Strengthening Health Development at the Community Level in Thailand: What Events Should Be Managed?

Vasuton Tanvatanakul, Instituto de Ciências Biomédicas Abel Salazar (ICBAS), University of Porto, 4099–033 Porto, Portugal and Faculty of Public Health, Burapha University, Chonburi, 20131, Thailand

Corália Vicente, Instituto de Ciências Biomédicas Abel Salazar (ICBAS), University of Porto, 4099–033 Porto, Portugal

João Amado, Instituto de Ciências Biomédicas Abel Salazar (ICBAS), University of Porto, 4099–033 Porto, Portugal

Sastri Saowakontha, Faculty of Public Health, Burapha University, Chonburi, 20131, Thailand

Correspondence: Vasuton Tanvatanakul, Faculty of Public Health, Burapha University, Chonburi, 20131, Thailand, Tel: +66 7138 3845, Tel./Fax: +66 3839 0041, Email: vasuton@buu.ac.th

Abstract

Community action for health development is important for sustaining community health. This study aimed to identify the components and processes for strengthening the community health development process. We used an exploratory, cross-sectional design and focus group discussions in Chonburi, Thailand, between March 2003 and April 2005. We interviewed 422 respondents selected by stratified sampling from various groups involved with community health activities. Interview data was analyzed and then clarified by focus group discussions with representatives of the communities and stakeholders. Results indicated that both study components, namely, community experience in health activities and appearance of health conditions in the community, as well as all of their subcomponents, influence community action for health development. The most influential subcomponent

of the community experience in health activities was perception of health information and policy ($p < .001$; $r = .546$). The most influential subcomponent of the appearance of health conditions in the community was the impact of health information ($p < .001$; $r = .439$). Focus group discussions indicated the communities' potential, ideas and need to activate health development by community mobilization. We recommend that the government encourage and support community action for health development with the subcomponents identified by this study. The process of community empowerment and network of implementation should encourage successful and sustainable health development by the community.

Introduction

Health development is the process of continuous, progressive improvement of the health status of individuals and groups in a population (WHO 1998). There are many health development patterns: community based, government based, partnership based, etc. Each pattern is suited to different health activities (Bureau of Policy and Strategy [BPS] 2003).

In many countries, governments have acted to strengthen health development. However, increasing technological complexity and introducing relative sophistication and centralization in national health systems decrease community involvement (Haile and Peter 1999). In most cases, the government has limited resources, limited health service distribution systems and limited know-how about community contexts. Meanwhile, communities have some potential to organize their own public service processes. Therefore, community members should partner with national governments or perhaps take the lead for health development in their communities (WHO 1994, 2003; WHO Regional Office for Europe 2001; WHO Regional Office for the Eastern Mediterranean [ROEM] 2004).

Community health development is a subset of community development that is useful in helping a community to employ and increase their capacity to improve local health status. The approach is characterized as a "people process" because it nurtures and provides a forum for developing initiatives through interactive and collaborative strategies (Burdine 2003; Green and Ottoson 1999).

Community involvement in health development programming grew in importance, beginning with the Declaration of Alma-Ata in 1978, to achieve the target of "Health for All by the Year 2000" using a strategy of primary healthcare (WHO 1979). An important element of this strategy was promoting greater and more effective community participation in services and structures designed to bring better healthcare to the people (Haile and Peter 1999). Since then, there have been various studies of community involvement models. The results of health development by community involvement have demonstrated significant progress in health promotion and prevention activities, reduced poverty levels and improved quality-of-life indices (WHO ROEM 2004; Wibulpolprasert 2005).

Health development by the community requires inter-sectoral and intra-sectoral collaboration in the community, community mobilization, community empowerment and training community leaders in various groups (Fawcett et al. 1995; Li-Chun et al. 2004; Tareen and Abu Omar1998; Yimyam, N. 2003). However, there is a need to increase the knowledge, skills, education and resources allocated (Bishai et al. 2002; Geiger 2002). Good management at every administration level and encouragement from policy makers and politicians are needed (Bhuyan 2004; WHO ROEM 2004). Other important points are the practices of specific target groups, structure of networks and continuous activities (Chaoniyom et al. 2005).

