CHAPTER III

RESEARCH METHODOLOGY

1. Research Design

This study focuses on determining the proportion of functional disability in the population and the associated factors that may influence functional disability. The world Health organization has set standards for the international classification of Impairment, Disability and Handicap (ICIDH)

- Impairment-with regard to health, impairment can mean loss or low level of cognitive and physical abilities, reduction in physical functions necessary for work including memory, loss of motor skills, and injuries.

- Disability-can be defined as the loss the performance ability caused by some physical or cognitive impairment such as low levels of cognitive ability which might prohibit one from such everyday tasks as going to market or dressing themselves.

- Handicap-can result from an impairment or disability and often limits the person's role in social life. For example if a girl is injured and handicap, she may less willing to interact socially which reduces her role in the social sphere. Disability is a major problem for the elderly, and the popular measurement tool used to determine disability is to gauge their ability to perform certain everyday tasks.

The researcher considers the following method to screen the disability and divides the tests into four sections.

Section 1   Socio-Demographic characteristic of the elderly

Section 2   Basic activity of daily living (BADL)

Section 3   Instrumental activity of daily living (IADL)

Section 4   Cognitive ability

2. Research Questions

1. What is the level of physical ability among elderly in Tumbon Anong ?

2. What is the relationship with dependence in physical ability among elderly in Tumbon Aonang ?

3. What is the prevalence of dementia among elderly in Tumbon Aonang ?

4. What is the relationship with dementia among elderly in Tumbon Aonang ?

3. Objectives

General objectives

To assess functional abilities among elderly in Tumbon Aonang

Specific objectives

1. To assess physical ability of elderly in Tumbon Aonang.

2. To assess dementia among elderly in Tumbon Aonang.

3. To determine the factors associated with basic activities of daily living.

4. To determine the factors associated with instrument activities of daily living.

5. To determine the factors associated with dementia among elderly in Tumbon Aonang.

4. Conceptual Framework

To assess physical disability and dementia which are part of functional disability and determine associated factors in the elderly who lives in Tumbon Aonang, Muang district, Krabi province by descriptive cross-sectional study .(figure3)
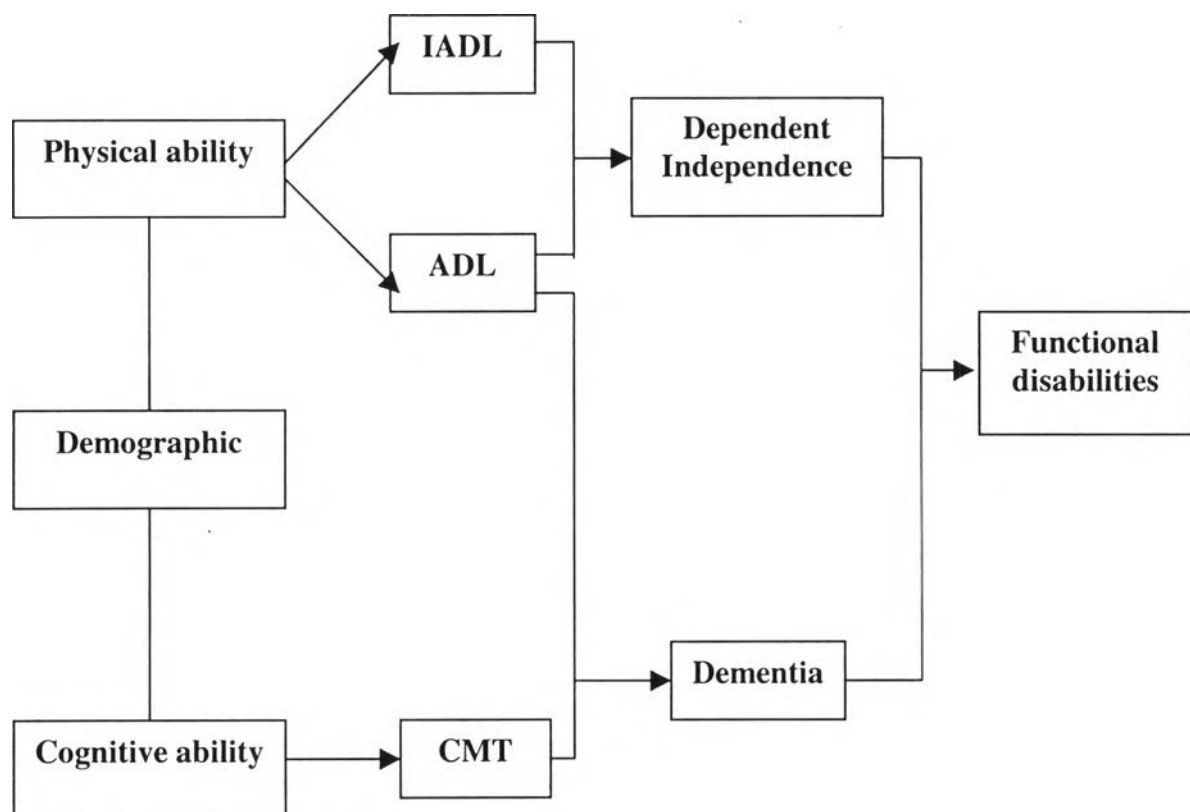

