECEDE-PROCEED model. The questionnaire was field tested for reliability and validity among a group of 30 FHL's in the nearby district of Huaiyot, using Cronbach's alpha co-efficient. Result showed the score at 0.74 for the section on knowledge, and 0.75 for the section on attitude. Validity was done through expert opinion, using 5 experts working in health promotion field in Trang Province. Knowledge, attitude, enabling factors and reinforcing factors and their relation with the actual practice of physical activity by the FHLs were determined. Data collection began on 1 November 2003 and ended on 15 July 2004. All 400 study-volunteers were interviewed by the researcher. A subset of 117 FHLs in the study volunteered to have their physical fitness evaluated at Trang College of Physical Education.

The research used SPSS for Windows for data analysis. Statistical tests used in this study were frequencies, percentage, means, and standard deviation of all variables,

as well as test of association between dependent and independent variables used chi-square at 0.05 level.

Results from analysis of socio-demographic characteristics are as follow: Most of the respondents are female (79%), with male to female ratio at 1:4. They are of productive age, with the majority being between 31-35 (37.0%), and 26-35 (32.0%). Most of the volunteers reported having had 6 years of education (65.7%). Their main occupation is agriculture (72.8%), with income between 2,801-5,000 Baht (54.5%), and more than 5000 baht (35.5%). Most of the respondents in the study are being married (78.5%).

The majority of the FHL volunteers have moderate level of knowledge about physical movement and exercise, 89.5%. While they are aware that exercise involves more than formal exercise, they, however, still have low level of knowledge about types of physical activity that qualifies as exercise. For example, their responses showed that they are not aware that bicycling for 8 kilometers in 30 minutes is a low level physical activity, that bicycling for 6.4 kilometers in 15 minutes is a heavy activity in short period, that gardening for 30-45 minutes is a low level physical activity, and that social dancing for 30 minutes is also a low level physical activity.

Attitude toward physical activity of this group of FHLs is mostly positive, and at a moderate level. They believe that physical activity can prevent illness, and that FHLs should do physical activity regularly because it is good for their health. While

they reported believing that they can maintain physical activity, given that they have correct advise, they appear to have difficulties in keeping up with daily exercise.

Certain finding about enabling and reinforcing factors might be helpful of understanding these physical activities. The study found that availability of equipment for physical activity is the vital to physical activity among FHLs. Those equipments that are related to regular home activity include house cleaning equipment (96.0%), and gardening equipment (93.7%). Knowledge about exercise seems to have influence over physical activity. The FHLs in the study reported that their primary sources of information about physical activity from television program (71.0%), and public health workers (54.0%). Continuity of knowledge received by FHLs, however, is still at dissatisfactory level, receiving knowledge daily at 36.5%, and biweekly at 14.7%. Social support and social pressure seems to be an important reinforcing factor for physical activity. Family support, for example, was report at 87.5% as important factor, followed by neighbor recommendation (74.7%), and conversation with peer group (70.5%).

The FHLs in Huai Yot district are still not performing physical activity at a satisfactory level. Their physical activities involve, for the most part, regular life activity such as house cleaning (91.5%), walking for 2.8 kilometers (84.3%), raking (83.0%), and gardening (81.3%). They reported doing between 5 and 10 activities as their regular physical activity (57.8%). Physical activity that has impact on health that the FHLs reported doing at 75.0% was walking at 2.8 kilometers. The study also found that the physical activities that FHLs reported as non-practice involves activities that

are not domestically related. In all, the study found that 92.0% of FHLs in the study needs to improve their physical activity.

Health status of the subset of the study volunteers who had their physical check up was found at an unsatisfactory level. Of the 117 volunteers who were tested, 72.7% has high fat percentage, and 58.9% with weak handgrip.

There appeared to be no statistical significant association between knowledge, attitude, predisposing, and reinforcing factors and FHLs' physical activity. Knowledge and attitude, however, appear to have a significant relationship with aerobic dancing, p value less than 0.05. Receiving advices from public health workers appears to be an important enabling factor encouraging the volunteers to do aerobic dances, p value less than 0.05. Social support is an imperative reinforcing factor, p value less than 0.05. Family, friends and health authority are some categories of social support that has influence over FHLs' exercise behavior.

Discussions

Demographic characteristics:

Age and gender of the volunteers. The majority of FHLs in this study (69%) are women age between 26-35 or older, which, according to a study done among Thai women (Sukanya Dokput, 2003) prefers to exercise at moderate level, and have a little lower level of endurance, when compare to men of the same age group. This could be an explanation why FLHs in this study reported not doing swimming, bicycling, or other types of heavy exercise. Older age has been associated with more difficult to train

the type of exercise that requires agility, with is best train before 25 to 30 years of age, while endurance can be trained even if the person is over 30 years of age. In any case, when a person is older than 35 or 40 years of age the ability to improve physical fitness diminishes. It therefore noted that the FHLs in this study would do better in training for endurance, but not for agility simply because of their age and gender. Encourage this group should keep in mind that limitations regarding age and gender. The Center for Disease Control (1996) recommends that this type of population do a medium level of exercise, which includes house cleaning, gardening, raking, car washing, or walking for 6.4 k.m. in one hour, bicycling for 16 k.m. in one hour, dancing quick steps, golfing, and tennis.

