

CHAPTER IV

RESEARH PROPOSAL

Assessing Quality of Life of the Elderly People in Khon Kaen Province

4.1 Introduction

Age is the first indicator of progress through the stage of life and serves as one of the scheduling mechanism of numerous forms of social and cultural activity such as schooling, dating, marrying, working and retiring (William, 2001)

Worldwide the proportion of people age 60 and over is growing faster than any other age group. Between 1970 and 2025, a growth in older population of some 870 million or 380% is expected. In 2025, there will be a total of about 1.2 billion people over the age of 60. The shift in age distribution is most often associated with the more developed region of the world. In developing countries, the numbers will continue to rise at a far more rapid rate than in developed countries. It is estimated that by 2025, some 840 million people over the age of 60 will live in developing countries. They will represent 70 percent of all older people worldwide (WHO, 2001).

In the case of Thailand, a developing country in South East Asia, has experienced a declining rate of population growth from 3.0 percent in the beginning of the Third National Social and Development Plan (1972-1976) to 1.2 percent at present (Wongboonsin, 1998).

According to the U.N. medium projection, the Thai population will continue to increase, but with a declining growth rate. As for the elderly (60 years old and over), their number will also increase continually, from 1.6 million in 1980 to 2.6 million, 3.7 million and 7.1 million in 1990, 2000 and 2020 respectively (Wongsinboon, 1998).

As mentioned above, the current trend towards an increasing number and proportion of the elderly, part of the structure change of population in Thailand contributed to an increase in the average life expectancy of the population. Furthermore the rapid population aging is accompanied by dramatic changes in the family structure and role, as well as in labor patterns and migration. Urbanization, the migration of young people to cities in search of jobs, smaller families and more women entering the formal workforce means that fewer people are available to care for older people when they need assistance.

Furthermore as the nation ages, in parallel to changing living and working conditions, a shift of disease patterns become inevitable. The shift from communicable diseases to non communicable diseases is fast occurring in Thailand, where chronic illness such as heart disease, cancer and depression are becoming the leading causes of

death and disability. Especially the Thai elderly, who are considered to be a high-risk group for ill health, will have an impact on both social and health services in the future.

The major causes of death of the elderly are cardiovascular diseases (Stroke and Hypertension), cancer, DM and COPD (The Bureau of the health policy and planning, Ministry of Public Health, 1999). Chronic diseases are significant and costly causes of disability, reducing quality of life (WHO, 2001). An elder's disabilities make it difficult to carry out the basic 'Activities of Daily Living' (ADL) such as bathing, eating, using the toilet and walking across the room. The likelihood of experiencing major disabilities dramatically increases in very old age. Chuprapawan C. (2000) found that 19 percent of the elderly in Thailand face disability with the major cause of accidents, stroke and blindness. There were 2.1 percent of the Thai elderly dependent from their family. The more age the more dependence.

However, disabilities associated with elderly people can be prevented or delayed. For example, there has been a significant decline over the last 20 years in age specific disability rate in the U.S.A., England, Sweden and other developed countries, using the strategies that focus on maintaining independence, preventing, delaying diseases and improve the quality of life (Lassy, 2000).

WHO defines quality of life as individuals' perception on their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectation, standard and concerns. It is a broad ranging concept affected with a complex way by the persons' physical health, psychological state, level of

independence, social relationships, personal beliefs and relationship to salient features of the environment (WHO, 1996). WHO has therefore developed instruments for assessing quality of life that can be used in a variety of cultural settings while allowing the results from different populations and countries to be compared. The instruments serve many purposes, including use in medical practice, research, audit and policy making. Thus, assessing the quality of life of the elderly people will help us to know the real situation from a holistic point of view.

Khon Kaen is a large province in the North East of Thailand. At present the number of elderly people in Khon Kaen are 146,533. The number of the elderly people increased during the last three year with 0.07 percent (Khon Kaen Provincial Health Office, 2001). In addition, the direction of Thailand Health Development under the 9th National Economic and Social Development Plan (2002-2006) focuses on human centered development within holistic approach strategies for sustainable development. The main strategies are to improve the quality of life of the Thai people (The Bureau of the health policy and planning, Ministry of Public Health, 2001).

