PERFORMANCES OF VILLAGE HEALTH VOLUNTEERS ON PEOPLE SECTOR HEALTH SYSTEM IN NAMPHONG DISTRICT KHONKAEN PROVINCE THAILAND

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PERFORMANCES OF VILLAGE HEALTH VOLUNTEERS ON PEOPLE SECTOR HEALTH SYSTEM IN NAMPHONG DISTRICT KHONKAEN PROVINCE, THAILAND

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ABSTRACT

This cross-sectional study aimed to access the performances of village health volunteers (VHVs) and to identify related factors (socio-demographic characteristics, knowledge, perception, availability and accessibility of health resources, and social support).

The study was conducted in 18 villages of 6 sub-districts in Namphong District, Khonkaen Province. 332 VHVs were systematically selected through multi-stage sampling technique. Self-administered questionnaires were utilized to collect quantitative data and guidelines for in-depth interviews, with observation in Community Primary Health Care Centers (CPHCC) also used to support this study. Number, percentage range, and Chi-square test were employed to analyze the data with support by content analysis of qualitative data.

The results revealed that 68.67% of VHVs had high level performances in the People Sector Health System (PSHS). Largely, they were 35-54 years old, female, married and worked in agriculture. They also had other social responsibilities in addition to VHV, had worked for 8 years and a family monthly income from 1,000 to 5,000 baht. The performances of VHVs and their social roles, knowledge, and perception on benefits of PSHS concept and policy, frequency of CPHCC openings, frequency of village radio broadcasts disseminating health information, readiness of materials in village radio broadcasting, places for working in the village, monthly meeting in TAO communion, new PHC budget management and social supports were significantly associated together at $p<0.05$.

To enhance VHVs' capabilities on PSHS, the Provincial Health Office should encourage health center personnel to continuously supervise, motivate and provide seminar workshops and village forums. Also, participatory management with a horizontal command structure must be employed.

KEY WORDS : VILLAGE HEALTH VOLUNTEERS / PERFORMANCES

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LIST OF ABBREVIATIONS

AIDS	:	Acquired Immune Deficiency Syndrome.
CPHCC	:	Community Primary Health Care Center.
HFA	:	Health For All.
IEC	:	Information Education Communication.
MOPH	:	Ministry Of Public Health.
NGO	:	Non Government Organization.
PHC	:	Primary Health Care.
PSHS	:	People Sector Health System.
TAO	:	Tambon Administrative Organization.
VHVs	:	Village Health Volunteers.
WHO	:	World Health Organization.

CHAPTER 1
INTRODUCTION

1.1 Rational and justification of the study

Since the Alma-Ata conference in 1978, the concept of "Health For All by the year 2000 "was accepted by all member countries of WHO. Primary Health Care (PHC) is one strategy using as the key approach to "Health For All "(HFA) especially in developing country. Thailand is one member of WHO and signed on its charter for health development, and has used PHC as the main strategy since 1980.

Through the PHC implementation from the 4th National Health Development Plan (NHDP) up to now (the 9th NHDP), VHVs are always important person involved on achievement of PHC as shown in the coverage of immunization, sanitation, and improvement on child nutritional status. VHVs have been strengthened their capacities and are covertly distributed everywhere of the country. For the following data, it is shown as the achievement of PHC according to VHVs commitment and participation on "HFA by the year 2000".

PHC achievements:

- VHVs covered the whole country including urban and rural areas at total number of 708,509 and 85 % of them play their role as a member of TAO.
- Drug funds were covered 48,030 villages.
- There were 96,873 Community Primary Health Care centers (CPHCC).
- There were 3,163,046 family health leaders equal to 80.42 % of household.

HFA achievement:

- 66,118 villages were received HFA = 97.82 % of total villages.
- 1,821 communities were received HFA = 93.87 % of total communities.
- 6,847 tambons were received HFA = 95.14 % of total tambons.

- 783 districts were received HFA = 90.00 % of total districts.
- 100 % of provinces were received HFA.

However, in the qualitative evaluation, it is found that, participation of communities and VHVs on PHC was moderate level. Mostly, VHV clubs and community organizations have good participation in practice under directing from health officers. But, to launch every activity by themselves, they still have not efficiency and effectiveness. It is probably caused from their habituation under Thai bureaucratic system.

At present, under the situation of rapid socio-economic and environmental change, the reformation of bureaucratic system according to politic decentralization; health civil society; globalization, and the dominant diseases concept changing from communicable diseases to non-communicable diseases, these changes effect on the way of health development significantly. Therefore, the 9th National Health Development Plan (2002 – 2006) was conducted a new strategy that promote and support people and community to become an owner of health development activities; to understand their health problems; to participate in determining the way to solve the problems; and to evaluate the achievement by themselves. Also, this plan has been adopted with the goal of "building healthy conditions for all Thai citizens" in a holistic manner with partnership of all sectors. The important point of this plan was emphasized on self-reliance of community, development of knowledge and potentials of people including to the adjustment of the budget system to supported VHVs' implementation by using health staff to them manage the budget by themselves. This is a new dimension of Thai health development so called: "People Sector Health System" (PSHS) and it was implemented since 2002.

Since the PSHS is the health management process that is manage by people and community organizations as already mentioned, those VHVs who are a part of this system must be change their role as well. In PSHS, their roles are determined in term of 1. Co-operation and building network, 2. Planning and acting community health activities, and 3. Leader roles in health and social issues (1, 2, 3, 4).

From literature reviews, it was found that there had not any research studied about the VHVs' performances on the new PHC system so called People Sector Health System. It therefore leads to one important question about "Do VHVs perform their activities or works according to their new assigned roles whether or not?" Therefore, this research intends to study about VHVs' performances on PSHS and to find out the factors related to their performances.

1.2 Research questions

1.2.1 How do VHVs perform their jobs on PSHS?

1.2.2 What are the factors related to their performances?

1.3 Research objectives

1.3.1 General objective

To describe the performances of VHVs on PSHS.

1.3.2 Specific objective

1. To identify the performances of VHVs on PSHS.

2. To identify the selected factors of VHVs namely predisposing factors (age, gender, marital status occupation, social roles, duration working as VHVs and family income, knowledge about PSHS concept and policy and perception towards PSHS), enabling factors (availability and accessibility of health resources), and reinforcing factors (mental support, material support, and information support from family members; neighbors/relatives; VHV club, member of Tambon Administrative Organization council; civic group; health personnel; and religious priests).

3. To determine the relationship between the predisposing factors, reinforcing factors and the performances of VHVs on PSHS.

1.4 Conceptual framework

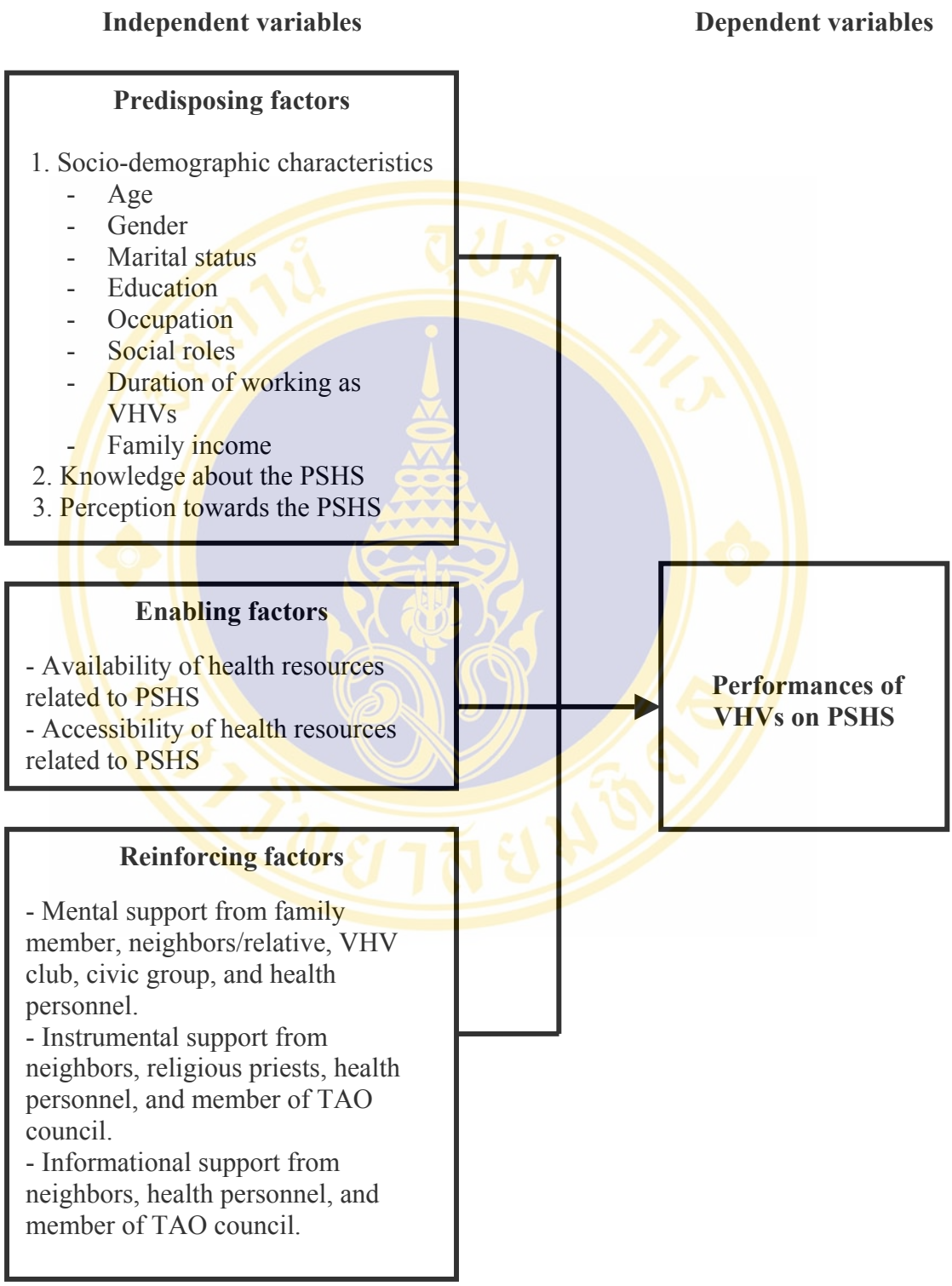

Figure 1 Conceptual framework of the association between independent and dependent variables

1.5 Operational definitions

1.5.1 Performances of VHVs on PSHS

Performances of VHVs on PSHS refer to VHVs' performances according to their new roles under PSHS and based on Healthy Thailand policy as:

1. Disseminate or health educate people who are living in community on the way of how to solve local endemic disease or health problems.
2. Train family health leaders about: dengue hemorrhagic fever; AIDS; mental health; tobacco problem solving; and health promotion.
3. Set up and provide basic health services in Community Primary Health Care Center.
4. Collaborate with community leaders, community organization or family health leaders to make village health plan.
5. Collaborate with community leaders, civic groups, and family health leaders to solve important health problem such as dengue hemorrhagic fever; AIDS; mental health; tobacco problem solving.
6. Collaborate with community leaders, civic groups, and family health leaders to set up important health promotion activities such as exercise, good diet, good emotion, diseases reduction and environmental health.
7. Disseminate and make public relation about national health insurance (30 Baht project).
8. Participate or joint in other social development in village such as member of TAO council; drug prohibiting group; housewife group; elderly group and others.

1.5.2 People Sector Health System

People Sector Health System refers to comprehensive village health service system that will integrate health promotion, health prevention, simple treatment and rehabilitation activities under the management of community organizations and health care networks by using VHVs as the main facilitator and health disseminator. This is included to using of Community Primary Health Care Center as a center of health

service system. The health service system has to have the referral system and linkage to the government system effectively.

1.5.3 Predisposing factors

Age refer to the age of VHV in years and is categorized in groups

Marital status is the marriage situation of VHVs and is categorized as single; married; divorced; widowed; separate status.

Education refers to the level of VHV's formal education and is categorized as primary school, secondary school and other.

Occupation refers to the main job or work that VHV spend time for earning income such as farmer; retail trader; civic servant; employee; and other.

Social roles refers to VHV involvement in group activities or being member of social groups in the community as cooperative group, voluntary scout, occupational group, self-funeral help group, elderly group, scout, school committee, religion committee, Tambon Administrative Organization.

Duration of working as VHV refers to the time in years which VHV take his or her responsibilities after the first registration.

Family income refers to total income per month of the VHV's family.

Knowledge about PSHS refer to the understanding of VHV in term of concept, strategy of PSHS, his or her roles on PSHS, and Healthy Thailand policy.

Perception towards PSHS refers to the perception of VHVs about concept; strategy and policy on PSHS and Healthy Thailand, their roles under these, barrier on the work activities and its benefits for them and for the village.

1.5.4 Enabling factors

Availability of health resources refers to enough and readiness of health resources to serve new VHV's function in Community Primary Health Care Center or to serve people or community demand. This study, health resources are consisted of the working places, equipments and materials, and budget. It is defined as follows:

- **Places** refers to Community Primary Health Care Center that used to provide basic health services, village radio broad casting that provided to disseminate or health educate for people in the village, and places for meeting; training; and for running activities.

- **Equipments and materials** refer to:

(1). Equipments that use for basic health service in Community Primary Health Care Center as: sphygmomanometer, stethoscope, weighing machine, and diabetic test paper, and Eye-chart.

(2). Materials in Community Primary Health Care Center as: table, patient bed, chair and bookcase.

(3). Materials for health education as: VDO; tape cassettes, text books; posters; pamphlets; documents, radio and amplifier.

- **Budget** refers to the PHC budget supported by government via Tambon Administrative Organization about 7,500 Baht/village.

Accessibility to health resources refers to VHV's perceptions about how difficult or easily to get, to participate in community health planning, and to apply health resources in their performing on PSHS as:

- Using places and materials for meeting; training; dissemination or health education in addition to include the village radio broad casting; and for running the activities.

- Seeking for the knowledge such as: training experience consist of monthly meeting; refresher training; and study tour. And seeking for health information from

information sources such as village information center; community primary health care center; radio; television; and other.

- Budget requirement.
- Implementation of PSHS activities in the village.

1.5.5 Reinforcing factors

- **Mental support** is defined as VHV's perception about the acquaintance, affection, closeness, reliability, trust, respect and praise, care, and the support as a member of society that VHV is received or gotten from their family members; neighbors, relatives, VHV clubs, civic groups, and health personnel.

- **Material support** refers to VHV's perception about helping as money, materials, or assistance that VHVs are received or gotten from their neighbors, relatives, member of Tampon Administrative Organization council, health personnel, and religious priests.

- **Informational support** refers to the perception of VHVs about the giving information and suggestions on PSHS implementation that VHVs received or gotten from their neighbors, member of Tambon Administrative Organization council, and health personnel.

1.6 Limitation of the study

This study was restricted to Namphong district, Khonkaen Province only. Hence, it might create some differences with geographical and socio-economic conditions from other province.

CHAPTER 2
LITERATURE REVIEW

This research focus on job performances of VHVs on PSHS, the discussion in this chapter is divided into 4 parts as the following:

2.1. People Sector Health System.

2.2. Theory reviews.

2.3. Previous researches related to this study.

2.1 People Sector Health System

2.1.1 Meaning of PSHS

PSHS is self-health management process which is implemented by people and community for their healthy living or well-being through various social movements under supporting and promoting from state and local government organization.

Since PSHS take care of physical and mental health of individual; family members; community members; and social. Therefore, PSHS is the holistic health care approach that lead to well-being of environments; foods; drugs; economic; social; education; and culture of community.

