

## Improving Primary School Students' Capacities as Health Promoting Actors

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Supported by grants from the National Health Security Office (NHSO), region 7, Thailand.

Received 22 June 2012; accepted 4 September 2012

### Abstract

This study was aimed at strengthening primary school children's capacities as 'health-promoting actors'. A participatory action research (PAR) design was implemented in five semi-rural primary schools in Mahasarakham Province. Selected students were identified as health promoting targets and planned for changing themselves by following a health promoting plan with the participatory action of their families and their schools. Quantitative data and qualitative data were collected and analyzed. The qualitative results indicated that to attain the goals of HPS it is important that using student capabilities to generate ways to solve their health-related problems becomes a fundamental strategy such as students communicating with health promotion strategies from the school through the families, building a stronger relationship between teachers-families-students, and students' capability as 'health promoting actors'. The possible roles for school teachers and health personnel assisting HPS program can revealed in quantitative analysis. Results showed that the student's knowledge of health promoting school significantly decreased from before the training course ( $P < 0.001$ ) The mean score of HPS knowledge after experiment was higher than before the experiment which are the HPS training scores ( $M = 9.5319$ ,  $SD = 1.62$ ) was significantly higher than before attending ( $M = 8.4681$ ,  $SD = 1.52$ ;  $t = -6.173$ ,  $p = < 0.001$ ) HPS course. The result of this study using Home Visit can increase the participatory actions among Primary School

students, teachers, family members. It can lead to more benefits in individual self efficacy and the development of healthcare among societies.

**Key words:** Capacity building; Health promoting actors; Health promoting schools; Participatory action research; Primary school; Mahasarakham

Somsaowanuch Chamusri, Phatcha Hirunwatthanakul (2012). Improving Primary School Students' Capacities as Health Promoting Actors. *Advances in Natural Science*, 5(3), 28-31. Available from <http://www.cscanada.net/index.php/ans/article/view/j.ans.1715787020120503.2538> DOI: <http://dx.doi.org/10.3968/j.ans.1715787020120503.2538>

### INTRODUCTION

The World Health Organisation (WHO) has been instrumental in conceptualising and popularising the notion of health promotion and framing international development of the field of healthcare activities (Colquhoun, Goltz, & Sheehan, 1997). Schools are one of the most important settings for health promotion. The health promoting school (HPS) program provides opportunities for action directed at improving school policies and environment, and enhancing links with the family and the wider community to maximise potential contributions to better health. Successful implementation of a setting-based approach to health promotion in the school context, in accordance with the WHO criteria, is not straightforward (Chamusri, 2008).

In Thailand, the promotion of health in school settings is an important goal. Sritapa (2008) traced the progress in implementing HPS over a 10 year period in Thailand. A number of barriers to successful implementation of a HPS program have been identified in regional, district and local levels, such as an unclear determination of activities and policy, and lack of coordination between the

Ministry of Education and the Ministry of Public Health (Kramomtong, Plitakul, & Surakeit, 2003; Mikawal, 2001; Suwan & Narayong, 1999; Tiabdokmai, 2002). These barriers are consistent with the WHO Expert Committee review (WHO., 1999). Suwan and Narayong (Suwan & Narayong, 1999) recommended that more research in health promoting schools should be undertaken to develop a new body of knowledge and effective strategies in organizing health promoting schools. Chamusri (Chamusri, 2008) argued for a focus on school students as active participants in their own development. In relation to HPS, this means assisting them to understand the rationale for activities that contribute to health, learn new life skills and seek ways to address health issues with support from teachers and families. Christensen (2004) terms this development “the child as a health promoting actor” (p.378) and such development could be seen as ‘capacity building’ (Hawe, Noort, King, & Jordens, 1997; Labonte & Laverack, 2001).

The objective of this project was to strengthen the abilities of selected primary school students to identify issues that they, their families and schools could address to improve health; and to support the children to initiate action on some of those issues.

## METHODS

### Research Design

A participatory action research (PAR) was carried out at Mahasarakham Province. Teachers worked as facilitators and as an evaluator for three times. The researcher confirms the evaluation data by interviewing people and observation at the end of study. Action research is a valid and important research method for all health promotion researchers (Whitehead, Taket, & Smith, 2003). Participatory action research has particular relevance in facilitating ‘bottom-up’ change and supporting the sustainability of that change (Bodorkós & Pataki, 2009) and therefore is an optimal research method in community health promotion programs (Liu, Gao, & Pusari, 2006).