Activities promoting health development by the community need community-based implementation. If people within communities are unconcerned, misunderstood or inactive, it is very difficult to improve healthy activities in those communities (American Public Health Association [APHA]1983; BPS 2003). Therefore, promoting or motivating people in the community to become community-based decision-makers involved in community health development is important. The objective of this study was to examine the components and processes that could both motivate the strengthening of community health development and manage health development in communities.

Materials and Methods

Design and Study Area

Our study employed an exploratory cross-sectional design, using a survey and focus group discussions. The study was approved by the Institutional Review Board from Instituto de Ciências Biomédicas Abel Salazar (ICBAS) of the University of Porto and was reviewed and approved by the Burapha University Ethics Committee. The research was conducted in the rapidly developing communities of Chonburi province, Thailand. Chonburi province is located in the industrial development region of Thailand on the eastern coast of the Gulf of Thailand, approximately an hour's drive to the southeast of the capital, Bangkok. Chonburi province includes the tourist city of Pattaya, as well as an international seaport and many industrial estates and various forms of agriculture. Rapid development has led to increased migration, creation of different socio-economic groups, a constantly evolving multicultural heritage and a congested living environment.

Study Population

Five communities located in 5 of the 10 different districts of Chonburi province were included. We consulted experts in various professions to find the communities that best represented the population of interest – the various groups of community members and stakeholders who were involved with community health activities. The five communities' population is estimated at 42,340 people. We estimated the minimum sample size as 398 people. To ensure a representative data set, we gave 500 surveys to interviewers trained from the research team. For the survey, we used stratified sampling to select representatives from community leaders, local and government personnel in communities, village health volunteers, chairs and members of various assemblies and villagers in each village. In each community, we arranged a focus group with a representative from each of those groups of interest.

Instruments

The interview questionnaire was created and developed by reviewing related literature. The researchers then wrote, analyzed and evaluated the questions and consulted with experts in community-based initiatives, community health development, health promotion and health prevention, questionnaire construction and research methodology. Questions were pre-tested in different communities with similar backgrounds to those of the study communities. Revisions were made prior to data collection by means of interview survey in study communities.

The questionnaire (included in Appendix)consisted of four main parts and seven subparts that measured related constructs. The reliability of the interview survey questionnaire, Cronbach's alpha, was 0.87. Part I asked for demographic data. Part II asked about community experience in health activities. The Cronbach's alpha was 0.79. Within Part II, we asked about four constructs: (1) health and quality-of-life practices, with questions such as "Were the programs of health and community health different in the past?" (2) perception of health situation changes, with questions such as "How quickly does the health situation change in your community?" and "Are there pollutants which may be dangerous to the health in your community?" (3) involvement in health resource allocation, as measured with questions such as "Are there private health services?" and "Have you or a member of your family ever used folk health wisdom as a treatment?" and (4) perception of health information and policy as measured with questions such as "How is your degree of satisfaction with the government health implementation policy?" and "Have you received health information from the mass media?" Part III asked about appearance of health conditions in the community. The Cronbach's alpha was 0.75. These constructs had emerged: (1) health awareness, as measured by questions such as "How often do you normally exercise?" (2) impact of health information, which was the response to questions such as "Does news of a new health problem or new communicable disease interest you?" and (3) health development concerns, which were measured by asking if the person had an

interest in health and community health activities or had ideas about preventing health problems. Each construct in Parts II and III was measured using scale scores from 5 to 11 items. Part IV was about community action for health development. The Cronbach's alpha was 0.85. This part was scored by counting community health-related activities that respondents had knowledge of and practice with health development processes in the community. They consisted of eight items such as "community cooperation, community groups or organization network, perception of community organization and community planning."

Semi-structured interview guidelines for focus group discussions were created and developed after the interview survey.

