

# Community-Based Participatory Research in Elderly Health Care of Paisanee Ramintra 65 Community, Bangkok, Thailand

A. Kulprasutidilok

**Abstract**—In order to address the social factors of elderly health care, researcher and community members have turned to more inclusive and participatory approaches to research and interventions. One such approach, community-based participatory research (CBPR) in public health, has received increased attention as the academic and public health communities struggle to address the persistent problems of disparities in the use of health care and health outcomes for several over the past decade. As Thailand becomes an ageing society, health services and proper care systems specifically for the elderly group need to be prepared and well established. The purpose of this assignment was to study the health problems and was to explore the process of community participation in elderly health care. Participants in this study were member of elderly group of Paisanee Ramintra 65 community in Bangkok, Thailand. The results indicated two important components of community participation process in elderly health care: 1) a process to develop community participation in elderly health care, and 2) outcomes resulting from such process. The development of community participation consisted of four processes. As for the outcomes of the community participation development process, they consisted of elderly in the community got jointly and formulated a group, which strengthened the project because of collaborative supervision among themselves. Moreover, inactive health care services have changed to being energetic and focus on health promotion rather than medical achievement and elderly association of community can perform health care activities for chronically illness through the achievement of this development; consequently, they increasingly gained access to physical, cognitive, and social activity.

**Keywords**—Community-based participatory research, elderly health care, Thailand.

## I. INTRODUCTION

CBPR has recently increased attention as the academic and public health communities attempt to study the persistent difficulty of gaps in the use of health care and health outcomes for numerous communities [1], [2]. CBPR can be defined as research protocol with a substantial level of community participation for the purposes of community improvement and social change [3]. Together with community demands for authentic partnerships in research that are locally related and “community based” rather than only “community placed,” this annoyance has led to a growing of awareness in an alternative research model.

The population of Thailand is getting old. Presently, population ageing is a predictable result of the demographic transition related with declining birth and death rates. This trend holds true in Thailand where the demographic changes are determined by the past trends in fertility, mortality, and migration. As it is occurring in much of other developing countries in Asia, population ageing in Thailand is taking place at a far faster pace than has happened in developed countries in the Southeast [4]. The growing share of older people in the Thai population is due to the fact that the growth rate of the older-aged population in Thailand exceeds that of the overall population. Not only the overall share of the ageing population is rising, but also the older inhabitants itself is ageing as evidenced by an increase in the number and percent of older persons who are aged 60 years and over. From the year 2010 to 2020, the total older adult population about 60 years is predictable to increase from 7,522,800 people to 11,888,000 people. In addition, the amount of older persons in the total population is projected to reach 19.8% in 2025 and nearly 30% by 2050. Thailand is not the only chance of success, a fact confirmed by a recent report submitted to the United Nations Human Rights Council stating that the 60-years-and-plus population is the fastest growing of all demographic segments [5].

The elderly undoubtedly requires more care and health services. It is critical to take into explanation the individual needs and concerns of the aging population in order to inform policies, programs, and improvements in the health care system [6]. As a result of medical and health advancements, and the development in the delivery of health care services, the elderly population has increased in number and is living longer than before. According to survey of population change done the by National Statistical Office [7], found that elderly living in Bangkok can be expected to live longer more 79.3 and 81.6 years, for males and females, respectively [8], [9]. This may be due to better economic status and health service access of the community and Bangkok elderly residents. From the most recent general survey found that Bang Khen region has the high priority number of elderly people in Bangkok about 25,000 people were presently found. Paisanee Ramintra 65 community is one of the interesting communities of elderly population in Bang Khen because of the complexity of urban health problems. In light of these challenges, the project aims to study the health problems of the elderly and to develop elderly health care by both community and personal enabling resources must be in attendance for use to take place [7], [8].

Akua Kulprasutidilok is with the Department of Health Management Technology, Faculty of Science and Technology, Phranakhon Rajabhat University Bangkok, Thailand (phone: 66 2544 8000; e-mail: akuakaew@gmail.com).

## II. MATERIALS AND METHODS

### A. Participants

One of the greatest challenges to CBPR is defining “community” because of its many socially constructed dimensions. For example, community could be defined as residents within a town, an ethnic population, a set of workers, or apartment building residents. Units of identity, such as family membership, social networks, or neighborhoods are created and recreated through social interactions. Therefore, it is important that community ultimately be defined by the people whose health is most likely to be affected by the research [10].