To improve the quality of life of Thai elderly people in Khon Kaen, base line data need to be assessed. Unfortunately, there is no information in Khon Kaen Province. Assessing Quality of life will be an important thing to do. Furthermore, in later life, activities need to focus on maintaining independence, preventing and delay disease and improving the quality of life for elderly people who live with some degree of illness or disability. In addition, the WHOQOL-BREF was recommended for multi purpose using. It was including for assessing the quality of life of the high-risk

population. Therefore, measuring Quality of life with the standard tool WHOQOL will be useful for the elderly health promotion planning, health policy research and will provide an important aspect of the routine auditing of health and social services. Finally, the information will be useful to attempts to improve the elderly quality of life.

4.2 Research Question

What is the elderly people's perception on quality of life in Khon Kaen Province?

4.3 Objective

General objective

- To describe the quality of life of the elderly people in Khon Kaen Province to inform decision making in term of policy, health promotion and social services.

Specific objectives

- 1). To describe the physical health factors influencing the quality of life of the elderly people's perception in Khon Kaen Province.
- 2). To describe the psychological factors influencing the quality of life of the elderly people's perception in Khon Kaen Province.

- 3). To describe the social relationship factors influencing the quality of life of the elderly people's perception in Khon Kaen Province.
- 4). To describe the environment factors influencing the quality of life of the elderly people's perception in Khon Kaen Province.
- 5). To explore the perceptions of the elderly people on key factors affecting quality of life of the elderly people in Khon Kaen.

4.4 Operational Definitions

Quality of life (QOL)

Means individuals' perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns. It is a broad ranging concept affected in a complex way by the persons' physical health, psychological state, level of independence, social relationships, personal beliefs and relationship to salient features of the environment

QOL will be measured by WHOQOL-BREF, which contains 4 domains, 24 topics and 2 topics for overall quality of life and general health facets.

Physical health factors

Refer to the WHOQOL-BREF domain that contains facets incorporated within 7 topics;

- Activity of Daily Living

- Dependence on medical substance and medical aids
- Mobility
- Energy and fatigue
- Pain and discomfort
- Sleep and rest
- Work capacity

Psychological factors

Refer to the WHOQOL-BREF domain that contains facets incorporated within 6 topics;

- Bodily image and appearance
- Negative feelings
- Positive feelings
- Self-esteem
- Spiritual/religion/personal beliefs
- Thinking, learning, memory and concentration

Social relationship factors

Refer to the WHOQOL-BREF domain that contains facet incorporated within 3 topics;

- Personal relationship
- Social support
- Sexual activity

Environment factors

Refer to the WHOQOL-BREF domain that contains facets incorporated within

8 topics;