Data Collection and Analysis

Research team members obtained a signed consent form (included in Appendix) from respondents who agreed to participate in this study, and all respondents were advised of their right to withdraw from the study at any time without prejudice. Four hundred and twenty-two respondents were included in the study. The survey interview and observation were carried out in the home of each respondent from March through September, 2003. Interview data were analyzed and followed up in focus group discussions to clarify the results and to find out the real situations described by the analysis.

We conducted focus group discussions and observations in communities during August and September 2004 and March and April 2005. Each focus group had between 11 and 16 participants and lasted approximately two to three hours. All groups were audiotaped and videotaped. Observation notes including pictures were added to the actual focus group files. Each tape was transcribed verbatim.

Descriptive statistics (percentages, mean and standard deviation) were used to describe the variables. The Pearson product-moment correlation coefficient was used to determine important factors. Content analysis of the taped focus groups was conducted. Additionally, observation data and pictures were analyzed to verify some information.

Results

Results of Interview Survey

General Information About Respondents

The response rate was 84.4%. Respondents were 20–80 years of age with an average age of 44.4 (*SD* = 11.6). There were slightly more women respondents (54.5%) than men. More than half of respondents had received primary education (52.8%). Over two thirds were married (69.7%). The most common occupations were "small shop in the community," "factory employee," "agriculturalist/farmer" and "government service" (26.3%, 23.9%, 22.7% and 21.6% respectively). Over one fifth (21.1%) indicated insufficient family income. The majority of respondents were local people (62.3%); 37.7% were migrants to the area.

Scores and Correlation of the Study Components and Subcomponents

Study components. The range of possible scores of the community experience in health activities component was from 1 to 81, with an average of 54.97 (*SD* = 8.55). The range of possible scores of appearance of health conditions in the community component was from 4 to 66, with an average of 44.81 (*SD* = 6.74). The range of possible scores of community action for health development was from 0 to 28, with an average of 17.61 (*SD* = 6.14). Average scores of each component were high. The community experience in health activities component and the appearance of health conditions in the community component were influential in the measurement of community action for health development ($p < .001$; $r = .628$ and .490 respectively) (Tables 1 and 2).

Study subcomponents of the community experience in health activities component. The ranges of possible and average scores for the subcomponents of health and quality-of-life practices, percep-

tion of health situation changes, involvement in health resource allocation, and perception of health information and policy were 1–25, 17.60 (*SD* = 3.48); 0–19, 12.91 (*SD* = 2.59); 0–20, 11.16 (*SD* = 2.85); and 0–17, 13.29 (*SD* = 2.32), respectively. Average scores of each subcomponent were high, and all of them – health and quality-of-life practices, perception of health situation changes, involvement in health resource allocation, and perception of health information and policy – were influential in community action for health development ($p < .001$; $r = .483$, .408, .479 and .546, respectively). The perception of health information and policy subcomponent had most influence ($p < .001$; $r = .546$) (Table 1).

Table 1. Correlation of the component "community experience in health activities" and its subcomponents with "community action for health development" (*N* = 422)

Component/Subcomponents	Mean	*SD*	Community Action for Health Development	
			r*	*p*-value**
Community experience in health activities component[a]	**54.97**	**8.55**	**.628**	**< .001**
Health and quality-of-life practices[b]	17.60	3.48	.483	< .001
Perception of health situation changes[c]	12.91	2.59	.408	< .001
Involvement in health resource allocation[d]	11.16	2.85	.479	< .001
Perception of health information and policy[e]	13.29	2.32	.546	< .001

Range of possible scores: [a]1–81. [b]1–25. [c]0–19. [d]0–20. [e]0–17.
*Pearson product-moment correlation coefficient. ***p*-value from Pearson product-moment correlation coefficient.

Study subcomponents of the appearance of health conditions in the community component: The ranges of possible and average scores for the subcomponents of health awareness, impact of health information and health development concerns were 2–23, 14.54 (*SD* = 2.87); 2–17, 13.59 (*SD* = 2.26); and 0–26, 16.64 (*SD* = 3.33), respectively. Average scores of each subcomponent were high level of score, and all of them – health awareness, impact of health information, and health development concerns – were influential in community action for health development ($p < .001$; $r = .324$, .439 and .432, respectively). The subcomponent with most influence was the impact of health information ($p < .001$; $r = .439$) (Table 2).