Figure 3: Conceptual framework

In the figure 3, dependent and independent are the outcome of assessing physical ability by using ADL and IADL. Dementia is the outcome of measuring cognitive ability which can be used CMT combined with ADL, or CMT with IADL.

This study is strictly using measurement by CMT combined with ADL, which connected by a straight line.

5. Limitation and Obstacle

Some of the elderly have abnormalities such as unconscious, hearing loss, confusion and a problem with communication that exclude from screening dementia

6. Expected Benefit of the Study

The results of the research will be use to improve health care service to provide appropriate service for the elderly in the community which are health promotion, medical treatment and rehabilitation.

7. Operational Definitions

Elderly : the person age 60 and over who live in Tumbon Aonang, Muang district, Krabi province

Functional ability : The capacity to perform a given function or activity.

Disability : The restriction in a person's ability to perform function in daily live.

Physical ability : The ability to perform activities of daily living including BADL (Basic Activities of Daily Living) and IADL (Instrumental Activities of Daily Living)

Cognitive ability : The ability to perform attention, memory, orientation, calculation, language, visual – spatial ability, concentration and abstraction and judgment.

Dementia : The loss of a person's cognitive ability that interferes with normal activities.

8. The Categories of Severity in Physical Disability

Independence : There is no need for helping to perform activities in daily life

Need supervision : Performing activities which need another person to look after

Need assistance : Performing activities which need someone help while individual in doing part of activities.

Dependence : Can not performance any activities and need another person for helping.

9. Research methodology

This study is a cross-sectional descriptive study.

10. Target Population

Thai elderly age 60 years and over who live in Tumbon Aonang, Muang district, Krabi province.

11. Population Study

Assessing physical ability, the researcher includes all the elderly who live in Tumbon Aonang 375 people.

Assessing cognitive ability, the elderly who have abnormality with mental health problem in communication will be excluded from this study.

12. Ethical Consideration

This study will be done by interviewing the elderly in the community. The researcher will clarify the objective of the study. The research result will cover all of the elderly and the benefit of this study is to improve health care service.

13. Data Collection

Data were collected by interviewing and using the screening test during October-November 2003. All 375 elderly were interviewed, ten of the elderly were excluded from screening cognitive ability because of unconsciousness, abnormality in mental health and deafness.

14. Data Analysis

The instrument included 15 items for assessing physical ability. Ten items belong to basic activities of daily living and five to instrumental activities of daily living. Each activity has four levels of severity of disability; independent, need supervision, need assistance and dependent.

The proportion of Physical disability is described by the amount of help received in ADL. By grouping the severity of disability into two categories; independence and dependence. Dependence includes need supervision; need assistance and dependent.

For assessing cognitive ability, the researcher used Chula Mental Test which consists of thirteen items and the total score of 19 was used to this The researcher established the prevalence of dementia classified by the cut point score in Chula Mental Test as less than score 15 and dependence with basic activities of daily at least one activity.

15. Statistical Analysis

After collection of the data, the variables were defined and coded to facilitate cleaning by using the statistical package. (SPSS 11.0) Then through analysis, interpretation of statistical result was achieved.

The section of characteristics of data, and associated factors with physical disability, percentage, Median, S.D. and Chi-square test were used to describe the data. Because the researcher found a few elderly who suffer dementia, percentage was use to describe the data