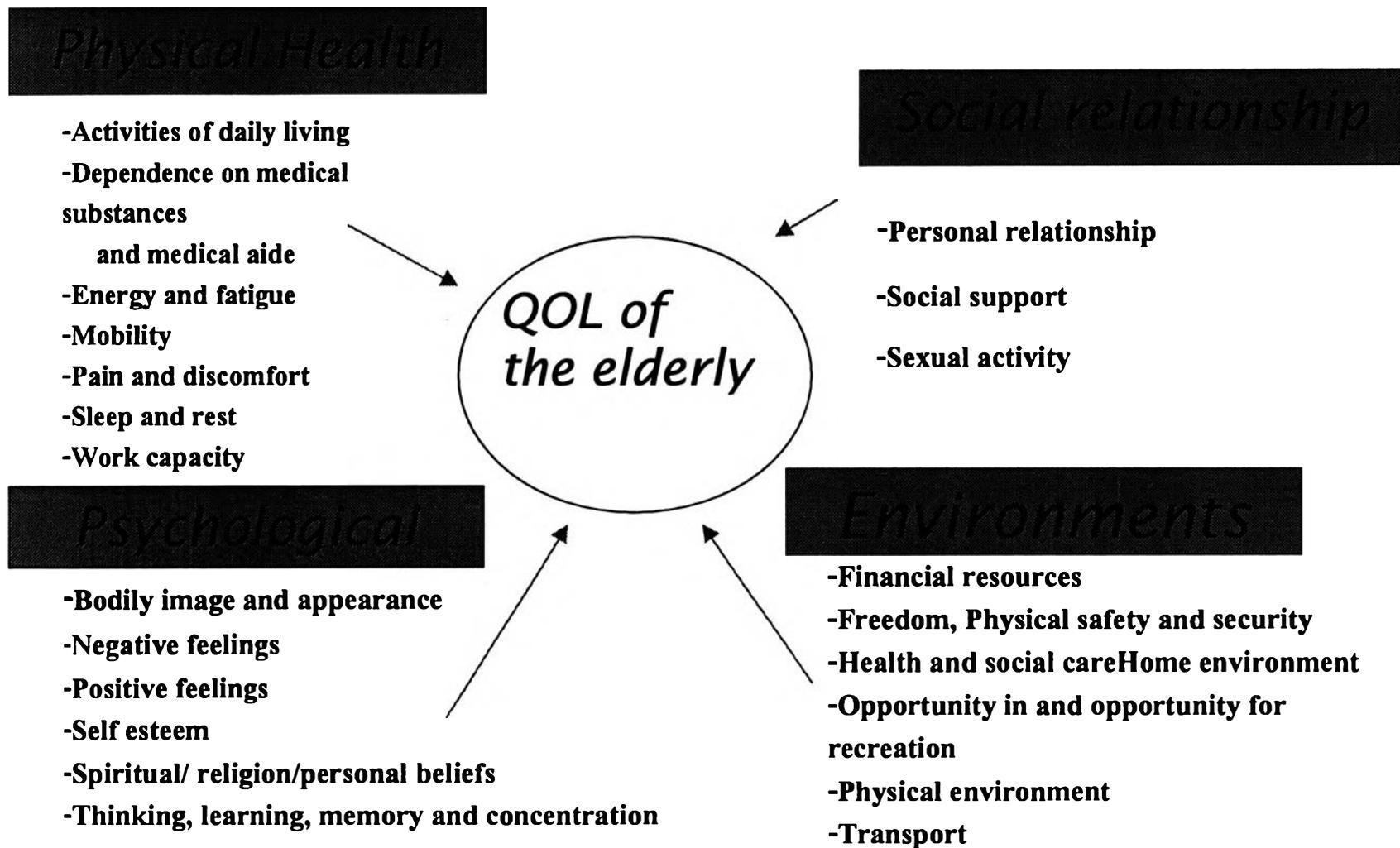
- Financial resource
- Freedom, physical safety and security
- Health and social care
- Home environment
- Opportunity in and acquiring new information and skills
- Participation in and opportunity for recreation
- Physical environment
- Transport

The elderly people

Mean the people whom are 60 or more than 60 year old in Khon Kaen Province.

The conceptual framework for this study is shown in Figure 4.1.

Figure 4.1: Conceptual Framework: QOL of the elderly people in Khon Kaen Province



Based on WHO 1996

4.5 Methodology

Study Design

The study is a cross – sectional descriptive study that aims to describe the perception on quality of life of the elderly people in Khon Kaen Province.

Population Study

- 1). **Target population:** Thai elderly people in Khon Kaen.
- 2). **The population of this study:** Thai elderly in Khoa Suan Kwang district, Ban Fang district, Weang Yai district and Si Chom Pu district.
- 3). **Sample population :** Elderly people in Khon Kean that calculated by the formula for a cross – sectional descriptive study.