### Selection of Schools and Student Participants

Five semi-rural schools at Mahasarakham province were purposively selected. Potential schools were identified with the Deputy Director of Mahasarakham Educational Service Area Office 1 and a member of the team of evaluators, who had responsibility for health promoting schools in the province. The selected school had achieved successful HPS criteria. Ninety-four students (62% female and 38% male) participated in the research. All students were also selected from the highest class in the school. There were fifty- four teachers participating in this study.

### Steps in the PAR cycle

The steps in the PAR cycle are described in the following section and summarized in Table 1.

**Table 1**  
**Summary of Processes in Each Step of the PAR Cycle**

Process	PAR
Selection of study sites	The Director of Education nominated the study sites. Agreement of School Director and School staff to participate themselves. If Schools did not wish to participate, they could refuse.
Selection of training topics	Teachers and community representatives discussed topics and the expectations for the students and the school; researchers supported and organized the meeting. The primary researcher worked as the co-organizer and manager. In the second cycle an experienced teacher launched the second training as the trainer.
Planning activities	The planning was conducted by teachers and students. Teachers supported students to identify health issues or negative behaviors that could be changed and were within the student’s capacity. Student plans were developed in three part; for students, families, and school. The students thought about three areas and could explain their expectations when they acted upon the plan.
Action through the plan	Students followed their plans. E.g. for themselves: no junk foods, hygiene care, having cooked food. For their families communicating with their family about smoking, drinking, risks of raw food, and care of the environment. In the school, students focused on the school grounds, toilets, and good behavior. Teachers were involved voluntarily in the community. They worked as facilitators of students and their plans, and as evaluators to visit students at home 2-3 times in each cycle.

## Data Collection and Analysis

Both quantitative and qualitative data were gathered during the participatory action research project. A checklist questionnaire which was divided into two parts was used by teachers (a) to assess the student’s progress on their plan in the three areas: self-caring, families, and school (12 items); and (b) to evaluate the visiting of student families for improving via teachers for 16 items. SPSS for windows version 17 was used for quantitative analysis. Descriptive statistics were applied to describe percentages, means, and standard deviations. Paired t-test was applied to test the differences of the mean scores of home visits over 3 times follow up at home. Qualitative data were collected by observation of the training activities, and teachers during the PAR process and parent interviews during the final phase of the research. Content analysis of interviews was used to identify key themes.

## RESULTS

### Health Promoting School Knowledge

The participants took the exam to measure their HPS knowledge before and after the training course. There is a 12 item true/false format. HPS knowledge questionnaire are the understanding of the HPS, the role and function of student, teacher, parent, and community to participate or be involved in HPS. For example, only the teacher has to be participating in HPS (true/false). As can be seen in Table 2, the mean score following the training (M= 9.5319,

SD= 1.62) was significantly higher than before attending (M= 8.4681, SD= 1.52;  $t = -6.173$ ,  $p < 0.001$ ) HPS course.

**Table 2**  
**The Score of HPS Knowledge of the Students Before and After Attending HPS Course**

Knowledge of HPS	n	Mean±SD	t	p
Before training course	94	8.4681±1.52	-6.173	0.00
After training course	94	9.5319±1.62		

### Home Visit

The teachers supported the student while they were working on their plan. However, the teachers also worked as the evaluator. At this point, the teacher used the home visit questionnaire to evaluate the student. There are 12 items derived from 3 areas; caring for themselves, caring for the family and caring for the school. The questionnaire scored on 5-point scale with 1 being not at all to 5 being usually work on their plan. The home visiting results evaluated by teachers illustrated that the students worked with their plan, the scores of home visit for all plans significantly increased over the period.

### Qualitative Data Analysis

Ten parent interviews were confirmed by researchers that teacher and families agree with this program that it was encouraged the students' skills in health promotion, also impacts to the school and families. Also teacher group discussions were organized for twice during the program; after the first site visit and end of last visiting. The data were structured and categorized for content analysis.