2.1.2 The target of PSHS

People and community can have self-health reliance under multi-sectoral collaboration among alliances. This will lead to healthy people and community under their self-managed system.

2.1.3 The aim of PSHS

Main point of PSHS is movement of health development by individual, family, and community according to their needs. External organization just only support, motivate, and build participatory conditions among alliances. This is the development

for community strengthening and self-reliance. In addition, PSHS is the health system linked to state health system and makes the whole health system to have its effectiveness and to be able to cover, access, people needs and social equity.

2.1.4 Concept of PSHS

Strategy of PSHS for community health promotion under people management by using people as center of development has 3 main components such as people, knowledge and capital.

People: is an important component, because, every development have to have people which living together; thinking together; and doing together, even they are different characteristics such as occupation; social status; ideas; gender; qualification; and seniority. But, they have the same expectation which is healthy and sustainable development.

Knowledge: in community acting, it needs to have knowledge; method; technology and experience. These components will be the process of exchangeable learning; communication; and informative distribution in community.

Capital: this capital is included to budget; social capital and natural resources. Budget means to community health finance that every community can look for the resources to make profits and use it for continuous development. Social resources are consisted of human resources, knowledge; social; culture; and tradition in community.

To make these 3 components have balance and favor together needs to have mechanism of management linked these together. People should be implementations and center of development, while knowledge act as a raw material to make health development stable and continuously. This will respond to people needs as well as prevention and management solving problems as shown in below diagram:

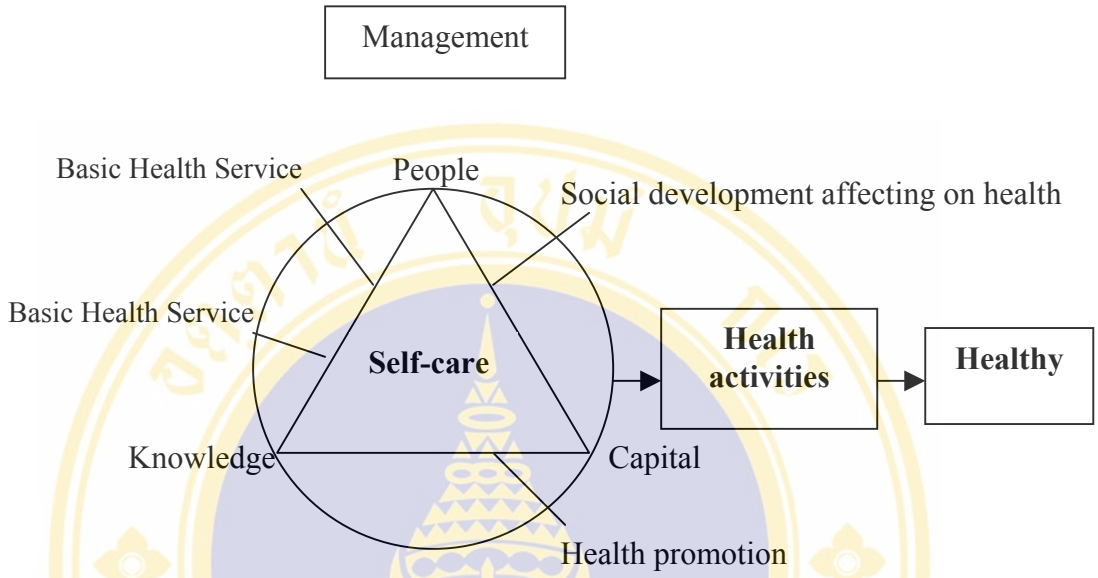

Figure 2 The concept of PSHS

2.1.5 Strategy of PSHS

To achieve aims of PSHS, Ministry Of Public Health will conduct 5 strategies as follow:

Strategy 1: Promote community strengthening

This strategy aims to support community able to manage health system themselves through supporting on PHC budget accounted to 7,500 Baht/village. This budget is used to implement health activities according to village health plans that are conducted participatory working of villagers and village health team.

Strategy 2: Promote roles of local administrative organization

This strategy is emphasized on budget support (add up from 7,500 Baht/village) including to set up the roles for healthy as well as health planning and Tambon health working.

Strategy 3: Promote coalition and inter sectoral support

This strategy mentioned about perception of various sectors including government and private organization in order to participate in term of supporting and implementation of PSHS.

Strategy 4: seeking for Public policy support

This strategy is emphasized on public policy support in term of public policy declaration and its reinforcement, mobilizing resources, and advocacy roles to implement PSHS conveniently through cooperation between national politicians and administrators.

Strategy 5: Develop the process of knowledge and informative management.

This strategy is mentioned to informative collections that is the basic data for PSHS management and planning.

2.1.6 Encouragement and duties of health members

Role of government sector and local administrative organization:

1. Determine health development policy to be public policy.

2. Develop mechanism of management in communities in order to they can manage their health system, and able to use their existent funds from environments, technology and budget for health development within efficiency way.

3. Promote activities for health development which is implemented by communities in order to complete these following activities:

- Health service activities including to:
  - Health promotion.
  - Diseases control and prevention.
  - Health consumer protection.
  - Arrangement on basic health service system.
- Manpower development for all sectors to create leader of change agent.
- Set up health information and knowledge management for using in term of:
  - Arrangement on quality control system.
  - Arrangement on budgeting system.

- Organizing for management.

Role of village health volunteer and village health volunteer clubs:

1. Co-ordination and building up health network.
2. Planning and arrangement of health activities in community as
   - Health promotion/First aid.
   - Health problems solving.
3. Leader roles on health and social issues.
4. Campaign communities and socials to have active responsibilities in 3 following level as
   - Oneself.
   - Community.
   - Socio-environments.
5. Promote and support for sustainable developments.

Role of people sector:

1. Self-Health care at community level:
   - Set up community health service center
   - Exchangeable knowledge.
   - Health information center.
   - Consultation sources.
   - Set up system of health consumer right protection in community.
   - Health management cover 4 dimensions (Basic health service, Diseases prevention, health promotion and social development related to health.
2. Self-potential development
   - Create public consciousness or civic mind.
   - Promote exchangeable leaning system for health development.
   - Support health activities in community.
   - Collaborate in management on other activities.
   - Focus on self-reliance until to build up community health budget.
   - Arrangement on knowledge management.

- Enhancement on skill of self- health care through village forum or communion forum.

3. Management on people sector.

4. Mobilizing funds for health promotion.

5. Arrangement on customer right protective system.

2.1.7 Accomplishment of development

Outcomes/Achievements:

1. Health information system will be set up such as family health folder history; communication process; data provision and public relation cover to social groups or health networks.

2. Mechanism and process for facilitating factors to support an appropriate PSHS implementation.

3. Mobilization and management on fund in appropriate way.

4. Having promotion and development process to enable service and development activities tailored to local knowledge.

5. Having responsible organization with systematic management.

Impacts of development:

1. People have healthy life and get health service with equity when they get sickness.

2. People and community have strength and self-reliance.

3. Health system implemented by people; managed by themselves; and it must be the system that integrates and reinforces government health system to have more effectiveness.

2.1.8 Healthy Thailand

Thai people should have good health and quality of life or well being under safety environments and none of any diseases with creates their health problems. They also should have good and continuous self care behaviors. These are the main and future targets of Ministry of Public Health (MOPH) for the next following 10

years. By these way, its look like the concept of Health For All by the years 2000 which is based on Basic Minimum Needs. However, it is believe that for such the future years, all Thai people would have better quality of more than being and it is the one main reason for MOPH to endorse or encourage the concept of Healthy Thailand as shown in the table.(6)

Table 1 Indicators of Healthy Thailand.

Target	**Indicators of Healthy Villages/ Tambon Achievement > 80%**	**Indicators of Healthy District/ Province achievements > 80%**	**Road map to Healthy Thailand**
Exercise	1. Population aged > 6 years has appropriate exercises according to their ages		**Healthy villages 2004**
Diet	2. Food shop/restaurants free from contaminated substances (6 types) > 90% 3. All markets which register to be a healthy market must pass the 1st standard level.	1. Food shops get a standard level of " clean food good test " > 30% 2. At least one healthy market 3.≥ 50% of food factories pass Good Manufacturing Practice	75% 0f all village ↓ **Healthy sub-district**
Emotion	4. Youth generation joist with the project "To be No. 1" > 50% 5. > 50% of elderly groups joist activities in their elderly clubs every months.		50% of all sub-district ↓ **Healthy District**

Table 1 Indicators of Healthy Thailand (cont.)

Target	Indicators of Healthy Villages/ Tambon Achievement > 80%	Indicators of Healthy District/ Province achievements > 80%	Road map to Healthy Thailand
Disease reduction	6.Dengue fever < 50 cases/100,000 populations 7. > 70% of population aged > 40 years must have urine examination and blood pressure measurement 1 time/year 8. > 40% of women aged > 35 years must have their breast testing for cancer diagnosis every months	4. Healthy child centers ≥ 50% 5. Health Promoting School > 30% 6.There has at least one Health Promoting Hospital in each district area or at provincial level, it should has ≥ 50%	**Healthy District** ↓ **Healthy Provincial** ↓ **Healthy Thailand 2015**
Environment	9.All child centers must register to be a Health Child Center, at district level, it should has at least one healthy center 10.All schools register to be Health Promoting School		

2.1.9 Village Health Volunteers

Thailand has had enough experiences about VHVs. They start as village volunteer in malaria control, continued to village health communicators and finally in 1978, Ministry of Public Health established VHVs cover on the whole country (7).

According to the concept of community participation, VHVs are selected from their community. They are villagers who interest in health care activities and have willingness to help their neighbors. Some of them are traditional healers and all of them are received basic training in primary health care services. They do not receive salary. However, the government give them some incentive benefits such as rewarding them with certificates of recognition, premium for meeting/training and providing them with free medical service (8).

Criteria for selection of VHVs: it is consisted of

1. / VHVs must have shown regular willingness in helping others and has enough free time for the public service.

2. / VHVs must live and work in the village.

3. / VHVs must be trusted by the villagers.

4. / VHVs must have their own occupation and able to take care of their own living.

5. / VHVs must live in their house easy to access by villagers.

6. / VHVs are not government officer and village header.

Roles and function of VHVs

1./ Provide health information to villagers and his/her responsible areas.

2./ Collect data from villagers regarding to health and health related matters.

3./ Disseminate knowledge, advise and stimulate his/her neighbors to utilize government, basic health care services.

4./ Co-ordinate public health and other activities in the village (9).

2.2 Theory reviews

2.2.1 The PRECEDE/PROCEED model

The Precede-proceed model is a framework for the process of systematic development and evaluation of health education programs designed by Lawrence Green and Marshall Kreuter (1998).

Precede-proceed have nine phases. The first five of which are diagnostic:

Phase 1 - Social Diagnosis.

Phase 2 - Epidemiological Diagnosis.

Phase 3 - Behavioral & Environmental Diagnosis.

Phase 4 - Education & Organizational Diagnosis.

Phase 5 - Administrative & Policy Diagnosis

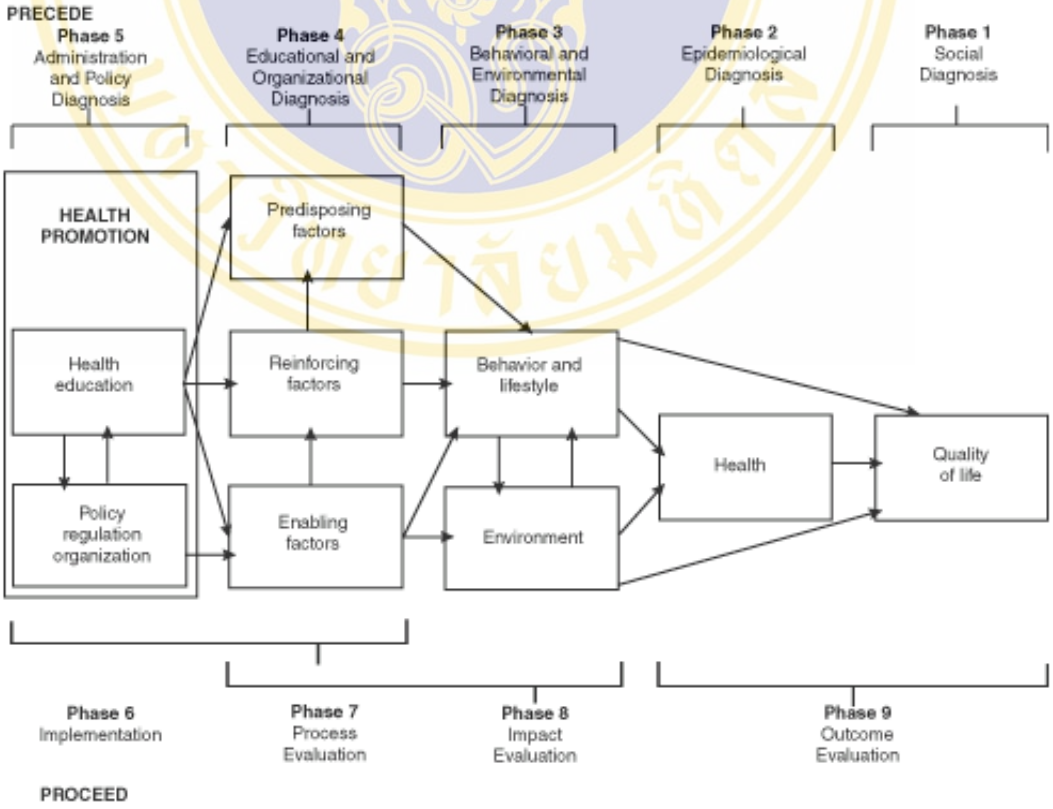

Figure 3 PRECEDE-PROCEED Model.

The four remain phases in Precede-proceed are implementation and evaluation (process, impact, and outcome), with emphasize on using the later to improve the former. Evaluation of the process begins as soon as implementation does, in order to detect problems early so they can be corrected. As implementation proceeds, the planer starts evaluating in the order in which program effects are expected.

Theory is most likely to be informative during phase 4 of the planning process suggested by Precede-proceed, or the educational and organizational diagnosis. This phase examines those behavioral and environmental conditions linked to health status or quality of life concerns to determine what course them. The educational and organizational diagnosis identifies factors that must be changed to initiate and sustain the process of behavioral and environmental change. These factors will become the immediate targets or objective of the program.

According to the PRECEDE Framework, three categories: predisposing, reinforcing and enabling factor effect individual or collective behavior.

Predisposing factors are factor antecedent to behavior that provide the rational or motivation for the behavior. Include a person's or populations' knowledge, attitudes, beliefs, values and perceptions that facilitate or hinder motivation for change.

Enabling factors are factor antecedent to behavior that allows a motivation or aspiration to be realized. Include personal skills; resources or barriers that can help or hinder the desired behavioral changes as well as environmental changes. These skills can be viewed as vehicles or barriers, created mainly by societal or systems. Those antecedents to behavior that enables a motivation to be realized including the availability, accessibility, and affordability of health care and community resources which facilitate the performances of an action. Facilities and personal or community resources may be ample or inadequate, as May income or health insurance, and laws and statues may be supportive or restrictive.