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

(Epidemiology unit, faculty of medicine KKU, 1999) .

n = sample size

$Z_{\alpha/2} = 1.64$

$\delta = 1.58$ (Khobkul Suksawat, 1998)

N = the elderly people whom 60 or more than 60 in Khon Kaen Province (Khon Kaen Provincial Health Office, 2001)

d = acceptable error; 10%

Sample (n) = 608 population

5% additional for sample lost

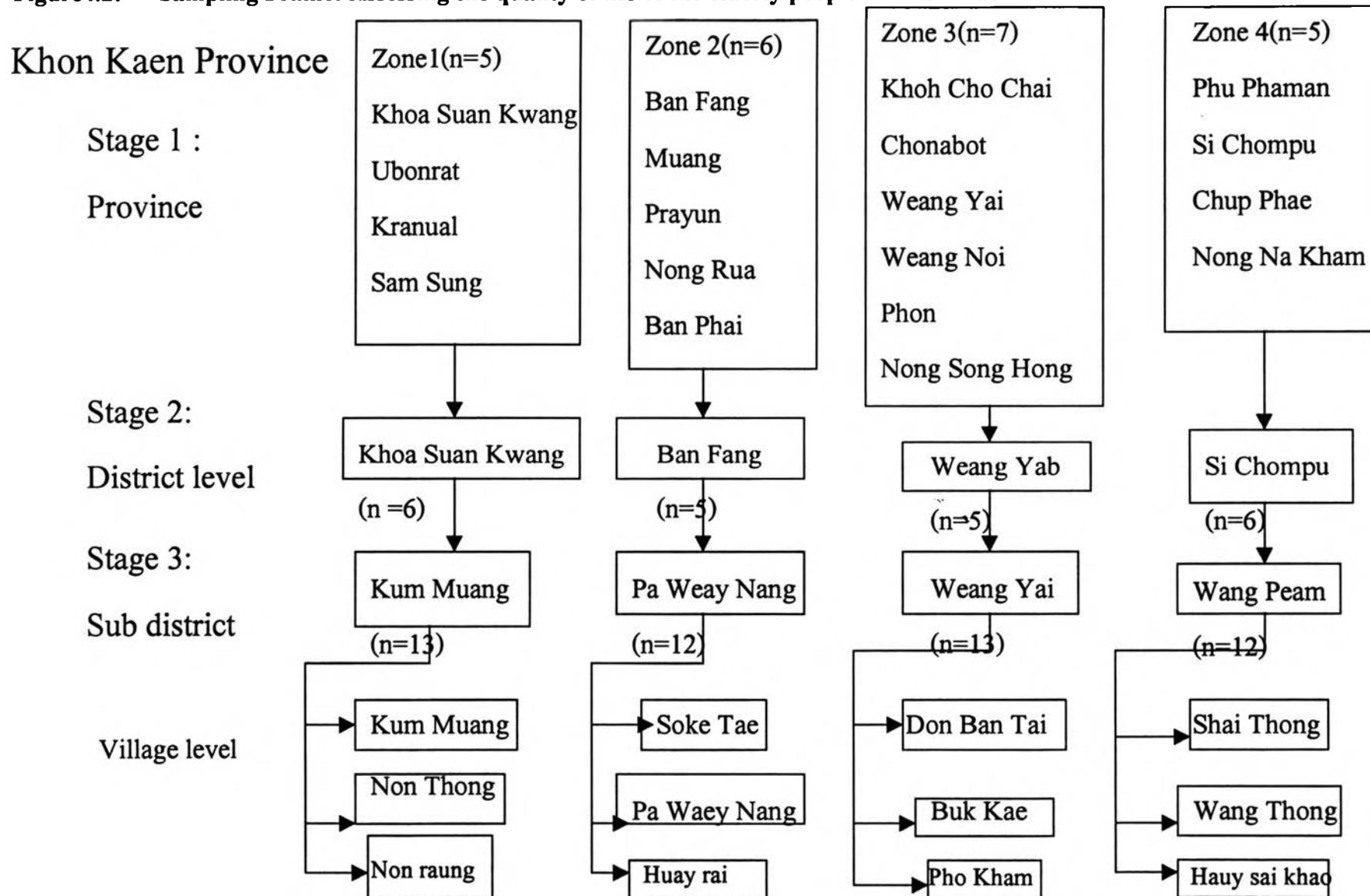
Therefore, **Total of sample = 638**

Sampling Technique

Using multi stage sampling technique.