Knowledge about physical activities:

The study found that although the respondents were aware that low level activities that are related to their normal and everyday activities can be counted as exercise, they were not aware that these activities can improve their health. FHLs in this study reported two popular types of daily physical activity: house cleaning for 45-60 minutes, and walking for 2.8 kilometers. Increasing the use of such house chore to improve physical fitness will be beneficial to the group. Thus, knowledge that these activities are good for health must be strengthened.

Attitude toward physical movement:

The study volunteers have both positive and negative attitude. First, it appears that FHLs in this study are primed for development in terms of physical activities as they reported believing that exercise can improve health. Their negative attitude about

not being able to maintain continuous exercise, however, might pose a challenge to the health promotion authority. It shows that even with variety of types of exercise available in the community, such as aerobic dance, tennis, golf, and with available equipment, FHLs might not adhere to daily exercise.

Enabling and reinforcing factors:

Of the two types of enabling factors that allow behavioral changes, skills and resources, this study found that only availability or resources appears to have influence over FHLs physical activity. Physical movement skills are lacking among FHLs. An important reinforcing factor to improve level of physical activity in this group could be social support from friends, family, and community. This is another important possibility that the health promotion programme could use.

Practice of physical activity:

FHLs in this study reported performing physical activity at a lower level than was recommended by the Department of Health. The health authority recommended that people exercise at least 3 times per week. The study found that the volunteers exercise less than 3 time per week, for about 15 minutes each time, using light type of exercise. The activity that the majority of the FHLs (75%) perform at excellent level was walking for 2.8 k.m. House cleaning exercise, gardening, walking for 3.2 k.m. while constitutes a small number of followers, showed that the people understand the new concept that uses everyday life activity to be source of physical exercise.

The researcher believes that the reason that FHLs in Trang province does not use regular, everyday life such as gardening, raking, car washing, house cleaning as source of physical activity, and at excellent level because the health authority of Trang province have not done enough health education program to encourage them. In addition, the program did not analyses physical readiness according to age and gender, therefore, have been providing the type of physical activity that was not conducive to the ability of this group. Aerobic exercise, for example, requires that a person have agility in their movement, as well as endurance, which get more difficult to train as one gets older. The study found that despite a lot of publicity of the program, only 13.7% of the people in study was able to perform correctly. Heavy physical exercise using shorter time such as swimming, basketball playing, volleyball, bicycle, and rope jumping, however, needs facilities and equipment, which could be costly. These activities are more suitable to people who are younger than 30 years old, and more popular among men than women.

Associations between knowledge, attitude, enabling and reinforcing factors and physical movement:

The study found no association between knowledge, attitude and enabling and reinforcing factors and physical movement. This finding is in support of study by Silman (1979) that reported no association between knowledge and attitude and practices. However, detail analysis found that some behaviors such as house cleaning, gardening and walking, which are activities that most people are familiar with showed

significant association between knowledge, attitude and practice. This finding was reported earlier by Thawatchi Chaijirachayakul (1984).

In general, FHLs in this study still have not reached the goal set by the health authority that they should exercise, either by formal or informal physical activities, at least 3 time per week, at 30 minutes each time, or accumulate physical activity about 30 minutes each day. The study found that 92.0% of the FHLs needs to improve their level of physical activity. The most important independent variable that can forecast physical movement is their attitude. They believe that they are not capable of doing correct physical activity, and that they need advises to be able to do so. Social support was found to be an important reinforcing factor of this group. They reported receiving advises from friends, family members, and neighbors.

Recommendations

Health promotion program in Trang province could use results from this study to design physical activity program that is acceptable to the people of the same demographic characteristics. The design of the program must include information from FHLs and their social supports to define the type of exercise, length of time, and time of the day that is conducive to FHLs time schedule, and preferences. This will ensure that the target population will participate in the activity.

Service providers should provide knowledge and social reinforcement to the target group. The program could be available in public places such as schools, community, office of local authorities such as housewives group, FHLs club, Village

Health Volunteer's office or home, etc. Knowledge dissemination can also start from this group to other groups in the community.

Evaluation of the results of the program is important. The service provider must perform evaluation, perhaps by questionnaire, at least once a year to ensure that the programs provided to the community is beneficial to the target group. This will ensure continuity of the provision and popularity of the program.

Recommendations for Future Research

1. It might be interesting to study the groups who have physical fitness level at good and excellent. The results might be useful in providing answer to why people are healthy.
2. Other types of occupational group must also be studied, especially among those whose occupation already involve rigorous physical movement such as fisherman, those who work in plants.