Results From Focus Group Discussions

General Information for Community Mobilization

Focus group discussions found that Thai communities already have health development programs, which they implement to the extent possible given their resources. However, as in previous research, we found that many of the programs are based on individual interests or commands from government sectors and may be inappropriate for the community, limited in community decision-making, and not sustainable (Tanvatanakul 2004). As an alternative, local organizations and community members need, and have the potential, to organize and implement health development programs in their communities, supported by government sectors (Wibulpolprasert 2005; Yimyam 2003).

The Community Needs to Be Supported by the Government

The summary of focus group results showed there are topics the government should attend to in order to encourage and support communities. Areas for supporting community action for health

development were (1) *providing information and knowledge support* to community members by using various training techniques, strengthening the education system and using public relations, (2) *providing resource support* to communities in terms of personnel, budget, supporting teams and equipment (Bishai et al. 2002; Chaoniyom et al. 2005; Geiger 2002), (3) *improving supervision, evaluation, reporting and health campaign planning* with the community by providing effective analysis, planning and support teams, and 4) *supporting activities that cannot be implemented at the community level*, such as an effective referral system, complicated healthcare, health pilot projects and a health infrastructure organization.

Table 2. Correlation of the component "appearance of health conditions in the community" and its subcomponents with "community action for health development" (*N* = 422)

Component/Subcomponents	Mean	*SD*	Community Action for Health Development	
			r*	*p*-value**
Appearance of health conditions in the community component[a]* **	**44.81**	**6.74**	**.490**	**< .001**
Health awareness[b]	14.54	2.87	.324	< .001
Impact of health information[c]	13.59	2.26	.439	< .001
Health development concerns[d]	16.64	3.33	.432	< .001

Range of possible scores: [a]4–66. [b]2–23. [c]2–17. [d]0–26.
*Pearson product-moment correlation coefficient. ** *p*-value from Pearson product-moment correlation coefficient. *** "Appearance of health conditions in the community" is a composite of various opinions, processes, activities and practices of health development of people in the communities.

Encourage and Support Community Mobilization

The summary of focus group discussions also highlighted topics to encourage and support community mobilization. The first topic is *community empowerment* (Fawcett et al. 1995), in terms of leadership, a community committee, a community learning organization, community meetings, community SWOT analysis and decision-making, setting a vision and a mission for the community, analyzing the community situation and setting the community development plan and activities calendar, and campaigning for and continually arranging health activities (Tareen and Abu Omar 1998). Each organization in a community should be involved, sharing community funds or resources, setting rules by community agreement and involvement, rewarding the best practice in the community and evaluating implementation before new planning activities. There could be five steps, summarized as (1) *community problem identification*, (2) *planning*, (3) *implementation*, (4) *utilization*, and (5) *evaluation* (APHA 1983; Tanvatanakul 2004). A second issue that focus groups talked about was *public relations and networking* in order to promote community activities. Networking is necessary for successful community projects, and for coordinating and sharing health-development experiences.

