



Exercise Activities in harmony with local community lifestyle

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ARTICLE HISTORY

Received: 06.07.2013

Accepted: 08.09.2013

Available online: 10.11.2013

Keywords:

Exercise, Community, Health, Public policy

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ABSTRACT

Regular exercise is good for health but it is quite difficult for people in local community because they have to spend their times on work rather than doing exercise. Thus exercise model that can be integrated with people's lifestyle need to be considered. If people can do exercise as part of their daily lives regularly, they will be healthy and fit. The purpose of this study was to make exercise as a part of community lifestyle that can be run continuously and long lastingly. The study had been conducted in 20 villages in Wungsang Sub-district, Kaedum District, Maha sarakham Province, Thailand. Data were collected using questionnaires, recording form of physical fitness test and observational record. The findings from a survey revealed that most people in communities needed to participate in an exercise project. The participants undertook physical fitness test including grip strength, muscle strength, flexibility, lung capacity, and body mass index before starting exercise program. There were exercise trainings by the sports science professionals such as stretching, Plong-Thai (long stick) exercise, elastic exercise, and aerobic dance. Exercises have been successfully run in communities regularly and continuously. People accepted benefits of exercise on their health, not only physical health but also mental and social health. The effective exercise project led to the health promotion for people in Wungsang Sub-district. The local administrative organisation, therefore add this project in the master plan every year as the public policy due to community need, benefit, and ownership.

INTRODUCTION

Healthy is a basic human right and health is related to numerous factors such as family, community, environment, and moral. In the Constitution of 1997, the provision of health care is defined to the effect that *"A person shall enjoy an equal right to receive standard public health services, and the indigent shall have the right to receive free medical treatment from public health facilities of the state, as provided by laws. The public health services by the state shall be provided thoroughly and efficiently and, for this purpose, participation by local government organizations and the private sector shall be promoted insofar as it is possible. The state shall prevent and eradicate harmful contagious diseases for the public without charge, as provide by law."*[1]. Principles of health for all people depend on the perceptions of individuals to develop and change health behaviour leading good health. If people believe they can take care of their health themselves, they will maintain healthy continuously. It is clear that situation and trend of health problems have been changes rapidly in both individual and

environmental contexts. Thus, it is important to support health promotion to Thai people that could help to make people healthier.

"Healthy people healthy Thailand" is one of the health policy of Thailand [2-4]. We are interested in multifactor that could improve the health of people in local communities in terms of healthy eating, regular exercise, stress management, no smoking, and no alcohol consumption. However, not all local communities where can run health promotion program completely and also continuously, even though we know those health behaviors are benefits for good health. Health promotion in Thailand has focused mainly on diet, exercise, emotion, no smoking and no alcohol-drinking [5].

It is clear that the importance of proper nutrition and physical activity in reducing rates of disease and death from chronic diseases has been well established [6]. To begin making people in community being aware in health promotion, exercise was the first priority to establish in Wungsang Sub-district. Regular exercise is good for health but it is quite difficult for people in local community because they have to spend their times on work

rather than doing exercise. Thus exercise model that can be integrated with people's lifestyle need to be considered. If people can do exercise as part of their daily lives regularly, they will be healthy and fit [7]. However, low self-esteem is a key barrier to increasing exercise levels. Shyness and apprehension about contravening established practices are also key barriers to overcome in increasing exercise levels. Both issues can be overcome by complementing communications with local support groups.

Exercise used to be run as the health projects in Wungsang almost every year but those projects were conducted temporary in particular events such as a campaign of health promotion. However, the people who participated in those projects were mostly teenagers because the exercise styles such as football, volleyball, and aerobic dance were not suitable for everyone. As the results, to promote people doing exercise as part of their daily lives regularly that they will be healthy and fit. This project purposed to make exercise a part of community lifestyle that could be run continuously and long lastingly.

MATERIALS AND METHODS

This action research employed P-A-O-R cycle including planning, action, observation, and reflection to develop an exercise model in Wungsang. To do action research, this study needed to undertake through a succession of cycles which included; developing a plan of action to improve what is already happening, acting to implement the plan; observing the effects of action in the context in which it occurs; and reflecting on these effects as a basis for further planning, subsequent action and so on. Thus, the study had been conducted the P-A-O-R cycle in 20 villages in Wungsang Sub-district, Kaedum District, Maha sarakham Province, Thailand.