Reinforcing factors are factors subsequent to behavior that provide the continuing reward, incentive, or punishment for a behavior and contribute to its persistence or extinction. Include Social support, praise, reassurance, and symptom relief might all be reinforcing factors. (10, 11)

2.2.2 Social support theory

Social support is a theory that has been study for more than 30 years (since the mid 1970s). The theory was preciously used in concrete terms, referring to an interaction or personal relationship. However, in the past 15 years, the terms has become more and more abstract encompassing anticipation, including abstract characteristic of a person, behavior, relationship, or social system.(12)

Type of provided social support (13)

Emotion support: Emotion support includes acquaintance, affection, closeness, reliability, trust, respect and praise, care, and the support as a member of society.

Information and cognitive support: This is the giving of information or suggestion, which would help a person to understand how thing happen, help in problem solving, in adaptation and the giving of reversed information on behaviors or people's conduct.

Tangible support: This is the help by giving money, materials, or assistance, which would help a person in problem solving.

Positive outcome of social support:

1. A person has acknowledges, affection, relationship and care.
2. A person has acknowledges, acceptance by others, and the value of being a member of society.
3. A person has motivation and readiness to change the behavior, and to adapt him to existing change.
4. A person has better self-recognition and recognition of the environment.

5. A person is able to change method of problem solving, problem confrontation and stress management.

6. A person is able to sustain good behavior and good health status.

2.3 Finding from previous research

Age:

The study of Tiewsuwan B. (14) was shown that there was a significant association between performances of VHVs and their age group and those in the higher age group had higher performances than the younger. And also the study of Francis Wade Z. Gomez (15) study in 1991 was found that VHVs aged group 45 – 70 were more active than those who were under 30 years old, while Hongvivatana T. (16) was found that VHVs aged 40 – 50 were more active. The result of Nguyen Thu Huong (17) in 2001 shown that there was association between VHVs' performances and age group which those of age less than 30 years old were reported the poor performances. It was observed that 57.4 % of the age group over 30 years old has the highest proportion of good performances compared with the young age group under 30.

However, there were other studies, which had contrast result such as the study of Sulaiman Ratman in 1991(18) and the study of Khin Myyitzu Han(19) who did not find any significant association between age and the performances of VHVs and their age.

Gender:

Havaree V. and Chaoniyom V. (20) studied in Singburi Province and found that gender of VHVs was not significantly related with VHVs' practice. However, the study of Yindeechan P. (21) was differently showed that it had significant relation between VHVs gender and his or her practice.

The study of Phonthongsy K. (22) was found that both sexes of VHVs had poor performances.

Education:

The study of Surendra Kumar Shestha (23) was shown that there was significant association between educational level and job satisfaction. It was recommended that educational background should be considered in selecting VHVs. Also, there were significantly associated between education and performances of VHVs in the study of Khin Myyitzu Han(19). But, the study of Tiewsuwan B.(14) was found that there were not significantly associated between education and performances of VHVs.

Lengrugsa V.(24) and Chan-amrung S.(25) reported that difference of education had effect on participation on PHC of VHVs and they concluded that people who were received high education has more participation than those who were obtained lower education.

Occupation:

The study of Ratioran S. (26) was found that their occupation had no effect on participation of VHVs.

As for the study of Phonthongsy K. (22) was found that VHVs who were orchard farmer and merchants had good performances.

The relationship between occupation and performances of VHVs was showed in the study of Publio (27). It was indicated that farmers are more associated with low performances compared to traders/laborers that trended to be in the high performances group.

However, the study of Davies et al. (28) was found that occupation did not consistently make significant independent contribution to the performances of VHVs.

Marital status:

Tiewsuwan B. (14) reported that there had not significant association between marital status of VHVs and their performances. But, the study of Ratioran S. (26) was found that marital status had effect on the participation of VHVs.

The study of Haryandi (29) was revealed that married people had more stable than unmarried and are better able to perform the tasks and responsibilities as VHVs.

Social roles:

The study of Kataratan (30) was shown that multiple positions in the village of VHVs were significantly associated with their performances. However, this result was in contrast with the study of Khin Myitzu Han (19), which was indicated that other responsibilities (multiple positions/roles) were not able to make any significant difference between VHVs performances and other responsibilities.

Duration of working as VHVs:

The study of Ratioran S. (26) was found that many of VHVs (66 %) served as VHV for about 0.5 – 6 years and many of them spent 0.5 – 3 hours per day for VHV working in their community. It was shown that both factors of the VHVs had effect on their performances.

The finding of Jinpeng X.'s study (31) and Kumar S.(23) was indicated that there was significant difference between the period of volunteer and the level of performances and expected those who had longer duration trended to more capable in doing VHV work. Contrary, the study of Soongkhang I. (32) and Admodjo BSK. (33) studies were indicated that there had not significant association between duration of working as VHVs and their performances.

Family income:

The study of Tiewsuwan B. (14) was found that VHVs who had sufficient income with saving trended to have a higher proportion of satisfactory performances than those who had insufficient income. However, the family income status was not

significantly associated with their performances. And Phouthongsy K (22) mentioned that VHVs who had more monthly income they had good performances.

Knowledge of VHVs:

From the result of Tanapiwatanakul N. (34) was revealed that knowledge of VHVs was not associated with their performances. While the study of Kumnerdmarn K (35), Rahman M. (36) and Soongkhang I. (32) was differently indicated that knowledge of VHVs had significant association with their performances.

The study of Nguyen Thu Huong (17) found a positive correlation between knowledge and performances of VHVs. It showed that VHVs with good knowledge have a tendency to result in good performances. This finding correspond to the study of Rahman M (36) and Mickhanorn J. (37)

Attitude of VHVs:

Admodjo BSK.'s study (33) found that VHVs who had a positive attitude would practice well and attitude had also a relationship with effectiveness of their performances.

Look like the study of Tiewsuwan B. (14), it was shown that the attitude of VHVs was significantly associated with their performances. The proportion of satisfactory performances was higher among VHVs who had a positive attitude compare to those with negative attitude.

Training experience:

The study of Tiewsuwan B. (14) was shown that the training experience in term of monthly meeting was significantly associated with VHVs performances. The proportion of satisfactory performances was higher among VHVs who had high monthly meeting compare to those with moderate and low monthly meeting. But, refresher training and study tour were not significantly associated with their performances.

Also, the study of Uthonthavikan Na Ayutthaya S. (38), Havaree V. and Chaoniyom (20), and Kumnerdkarn K. (35) were shown that continuing knowledge from health officers had an effect to VHVs' practice at a satisfactory level.

Social support:

The results of Ratioran S. (26) were found that most of the sources of emotional support, instrument support, and information support were from health officers (86 – 90%). The respondents indicated that health officers were the first priority of the support. It was shown that only emotional support from health officers had the effects on participation of VHVs.

The study of Nguyen Thu Huong (17) was shown that sources and types of motivation support for VHVs were regarded as support from family, local leader, and health officers. For the family support, the number of VHVs with good performances was found to be higher among those VHVs who were received more support from family. In term of local leader support, this study indicated that there was a light association between the performances of VHVs and the number of support from the local leaders. Those VHVs who were received more support from local leaders were more likely to have good performances than those who were received fewer. And lastly, for the support from health officers, the study result was indicated to a trend of association between type of support from health officers and performances. Briefly, those VHVs who were received more frequency of supervisions and were more provided with IEC materials were more likely to perform better.

In conclusion, social support is a basic human need. It will consider being personal-environmental interactions that decrease the occurrence of stress. It is the reciprocal process and interactive resources that provide comfort, assistance, encouragement, and information. The amount and sources of social support are needed to across the life span and across in a given situation. (39)

From reviewing 2 theory and previous related researches, the researcher will select some factors and variables from them to formulate conceptual framework of this study as shown in figure 1.

CHAPTER 3
RESEARCH METHODOLOGY

3.1 Study design

This was a cross sectional study design that assessed the performances of VHVs and identified factors associated with their performances on PSHS in Namphong District Khonkaen Province. It was mainly employed with quantitative and auxiliary supported by qualitative research technique.

3.2 Study population

The target population in this study is VHVs who have been working in Namphong District Khonkaen Province. The population of VHVs came from 6 sub-district of Namphong District Khonkaen Province.

3.3 Study areas

Namphong District, Khonkaen Province is located in North-Eastern of Thailand, it has 12 sub-districts, 150 villages with 113,862 population and 2,494 VHVs.

3.4 Sample size

3.4.1 Quantitative data

According to previous study of Tiewsuwan B. (2002), the proportion of satisfy performances of VHVs were about 52.2 % (14). So, the sample size of this study was calculated based on the statistical formula of the cross-sectional study of one sample (40) as follow:

$$n = \frac{NZ_{\alpha/2}^2 P(1-P)}{(N-1)d^2 + Z_{\alpha/2}^2(1-P)}$$

n: minimum simple size

N: Total number of VHVs in Namphong District Khonkaen Province = 2,494 VHVs (41)

z: Critical value for 95 % confidence level = 1.96

p: The proportion of satisfactory performances of VHVs from previous study = 0.512 (14).

1-p = 0.488

d: absolute precision in this study set at 0.05

$$n = \frac{(2{,}494)(1.96)^2(0.512)(0.488)}{(2{,}493)(0.05)^2 + (1.96)^2(0.512)(0.488)} = 332$$

3.4.2 Qualitative data

8 VHVs were selected from 6 villages of 6 sub-districts.

3.5 Sampling technique

3.5.1 Quantitative data

Namphong District is the purposively selected for this study. 6 out of 12 sub-districts are selected by cluster sampling and simple random sampling technique according to their geographical areas and they are the representative of 3 groups from 3 parts of districts: 2 from group of North, 2 from group of Center and last 2 from group of South. Then 18 out of 77 villages in 6 sub-districts are selected by simple random sampling technique and the systematic random sapling technique is used to select the total number of 332 VHVs as show in table 2 and figure 4.

Table 2 Distribution of VHVs in Namphong District Khonkaen Province.

Sub-District	No. of Village	No. of VHVs	No. of sample	
			Quantitative	Qualitative
Bankham	16	186	40	1
Bua-ngeon	15	216	47	1
Phangtui	12	481	105	2
Wangsai	11	191	42	1
Namphong	10	271	56	2
Sa-at	13	190	42	1
Total	77	1,535	332	8

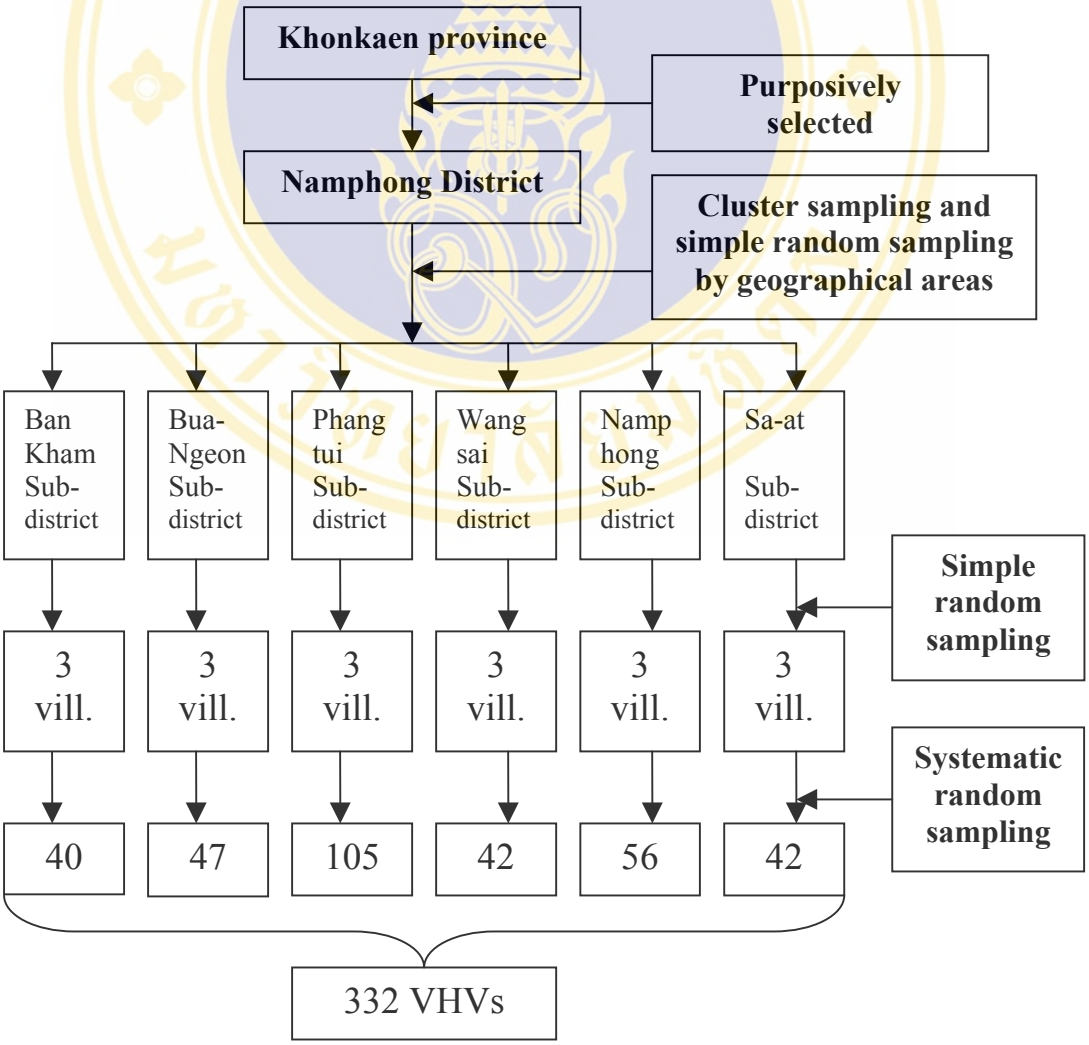

Figure 4 Diagrammatic of sampling technique.

3.5.2 Qualitative data

8 VHVs were possibly selected to in-depth interview. During the processing of quantitative data collection. This group was included under criteria as:

1. They could provided necessary and more detail of information to support quantitative study so called a key informant person.

2. They had willingness and were enthusiasm and enough time to give the data under in-depth interview processing.

3.6 Research instrument

3.6.1 Quantitative data

By using the self administered questionnaire as the instrument for this research. The contents of the questionnaire consisted of 8 parts as follows:

Part 1: Socio-demographic characteristics.

Part 2: Knowledge about PSHS concept and policy.

Part 3: Perception towards PSHS concept and policy.

Part 4: availability of health resources to support VHVs' performances.

Part 5: accessibility to health resources to support VHVs' performances.

Part 6: social support.

Part 7: Performances of VHVs on PSHS.

Part 1: Socio-demographic characteristics.

The socio-demographic characteristics consisted of: age; gender, marital status; education; occupation; social roles; working duration of VHVs and family income. There are 8 questions as Q1 to Q8.

Part 2: Knowledge on PSHS

There are 10 questions, from question number 9 to 18, regarding to the concept and policy of PSHS and VHVs' performances roles. Each respondent must select only one answer that they think it should be correct between "yes" and "no".

- There are 4 questions for the knowledge about concept and policy of PSHS as Q9, Q10, Q11, and Q12.
- There are 6 questions for the knowledge about VHVs' performances roles as Q13, Q14, Q15, Q16, Q17, and Q18.