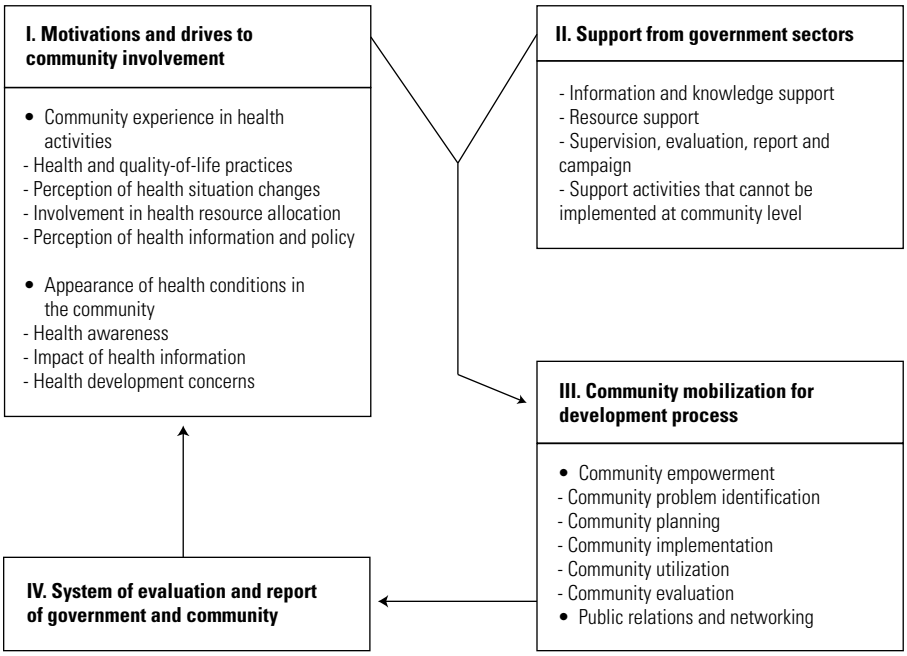
Establish a Process for Health Development by Community Mobilization

The results of this study are shown in a flow chart with four parts that should be implemented, and managed for health development by community mobilization. Figure 1 shows each step of the process, with details of activities for each step.

Figure 1 indicates that the communities should be motivated continually by supporting more community experience in health activities and more appearance of health conditions in communities, especially in the subcomponents identified in this study. Government sectors should support

communities by initiating and negotiating conditions of agreement and encouraging community members to participate. Community empowerment, public relations and networking are important processes in mobilizing the community for development. Thus, communities can organize their own activities via mobilization. Results of community activities should be reported to communities or community networks for use in planning new activities. Evaluation and reporting are necessary for continuous motivation and advancement of activities in communities and are important for government sectors in planning for support of community activities.

Figure 1. Process for strengthening health development by community mobilization



Discussion

Community involvement and action for health development are important in order to increase the effectiveness of health promotion, disease prevention and other health activities in community. However, it was very difficult to motivate community participation or action because the communities are accustomed to the government's health service systems, which are operated to solve the problems for communities (WHO ROEM 2004; Wibulpolprasert 2005). Therefore, motivating community involvement and action for health self-care development needs special mechanisms that are related to community lifestyle and community needs (Green and Ottoson 1999; WHO 1994). Mechanisms should not be enforced from outside the community.

This study indicated that the two main components influencing the community decision to participate in health development were community experience in health activities and an appearance of health conditions in the community. Influential subcomponents included health and quality-of-life practices, perception of health situation changes, involvement in health resource allocation, perception of health information and policy, health awareness, impact of health information and health development concerns. The subcomponents contributing most to the correlation were perception of health information and policy and impact of health information. These two subcomponents were related because they are responses to information and public relations, which are communicated to the people through mass media. However, depending on the culture, ecology and situation in the

community, different approaches to implementing health development programs will be effective (BPS 2003; WHO 1994). The influence of subcomponents on program outcome may differ from place to place, although each subcomponent should always be considered.

Results from focus group discussions indicated that communities had both the potential and need to organize health activities. However, the ability to carry out health programs is related to community resource levels and community empowerment (Chaoniyom et al. 2005). Conditions and processes for organizing health development activities by the communities were the following: suitable for their lifestyle, need to be identified by the community, problem consideration by community, planning and implementation by community, utilization by the community, continuous monitoring and evaluation by community (Tanvatanakul 2004; WHO 1994). The government could act as consultant, continually providing encouragement and supervision for community activities.

Conclusions

Conclusions about health development activities in the community are that the community needs motivation mechanisms continuously, especially for the two main components of community experience in health activities and appearance of health conditions in the community. At the same time, the government should be supportive of the communities. The community should have full authority of health development administration and networks with other sectors for support when a plan is beyond its capacity. Evaluation and reporting should be organized to show and improve the progression of health development in the community.

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