Population and samples

The target population of this study was the people in Wungsang from at least one person from each family which estimated 1,125 people. This study appreciated to include all persons in Wungsang district to participate in the project. The precise number of participants was not known at the outset. The participating samples on the opening day when the program established were the 159 mainstays. They were volunteers from 20 villages including 7 of youth group, 132 of adults, and 20 elderly people.

Data

Quantitative data were collected using questionnaires and recording forms of physical fitness test. Interview, observation and focus group methods were employed for qualitative data. Descriptive statistics were presented using frequency, mean and standard deviation.

Research process

The study had processed the P-A-O-R cycles until the community had the exercise model, which was suitable for their lifestyles [8]. The planning process initially surveyed people's attitude and need about exercise using questionnaires. Then physical fitness tests were conducted together with vital signs and body mass index assessments. Designed exercise models which were suitable for people in each group who were children, teenage, adult and elderly. Prepared exercise trainers from the mainstays of each village for different exercises. In action process, the exercise mainstays had conducted the exercise programs in the community. There were the community events

that included exercise competition for motivating and entertaining the people for doing exercise. During the action process, the assessments of exercise activities used observational techniques in each village. The focus group processes were employed to evaluate the exercise project from the attitudes of the mainstays of each group. For reflecting the project, the AAR or After Action Review approach had been conducted for analyzing the exercise program which had been done in relation to what happened, why it happened, and how to sustain strengths and improve on weaknesses [9].

RESULTS AND DISCUSSION

The study results of quantitative and qualitative data reveal that the physical exercise within a cultural framework of Wungsang was widely accepted in communities. The strength to emerge the successful exercise program was preceded following the P-A-O-R cycles.

Planning: It was found that 97.5% of 159 people wanted to participate in the program. 90.4% wanted group exercise (i.e. aerobic dance, yoga, Plong-Thai and sport). 63.5% wanted single exercise (i.e. muscle stretching, running, and cycling) [10-12]. Opinion about the effects of exercise, most of the samples had positive opinion to exercise in terms of benefits of exercise for physical health, emotional health social health, and family relationship. However, there were some participants stated the negative opinions for example, exercise made exhaustion and energy loss, feeling embarrassment when doing exercise, exercise was wasting time, and exercise was a difficult activity. Physical fitness test found that in overall the results of grip strength, muscle strength, flexibility, lung explanation, and body mass index of the participants were at the fair level [13]. (Fig. 1)

Action: There were exercise mainstays who had been trained exercise techniques by the masters from the Department of Health and Sport Sciences, Faculty of Education, Mahasarakham University. The exercise skills included stretching exercise, Plong-Thai (long stick) exercise, elastic exercise, and aerobic dance. The massage techniques for after exercise had also been trained. The exercise mainstays then had extended the skills to practice in each village. Most people had done exercises individually in the morning by such as stretching exercise, Plong-Thai exercise, walking, running and cycling. Some villages had run aerobic dances for group exercises in public areas such as community centre, in the afternoon. (Fig. 2-5)

The exercise styles were designed by the participants and were made as the posters which were distributed to all villages to be the exercise examples and to motivate the exercises. Sub-district administrative organization (SAO) of Wungsang had put the exercise projects as the public policies into the master plans of the SAO continuously every budget year. Policy changes at the local level could be particularly effective at encouraging increased physical exercise in Wungsang over the long term by making physical exercise in harmony with community lifestyle [14]. Consequently, this exercise project was implemented to chronic disease people such as diabetes mellitus and hypertension. In diabetes patients, regular exercise could control blood sugar level. Inactive people should start with small amounts of physical activity and gradually increase duration, frequency and intensity over time. Inactive adults and those with disease limitations will have health benefits when they become more active [15-19].