To measure knowledge, each right answer was given "1" score and wrong answer was given "0" score. After summing up the total knowledge scores of respondents on the basis of percentage, the knowledge level of Vivo was classify into 3 groups according to Bloom's level(42) as follow:

- High knowledge > 8 or 80% of total score
- Moderate knowledge = 6 – 8 or 60 - 80% of total score
- Poor knowledge < 6 or 60 % of total score

Part 3: Perception of VHVs towards PSHS

The respondents were asked about their perception towards PSHS by using a 3-response scale of choice for questionnaire construction. A 3-point response format consists: agree; not sure; and disagree. The criteria for setting score of each questioning positive statement were 3 to 1 respectively and reverse in negative statement. This design balances any possible response set. The total scores of perception classify into3 levels according to Yate level as follow:

- High perception = 38-48 scores
- Moderate perception = 27-37 scores
- Low perception = 16-26 scores

There are 16 questions (from Q19-Q24) in this part and divided into 4 groups:

Group1: Perception on benefits of PSHS concept and policy, it is consisted of 4 questions (Q19-Q22).

Group 2: Perception on barrier of PSHS concept and policy, it is consisted of 4 questions (Q23-26).

Group 3: Perception on benefits of practice under PSHS, it is consisted of 4 questions (Q27-Q30).

Group 4: Perception on barrier of practice under PSHS, it is consisted of 4 questions (Q31-Q34).

Part 4: Availability of health resources

Availability of health resources included the places, equipments and materials, and budgets. These part respondents were asked question about sufficiency and readiness of these resources. There are 9 questions, from Q35 to Q43.

Part 5: Accessibility to health resources

Accessibility to health resources, which included the using places and materials, seeking the knowledge and information, budget requirement. This part, respondents were asked the question about how difficult and easily to get, to use these resources. There are 9 questions, from Q44 to Q52.

Part 6: Social support

There are 3 types of social support such as mental support, instruments support, and information support. This part, respondents were asked the question about support from: their family, VHV clubs, Tambon Administrative Organization, health staffs, neighbors, religious priests, and other civic groups. The question were designed by yes and no questions, where the right answer was given "1" score and wrong answer was given "0" score. After summing up the total scores of respondents on the basis of percentage, the social support level of VHVs was classify into 3 groups as follow:

- High social support > 80% of total scores
- Moderate social support = 60 - 80% of total scores
- Low social support < 60% of total scores

There are 14 questions (from question number 53 to number 66) and it is consisted of 3 groups of supports as:

Group 1: Mental supports, there are 5 questions: Q53 to Q57.

Group 2: Material supports, there are 6 questions: Q58 to Q63.

Group 3: Informational supports, there are 3 questions: Q64 to Q66.

Part 7: Performances of VHVs on PSHS.

There are 17 questions in this part (from question number 67 to number 83). The respondents were asked about PSHS activities in the village. There was a 4-point response format used through choices of the respondents: always, sometimes, few, and never. The criteria for setting score of each question were 3 to 0 respectively. Total score were categorized into2 levels by using median as follow:

- High performances ≥ 42
- Low performances < 42

3.6.2 Qualitative data

By using guideline of in-depth interview, 8 VHVs as key informant persons were purposely selected to interview according to main issues as:

- General information of VHVs.
- Knowledge about PSHS.
- Perception towards PSHS concept and policy.
- Social support.
- Their performancess.

The researcher would directly observe the performances of VHVs' and function of 5 Community Primary Health Care Centers in 3-4 the studied villages and after that the data from these was analyzed and noted in the notebook. The functions of CPHCCs were observed and evaluated on its availability and accessibility of instruments, equipment and locations. It was also included to the performances of VHVs under these conditions of CPHCCs.

3.7 Pre-test of questionnaire

3.7.1 Quantitative questionnaire

Prior to data collection, a pre-test with 30 VHVs was carried out in Nonkoong sub-district, Namphong district, Khonkaen province. Thereafter, the reliabilities and

validity of questionnaire among knowledge and perception towards PSHS concept and policy part test were done.

When the questionnaires were pre-tested by using Cronbach's Alpha method for perception part and Kuder Richardson 20 (KR-20) for knowledge part. After testing, it was found that, KR-20 value = 0.49 for the knowledge part and Cronbach's alpha = 0.67 for perception part. After that, some questions of knowledge part were edited.

3.7.2 Qualitative questionnaires

Before processing to the data collection, the researcher submitted the qualitative instruments to thesis advisors in order to check up its content validity. The instruments were adapted according to their recommendations.

3.8 Data collection

Data collection of this study was conducted by using a self-administered questionnaire, in-depth interview, and direct observation. There were 4 basic steps as follow:

1. Contacted Khonkaen provincial PHC center, Namphong District Health Office to ask their permission and co-operation for data collecting.

2. Contacted Chief of Namphong District VHVs club and informed study's objectives in order to select sample population.

3. processing quantitative and qualitative data collection are conducted during January 2005.

Questionnaires were used to interview the respondents by three trained interviewers. For another the qualitative collection, the researcher will directly employ in-depth interview with the key informant group. To do like this, the interviewers would screen and select the target group or 8 VHVs by making an appointment date with them. These should be the person who could respond to the

quantitative questionnaire quite well and could give more details related to the study topics.

Furthermore, the researcher also directly observed the functions of CPHCCs and the performances of VHVs in them too. The data, collected from the observation, would be daily noted and categorized by the researcher.

4. During the processing of data collection, both of the data were primary edited in the field immediately for checking its completeness and accuracy. If they had some incomplete parts, the researcher would come back to the field again in order to collect or fulfill them. However its process should not be done after the primary data was edited not more than 1 week.

When these processes were completely done, the researcher would leave the field and the data was re-edited and categorized again and after that the data was entered into a statistical package program so called MiniTab version 13.

3.9 Data analysis

3.9.1 For quantitative data

After cleaning the raw data, the data were entering into the Minitab version 13 statistical packages. The frequency and proportion of village health volunteers among independent and dependent variables will be analyzed by descriptive statistic such as percentage, mean, median, standard deviation, minimum and maximum.

Bivariate analysis using the Chi-square statistical technique to determine the significant association between the dependent and independent variables. The significance level of the Chi-square test at $\alpha = 0.05$.

3.9.2 For qualitative data

It is analyzed within its contents and used for enhancing the explanation of quantitative results. And its results were shown in appendix E.

CHAPTER 4
RESULTS

This research was aimed to study the performances of VHVs on PSHS and its related factors in Namphong District Khonkaen Province. The quantitative data was collected from 332 VHVs who has been working in 18 villages of 6 sub-districts. This chapter presented the results and it was divided into 8 parts as follows:

Part 1: Performances of VHVs on PSHS.

Part 2: Socio-demographic characteristics of VHVs.

Part 3: Knowledge of VHVs about PSHS concept and policy.

Part 4: Perception of VHVs towards PSHS concept and policy.

Part 5: Availability of health resources to support VHVs' performances.

Part 6: Accessibility of health resources to support VHVs' performances.

Part 7: Social support to reinforce VHVs' performances.

Part 8: The association between the performances of VHVs and the socio-demographic characteristics, knowledge, perception, availability, accessibility and social support.

4.1 Performances of VHVs on PSHS

The total scores of VHV's performances were divided into 2 levels of high and low performances by using its median. Majority of them (68.67%) practice at high performances level as shown in the table 3.

Table 3 Number and percentage of the respondents classified by their performances on PSHS

Performances of VHV	Number N= 332	Percent
High	228	68.67
Low	104	31.33
Median = 36, Min = 13, Max = 51, Q1 = 32, Q3 = 43		

Considering to the detail of VHVs' performances, it was shown that, 58.9% of them sometimes disseminated health knowledge for their village. This finding matched with some VHVs' conversation as shown in the appendix E 5.1 and 5.2.

In term of family health leader training that is one role of VHVs needed to perform, 24.4% and 39.8% of the respondents replied that they always and sometimes trained family health leaders respectively. But, from talking with some VHVs they told that they had never set up the training by themselves, they only be jointed as assistance. These VHVs' talking was shown in the appendix E 5.5

One activity that VHVs have to do is the basic health service, one third of them sometimes provided and less than one third always provided it. This result could be supported the speech of some VHVs (presented in the appendix E 5.6).

Concerning to the health planning process which is began from village health information survey; plan village health plans with the village committee or social group; monitoring of health operational plan; and evaluation of the PSHS activities in the village. It was showed that, a little bit more than one third of them always and sometimes did it. And some of them (15.5%) never did it. From Talking with some VHVs, it was found that, some of them still never did the village health planning process (more details was shown in the appendix E 5.3)

For the new PHC budget management, a little bit more than half of them jointed to manage this budget with the village committee. But, there were also quite some of them (12%) never join it. There was one VHV talking about this matter as shown in the appendix E 5.4

In term of health activities implemented in the village, majority of them did it in many activities as they supported villagers to play regular exercise; surveyed and provided chemical substance to kill mosquito larvae in village household; jointed in "one big cleaning day campaign"; motivated youth generation to joints with the "To be number one" program; and motivated elder people to joints the activities of elderly club. For this matter, some of VHVs had confirmed that they jointed every time and every activity (more details of their talking was shown in the appendix E 5.7).

4.2 Socio-demographic characteristics of the respondents

From the result, majority of the respondents (67.84%) was concentrated in the age group of 35 to 54 years old, nearly two third to the respondents (64.16%) were female and 34.84% were male. 91.57 percent of them were married.

The educational attainment of the respondents was indicated that, most of them (71.69%) graduated at primary school level.

Regarding their occupation, farmer was comprised the largest percentage of occupation distribution among the total respondents (88.25%), employee and other occupation (including retrial trader and housewife) accounted to only 7.53% and 4.21% respectively.

In terms of social roles or other responsibilities in the village, 70.18% of them played their VHV and other social responsibilities as occupational groups, elderly groups, self-funeral groups, religious committee, school committee, and member of TAO council.

For the duration of working as VHVs, 43.37% of them had duration working ranged from 1 to 5 years. Majority of them (81.63%) had average monthly family income between 1,000 to 5,000 Baht per month. More details of these were shown in table 4.

Table 4 Number and percentage of respondents classified by their socio-demographic characteristics

socio-demographic characteristics	Number N= 332	Percent
Age group (years)		
34 and lower	61	18.37
35-44	121	36.45
45-54	106	31.39
55 and above	44	23.25
Median = 43, Min = 22, Max = 72, Q1= 36.25, Q3 = 50		
Gender		
Male	119	35.84
Female	213	64.16
Marital status		
Married	304	91.57
Other	28	8.43
Education		
Primary School	238	71.69
Secondary School	80	24.10
Others	14	4.21
Occupation		
Farmer	293	88.25
Employee	25	7.53
Others	14	4.22

Table 4 Number and percentage of respondents classified by socio-demographic characteristics (cont.)

socio-demographic characteristics	Number N= 332	Percent
Other responsibilities		
only VHV	99	29.82
VHV and others	233	70.18
Duration Working as VHV (years)		
5 and lower	114	43.37
6-10	75	22.59
11-15	76	22.28
16- 20	25	7.53
21 and above	12	3.61
Median = 8, Min = 1, Max = 29, Q1 = 3, Q3 = 12		
Family Income (Baht per month)		
Less than 1000	5	1.51
1000-5000	266	80.12
5001-10000	34	10.24
More than 10000	27	8.13
Median = 3000, Min = 500, Max = 35000, Q1 = 2000, Q3 = 5000		

4.3 Knowledge of VHVs about PSHS concept and policy

The knowledge score of the respondents were summed up and after that it was categorized into 3 groups of high, moderate and low knowledge level. This study was found that, two-third of them (67.77%) had moderate knowledge level; another 25.6% and 6.63% were high and low knowledge level respectively, as shown in the table 5.

Table 5 Number and percentage of respondents classified by knowledge about PSHS concept and policy

knowledge about PSHS	Number N= 332	Percent
High (> 8 scores)	85	25.60
Moderate (6-8 scores)	225	67.77
Low (< 6 scores)	22	6.63
Median = 8, Min = 5, Max = 10, Q1 = 7 , Q3 = 8		

Considering to details of VHVs' knowledge about performances roles of VHVs, it was found that, most of them know about concept and policy of PSHS such as the importance issues and strategy of PSHS, the importance policy of MOPH now, and VHV roles under PSHS. However, nearly to two-fifth of them (37.87%) did not know about the function of CPHCC and VHVs' roles. They replied that CPHCC was the place for all treatments, but, health dissemination and health planning in the village were not their duty. It should be the duty of health personnel, more details were shown in the table 6.

Table 6 number and percentage of correct answers of knowledge about PSHS concept and policy

Questions	Correct answers	
	N	%
Knowledge about concept and policy of PSHS:		
1. Self-health management is the one importance issue in PSHS	318	95.78
2. To promote multi-sectoral collaboration for community health development is one strategy of PSHS.	326	98.18
3. Healthy Thailand is now the important policy of MOPH.	316	95.18
4. CPHCC is the place for all treatments.	227	68.37
Knowledge about VHVs' performances role:		
5. Health dissemination for villagers must be the only duty of health staffs	215	64.76
6. Planning for solving health problems in the village must be the main duty of village health committee.	196	59.04
7. Under PSHS, VHVs play the main function as one facilitator/collaborator who mobilizes networking group for health developments.	322	96.99
8. To train family health leaders it is a main role of health community workers.	296	89.16
9. Under the new management system of PHC budget, it is strictly directed and controlled by health personnel.	111	33.43
10. To support a health promoting club in village is the one important activity of VHVs.	213	64.16

The interesting point of this result was found that, quite a lot of VHVs (66.57%) told that the new PHC budget management had to be strictly directed and controlled by health personnel. From in-dept interviewing, it was found that, some of them did not know about PSHS, they never heard the term PSHS and did not know about their new roles (the speech of them was shown in the appendix E 2.1 and 2.2).

4.4 Perception of VHVs towards PSHS concept and policy

Table 7 shows the perception of VHVs towards PSHS concept and policy. Based on the total perception scores, the respondents were divided into 3 levels of high moderate and low perception. Majority of them (72.59%) had high perception level towards PSHS concept and policy, while nobody had its low perception.

Table 7 Number and percentage of respondents classified by perception towards PSHS concept and policy

Perception towards PSHS	Number N= 332	Percent
High	241	72.59
Moderate	91	27.41
Median= 42, Min = 28, Max = 48, Q1 = 36, Q3 = 45		

Considering to the perception of VHVs on benefit and barrier of PSHS concept in addition to their policy and perception on benefit and barrier of practice under PSHS, it was found that majority of VHVs agreed to the benefits of PSHS concept and policy in term of the enhancement of villagers' capacities to solve their health problems, the creation of multi-sectoral collaboration among many alliances, the enhancement of village to mobilize their resources to develop their health status, and the creation of community involvement on health development. They realized that, these above tasks would be done under PSHS implementation. And also, there were majority of them realized that, when they played their functions under PSHS, it could be build up their capacities to solve health problems on their village, then their will get the respect from health personnel. And lastly, it could be make the villagers get better health status. More details were illustrated in table 8.

However, there were quite a lot of them agree with the barriers of PSHS concept and policy such as they think that people now no need to take care their health because they can easily come to health center, or many health policies that directed or

proposed from MOPH were difficulty for them to practice, nearly half of them not sure that PSHS can be make villagers had self-reliance on health issues or not. More details were demonstrated in table 8.

The interesting point of this result was the perception of VHVs on barriers of practice under PSHS, half of them believed that, practiced under PSHS should have some barriers to practice under PSHS such as they had so much busy work to do they could not participate on PSHS completely, there were many PSHS activities difficult for them to practice, the present incentive interests could not motivate them to play their roles quite well, and working under this system could not make them get some promotions from community leaders. This result was agreed with the speech of some VHVs (more details was shown in the appendix E 3.1; 3.2 and 3.3).

