CHAPTER III

RESEARCH METHODOLOGY

This study aimed at providing "capacity analysis" for implementing health promotion. A survey was developed and a draft was pilot tested with a small group of Tambon Health Centers in nearly province, Uthaithani. The comments were incorporated into the final version. Chulalongkorn University's Research Ethics Board approved the survey and study. All Health Workers at Tambon Health Centers, including health centers, primary care units (PCU), and community medical care units (CMU) in supervision of Nakhonsawan Provincial health office northern Thailand, who practiced health promotion as their responsibility and represents the organization were chosen and asked to respond the questionnaire. Descriptive statistics such as frequency and percentages were used and Spearman's rank correlation was used to test for relationship among domains and sub-domains of capacities, using SPSS for window version 11.5.

3.1 Study Site

This study was conducted at Nakhonsawan Province, in Northern Thailand.

3.2 Study Design

The study design was cross sectional descriptive study. The question tool contains concept of health promotion with questionnaires on three domains of board health promotion concepts, individual, organization and environment, and structured questionnaires applied from "HEALTH PROMOTION CAPACITY CHECKLIST" of Prairie Region Health Promotion Research Centre, University of Saskatchewan, Saskatoon, Saskatchewan, Canada.

Tested and modified questionnaires were distributed to all tambon health centers, primary care units (PCU), and community medical care units (CMU) through the District Health Office staffs in Nakhonsawan province. Health workers who represent the "implementing health promotion" in each health center, either head-office or his/her colleague were invited to respond. All respondents were asked to respond their opinion in overview of each topic (close ended questions) by self-assessing checklists in three domains; 1)Individual, 2)Organization, and 3)Environment.

Respondents were asked to identify and assess the implementation of health promotion with their own experienced in responsible areas. The Health Promoting Implementation Questionnaire consists of three domains where the respondents were asked to indicate their using the checklist questionnaire and respond on overall reflection as open-ended questions of board health promotion concept as follows:

Individual Health promotion Capacity – This domain consists of four sections: Knowledge, Skills, Commitment, and Resources. The items are general, so responses should be the best 'overall' fit, not based on one incident or experience. The

quality of the answering needs more critical implementing process than the outcome.

The items in questionnaire are listed in table 3.1.

Table 3.1: Individual Health Promotion List

Knowledge
• I have a holistic understanding of health and its determinants.
• I understand the fundamental principles of population health promotion.
• I am familiar with a variety of strategies for health promotion.
• I understand the contexts within which different health promotion strategies are effective.
• I am familiar with the conditions, aspirations, and cultures of the populations with Whom I work.
Skills
• I am able to effectively plan, implement and evaluate health promotion.
• I communicate effectively with diverse audiences, using a variety of means.
• I work well with others, in a range of roles and contexts.
• I systematically gather and use evidence to guide my practice.
• I am able to build the capacity of communities and organizations with whom I work.
• I am strategic and selective in my practice.
Commitment
• I have energy, enthusiasm, patience and persistence in my work.
• I value equity, justice, empowerment, participation, and respect for diversity.
• I am flexible, innovative, and willing to take thoughtful risks
• I learn from my experiences, and from those of others.
• I am confident in my abilities, and am credible in the eyes of others.
• I believe in and advocate for health promotion.
Resources
• I have adequate time to engage in health promotion practice.
• I have tools to aid my practice so that I am not constantly reinventing the wheel.
• I have the infrastructure needed to practice health promotion.
• I have supportive managers, colleagues, and allies with whom to work and learn.
• I can access adequate financial resources for my health promotion practice.

Organizational Health Promotion Capacity – The domain comprised of four broad areas of organizational capacity commitment, culture, structures, and resources. The organizational capacity questionnaire is intended for practitioners in health centers to reflect on their organizations' potential. The items from the organizational health promotion capacity are listed in table 3.2 below.

Table 3.2: Organizational health Promotion Capacity List

Commitment

- We value health promotion at all levels of our organization.
- We have a clearly defined vision and mission to engage in health promotion.
- Our policies and programs support our health promotion mission.
- We have strategic priorities for addressing the determinants of health.
- We value partnerships with diverse organizations and communities.

Culture

- Our leaders and managers enable health promotion practice.
- We foster critical reflection, innovation, and learning.
- Health promotion principles and values are practiced and celebrated at all levels.
- Positive and nurturing relationships are fostered among employees.
- Communication throughout the organization is open and timely.

Structures

- Health promotion is a shared responsibility.
- Health promotion is integral to our accountability mechanisms.
- Our structures facilitate collaboration, both internally and externally.
- We have effective policies for human resource development.
- We use empowering and evidence-based processes for strategic and program planning.

Resources

- We have many employees with solid knowledge and skills in health promotion.
- We dedicate adequate human resources to health promotion activities.
- Resources for health promotion are allocated from our core budget.
- We actively engage with our communities.
- We provide practitioners with adequate infrastructure and equipment to do their jobs.

Environmental Health Promotion Capacity – The domain has three levels of health authority: central, provincial and district, and peer organization in Tambon level. Table 3.3 contains a list of environmental health promotion capacity.

Table 3.3: Environmental Health Promotion Capacity List

Political will

- District and provincial, and central governments provide adequate financial resources for the comprehensive health system, including care, prevention, and promotion.
- District and provincial, and federal departments of health provide leadership for the health promotion agenda.
- Provincial/regional health care organizations are mandated to invest core funding in population health promotion.
- Governing boards of provincial and regional health care organizations value and support health promotion as a core mandate of their organization.