The samples of this study included the elderly who were aged 60 and over from Paisanee Ramintra 65 community where located in Bang Khen area of Bangkok, Thailand and comprised about 371 family units, offers a potential for urban health documents. The variables included in the analysis were age, sex, Barthel activities of daily living (ADL), sickness information. Age was categorized into 3 age groups: 60-69 years, 70-79 years, and 80 years and over.

### B. Study Design and Procedure

Assessment questionnaires, self-reported measures, in depth interviews and focus groups meetings and interviews (Fig. 1) are important techniques for CBPR. The results often offer valuable insights on the health of an understudied population. In addition, all techniques are well suited to explore health problems in a community which is poorly known in Paisanee Ramintra 65 aging population.



Fig. 1 Focus group meeting and interviews sharing in Paisanee Ramintra 65 Bang Khen region, Bangkok, Thailand

### C. Elderly Health Care Development

Community-based participatory approach has been described as an important framework to understand the health needs of minority population who are underserved, and whose unique health issues are closely linked to cultural diversity. Through community participation, the relevance of research outcome is greatly enhanced [11].

For an intervention to have a convincing chance of improving health care there must be a clear description of the problem and understanding of how the intervention is likely to work. Different health problems have different levels of complexity. Some can be conceptualized in relatively simple ways, but others occur at multiple levels. This study found that

the health problems of the elderly people in Paisanee Ramintra 65 community are chronic diseases such as hypertension, diabetes and nervous tension. The development of community participation consisted of four steps as follows: 1) The process for using social capital by giving an opportunity to focus group meetings, reaching a consensus and making agreements on roles and responsibilities of each member, 2) Identifying problems and needs, 3) Designing elderly care activities based on the concept of self-care capacity building through participation in community forum, sharing and learning, setting mutual goals, planning and working together towards those goals, 4) Developing mutual agreements on the care of elderly which is contextual appropriate and locally sustainable. This process began with open communication channels to promote acknowledgement and participation in various activities both at individual and group. This continued until the elderly health care project was included in a community development plan, which must be congruent with the local administrative plan. In addition, cognitively motivating activity may preserve cognition with age. The development design methods, therefore, provide the activity tasks and develop effective health promotion for achieving elderly health care development by using several activities with the events are as follows:

TABLE I  
SUMMARY OF THE ACTIVITY TASKS FOR ACHIEVING ELDERLY HEALTH CARE DEVELOPMENT

Episode	point in time	activity
1	27/3/2015	Focus group meeting
2	8/5/2015	Focus group interviews
3	12/5/2015	The study site visit
4	20/5-5/6/2015	Coaching exercise
5	22/5/2015	Focus group meeting
6	24/5/2015	Writing Training Project
7	5/6/2015	1 <sup>st</sup> Elderly Health Care
8	10/6/2015	2 <sup>nd</sup> Elderly Health Care
9	14/7/2015	3 <sup>rd</sup> Elderly Health Care
10	11/9/2015	4 <sup>th</sup> Elderly Health Care
11	9/10/2015	5 <sup>th</sup> Elderly Health Care
12	13/10/2015	The study site visit
13	16/11/2015	Focus group meeting
14	25/12/2015	Returning data to community

### D. Collecting Data and Data Analysis

Quantitative data: Questionnaire data was collected via assessment questionnaires, self-reported measures and participants' perception of Barthel ADL and sickness information were explored.

Qualitative data: Prior to interviews and focus groups meeting and interviews, study participants gave written consents for audio recording. The length of discussions was determined by the level of interaction among participants. Facilitators proceeded with topics when responses were exhausted.



Fig. 2 The activity tasks for achieving elderly health care development; A. Social engagement B. Physical activity C. Cognitive stimulation

### III. RESULTS AND DISCUSSION

#### A. Participants' Characteristics

From March to December 2015, the study evaluated 97 older adults whom agreed to participate and was randomly assigned in focus groups, with 8–10 attendees per group (Table II). This study mainly explored health problems including two subthemes include Barthel ADL (Table III) and sickness of elderly (Table IV) using assessment questionnaires, self-reported measures and focus groups meetings and interviews as well as investigated the process of community participation in elderly health care with the participation of the Paisanee Ramintra 65 community.