Table 8 Perception of VHVs towards PSHS concept and policy

Statements	Agree	Not sure	Dis agree
	N (%)	N (%)	N (%)
Perception on benefit of PSHS concept and policy			
1. PSHS can enhance villagers' capacities to solve their health problems.	278 (83.73)	49 (14.76)	5 (1.51)
2. PSHS can create multi-sectoral collaboration among many alliances.	279 (84.04)	51 (15.36)	2 (0.60)
3. PSHS can enhance villages to mobilize their resources to develop their health status.	278 (83.73)	46 (13.86)	8 (2.41)
4. PSHS can create community involvement on health development.	282 (84.94)	44 (13.25)	6 (1.81)
Perception on barrier of PSHS concept and policy			
5. PSHS can not make villagers have self-reliance on health issues.	109 (32.83)	148 (44.58)	6 (1.81)
6. Under directing and controlling from the health personnel now, it creates difficulties for VHVs to practice activities under PSHS.	209 (62.95)	49 (14.76)	74 (22.29)

Table 8 Perception of VHVs towards PSHS concept and policy (cont.)

Statements	Agree	Not sure	Dis agree
	N (%)	N (%)	N (%)
7. There are many health policies directed or proposed from MOPH, so it create difficulty for VHVs to practice or follow them	195 (58.73)	58 (17.47)	79 (23.80)
8. Villagers can easily access to the health centers under 30 baht program, they do not have necessary to self-care their health.	227 (68.37)	21 (6.33)	84 (29.30)
Perception on benefit of practice under PSHS			
9. To play VHVs' functions under PSHS can make villagers get better health status.	298 (89.76)	15 (4.52)	19 (5.72)
10. To play VHVs' functions under PSHS can make VHVs get respects from health personnel.	280 (84.34)	42 (12.65)	10 (3.01)
11. To play VHVs' functions under PSHS can build up VHVs capacities to solve health problems in villages	292 (87.95)	34 (10.24)	6 (1.81)
12. To play VHVs' functions under PSHS can encourage VHVs' capabilities to participate on other social works with many alliances from many sectors.	225 (67.77)	28 (8.43)	79 (23.80)
Perception on barrier of practice under PSHS			
13. Village Health Volunteers have so much busy work to participate on activities in PSHS.	152 (45.78)	51 (15.36)	129 (38.86)
14. Many activities in PSHS are difficult tasks for VHVs to practice.	170 (51.20)	69 (20.78)	93 (28.01)
15. Present incentive interests for VHVs do not motivate them to play their roles quite well.	163 (49.10)	50 (15.06)	119 (35.84)
16. To play VHVs' functions under PSHS can not make them get promotions from community leaders quite well.	183 (55.12)	53 (15.96)	96 (28.92)

4.5 Availability of health resources

Most of the respondents (95.78%) replied that there were CPHCC for health services in their village. And not much different proportion, 47.17% and 41.51% of them replied that there was rarely and everyday opening respectively.

In term of the readiness of equipments, materials, and health printed materials in CPHCC found that 71.01% of equipments and 71.70% of materials, and 57.86% of health printed materials in CPHCC were incomplete (less than 5 items for equipments as sphygmomanometer; stethoscope; weighing machine; diabetic test paper and eye-chart, less than 4 items for materials as table; chair; patient bed; and document container, and less than 4 items for health printed materials as text book/manuals; posters; pamphlets; and documents).

Regarding to the frequency of health dissemination in village radio broadcasting, 63.86% of respondents replied that they had sometimes disseminated. 66.27% of the village radio broadcasting had incomplete materials (less than 2 items as radio-tape and amplifier) ready to use.

Most of the respondents (90.66%) replied that they had places for working in their village. And a little bit more than two-third of them (67.47%) replied that the new PHC budget (7,500 baht / village) was not enough to support for health activities implementation. More details are shown in the table 9

Table 9 Number and percentage of Availability of health resources

Availability Factors	Number N= 332	Percent
CPHCC in the village		
Yes	318	95.78
No	14	4.22
Frequency of CPHCC opening		
Every day	132	41.51
Sometimes	36	11.32
Rarely	150	47.17
Readiness of equipments in CPHCC		
Complete	92	28.93
Incomplete	226	71.01
Readiness of materials in CPHCC		
Complete	90	28.30
Incomplete	228	71.70
Readiness of health printed materials in CPHCC		
Complete	134	42.14
Incomplete	184	57.86
Frequency of health dissemination in village radio broadcasting		
Every day	31	9.34
Sometimes	212	63.86
Rarely	89	26.81
Readiness of materials in village radio broadcasting		
Complete	112	33.73
Incomplete	220	66.27
Places for working in the village		
Yes	301	90.66
No	31	9.34
Enough of new PHC budget (7,500 B/Village)		
Yes	108	32.53
No	224	67.47

4.6 Accessibility of health resources

Most of the respondents (95.48%) replied that they could easily use the places in the village for meeting, planning, and health dissemination.

For the easiness or difficulty of using materials in village radio broadcasting, health printed materials and equipments in CPHCC, 87.35% of them replied that they had not difficulty to use materials in village radio broadcasting. 90.60% and 88.86% of them can easily use health printed materials and equipments in CPHCC.

In terms of monthly meeting in CPHCC, nearly to the same proportion, 37.35% and 35.25% of them attended it for sometimes and every time respectively. For monthly meeting in TAO communion, nearly to two-fifth (38.86%) of them would rarely go to the meeting, while 29.22% and 25.90% attended it for sometimes and every time respectively. And 79.22% were received refresher training.

Regarding to the problems of new budget management (7,500 baht per village), 81.63% of them did not have any problems.

In terms of information sources that VHVs can easily get it to support their work (such as village informative center, CPHCC, radio, television, and health personnel), two-third of the respondents (64.76%) were gotten more than three sources. More details are presented in table 10.

Table 10 Number and percentage of accessibility of health resources

Accessibility Factors	Number N= 332	Percent
Easy to use CPHCC place		
Yes	317	95.48
No	15	4.52
Difficult to use materials in village radio broadcast		
Yes	42	12.65
No	290	87.35
Easy to use health education materials in CPHCC		
Yes	229	90.60
No	19	5.72
Difficult to use instruments in CPHCC		
Yes	23	6.93
No	295	88.86
Monthly meeting in CPHCC		
Every time	117	35.25
Sometimes	126	37.95
Rarely	58	17.47
Never	17	5.12
Monthly meeting in TAO communion		
Every time	86	25.90
Sometimes	97	29.22
Rarely	129	38.86
Never	20	6.02
Refresher training of VHV		
Yes	263	79.22
No	69	20.78
Problems in PHC budget management		
Yes	61	18.37
No	271	81.63

Table 10 Number and percentage of accessibility of health resources (cont.)

Accessibility Factors	Number N= 332	Percent
Health informative sources		
One source	62	18.79
Two sources	55	16.57
Three sources and up	215	64.76

4.7 Social support to reinforce VHVs' performances

The total scores of social support were summed up and divided into 3 levels of high, moderate, and low social support level. Majority of the respondents (67.47%) were gotten high social support level. More details are shown in the table 11.

Table 11 Number and percentage of respondents classified by social support

Social support	Number N= 332	Percent
High	224	67.47
Moderate	56	16.87
Low	52	15.66
Median = 13, Min = 5, Max = 14, Q1 = 11, Q2 = 13		

In addition, according to the types social support, the result were revealed that, in the mental support, majority of the respondents (79.22%) were gotten its high support, half of them (50.00%) were gotten moderate material support, and majority of them (75.60%) had high informative support. These were shown in table 12.

Table 12 Number and percentage of respondents classified by type of social support

Type of social support	Number N= 332	Percent
Mental support		
High	263	79.22
Moderate	48	14.46
Low	21	6.33
Median = 5, Min = 2, Max = 5, Q1 = 5, Q3 = 5		
Material support		
High	86	25.90
Moderate	166	50.00
Low	80	24.10
Median = 5, Min = 0, Max = 6, Q1 = 4, Q3 = 6		
Informational support		
High	251	75.60
Moderate	52	15.66
Low	29	8.73
Median = 3, Min = 0, Max = 3, Q1 = 3, Q3 =3		

Considering to the mental support, most of VHVs were gotten an appreciation from their family members; an acceptance on performing health activities from neighbors and relatives; the consultation from their VHVs friends; the advices from civic group; and the praise from health personnel.

In term of the material support, about-two third of VHVs were gotten the support in form of labors; special budgets or money aids; and materials from neighbors; health personnel and member of TAO council. For the support from religious priest, it was found that, there were nearly to half of VHVs were gotten it.

For the information support, most of VHVs were gotten from their neighbors; health personnel and TAO members. More details were shown in table 13.

From the in-dept interview, some of them had recommended that, it need to had more supports in term of the budget aids funding for their daily living in order to they could play their new roles completely. (As the speech of them shown in appendix E 4.1 and 4.2).

Table 13 Number and percentage of respondents' answers classified by social support.

Questions	Yes N (%)
Mental support	
1. Have you ever gotten appreciation from your family member?	327(98.49)
2. Have your neighbors/relatives accepted you to perform health activities in the village?	323(97.29)
3. When you have problems in your work, have you ever gotten consultations from VHVs?	326(98.19)
4. Have you ever gotten advices from civic groups to perform health activities in the village?	282(84.94)
5. Have you ever gotten any praise from health personnel?	309(93.07)
Material support	
6. Have your neighbors supported labor in order to do health activities with you?	297(89.46)
7. Have you ever gotten health supporting materials from religious priests?	142(42.77)
8. Have you ever gotten special budgets or money aids from health personnel for performing health activities in the village?	249(75.00)
9. Have you ever gotten materials from health personnel for performing health activities in the village?	274(82.53)
10. Have you ever gotten special budgets from member of TAO council?	250(75.30)
11. Have you ever gotten health supporting material from member of TAO council?	240(72.29)

Table 13 Number and percentage of respondents' answers classified by social support (cont.)

Questions	Yes N (%)
12. Have you ever gotten health information from your neighbors?	302(90.96)
13. Have you ever gotten information from health personnel to support your performing health activities in the village?	323(97.29)
14. Have you ever gotten information from TAO member to support your performing health activities in the village?	259(78.01)

4.8 The association between the performances of VHVs on PSHS and socio-demographic characteristics, knowledge, perception, availability and accessibility of health resources, and social support.

4.8.1 Association between the performances of VHVs and their socio-demographic characteristics

For the association between the socio-demographic characteristics and the performances on PSHS. It was found that only one of the socio-demographic characteristic (take VHV and social roles or other responsibilities) was significantly associated with the performances of VHVs on PSHS with p-value = 0.010.

With regards to the social roles, majority of the respondents (72.96%) who had many responsibilities in the village more than VHV roles had higher proportion of performances compared with those who had only VHVs (58.59%). Some VHVs talked about this matter that, they happy when they work in many responsibilities. Because, they could get more experiences, knowledge from their works and the respect, trust from community. As the speech of one VHV was shown in the appendix E 1.1 and 1.2

Table 14 Association between Performances of VHVs on PSHS and Socio-demographic characteristics

Socio-demographic factors	Performances				Total	$\chi 2$ (df)	P-value
	High		Low				
	N	%	N	%			
Age group (years)							
34 and lower	41	67.21	20	32.79	61	0.130	0.988
35-44	83	68.60	38	31.40	121	(3)	
45-54	74	69.81	32	30.19	106		
55 and above	30	68.18	14	31.82	44		
Gender							
Female	146	68.54	67	31.46	213	0.005	0.945
Male	82	68.91	37	31.09	119	(1)	
Marital status							
Married	208	68.42	96	31.58	304	0.108	0.743
Other	20	71.43	8	28.57	28	(1)	
Education level							
Primary School	167	70.17	71	29.83	238	1.198	0.549
Secondary School	51	63.75	29	36.25	80	(2)	
Other	10	71.46	4	28.57	14		
Occupation							
Farmer	202	68.94	91	31.06	293	5.838	0.054
Employee	20	80.00	5	20.00	25	(2)	
Other	6	42.86	8	57.14	14		
Social Roles							
Only VHV	58	58.59	41	41.41	99	6.674	0.010*
VHV and other	170	72.96	63	27.04	233	(1)	

Table 14 Association between Performances of VHVs on PSHS and Socio-demographic characteristics (cont.)

Socio-demographic factors	Performances				Total	χ2 (df)	P-value
	High		Low				
	N	%	N	%			
Duration working as VHV(years)							
5 and lower	96	66.67	48	33.33	144	3.211	0.359
6-10	48	64.00	27	36.00	75	(4)	
11-15	55	72.37	21	27.63	76		
16-20	19	76.00	6	24.00	25		
21 and above	10	83.33	2	16.67	12		
Average family income							
Less than 1000	4	80.00	1	20.00	5	6.263	0.099
1000-5000	176	66.17	90	33.83	266	(2)	
5001-10000	24	70.59	10	29.41	34		
More than 10000	24	88.89	3	11.11	27		

* Significant at p-value < 0.05

4.8.2 Association between the performances of VHVs on PSHS and their knowledge

For the association between knowledge about PSHS concept and policy and the performances of VHVs, it was found that, VHVs who had high, moderate, and low knowledge had proportion high performances about 74.12%, 68.89%, and 45.45% respectively. By compare within three groups, it indicated that the VHVs with high knowledge had higher proportion of high performances than those who had moderate and low knowledge. It can be concluded that, the VHVs' knowledge about PSHS concept and policy was significant associated with their performances at p-value = 0.035. As shown in the table 15.

Table 15 Association between the performances of VHV on PSHS and their Knowledge

Knowledge	Performances				Total	$\chi 2$ (df)	P-value
	High		Low				
	N	%	N	%			
High	63	74.12	22	25.88	85	6.689	0.035*
Moderate	155	68.89	70	31.11	225	(2)	
Low	10	45.45	12	54.55	22		

* Significant at p-value < 0.05

4.8.3 Association between the performances of VHVs on PSHS and their perception

In term of the comparison between VHVs' performances and their perception, it was found that, VHVs who had high performances level had higher median scores (42 scores) than those who had low performances level (40 scores). It can be concluded that, there was significant difference perception level among two groups of high and low performance with p-value = 0.036. More details were shown in the table 16.

Table 16 Comparison the mean score of perception of VHVs between high and low performances level group

Variable	Performance level	Number	Median (P25th,P75th)	Z*	p-value (2-tailed)
Perception				2.10	0.036*
	High	228	42(36,45)		
	Low	104	40(36,43)		

* Significant at p-value < 0.05.

Considering to the perception on benefit concept and policy. It was found that, VHVs who had high performances level had higher median score (12 scores) than those who had low performances level (11 scores). And there was significant difference perception level among two groups of high and low performance with p-value< 0.001. For the other perceptions as perception on barrier of PSHS concept and policy and on benefit and barrier on practice under PSHS were not significant differences. More details are shown in the table 17.

Table 17 Comparison the median score of VHVs' perception on benefit and barrier of PSHS concept and policy and VHV practice under PSHS between high and low performances level group

Variable	Performances level	Number	Median (P25th,P75th)	Z*	p-value (2tailed)
Perception on benefit of PSHS concept and policy				4.505	<0.001*
	High	228	12 (11<12)		
	Low	104	11 (10<12)		
Perception on barrier of PSHS concept and policy				0.647	0.518
	High	228	11 (7,11)		
	Low	104	10 (8,11)		
Perception on benefit of practice under PSHS				0.174	0.862
	High	228	12 (10,12)		
	Low	104	11 (10,12)		
Perception on barrier of practice under PSHS				1.873	0.061
	High	228	9 (6,12)		
	Low	104	8 (6,11)		

4.8.4 Association between performances of VHVs and Availability of health resources

Regarding to the frequency of CPHCC opening for health service in the village, it was found that, VHVs who had their CPHCC opened every day and sometimes had higher performances with proportion of 78.03% and 75.00% respectively compare with those who had it rarely opened (58.00%). It was significantly associated with the performances of VHVs with p-value = 0.002.