Public opinion

- People have a holistic understanding of health and its determinants.
- People believe that addressing the determinants of health is a shared responsibility.
- People take ownership of and responsibility for their own health and well-being.
- People take collective action to foster community well-being.
- People believe the health system has a mandate for health promotion.
- Positive public and media attention is paid to health promotion.

Supportive organizations

- Diverse organizations address the determinants of health.
- Supportive organizations include those from outside the health care sector.
- Supportive organizations frequently partner with one another, including intersectorally.
- Supportive organizations are linked both through informal networks and formal associations.
- Supportive organizations advocate to enhance the credibility of health promotion.

Ideas and other resources

- Stimulating and innovative ideas about promoting health are widely accessible.
- Evidence for the effectiveness of health promotion can be easily found.
- Resource materials and conceptual tools are available for a wide range of health promotion strategies, initiatives and processes.
- Networks of researchers and practitioners are available for advice and support with regard to specific challenges.
- Appropriate opportunities exist for professional development in health promotion.

Questionnaire can be answered in a variety ways of rating by practitioners to assess health promoting implementation capacity. It can be used as a baseline assessment and coupled with a plan for improvement. This could also constitute a part of an annual review of practice, review of an organizational change process or an environmental scan. The questionnaire is used for self-learning and for later review or to share with others. Respondents were allowed to indicate their health center's capacities whether an individual or team response unless they worked in same health center.

Rating - a simple Likert's scale with five response options was used. Respondents were asked to rate each item on a 1-to-5 response scale where:

Table 3.4: Value of scale rating

For Positive Items	Scale	For Negative Items
strongly disagree	1	strongly agree
Disagree	2	agree
Undecided	3	undecided
Agree	4	disagree
strongly agree	5	strongly disagree

3.3 Population and Sample

All of the 189 tambon health centers under control of provincial health office in Nakhonsawan province were recruited and health workers in those health centers were invited to be respondents. Respondents who respond the checklist questionnaires must represent health centers and be working for health promotion as their direct responsibility.

3.4 Tool

"HEALTH PROMOTION CAPACITY CHECKLIST" of Prairie Region Health Promotion Research Centre, University of Saskatchewan, Saskatoon, Saskatchewan, Canada was applied for this study. The questionnaire aimed to assess capacity of health promotion providers in three domains, individual, organization and its wide environment on board concepts of health promotion providing. Self-assessment was the way of use for this tool.

3.5 Validity and Reliability

3.5.1 Validity

Validity is the ability to measure what it is designed to measure. The content and face validity were checked by two health promotion expertise after constructing the draft questionnaire and further reviewed by research committee.

3.5.2 Reliability

Reliability process was conducted by pre-testing on the similar population in nearby Province, Uthaithani. The 21 health centers in four districts responded the questionnaire. All responded questionnaire were ran statistic test after checked for completeness. Internal consistency was tested using Cronbach's alpha coefficient where alpha was equal to 0.97 in overview, 0.92 for individual, 0.92 for organizational and 0.94 for environmental.

3.6 Data Collection

The data collection process of this research was done as follows:

1. Researcher submitted the letter of request from the Dean of the College of Public Health Sciences, Chulalongkorn University, to the Nakhonsawan

Provincial Health Office and all district health offices asking for the permission to directly submit and collect questionnaires from all health centers.

2. Researcher contacted and coordinated with the staff from Provincial and District Health Offices in Nakhonsawan province during data collection process.
3. Researcher collected the completed questionnaires from provincial and district health officers who distributed and collected the study questionnaire.
4. The completed questionnaires were then verified for data analysis.

3.7 Data Management

1. The questionnaires were checked and encoded when returned. If the questionnaires were found to be incomplete, it was completed via phone conversation with the same respondent.
2. Data were entered and verified for completeness, range and logical checked by Statistical Package for the Social Sciences (SPSS) for window and also manual cross-check was done.
3. Cleaned data were analyzed by SPSS after verification.

3.8 Data Analysis

3.8.1 After reviewing the data for completeness, they were then decoded and processed for statistical analysis using Statistical package for social science (SPSS) for window. Descriptive statistics were used for frequency, percentage, mean, standard deviation and median as appropriate.

3.8.2 Qualitative data responses were skipped because it was incomplete.

3.8.3 Descriptive Statistics were used to state health promoting implementation capacity of health centers in each domain and sub-domain. Inferential statistic, Spearman's rank correlation was used to test relationship among them.

Rating scale attributed present capacity of respondents. When the score of five level options ('strongly disagree' =1, 'disagree' =2, undecided =3, 'agree' =4, and 'strongly agree' =5) attributed greater than 3, it was taken to mean that subject "agree" where he/she has that indicator of his/her capacity. The following are agreement and meaning of mean score;

≤ 3.0 = disagree = inappropriate capacity

> 3.0 = agree = appropriate capacity

Attribute measures are aggregating as follows:

- Respondents' characteristics
- Individual capacities; knowledge, skills, commitment, resources
- Organizational capacities; commitment, culture, structure, resources
- Environmental capacities; political will, public opinion, supportive organizations, ideas and others resources

Mean scores and variables associations were classified to state overview of key potentials, strengths and weaknesses.