TABLE II  
AGE AND GENDER OF SAMPLE RESPONDENTS

		amount	percentage
Age:	60-69	59	60.8
	70-79	28	28.9
	≥80	10	10.3
	Total	97	100
Sex:	Female	37	38.6
	Male	60	61.4
	Total	97	100

TABLE III  
BARTHEL ADL OF ELDERLY IN PAISANEE RAMINTR 65 COMMUNITY

Barthel ADL	amount	percentage
Mild dependence	92	94.8
Moderate to Sever dependence	4	4.1
Total dependence	1	1.0
Total	97	100.0

TABLE IV  
SICKNESS OF ELDERLY IN PAISANEE RAMINTR 65 COMMUNITY

Sickness	amount	percentage
Dementia	2	2.2
Osteoarthritis	8	8.2
Diabetes	14	14.4
Hypertension	31	32
Paralysis	5	5.2
Heart disease	2	2.1
Carcinoma	2	2.1
Tuberculosis	-	-
Total	97	100.0

Table III describes the ability to engage in daily activities which found that the most elderly in Paisanee Ramintra 65 community is mild dependence with 92 people (94.8%). In Table IV, the major causes of sickness in older adults of this community are chronic diseases. The most common major health problem in this elderly community is hypertension, followed by diabetes. The risk factors for these diseases—smoking obesity, hypertension, stress and sedentary lifestyles—are well known [12], [13]. In addition, the demand for long-term care for the elderly with disabilities or chronic illnesses is increasing at the same time that taking care of elderly people within the family is becoming more difficult due to the limit number of children in families as well as the changing pattern of adults working outside, and often far away from the family home. Therefore, the model of community services that integrate health care and social services is requiring for healthier communities.

#### B. Process Development

The purpose of the study described in this article was to try to identify the factors explaining utilization of health care by older people. This identification would provide information enabling us to develop a methodology that could be used in developing model which to create activity for the older population of Paisanee Ramintra 65 community (Fig. 3). In addition, understanding community older adults' perceptions toward health care research help shed light on whether community members support health improvement through CBPR.

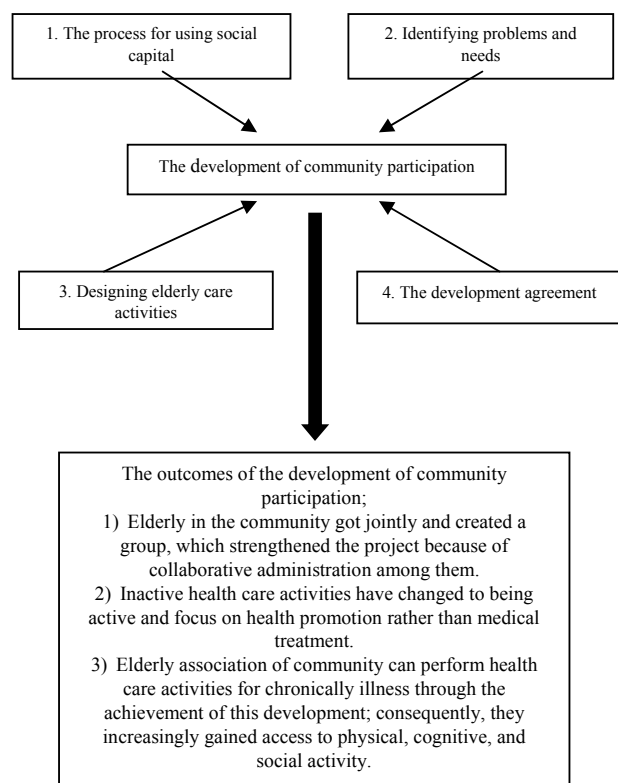


Fig. 3 The outcomes of the development of Paisanee Ramintra 65 community

This research showed that physical, cognitive, and social activity increased, suggesting the potential for the development of community participation of this study has improved health for an aging population of Paisanee Ramintra 65 community (Fig. 3). The findings on utilization and outcomes are in themselves interesting. The research found that after almost one year of elderly healthcare programming, most elderly participants gain more elderly healthcare knowledge and transfer to other elderly communities. In addition, the study found that community members have influence toward health care development. Therefore, both community and academic partners also reported that building new organizational relationships and ties has been an advantage of their involvement in the CBPR. Strengthening of ties between university and community organizations in Bangkok and actually bringing the university into the work of communities is one benefit mentioned by almost every board member. Outcomes from this CBPR projects demonstrate a number of benefits of this methodology for both academic researchers and community members. These benefits depend upon the strength of communication and cultural understanding among all partners. Although communication is not the only aspect crucial to successful CBPR, without it the benefits of CBPR will not be realized.

Overall, this study provided valuable information on the motives of potential CBPR participants as well as ways to use that information to modify informed consent and recruitment

materials. The author thinks that using CBPR methods to elicit the community voice and accordingly adjust study materials and communications yielded a meaningful consent and recruitment process that enabled us to recruit a high percentage of eligible population for healthier communities. As Thailand is now developing several innovative long-term care programs. It is critical to have effective home and community-based care to support the informal care system, assure that families and relatives can provide adequate care to older persons.