In case of frequency of village radio broadcasting disseminated health information. It was found that, VHVs who had it disseminated every day and sometimes had higher performances with proportion of 83.87% and 78.65% respectively compare with those who had it rarely disseminated (62.26%).It was significantly associated the performances of VHVs with p-value = 0.003.

Concerning to the readiness of material in village radio broadcasting, it was shown that, VHVs who had it with complete materials had higher performances (75.89%) compare with those who had it with incomplete materials (65.00%). This was significantly associated with the performances of VHVs with p-value = 0.043.

For the places for VHV working, it was shown that, VHVs who had places for community development as meeting; planning or implementation of health activities had higher performances with proportion of 71.10% compare to those who had no its places (45.16%). It was significantly associated the performances of VHVs with p-value = 0.003.

The other health resources were not associated with the performances of VHVs. More details were shown in the table 18.

Table 18 Association between performances of VHV and availability of health resources

Availability of health resources	Performances				Total	χ2 (df)	P-value
	High		Low				
	N	%	N	%			
CPHCC in the village							
Yes	217	68.24	101	31.76	318	0.665	0.415
No	11	78.57	3	21.43	14	(2)	
Frequency of CPHCC opening							
Everyday	103	78.03	29	21.97	132	14.623	0.002*
Sometimes	27	25.00	9	75.00	36	(3)	
Rarely	87	20.00	63	80.00	150		
The readiness of equipment in CPHCC							
Complete	67	72.83	25	27.17	92	1.257	0.262
Incomplete	150	66.37	76	33.63	226	(1)	
The readiness of materials in CPHCC							
Complete	59	65.56	31	34.44	90	0.417	0.518
Incomplete	158	69.30	70	30.70	228	(1)	
Readiness of health printed materials in CPHCC							
Complete	89	66.42	45	33.58	134	0.354	0.552
Incomplete	128	69.57	56	30.43	184	(1)	
Frequency of village radio broadcasting disseminate health information							
Everyday	26	83.87	5	16.13	31	11.496	0.003*
Sometimes	70	37.74	19	62.26	89	(2)	
Rarely	132	21.35	80	78.65	212		
Readiness of materials village radio broadcasting							
Complete	85	75.89	27	24.11	112	4.093	0.043*
Incomplete	143	35.00	77	65.00	220	(1)	

Table 18 Association between performances of VHV and availability of health resources (cont.)

Availability of health resources	Performances				Total	$\chi 2$ (df)	P-value
	High		Low				
	N	%	N	%			
Places for community development planning or meeting in the village							
Yes	214	71.10	87	28.90	301	8.788	0.003*
No	14	45.16	17	54.84	31	(1)	
The enough of PHC budget (7,500 baht/village)							
Yes	69	63.89	39	36.11	108	1.704	0.192
No	159	70.98	65	29.02	224	(1)	

* Significant at p-value < 0.05

4.8.5 Association between performances of VHVs on PSHS and accessibility of Health resources

According to the monthly meeting in TAO communion, it was found that, VHVs who every time and sometimes attended it had higher performances with proportion of 83.72% and 77.32% respectively, compare to those who had rarely and never attended it (59.69% and 20.00% respectively). It was significantly associated with the performances of VHVs with p-value = 0.000.

Concerning the difficult problems of new PHC budget management, it was found that, VHVs who had no problems had higher performances (81.97%) than those who had problems (65.68%). There was significantly associated with the performances of VHVs with p-value = 0.013.

For the other accessibilities of health resources were not significant associated with the performances of VHVs. More details are presented in the table 19.

Table 19 Association between the performances of VHV and the accessibility of health resources

Health resources	Performances				Total	χ2 (df)	P - value
	High		Low				
	N	%	N	%			
Easiness of use of places in the village							
Yes	219	69.09	98	30.91	317	0.550	0.459
No	9	60.00	6	40.00	15	(1)	
Difficulty of use materials in village radio broadcasting to disseminate health information							
Yes	32	76.19	10	23.81	42	1.263	0.261
No	196	67.59	94	32.41	290	(1)	
Easiness of use of health printed materials in CPHCC							
Yes	203	67.89	96	32.11	299	0.944	0.624
No	14	73.68	5	26.32	19	(1)	
Difficulty of use of equipments in CPHCC							
Yes	17	73.91	6	26.09	23	1.037	0.596
No	200	67.80	95	32.20	295	(1)	
Monthly meeting in CPHCC							
Every times	88	75.21	29	24.79	117	5.353	0.253
Sometimes	79	62.70	47	37.30	126	(3)	
Rarely	38	65.52	20	34.48	58		
Never	12	70.59	5	29.41	17		

Table 19 Association between the performances of VHV and accessibility of health resources (cont.)

Health resources	Performances				Total	$\chi 2$ (df)	P-value
	High		Low				
	N	%	N	%			
Monthly meeting in Tambon communion							
Every times	72	83.72	14	16.28	86	39.287	0.000*
Sometimes	75	77.32	22	22.68	97	(3)	
Rarely	77	40.31	52	59.69	129		
Never	4	20.00	16	80.00	20		
Yearly VHV refresh training							
Yes	187	71.10	76	28.90	263	3.468	0.063
No	41	59.42	28	40.58	69	(1)	
Difficult problems about new PHC budget management							
Yes	50	65.68	11	34.32	61	6.138	0.013*
No	178	81.97	93	18.03	271	(1)	
Information source							
One source	37	59.68	25	40.32	62	2.995	0.994
Two sources	40	72.73	15	27.27	55	(2)	
Three sources up	151	70.23	64	29.77	215		

* Significant at p-value < 0.05

4.8.6 Association between the performances of VHVs on PSHS and social support

The results was shown that, VHVs who had high social support had higher performances with proportion of 80.80% compare to those who had moderate and low social support (55.36% and 30.77% respectively). This was significantly

associated with the performances of VHVs with p-value = 0.001. As shown in the table 20

Table 20 Association between the performances of VHV on PSHS and social support

Social support	Performances				Total	$\chi 2$ (df)	P-value
	High		Low				
	N	%	N	%			
High	181	80.80	43	19.20	224	54.665	0.001*
Moderate	31	55.36	25	44.64	56	(2)	
Low	16	30.77	36	69.23	52		

*significant at p-value < 0.05

According to the types of social support as show in table 19, it was found that, VHVs who had high mental; material; and informational support had higher performances with proportion of 77.57%; 93.02%; and 75.30% respectively, compared to those who had moderate and low of mental; material; and informational support (43.75% and 14.29%; 69.88% and 40.00%; and 65.38 and 17.24% respectively). And three of them were significantly associated with the performances of VHVs at p-value = 0.001. More details presented in table 21.

Table 21 Association between the performances of VHV on PSHS and social support (Classify by type of social support)

Social support	Performances				Total	χ2 (df)	P-value
	High		Low				
	N	%	N	%			
Mental support							
High	204	77.57	59	22.43	263	46.509	0.001*
Moderate	21	43.75	27	56.25	48	(2)	
Low	3	14.29	18	85.71	21		
Material support							
High	80	93.02	6	6.98	86	54.389	0.001*
Moderate	116	69.88	50	30.12	166	(2)	
Low	32	40.00	48	60.00	80		
Informational support							
High	189	75.30	62	24.70	251	41.042	0.001*
Moderate	34	65.38	18	34.62	52	(2)	
Low	5	17.24	24	82.76	29		

*Significant at p-value < 0.05

CHAPTER 5
DISCUSSION

5.1 Performances of VHVs on PSHS

According to the performances of VHVs on PSHS, it was demonstrated that 68.67 percent of them had high performances level. The performances of this study was higher than previous studies of Tiewsuwan, B. (14) and Khin Myitzu Han (19) which found VHVs who performed their duties at high level accounted to 56.7% and 32.6% respectively.

The difference between this study and the previous studies is due to different research methodology and study area. Tiewsuwan,B (14) classified the performances level of VHVs by using mean at cut point. Due to the data in this study does not normal distribution, this study, and the performances level of VHVs was classified by using median at cut point.

This finding indicated that under new strategy of PSHS, VHVs can play their new duties effectively. It might be due to they have public consciousness and willingness to do public activities. They know that the person who wants to be VHV must volunteer and donate so much time to perform many activities for public benefits. They also recognize well that a person who wants to do this work has to have much intention and enthusiasm. All of these yield to their high performances significantly.

5.2 Socio-demographic characteristics of VHVs

In this study, it was found that, those VHVs who employed VHV and other social responsibilities had higher performances than those who played only function

as VHV. There was significantly associated with their performances and social roles (p= 0.010).

This finding is supported by the study of Tiewsuwan, B (14) who found that multiple responsibilities in the village of VHV were significantly associated with the performances. Similar to the study of Kotaratan V (30) he found that the person who had been a leader in the village usually had other responsibilities and most of them would pass the training courses that enhances their capacity than those who were only VHV.

To find out those VHVs who had many responsibilities in the village could perform their tasks higher than those who had only VHV. It might be due to they can gained their experiences, knowledge and capacities from many tasks. They can apply these into their VHV performances. Another thing is that among VHVs who have many social roles might have public consciousness and from their consciousness it affects them to joint or take many social tasks or responsibilities with many groups in their village. This results was agreed with the qualitative data from conversation with some VHVs and they talked about this matter that they had willingness to employed many social responsibilities, because they could gain many experiences and knowledge from it. They could gain respects and confidences from villagers, community leaders and other official staffs. These made them have more powerful to perform their tasks efficiently.

5.3 Knowledge about PSHS concept and policy

From the result, it was shown that of VHVs who had high that had high knowledge level (74.12%) had higher proportion of high performances level than other VHVs who had moderate (68.89%) and low knowledge level (45.45%) respectively. There was significantly associated between their performances and knowledge level (p= 0.035).

This finding agreed favorably with the study of Soongkhang, I (32), Kumnerdkarn, K (35), and Raman, M (36) who also found to the significant association between the knowledge of VHVs and their performances too.

However, there were other studies that found the knowledge of VHVs was not significantly associated with their performances as indicated from the study of Tiewsuwan, B (24) and Thanatipwattanakul, N (34).

Considering in details of VHV's knowledge, it was found that, majority of them had knowledge about the important issues in PSHS, strategy of PSHS, important policy of MOPH now, the main function of VHVs under PSHS. However, there had some VHVs, about two-third of them did not know the management of new PHC budget. They understood that, new PHC budget management had to manage under directing and controlling by health personnel. The reasons may be due to PSHS just be started for a few years ago, the information and concept about it may not disseminate to VHVs extensively. Furthermore, more than half of respondents were working as VHV more than 5 years, and it is possibly that these respondents are not familiar with the term "PSHS". In the past, they always heard only the term "PHC". This reason can be supported from talking with some VHVs, which found that, they really never heard and did not known about PSHS concept and their new roles under PSHS. Or it may be possibly that, VHVs habituate under bureaucratic system. They always work under directing of official staffs. It makes them understand that, they have to do every thing under controlling of the staff.

5.4 Perception of VHVs towards PSHS

The findings showed that, 72.59 of the respondents had the high perception, 27.41% of them had its moderate level, while nobody had the low performances. VHVs that had high perception level had the high performances, and there was significant difference the perception level between 2 groups of the high and low performances. This was similar to the study of Soongkhang, I (32).

The finding also indicated that, VHVs had perception on benefit and barrier of PSHS concept and of practice under PSHS. Most of them realized that they would get more benefits from it. As they believe to play their roles under this system it could build up their capacities to solve health problem in their village. Or it could encourage their capacities to participate on other social work with many alliances. And it could make them get respect from villagers; community leaders and health personnel. In addition, it could make villagers get better health status. These their perceptions make them do their work attentively; even they know that they have to face some difficulty. This is the reason support that VHVs who had high perception level had high performances.

To consider the perception towards barriers, there were some of VHVs believed that they have some problems when they worked as VHVs, such as many activities of PSHS were difficult tasks for them to practice; they had so many busy works to participate on PSHS activities or present incentive interest for VHVs did not motivate them to play their roles. It might be due to their income quite low and they have more family tasks to do. It makes them have to struggle to earn money for daily living. So, they have no enough time to play their VHV roles or joint in other social works. All of this makes them lack of confidence to do their VHV works which lead to their performances gotten low.

5.5 Availability of health resources

The results were indicated that, VHVs who worked with CPHCC opened on every day and sometimes had (78.03% and 75.00% respectively). Also, those who worked with village radio broadcasting disseminated health information on every day and sometimes had high proportion of performances (83.87% and 78.65% respectively) and VHVs those who worked with complete materials and had places to use for meeting training and health activities implementation in their village also had high proportion of performances (75.89% and 71.10% respectively). It may be explain that, CPHCC is the one important place for VHV working. It is the place to provide

basic health service; it can be the place for meeting for planning or training of VHVs and villagers. Opened CPHCC for every day or sometimes can therefore enough VHVs function their jobs better than closed or rarely opened CPHCC. Every day of working in CPHCC will make them have more experiences and skills which lead to their performances. Also, village radio broadcasting that has complete materials and disseminates health information every day or sometimes can motivate VHVs to work more conveniently. The complete materials will provide convenient conditions to facilitate or contribute on VHV work. These are important instruments used to support or contribute on their working. Without them, VHVs can not work inefficiently. As well as health dissemination, if they always do it, they can get more knowledge which lead to their confidences. If they have more confidence they can do every thing better. In addition, for the place for working in the village, it is also used to support VHV and civic working; VHVs and people can use it to meet each other to talk; exchange some ideas or information; consult and plan together. These can be used to mobilize their VHV work and enhance the formation of their public consciousness and they will affect to the performances at high level.

5.6 Accessibility of health resources

The result shown that, the performances of VHVs had significant association with 2 health resources such as monthly meeting in tambon communion and new PHC budget management. It indicated that, VHVs who had every times to attend the monthly meeting had higher performances compared with those who had sometimes and rare attention. It can be explained that to joint monthly meeting regularly will made them to know the way to perform their work better. In the meeting, it may talk about the success or failure of community work from one month ago; problems and the way to solve them; and plans for next one month. VHVs can get these necessary points and apply them into their work appropriately. It may lead to their successful and high performances, and from the results VHVs who had no difficult problems on new PHC budget management also had higher performances than those who had its problems. This may be due to they plan to use budget clearly and manage it follow the

plan. It also means to they use the budget correctly which lead to the successful of working too.

5.7 Social support

The results shown that, VHVs who had social support had higher proportion of high performances than those who had moderate and low social support at p-value <0.05. This finding was supported by other studies done by Tiewsuwan, B (14), Yindeechan, P (21), Kumnerdkarn, K (35), and Uthonthavikan Na Ayuthaya, S (38).

Considering to types of social support (mental support, material support and informational support), the results found that, three of them were significantly related to the performances of VHVs at p-value < 0.05.

Social supports are very important reinforcing factors that effect to VHVs' performances at high level. It may be due to the most important thing of PSHS implementation is community participation which lead to encouragement; labor; money and materials from many alliances both inside and outside community. VHVs who mobilize PSHS need to have these supports from community. As the result of this study, majority of VHVs who had high social support they had high performances.