Observation: Participants' opinions about the effects of

Table 1: Percentage of participants about opinions on exercises

Opinions	Not at all	A little bit	Some-what	Quite a bit	Very much
Physical effects of exercise					
1. Exercises improve cardiovascular system.	1.2	1.2	0	29.1	68.5
2. Exercises prevent hart diseases.	2.5	1.9	0.6	35.2	59.9
3. Exercises prevent hypertension.	2.5	4.3	5.6	29.0	58.6
4. Exercises make exhausted.	37.0	15.4	23.5	9.3	14.8
5. Exercises make muscles stronger.	0	2.5	1.2	24.7	71.6
6. Exercises make healthy.	1.2	1.2	0.6	26.5	70.4
7. Exercises extend life expectancy.	1.9	4.9	1.9	29.0	62.3
8. Exercises reduce physical weakness.	2.5	7.4	2.5	29.6	58.0
Emotional and psychological effects of exercise					
9. Exercises make fun and joyful.	1.9	3.1	0	32.7	62.3
10. Exercises can release stress.	1.2	6.2	2.5	32.7	57.4
11. Exercises improve psychological health.	1.2	2.5	0	27.8	68.5
12. Exercises make relax.	1.9	5.6	0	32.1	60.5
13. Exercises induce more worries.	43.2	15.4	22.2	6.8	12.3
14. Exercises are embarrassing activities.	46.9	13.0	25.9	5.6	8.6
15. Exercises are entertainments.	5.6	8.0	2.5	26.5	57.4
16. Exercises improve personalities.	1.2	0.6	0	35.8	62.3
Family and social effects of exercises					
17. Exercises are wasting times.	45.1	16.0	25.3	6.2	7.4
18. Exercises make friends.	3.1	8.0	3.1	38.3	47.5
19. Exercises are cosy.	50.6	18.5	19.1	5.6	6.2
20. Exercises waste times for family.	46.9	19.1	20.4	5.6	8.0
21. Wearing exercise clothes look funny.	44.4	21.0	19.1	5.6	9.9
22. Places for exercises are limited.	34.6	22.2	9.9	17.9	15.4
Other effects of exercises					
23. Exercises are complicated activities	45.1	19.1	17.9	7.4	10.5
24. Exercises make good sleeping.	0.6	3.7	0	30.2	65.4
25. Exercises improve persons.	1.9	4.3	0	34.6	58.6

exercise were assessed using a questionnaire which Cronbach's coefficient for reliability was 0.89. It was clear that most of them had positive opinions to exercise in terms of benefits of exercise for physical health, emotional health social health, and family relationship. However, there were some participants stated the

negative opinions for example, exercise made exhaustion and energy loss, feeling embarrassment when doing exercise, exercise was wasting time, and exercise was a difficult activity. (Table 1)

Physical fitness test found that in overall the results of grip strength, muscle strength, flexibility, lung explanation, and body

Table 2: Percentage of participants about physical fitness tests

Tests	Very poor	Poor	Fair	Good	Very good
Lung capacity	17.3	13.6	34.6	21.5	13.1
Flexibility	4.5	2.5	35.0	27.0	31.0
Hand grip	45	20.5	27.0	5.0	2.5
Muscle strength	27.4	11.3	31.7	7.5	22.0

**Fig. 1:** Planning**Fig. 4:** Exercising**Fig. 2:** Training**Fig. 5:** Exercising**Fig. 3:** Training**Fig. 6:** Evaluating



Fig. 7: Planning community policy

mass index of the participants were at the fair level. (Table 2)

Reflection: There were group discussions between the researchers and delegates of community to evaluate and reflect the program. It was clear that people in Wungsang Sub-district perceived benefits of exercises increasingly, thus exercises had successfully run in communities regularly and continuously. People accepted benefits of exercise on their health, not only physical health but also mental and social health. The effective exercise project led to the health promotion for people in Wungsang Sub-district. It was clear that interventions to promote physical activity should be developed in reference to behavior changes and health benefits. The local administrative organisation, therefore add this project in the master plan every year as the public policy due to community need, benefit, and ownership. (Fig. 6-7)

CONCLUSION

This exercise project was truly successful in Wungsang because this was the community needs. The survey before starting the program found that 97.5% of the survey subjects wanted to participate in this exercise project. The exercise leaders and the exercise participants had taken part willingly. They were not obliged because people perceived the benefits from exercise by themselves. Moreover, there was entertainment from music used with exercise such as aerobic dance and the community was united consequently.

The strong convergence between policy and community participation is a powerful and constructive development that processes well for Wungsang health and development in this local government. The cultural framework of Wungsang could be applied in other regions, focuses and setting where there is a commitment to using local culture participation as a vehicle to promote health. The use of community action and development approaches to health promotion is an important consideration because it acknowledges that each community is unique and has different needs and aspirations.

ACKNOWLEDGEMENTS

We would like to thank all of the participants in this study from Wungsang Sub-district, staff of the Wungsang Tambon Administrative Organization, and health professionals of health centers in Wungsang Sub-district. We are grateful for the project funding from the National Health Security Office and Faculty of Public Health, Mahasarakham university, Maha Sarakham province, Thailand.

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