The sampling frame is shown in figure 4.2.

Figure 4.2: Sampling Frame: Assessing the quality of life of the elderly people in Khon Kaen



The sampling technique used in following 3 stages is ;

Stage 1: Province level, simple random sampling districts from the Khon Kaen Provincial health office supervision zone.

Stage 2: District level, simple random sampling sub-districts from the sample district

Stage 3: Sub district level, simple random sampling villages from the sample sub-district.

Using the proportional to size for sample size calculated in each village after that systematic random sampling of elderly people in the villages will be done.

Table 4.1: The distribution of the sample size

District	Sub-district	Village	60+ population	sample
Khoa Suan Kwang	Kum Muang	1.Kum Muang	80	46
		2.Non Thong	92	53
		3.Non Raung	78	45
Ban Fang	Pa Weay Nang	1.Soke Tae	96	56
		2.Pa Waey Nang	98	57
		3. Huay rai	81	48
Weang Yai	Weang Yai	1.Don Ban Tai	102	59
		2.Buk Kae	97	57
		3. Pho Kham	79	46
Si Chompu	Wang Peam	1.Shai Thong	111	64
		2.Wang Thong	97	56
		3.Hauy sai khao	87	51
Total			1098	638

Inclusion Criteria

- 1). The elderly people who live in Khon Kaen Province fore more than 1 year

- 2). The elderly people who are able to communicate with the interviewers and willing to be interviewed.

Exclusion Criteria

- 1). Elderly having health problems that cause communication problem with interviewers such as: incapable of hearing, speech impairment and mental health disorder, etc.
- 2). Elderly people who are not willing to be interviewed.

Data Collection

Part 1 : Quantitative Method:

1). Instrument : WHOQOL-BREF

WHO developed the WHOQOL with the objective to assess the quality of life that for worldwide use. The WHOQOL-100 was the first tool that allows detailed assessment of each individual facet relating to quality of life. In certain situation, however, the WHOQOL-100 may be too lengthy for practical use. The WHOQOL-BREF Field Trial Version was therefore developed to provide a short form quality of life assessment that looks at domain level profiles, using data from the field trial version of all-available data from the field trial version of the WHOQOL-100.

The WHOQOL-BREF (Field Trial Version) produces a quality of life profile. It's possible to derive four domain scores. There are also two items that are examined separately: Question 1 asks about an individual's overall perception of quality of life and question 2 asks about an individual's perception of their health. The

four domain scores denote an individual's perception of quality of life in each particular domain.

Domain scores are scaled in a positive direction (i.e. higher denote higher quality of life). The main score of stems within each domain scores comparable with scored used in the WHOQOL-100.

At present, the WHOQOL-BREF is available in 19 different language. In addition, the WHOQOL-BREF was translated in Thailand already. For Thai version reliability was tested as ($\alpha = 0.89$) (Mental Health Division, MOPH, 1996). Furthermore, the questionnaire was tested for the reliability and validity which the result was accepted worldwide ($\alpha = 0.9$) (WHO, 1996).

2). Data collection plan

Preparation Phase

- 1). Inform the responsible organizations such as the Khon Kaen Provincial Health Office, the Khoa Suan Kwang District health office, the Ban Fang District health Office, the Weang Yai District health office, the Si Chom Pu District Health office, Health centers at the sub district level and the village head man of the sample villages.
- 2). Using the WHOQOL-BREF Training for interviewers. With the objective for the interviewers to understand the

definitions, the interview technique, and the how to use the WHOQOL-BREF.

Action Phase

- 1). The interview will be carried out for each elderly people in their house, following the items in the questionnaire guideline. The time spent on each interview will be approximately 30 minute.
- 2). While interviewing, strict confidentiality will be maintained by not recording the name of the elderly.