CHAPTER 6
CONCLUSION AND RECOMMENDATION

This research was a cross sectional study aimed to identify the performances of VHVs on PSHS and its related factors as predisposing factors in term of socio-demographic characteristics, knowledge about PSHS concept and policy; perception towards PSHS concept and policy, enabling factors in term of availability and accessibility of health resources, and social support including mental, material and informational support.

The study was carried out in Namphong District Khonkaen Province during 18 January to 5 February, 2005. 332 VHVs in the 18 villages of 6 Sub-districts were selected by using multistage random sampling. Self-administered questionnaire was use for collecting the data.

6.1 Conclusion

6.1.1 Performances of VHVs

From the results, it was shown that, majority of the respondent (68.67%) had high performances on PSHS, while 31.33% had low performances.

6.1.2 General characteristics of VHVs

The results were presented that about two-third of respondents were female (64.16%), most of them were married (91.57%), 36.45 percent of them were within the age group 35 to 44 years. 71.69% were graduated at primary school level and their main occupation was farmer(88.25%). Majority (70.18%) had other social responsibilities in the village and average duration working as VHV was 8 years with 43.37 % of them had work duration < 5 years; Most of them (81.63%) had family income per month less than 5,000 baht.

Majority of them (68.89%) had moderate knowledge about PSHS concept and policy. And 72.59% had high perception towards PSHS concept and policy.

Concerning to CPHCC, most of them (95.78%) had CPHCC in their village; nearly half of CPHCC (47.17%) were rarely opened, while 41.51% were opened every day. About 70% of CPHCC had incomplete equipment and materials, and nearly to 60% had incomplete health printed materials.

Nearly two-third of them (63.86%) sometimes disseminated health information in village radio broadcasting. two-third of village radio broadcasting (66.27%) had incomplete materials.

Most of them (90.66%) replied that they had places for working in their village, and 95.48% of them can easily to use that places.

67.47% replied that the new PHC budget (7,500 Baht per village) had not enough to support PSHS activities; however 81.63% had no problems within its budget management.

Most of them can easily used materials in village radio broadcasting (87.35%), health printed materials (90.60%); and equipment (88.86%) in CPHCC.

For monthly meeting in CPHCC, 35.25 of them joined every time and 37.95% jointed sometimes. 38.86% rarely jointed monthly meeting in TAO communion, while every times jointed was only 25.90%.

Majority (79.22%) of them were received refresher training, and 64.76% got health information more than three sources.

Majority of them (67.47%) were received high social support, whereas 79.22% were high mental support, 50 % were high material support and 75.60% were high informational support.

6.1.3 Factors affected performances of VHVs on PSHS

It was found that among the socio-demographic characteristics, only social roles of VHVs was significant associated with their performances (p-value=0.010), while other factors were not.

There was significant associated between knowledge about PSHS and the performances of VHVs (p-value=0.035).

There was significant difference perception level between two groups of high and low performances (p-value=0.035), and there was only perception on benefit of PHS concept and policy had significant between high and low performances (p-value=0.001).

It was found that the availability of health resources as frequency of CPHCC opening; frequency of village radio broadcasting disseminated health information; readiness of materials in village radio broadcasting and places for working were significant associated with performances of VHVs (p-value=0.002; 0.003; 0.043; and 0.003 respectively).

For accessibility of health resources, only monthly meeting in TAO communion and the difficulty problems about new PHC budget management were significant associated with the performances of VHVs (p-value=0.001 and 0.013 respectively).

There was significant associated between social support and performances of VHVs (p-value=0.001), and also, three types of social support as mental; materials; and information support were significant associated with the VHVs' performances (p-value=0.001).

6.2 Recommendation

6.2.1 Recommendation for implementation

1. Based on research finding, VHVs who had many responsibilities in the village had high performances, it means to that, from involvement in many social activities these create more skills work related to PSHS. To improve VHVs' working, it therefore has to promote them to joint or participate in other social groups in the village in order to they can get more experiences and enthusiasm for working by using civic spaces to allow them and other participate activities in the village as health information survey planning, implementation and evaluation. This is agreed with the PSHS principal. Therefore, chief of TAO should give a chance for them to joint in exchangeable idea and introduce the problems to TAO.

2. From the result, there were some of VHVs misunderstand about PSHS concept and policy. They understand that, the management of new PHC budget have to strictly directed and controlled of health personnel; the planning for solving health problems in the village must be the duty of health personnel; and CPHCC is the place for all treatment. In these issues, the official staff or TAO member should give them the knowledge and comprehension about PSHS performing by using monthly meeting, refresher training or media.

3. This study found that, some of VHVs realize that, they have difficulty when they play their roles under PSHS. For solving this problem, health personnel have to change the role as a supporter. Give a chance for people take part in their health management including budget management, which show the really decentralization to people.

4. Based on the research finding, some CPHCC do not open for health services, though at first expected that, it will be the places for people work together. But, reality it is not like that. Some CPHCC are in the chief of VHVs' house, it is not convenient for health services. Health personnel and community leaders have to explain to VHVs about the importance of CPHCC.

5. From the result, it was found that, some of VHVs had quite low income, working hard and they had more busy work which leads to their performances getting low. To solve this problem, government sector have to build conditions for people can easily to earn a living and self-reliance. Promote the buy and selling in the village for they can earn more money, and then they can work more for public.

6. Based on the results, VHVs could not manage PHC budget by themselves efficiently. Issues of its planning and implementation were mainly generalized and directed from health personnel. Instead of playing their own roles like this and to solve village problems practically for suitable development of self-management on PHC budget, health official sector and health personnel must let VHVs have authority to manage the budget by themselves. The health personnel must play his or her function as one facilitator and supervisor to trustful suggest or guide them with the way of how to manage the budget. This is one way of enhancement on VHV's capacities to play their VHV's performances quite better well.

7. Based on this study, some of VHVs have not enough self-confidences on community health management, it therefore should had a special training that create community health managers, this training should change them to have holistic health concept and knowledge of how to perform VHV works integrate with other social development activities, they should be improved their self-capabilities and confidences to participate in social works with other partner groups such as civic groups, NGO, government sectors under inter-sectoral collaborations ways.

8. Based on the finding there were a few of young generation VHV. While majority of them were middle to elder groups. If this situation does not be solved, it will create the shortage of VHVs manpower in the future. So therefore, the concept of health volunteers should be expended and implemented in productive age groups in workplaces especially in youth health volunteer in school.

9. From the results, it was found that, majority of VHVs get the support from their family, neighbors or relatives, VHVs, community leaders and health personnel in term of acquaintance, affection, closeness, reliability, trust, respect and praise, giving money, materials or assistance, or giving information or suggestion. These lead to their performances gotten high level. Therefore, these social supports must be going on continuously in order to VHVs and community take care their health by themselves effectively. TAO must support VHVs in term of budget to promote them perform health development activities in their community significant increasing.

6.2.2 Recommendation for further study

1. Participatory action Research (PAR) should be used to strength or enhance the people in community to solve their own health problems. With this technique, it will make people participate with PSHS more efficiently. The process of PAR will make them to have knowledge about benefits of PSHS. More over these, it will contribute or empower them to joint and consult together in order to find out their own ways to solve health problems in their village systematically.

2. Qualitative study should be performed in order to find out more factors that relate to the performances of VHVs. Because, there are many cultural and social factors (such as the influence of bureaucratic between health personnel and VHVs) that determine and obstacle of VHVs' working. Qualitative study can find out the details or reason that lead to the performances of VHVs.

3. It should have a research and development program to find out appropriate model of PSHS function with other social activities among government and non government organizations.

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APPENDIX

APPENDIX A
QUESTIONNAIRE

PERFORMANCES OF VILLAGE HEALTH VOLUNTERS ON PEOPLE SECTOR HEALTH SYSTEM IN NAMPHONG DISTRICT, KHONKAEN PROVINCE

This questionnaire is prepared for thesis writing for M.P.H.M. course at the ASEAN Institute for Health Development, Mahidol University. Your answers will be kept in secret and not exposed to other purpose.

Part I. Socio-demographic factors

(Please put the mark ✓ in the appropriate box to answer the question)

1. Age: _____ years old.
2. Gender: ☐1. Male ☐2. Female
3. Marital status:
   - ☐ 1.Single
   - ☐ 2.Married
   - ☐ 3.Widow/Divorce/separate
   - ☐ 4. Others (specify)_____
4. Highest education attainment
   - ☐ 1. Primary school
   - ☐ 2. Secondary school
   - ☐ 3. Vocational
   - ☐ 4. Others (specify)_____
5. What is your main occupation?
   - ☐ 1. Farmer
   - ☐ 2. Retail trader
   - ☐ 3. civic servant
   - ☐ 4. Employee(specify)_____
   - ☐ 5. Others (specify)_____

6. Do you have other responsibilities or positions in the village?(multiple choices)

☐ 1. Only VHV

☐ 2. Cooperative group(specify…….)

☐ 3. Voluntary scout

☐ 4. Occupational group(specify……)

☐ 5. self-funeral help group

☐ 6. Elderly club

☐ 7. School committee

☐ 8. Religious committee

☐ 9. Tambon administrative organization member

☐ 10. Others (specify)_____

7. How long have you been working as a village health volunteer? _____ years

8. Total family income per month_____ Baht/month

Part II: Knowledge about People Sector Health System of VHVs:

(please mark ✓ in the column you agree)

Statement	Yes	No
Knowledge about concept and policy of PSHS: 9. Self-health management is the one importance issue in PSHS		
10. To promote multi-sectoral collaboration for community health development is one strategy of PSHS.		
11. Healthy Thailand is now the important policy of Ministry of Public Health.		
12. CPHCC is the place for all treatments.		
Knowledge about VHVs' performances role: 13. Health dissemination for villagers must be only duty of health staffs		
14. Planning for solving health problems in the village must be the main duty of village health committee.		
15. Under PSHS, VHVs play the main function as one facilitator/collaborator who mobilizes networking group for health developments.		

Statement	Yes	No
16. To train family health leaders it is a main role of health community workers.		
17. Under the new management system of PHC budget, it is strictly directed and controlled by health personnel.		
18. To support a health promoting club in village is the one important activity of VHVs.		

Part III: Perception on benefit and barriers of PSHS

(please mark ✓ in the column you agree)

Questions	Agree	not sure	Disa gree
Benefit on PSHS concept and policy:			
19. PSHS can enhance villagers' capacities to solve their health problems.			
20. PSHS can create multi-sectoral collaboration among many alliances.			
21. PSHS can enhance villages to mobilize their resources to develop their health status.			
22. PSHS can create community involvement on health development.			
Barrier on PSHS concept and policy:			
23. PSHS can not make villagers have self-reliance on health issues.			
24. Under directing and controlling from the health personnel now, it creates difficulties for VHVS to practice activities under PSHS.			
25. There are many health policies directed or proposed from MOPH, so it create difficulty for VHVs to practice or follow them			

Questions	Agree	not sure	Disa gree
26. Villagers can easily access to the health centers under 30 baht program, they do not have necessary to self-care their health.			
Benefit of practice under PSHS:			
27. To play VHV's functions under PSHS can make villagers get better health status.			
28. To play VHV's functions under PSHS can make VHVs get respects from health personnel.			
29. To play VHV's functions under PSHS can build up VHVs capacities to solve health problems in villages			
30. To play VHV's functions under PSHS can encourage VHVs' capabilities to participate on other social works with many alliances from many sectors.			
Barrier of practice under PSHS:			
31. Village Health Volunteers have so much busy work to participate on activities in PSHS.			
32. Many activities in PSHS are difficult tasks for VHVs to practice.			
33. Present incentive interests for VHVs do not motivate them to play their roles quite well.			
34. To play VHVs' functions under PSHS can not make them get promotions from community leaders quite weel.			

Part IV: Availability of PSHS resources

(Please put the mark ✓ in the appropriate box to answer the question)

35. Is there any CPHCC in your village?

☐ 1. Yes ☐ 2. No (move to Q 40)

36. How often does CPHCC open? (Within 6 months)

☐ 1. Every day

☐ 2. Sometimes

☐ 3. Rarely.

☐ 4. Never.

37. Are there the following equipments in your CPHCC ready to use?

3.1. Sphygmomanometer	☐ 1. Yes	☐ 2. No
3.2. Stethoscope	☐ 1. Yes	☐ 2. No
3.3. Weighing machine	☐ 1. Yes	☐ 2. No
3.4. Diabetic test paper	☐ 1. Yes	☐ 2. No
3.5. Eye-chart	☐ 1. Yes	☐ 2. No

38. Are there the following materials in your CPHCC ready to use?

4.1. Table	☐ 1. Yes	☐ 2. No
4.2. Chair	☐ 1. Yes	☐ 2. No
4.3. Patient bed	☐ 1. Yes	☐ 2. No
4.4. Document container	☐ 1. Yes	☐ 2. No

39. Do the health printed materials in CPHCC ready to use?

5.1. Text books/manuals	☐ 1. Yes	☐ 2. No
5.2. Posters	☐ 1. Yes	☐ 2. No
5.3. Pamphlets	☐ 1. Yes	☐ 2. No
5.4. Documents	☐ 1. Yes	☐ 2. No

40. How often does village broadcasting disseminate health information? (Within 6 months)

☐ 1. Every day

☐ 2. Sometimes

☐ 3. Rarely.

☐ 4. Never.

41. Do the materials in village broadcasting ready to use?

7.1. Tape-radio ☐ 1. Yes ☐ 2. No

7.2. Amplifier ☐ 1. Yes ☐ 2. No

42. Is there any places for community development planning or meeting in your village?

☐ 1. Yes (specify_____)

☐ 2. No

43. Do 7,500 Baht of PHC budget enough to perform health activities in the village?

☐ 1. Yes ☐ 2. No Please give reasons……

Part V: Accessibility to health resources

(Please put the mark ✓ in the appropriate box to answer the question)

44. Can you easily use some places to perform health activities such as health education, exercise, training etc. in your village?

☐ 1. Yes

☐ 2. No Please give reasons……

45. Are you difficult to use materials in village broadcasting to disseminate health information?

☐ 1. Yes Please give reasons……

☐ 2. No

46. Are the health education materials in CPHCC easy to educate people? (If don't have CPHCC, move to Q 48)

☐ 1. Yes

☐ 2. No Please give reasons……

47. Are you difficult to use the equipments in CPHCC for basic health service?

☐ 1. Yes Please give reasons……

☐ 2. No

48. How often do you attend monthly meeting in CPHCC?

☐ 1. Every times

☐ 2. Sometimes

☐ 3. Rarely.

☐ 4. Never.

49. How often do you attend monthly meeting in Tambon communion?

☐ 1. Every times

☐ 2. Sometimes

☐ 3. Rarely.

☐ 4. Never.

50. Have you ever attended the yearly VHV refresh training?

☐ 1. Yes ☐ 2. No

51. Do you have some difficult problems about new PHC budget management? (7,500 Baht/village)

☐ 1. Yes (specify _____) ☐ 2. No

52. What are the important information sources that you can easily get it to support your work? (multiple choices)

☐1. Village informative center

☐2. CPHCC

☐3. Radio

☐4. Television

☐5. Health staff

☐6. Others(specify……

……

……

Part VI: Social support

(please mark ✓ in the column you agree)

Questions	Yes	No
Mental support		
53. Have you ever gotten appreciation from your family member?		
54. Have your neighbors/relatives accepted you to perform health activities in the village?		
55. When you have problems in your work, have you ever gotten consultations from VHVs?		
56. Have you ever gotten advices from civic groups to perform health activities in the village?		
57. Have you ever gotten any praise from health personnel?		
Material support		
58. Have your neighbors supported labor in order to do health activities with you?		
59. Have you ever gotten health supporting materials from religious priests?		
60. Have you ever gotten special budgets or money aids from health personnel for performing health activities in the village?		
61. Have you ever gotten materials from health personnel for performing health activities in the village?		
62. Have you ever gotten special budgets from member of TAO council?		
63. Have you ever gotten health supporting material from member of TAO council?		
Informational support		
64. Have you ever gotten health information from your neighbors?		
65. Have you ever gotten information from health personnel to support your performing health activities in the village?		
66. Have you ever gotten information from TAO member to support your performing health activities in the village?		