### Communicating Health Promotion from the School Through the Families

Parent interviews demonstrated that some parents knew about training activities for the student, however they could not describe in details of the topics covered in training. They stated that the training was useful, and after training the students showed more concern about their physical health and health behaviors; care about hygiene and managing the house environment, stopped having uncooked meat, and helped the family with housework. Health information was also conveyed to family members about decreasing smoking or drinking, avoiding raw foods and the need for increased exercise. This was a particular aim for the health promoting program to pass the information to the family and community.

### Building a Stronger Relationship Between Teachers - Families - Students

The parents were appreciative when the teachers visited their house because their child had shown increased concern about health issues; for example when teachers told students that they might come and see the students at home, students engaged in cleaning the room, toilets, and house environment. Moreover, as one parent stated *"The teachers not only help their house clean up but*

*also do with their neighbors"*. The teachers encouraged students to assist with cleaning the grounds of neighbors. As well, the student views of the home visits by teachers were positive. When the teachers visited students at home they encountered situations that students experience in their home life. The teachers encountered family issues such as the "broken family" (e.g., divorced parents), health behavior issues, and economic issues. The students' planning and implementation focused on health issues that linked to the broader picture of their everyday lives. It was complicated for young people to solve the issues that they encountered in their lives. So the home visits by teachers resulted in further discussion between evaluator school teachers, as a consequence of better understanding of student circumstances.

In the school setting, the teachers and students worked together. The students surveyed the school and found ways to improve their school. They worked in the garden, toilets, and other areas in the school which warranted attention. A variety of projects were carried out in the differing school settings such as improving the first aid room by decorating and re-organizing, preparing hand jell, and growing non toxic-vegetables for lunch cooking, taking home or selling. The teachers worked as facilitators to manage time and advise them in practice. All activities built stronger relationships not only in the school context but was also linked to the students' families in the community context. The parents understood that teachers were not teaching in the school, but they could do more in health and environment.

### Students' Capability as 'Health Promoting Actors'

The students at primary school level demonstrated the ability to plan and implement health promotion for themselves, families, and the school. They were able to communicate and find out the families' health issues and their plans illustrated their own thinking about such issues and ways to solve them. They could link their circumstances and anticipate health outcomes; they wanted to be healthy, the school clean, and no illness in the family. All students created a plan with at least 1-2 issues to deal with. The teachers and the families could both learn. When teachers visited students at home, they could see that the plans were relevant to the family and community context.

## DISCUSSION

The achievement of this project related to knowledge and understanding of health promotion that is the students having the ability to think about health issues and find the ways to solve the problems by themselves. This contrasts with the earlier study, Chamusri (2008) found that the student worked under supervision of teachers without knowledge or understanding of health promotion in the school context. Student cooperation on tasks such as

cleaning the school grounds was based on relationships between teacher and students. Students wanted to maintain a good relationship with teachers and were mindful of their parents' instructions to be good pupils by listening and following the teachers' orders. Similarly, the teachers focused on developing responsibility in the pupils as it can be seen in the score of home visits for all plans which significantly increased over the period. Home visits also raised awareness of students and family members to be concerned with health behavior.

## CONCLUSION

This study has contributed to a more meaningful explanation of student capacity in HPS using a 'bottom-up' approach that engaged students and their teachers with school and community activities. This highlights the importance of the school, via its teachers and students, reaching out with health promotion activities to families and their communities, thus building the relationships between the students and their teachers, and the teachers and their local community. The important predictor of the students' capacity as 'health promoting actors' of the study is that the students understand how to improve their health, and that of their families, and the school environment. As a consequence they were able to implement simple activities in their situation that showed success.

One of the main qualities of this program is it illustrated the students' abilities to respond to simple issues of the context and to focus on problem-solving skills. These are the key action areas for implementing strategies of health promotion (Prevention and Population Branch, 2011). The study was implemented to strengthen student capacity as 'health-promoting actors' in HPS, however other positive impacts that identified outcomes of this participatory action research were the students' experience of the engagement and supportiveness of teachers outside the school environment and new practical activities identified to both sustain the HPS program in the schools and strengthen the outreach of schools to the community.

## ACKNOWLEDGEMENTS

The authors thank the participating schools, teachers, students, families and community. The authors would like to thank Dr. Buavaroon Srichaikul and Ajarn Gordon Bakker for editing. The authors would also like to thank the Faculty of Nursing, Mahasarakham University for giving time and a scholarship to prepare the publication. This project was supported by grants from the National Health Security Office (NHSO), region 7, Thailand.

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