Evaluation Phase

- 1). The WHOQOL-BREF questionnaire will be checked and decoded in the field. If the questionnaire is not complete, it's needed to repeated interview.
- 2). The information provided will be entered into a program and checked by double entry technique into EPI INFO Ver 6 before exported to SPSS

Part 2 : Qualitative Method

Focus group discussion (FGD)

One of the objectives of the study is to further explore the perception of the elderly on the key factors affecting QOL of the elderly in Khon Kaen. The qualitative data depend on the WHOQOL-BREF survey findings, which is containing 4 domains.

The qualitative data collection will start up after analysis of quantitative data and explore key area that to be problematic by using the focus group discussion technique.

The Focus Group Discussion (FGD) planning

The sample plan for FGD is dependent on the finding of the WHOQOL-BREF, therefore numbers of participants, gender parity and location can not be define at this stage.

However, to avoid cultural barriers, participants will be divided by gender separately and each group will have 8 elderly people (Therese L, 1999).

The FGD will be carried out for each group using the question of the FGD guideline.

The data management

- 1). The FGD guideline will be reviewed an expert consultant, a meeting with elderly people from another area of the sample will be used to test the FGD guideline. Modifications will be made as needed before actual collect data.
- 2). Sampling technique: The purposive sampling a will be used to select the key informants for study. The key informants are the elderly who are willing to joint the meeting.
- 3). The equipment for helping data collection is the tape recorder. By the key informant allow to recorded the information that they give and strictly confidentially is maintain by not recording the name of key informant

Data Analysis

Quantitative data

1. The data collection will be analyzed by using SPSS
2. The base line data will be applied to a descriptive statistic of analysis using frequency, mean, and standard deviation.
3. The factors influence quality of life of the elderly people using multiple regression.

All statistic tests will be considered significant if the p-value is below 0.05

Qualitative data

Content analysis will be explored for the perception of the on key factors affecting quality of life of the elderly in Khon Kaen. The detail as follows:

1. The data set from 12 FGD will be read carefully and developed a scheme to code the content.
2. To prevent the subjective consideration from difference coders and to increases valid and reliable, the data need to get specific contents that interest the coders often requires complex code and analysis.
3. The ATLAS/ti, a text base manager computer software program for analysis, will be applied to a retrieve the data coded set, link different codes, building ordered classification system and develop graphic network model to explore the perceptions of the elderly people on key factors affecting quality of life of the elderly people in Khon Kaen.

4.6 Ethical Consideration

The study will be approved by the Ethical Committee of the Faculty of Medicine, Khon Kaen University before implementation. Every respondent will be informed about the detail of the study and will be asked to sign a written informed consent form before being enrolled in the study.

4.7 Expected Outcome

Outcomes on the quality of life of elderly people in Khon Kaen Province will provide useful recommendations health policy, research and decision making on important aspect of health and social services.

4.8 Limitations

- For QOL assessment, it cannot be performed for all elderly people because some have health problems. The outcome can be generalized for all-elderly people in Khon Kaen who do not meet exclusion criteria of this study.

4.10 Budget

The budget required for assessing the quality of life of the elderly people in Khon Kaen Province is presented in table 4.3 below:

Table 4.3: Estimated Expenditure for Program Activities

Budget category	Unit cost(Baht)	Multiplying factor	Total cost (Baht)	% of total
1. Personnel				
1.1 WHOQOL-BREF training				
- Trainer	200 Baht/day	10 persons	2,000	
- Interviewers	1,000 Baht/day	1 persons	1,000	
1.2 Perdiem for the elderly meeting for FGD	100 Baht/day	72 persons	7,200	
1.3 Incentive for interviewers	50Baht/questionnaires	638 questionnaires	31,900	
Total			42,100	60.14
2. Transport & Material				
- Fuel	500 Baht/day	36 days	18,000	
- Paper	100 Baht/ream	10 reams	1,000	
- Diskette	250 Baht/total	3 boxes	750	
- Tape recorders	500 Baht/each	12 cassette	6,000	
Total			25,750	36.78
3. Dissemination of results				
- Photocopy & supplies	0.5 Baht/page	1000 pages	500	
Total			500	0.5
4. Miscellaneous & supplies				
Total			1,650	2.36
Total			1,650	100
Grand total			70,000	100.0

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