Part VII: Performances of VHVs on PSHS

(please mark ✓ in the column you agree.1=Always, 2=Sometimes, 3=Few, 4=Never)

Questions	1	2	3	4
67. Have you ever disseminated health knowledge for your villagers?				
68. Have you ever trained family health leaders in your village?				
69. Have you ever provided the simple treatment for the villagers?				
70. Have you ever given first aids for the patients before referring them to health center or community hospital?				
71. Have you ever provided and prepared essential drugs in order to use or sell in CPHCC?				
72. Have you ever surveyed village health information?				
73. Have you ever introduced health problems to TAO or health personnel?				
74. Have you ever planned village health plans with village committee or social groups in order to solve the health problems?				
75. Have you ever monitored the health operational activity plan in the village?				
76. Have you ever evaluated PSHS activities in the village?				
77. Have you ever managed the primary health care budget (7,500 baht) with the village health committee?				
78. Have you ever supported exercise group in the village?				
79. Have you ever persuaded villagers to play regular exercises?				
80. Have you ever surveyed and provided chemical substance to kill mosquito larva in village household?				
81. Have you ever jointed in “one big cleaning day campaign” in village?				
82. Have you ever motivated youth generation to joints with the “To be number one” project?				
83. Have you ever motivated elderly people to joints the activities of elderly club?				

Comment or suggestions for enhancement on VHVs performances or village health developments

……

……

……

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……

Thank you for your answers and cooperation.

APPENDIX B
GUIDELINE FOR IN-DEPTH INTERVIEWING

1. General information of VHVs

1.1 What are your motivate factors guided you to make decision to work as VHV?

1.2 In your opinion, are there any affect of your homework or your occupation to your VHV working? How do they affect to your VHV jobs?

1.3 How do your experiences of your VHV work help you to perform VHV duty?

1.4 Besides working as VHV, have you ever jointed in other social or community activities? And how do you think about it?

2. Knowledge about PSHS concept and policy

2.1 Have you ever heard "PSHS" before? And how do it function?

2.2 Are there any difficulties with your VHV roles and performances under PSHS?

2.3 How do you think with your VHV works under PSHS? Why do you think like these?

3. Perception towards PSHS concept and policy

3.1 What are the benefits of PSHS for people, community, and VHVs?

3.2 Does the community accept to PSHS and your new VHV roles under this system? And how does the community think about these?

4. Social support related to PSHS

4.1 Do the health personnel support your work? How do they support?

4.2 How do the official staffs help you to work under PSHS? And how do people and civic groups in your village help you to work?

4.3 Do villagers, community leaders or health personnel trust, realize and respect to you? And how do they practice on these?

5. Performances of VHVs on PSHS

5.1 Do you work in CPHCC? And how do you work?

5.2 Have you ever used village radio broadcasting to health disseminates and plan for your villagers? And have you any difficulty or barrier for using it?

5.3 Have you ever jointed with health personnel, community leaders, community organization, civic group or society group? How have you interacted with these groups?

5.4 How much do you have self-confidence in community health planning, implementation, and evaluation of its activities?

5.5 How much do you have self-confidence to play your role as facilitator in order to integrate people joint in community health planning and implementation?

5.6 Do you have any way to improve your duties as mention above to be better?

APPENDIX C

GUIDELINE FOR DIRECT OBSERVATION ON CPHCC FUNCTIONS

1. Location

☐ Isolate ☐ House of someone

2. Cleanness

☐ Good ☐ Fair ☐ Poor

3. Tidiness

☐ Good ☐ Fair ☐ Poor

4. Readiness of equipments

4.1. Sphygmomanometer	☐ 1. Yes	☐ 2. No
4.2. Stethoscope	☐ 1. Yes	☐ 2. No
4.3. Weighing machine	☐ 1. Yes	☐ 2. No
4.4. Diabetic test paper	☐ 1. Yes	☐ 2. No
4.5. Eye-chart	☐ 1. Yes	☐ 2. No

5. Readiness of materials

5.1. Table	☐ 1. Yes	☐ 2. No
5.2. Chair	☐ 1. Yes	☐ 2. No
5.3. Patient bed	☐ 1. Yes	☐ 2. No
5.4. Document container	☐ 1. Yes	☐ 2. No

6. Readiness of health printed materials

6.1. Text books/manuals	☐ 1. Yes	☐ 2. No
6.2. Posters	☐ 1. Yes	☐ 2. No
6.3. Pamphlets	☐ 1. Yes	☐ 2. No
6.4. Documents	☐ 1. Yes	☐ 2. No

APENNDIX D

Table D1 Number and percentage of availability in details

Health resources	YES		NO	
	No.	%	No.	%
Readiness of materials in CPHCC				
Sphygmomanometer	280	84.34	38	11.45
Stethoscope	196	59.04	122	36.75
Weighing machine	297	89.46	21	6.33
Diabetic test paper	191	57.53	127	39.25
Eye-chart	103	31.02	215	64.76
Readiness of materials in CPHCC				
Table	263	79.22	55	16.57
Chair	274	82.53	44	13.25
Patient bed	100	30.12	218	65.66
Document container	193	58.13	125	37.65
Readiness of health printed materials in CPHCC				
Text book/Manuals	171	51.51	147	44.28
Posters	243	73.19	75	22.59
Pamphlets	174	52.41	144	43.37
Documents	176	53.01	142	42.77
Readiness of materials in village radio broadcasting				
Radio-tape	228	68.67	104	31.33
Amplifier	281	84.64	51	15.36

Table D2 number and percentage of respondents classified by performances level

Questions	Always N(%)	Sometime N(%)	Few N(%)	Never N(%)
1. Have you ever disseminated health knowledge for your villagers?	124 (37.3)	193 (58.9)	13 (3.9)	2 (0.6)
2. Have you ever trained family health leaders in your village?	81 (24.4)	132 (39.8)	98 (29.50	21 (6.3)
3. Have you ever provided the simple treatment for the villagers?	64 (19.3)	134 (40.4)	105 (31.6)	29 (8.7)
4. Have you ever given first aids for the patients before referring them to health center or community hospital?	56 (16.9)	142 (42.8)	111 (33.4)	23 (6.9)
5. Have you ever provided and prepared essential drugs in order to use or sell in CPHCC?	80 (24.1)	61 (18.4)	113 (34.0)	78 (23.5)
6. have you ever surveyed village health information?	129 (38.9)	69 (20.8)	123 (37.0	11 (3.3)
7. Have you ever introduced health problems to TAO or health personnel?	83 (25.0)	154 (46.4)	40 (12.0)	55 (16.6)
8. Have you ever planned village health plans with village committee or social groups in order to solve the health problems?	103 (31.0)	176 (53.0)	22 (6.6)	31 (9.3)
9. Have you ever monitored the health operational activity plan in the village?	129 (38.9)	160 (48.2)	23 (6.9)	20 (6.0)
10. Have you ever evaluated PSHS activities in the village?	117 (35.2)	149 (44.9)	149 (44.9)	32 (9.6)
11. Have you ever managed the primary health care budget (7,500 baht) with the village health committee?	197 (59.3)	74 (22.3)	21 (6.3)	40 (12.0)

Table D2 number and percentage of respondents classified by performances level (cont.)

Questions	Always	Sometime	Few	Never
	N(%)	N(%)	N(%)	N(%)
12. Have you ever supported exercise group in the village?	206 (62.0)	96 (28.9)	20 (6.0)	10 (3.0)
13. Have you ever persuaded villagers to play regular exercises?	229 (69.0)	79 (23.8)	19 5.7)	5 (1.5)
14. Have you ever surveyed and provided chemical substance to kill mosquito larva in village household?	284 (85.5)	33 (9.9)	9 (2.7)	6 (1.8)
15. Have you ever jointed in “one big cleaning day campaign” in village?	272 (81.9)	40 (12.0)	11 (3.3)	9 (2.7)
16. Have you ever motivated youth generation to joints with the “To be number one” project?	227 (68.4)	86 (25.9)	9 (2.7)	10 (3.0)
17. Have you ever motivated elderly people to joints the activities of elderly club?	233 (70.2)	67 (20.2)	15 (4.5)	17 (5.1)

APPENDIX E
THE RESULTS OF QUALITATIVE DATA

1 General information of VHVs

From in-dept interview, it was found that, the reasons of VHVs decided to play VHV roles were:

(1). The public consciousness of VHVs: some of them told that, they like to help people and their society in order to make them to get healthy.

(2). They have enough time to work for public benefits.

(3). They believe that, they can get more benefits from their VHV working as the respect and trust from community.

(4). They can get more skills for working.

(5). They have self-proud ness when they work as VHV.

Two of them said with these as follows:

1.1 "I like this work; I like to help people; my family and my relative. I want them to be healthy and happy. Another thing, I have enough time to joint other worked in my village. Therefore, I volunteer to working as VHV".

1.2 "When I working as VHVs, it has not any impact to my family, but it has more benefit for me. Because, I can get a lot of experience from it. Right now, not only I am a VHV but I also have another responsibilities in the village such as member of self-funeral help group, bloom cooperative group, handicraft group and school committee. I believe that, if I have many responsibilities, it will make me have more experience; more knowledge. Over all, I get the respect and trust from people. May be they think that, even I have many responsibilities, but I can be successful. I am very happy when people trust and believe in me. So, I think I need to work hard for them. Now I like this work and I will do it forever."

2 Knowledge about PSHS of VHVs

From the quantitative data, it was shown that, majority of VHVs had moderate knowledge about PSHS. But, from in-dept interview, it was found that, most of them told that they never heard the term "PSHS" and they do not know their new roles. As one VHV said that:

2.1 "I never hear this word, the health staff does not educate for us. I really do not know".

However, they made sense that these did not have difference from the old, PHC work as they ever did it before. As one VHV told that

2.2 "I think it is the same work as we do now. Because, it is the work for people. We are still not train on this topic, I am not sure it is the same whether or not".

3 Perception towards PSHS of VHVs

From in-dept interview, some of them still misunderstand about benefits and barriers of PSHS, they understood that, their works had to control or direct by health personnel, they had a lot of duties for their daily living. So, they want someone help them to perform health activities in their villages as a nurse. In addition, for new PHC budget management, they observed that, there was not appropriate using of this budget as used for meeting per diem, national VHV's day, let someone borrowed or treasurer used it then could not returned. So, they though that, it need to had the controlling from health personnel as 5 of them said that:

3.1 "In my opinion I think that, to success the objective of this system, it has to take a long time. Especially, to make people have self health reliance, I do not believe that it is possible. Because, now people still living under helping of government".

3.2 "VHVs have a lot duty; VHVs are only farmer to earn money for daily living."

3.3 "Because, we have no salary, we work as really voluntary not reward at all. I want every villages have a nurse in order to relieve VHVs do not work hard."

3.4 "The budget of 7,500 Baht is not enough to use on health activities in the village. Besides, some of this budget is used for meeting per diem or national VHV's day. I think that is not correct. I think, we should have the controlling of health personnel for using this budget"

3.5 "It needs to have controlling from health personnel for the budget management. Because, there were failure on budget management by VHVs in the past. Some one borrowed and did not returned, but treasurer can not ask for return of that money, or sometime treasurer use it and people do not dare to ask for return. So, it needs to have the strictly controlling from health personnel or official staff."

4 Social support

From the result of the study, most of VHVs had high social support. But, from in-dept interview, they need the support from government sector like rewards or living support funding as two of them mention about this matter that:

4.1 "Since I am VHV, most of us are very good working even we do not get any reward. In my opinion, to encourage VHVs to do their responsibility well, it need to give them some rewards it will be better."

4.2 "I want to have the living support funding to support VHVs can easily in daily living and then they will have more time to do their work".

5 Performances of VHVs on PSHS

From in-dept interview, it was presented that, VHVs were performed PSHS activities as health dissemination, diseases prevention, first aid, home visit and social development activities.

However, there were some of them never did some activities as introduction of health problems to TAO or health personnel, management of new PHC budget and evaluation of PSHS activities. It may be due to they think that, they have to work under directing and controlling of health personnel, especially in some activities as training of family health leaders, village health plan process and new PHC budget management. As 7 of them said that:

5.1 "The duty of VHVs is the "bad news announcement and health disseminate" we will play our roles as a disseminator. For example, in the rainy season, it might be having the spread of dengue fever; we will announce villagers to joint in mosquito larvae killing."

5.2 "I sometimes disseminate people about diseases prevention and health promotion. Such as how to protect ourselves from mosquito bite to avoid dengue fever or regular exercise for healthy."

5.3 "I do not joint in health planning, because, every health plan come from health center. I only wait for the order from health personnel; we have no thing that dissatisfaction. Because, we are the VHVs, we can do every thing that they order."

5.4 "In my observation, in the past, mostly of the budget management will do by chief of VHVs and village committee, common VHVs as me never joint."

5.5 "VHVs do not set up the training by themselves, we are only an assistant. Most of the training are arrange by health personnel, when they have plan to train in our

village they will inform the chief of VHVs, and then chief of VHVs will allot the work to VHVs such as prepare the place, inform the family health leaders who will be attend on the training or some one will be an assistant trainer."

5.6 "Sometimes, I have provided the basic heath services for my villagers such as to take a temperature, to weigh, to take a blood pressure. And sometimes I have followed the patient who got some chronic diseases such as diabetes, high blood pressure."

5.7 "Every activity in our village, we joint every times. These activities not only about health but also including other social activities. "

APPENDIX F

THE RESULTS OF DIRECT OBSERVATION ON THE FUNCTIONS OF CPHCCS AND THE RELATED PERFORMANCES OF VHVS

From direct observation of 4 Community Primary Health Care Centers in Namphong sub-district, it was presented that all of them were daily opened and have its appropriate locations. Each has the identity place separated from other government offices and located at center area of village. These create so much easiness for the villagers and others to access them. All were cleanness and tidiness. Their physical environments were comfortable for health personnel and VHVs in additional to other villagers to work, joint meeting and visit them. Also they had enough materials and equipment promptly to use for provision of the basic health services and disease prevention.

All of them are in the catchment area of Namphong community hospital. In this area, it mean to that the hospital will provide community nurses to work in CPHCC every day and they also has some assistance from nurse assistants who are passed a special training about community health nurse. Nurse assistants are supported by Tambon Administrative Office council in term of its budget for their training and working. For Village Health Volunteers, they sometimes joint to work here and this is depended on demands of the community nurses. If they want VHVs to help something in CPHCC, they will inform VHVs to participate in their works especially in a big cleaning day, a National AIDS day….etc.

In a contrast way from mentioned above, one Community Primary Health Care Center, in one village of Bang Sai sub-district, was inconveniences for visitors and Village Health Volunteers due to it was established in chief of VHV' s house. And it was irregularly opened. All the health activities were only supplied by only chief of VHVs. It was not therefore a center place for VHVs to have meeting and planning on

PSHS. To say in more details, they did not participate to use the center in order to discuss, plan and evaluate health activities.

BIOGRAPHY

NAME : Bayliab Ketsophaphone

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INSTITUTION ATTENDED : Vientiane Medical University
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