#### IV. CONCLUSION

Thailand has reached a demographic turning point with the advent of an ageing society. Improvements in the health care system and technology advancement over recent decades mean that Thai enjoy better health in old age than they used to do. Successful healthy aging planning and initiatives must be based on a thorough needs assessment. The author identified priority community health concerns based on assessment questionnaires, self-reported measures and focus groups meetings and interviews. However, there is an important role for CBPR in reducing disparity. Although questions remain about exactly how participation may affect interventions and health, the growing interest demands that the researcher become more aware about CBPR practice and need to maintain continual opportunities for self-reflection and for dialogue around this self-reflection with research partners. The application of this framework was useful because these assessment findings were suggestive of the interplay of Ramintra 65 community older adults' perception on health promotion and their behavior toward unmet health needs. The findings showed that older adults expressed their conceptions of healthcare in terms of physical, cognitive, and social activity, which influences their perceived needs of health care. The most commonly perceived problems were chronic health problems, high costs of health care services, lack of and limitations of health care activity. The research found that after almost one year of elderly healthcare training, most elderly participants increase more understanding of healthcare knowledge and explain it to other elderly communities. In addition, the study found that community members have, in general, influence toward health care development.

#### ACKNOWLEDGMENT

The author would like to thank students and volunteers who participated in research and grateful to the community advisory board members for their continued efforts in this project. This work was supported by Phranakhon Rajabhat University.

#### REFERENCES

- [1] B.A. Israel, A.J. Schulz, E.A. Parker, A.B. Becker, "Review of community-based research: assessing partnership approaches to improve public health", *Annu Rev Public Health*, 19, pp. 173–202, 1998.
- [2] N. Freudenberg, "Community-based health education for urban populations: an overview", *Health Educ Behav*. Vol. 25, no.1, pp. 11–23, 1998.

- [3] N. B. Wallerstein and B. Duran, "Using community-based participatory research to address health disparities," *Health Promotion Practice*, vol. 7, no. 3, pp. 312–323, 2006.
- [4] T.A. Bruce, S.U. McKane, eds. *Community-Based Public Health: a Partnership Model*. Washington, DC American Public Health Association, 2000.
- [5] J. Knodel, and N. Chayovan, "Population Ageing and the wellbeing of Older Persons in Thailand: Past Trends, current situation and future challenges. Bangkok" *UNFPA Thailand*, 2008.
- [6] P. Kamnuansilpa, S. Wongthanavas, J. Bryant, and A. Promno, "An assessment of the Thai government's health services for the aged", *Asia-Pacific Population Journal*, Vol. 15, no.1, 3–18, 2000.
- [7] Division of Vital Statistics, Public Health Statistics 2000. Bangkok: *Division of Health Statistics, Office of the Permanent Secretary, Ministry of Public Health*, 2001.
- [8] P. Kamnuansilpa, S. Wongthanavas, J. Bryant, and A. Promno, "An assessment of the Thai government's health services for the aged" *Asia-Pacific Population Journal*, Vol. 15, no. (1), pp. 3–18, 2000.
- [9] S. Jitapunkul, S. Bunnag, and S. Ebrahim, "Effectiveness and cost analysis of community-based rehabilitation service in Bangkok" *Journal of the Medical Association of Thailand*, Vol. 81, 572–578, 1998.
- [10] M. Minkler N. Wallerstein, *Community Based Participatory Research for Health*. San Francisco, CA: Jossey-Bass; 2003.
- [11] L.R. O'Fallon, A. Dearry, "Community-based participatory research as a tool to advance environmental health sciences", *Environ Health Perspect*. Vol. 110, pp. 155–159, 2002.
- [12] J. S. House, K. R. Landis, and D. Umberson. "Social relationships and health" *Science* Vol. 241, 540–45, 1998.
- [13] N. Wallerstein, "Power between evaluator and community: research relationships within New Mexico's healthier communities", *Soc Sci Med*. Vol. 49, pp. 39–53.



**Akua Kulprasutidilok** has a B.A. in Nursing from Saint Louis Nursing College and M.Sc. in Health Education from the University of Kasetsart. Her Ph.D. is in Educational Research, Measurement, and Statistics from the University of Burapha Currently, she is employed as an Asst. Prof. at department of health management technology, faculty of science and technology, Phranakorn Rajabhat University Bangkok, Thailand.