

**HOME CARE STATUS FOR THE ELDERLY
IN OMON DISTRICT, CANTHO CITY, VIETNAM**



**A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF PRIMARY HEALTH CARE MANAGEMENT
FACULTY OF GRADUATE STUDIED
MAHIDOL UNIVERSITY**

2005

ISBN 974-04-5726-6

COPYRIGHT OF MAHIDOL UNIVERSITY

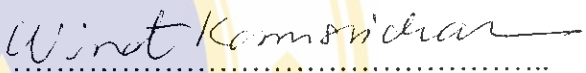
Copyright by Mahidol University

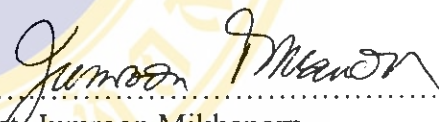
Thesis
entitled


**HEMOCARE STATUS FOR THE ELDERLY
IN OMON DISTRICT, CANTHO CITY, VIETNAM**






.....
Ms. Tran Thi Hanh
Candidate


.....
Lect. Wirat Kamsrichan
Ph.D.
Major-Advisor


.....
Lect. Jumroon Mikhanorn
M.D., M.P.A., D.P.H.
Co-Advisor


.....
Assoc. Prof. Chounchom Charoenyooth
Ph.D.
Co-Advisor


.....
Assoc. Prof. Waraporn Thitinanthapan
D.D.S., M.Sc.(Clinical Science),
Diplomate, Thai Board of Endodontics
Acting Dean
Faculty of Graduate Studies


.....
Assoc. Prof. Sirikul Isaranurug
MD., Dip. Thai Board of Pediatrics
Chair
Master of Primary Health Care Management
ASEAN Institute for Health Development

Thesis
entitled

**HOMECARE STATUS FOR THE ELDERLY
IN OMON DISTRICT, CANTHO CITY, VIETNAM**

was submitted to the Faculty of Graduate Studies, Mahidol University
for the degree of Master of Primary Health Care Management

on
March 17, 2005



.....
Ms. Tran Thi Hanh
Candidate



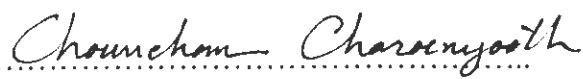
.....
Lect. Wirat Kamsrichan
Ph.D.
Chair




.....
Lect. Jumroon Mikhanorn
M.D., M.P.A., D.P.H.
Member



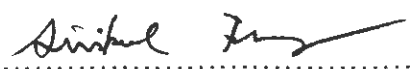
.....
Asst. Prof. Junya Pattaraarchchai
Sc.D
Member



.....
Assoc. Prof. Chounchom Charoenyooth
Ph.D.
Member



.....
Assoc. Prof. Waraporn Thitinanthapan
D.D.S., M.Sc.(Clinical Science),
Diplomate, Thai Board of Endodontics
Acting Dean
Faculty of Graduate Studies
Mahidol University



.....
Assoc. Prof. Sirikul Isaranurug
MD., Dip. Thai Board of Pediatrics
Director
ASEAN Institute for Health Development
Mahidol University

ACKNOWLEDGEMENT

This thesis is impossible to be completed without the help and supports from my sponsor advisors, lecturers, sponsor, leaders, colleagues, friends and family.

First of all, I would like to express my sincere gratefulness to Bread for The World, my sponsor and Dr.Ton That Khai, M.P.H., Director of Occupational Health and Environment Center, Cantho City, Vietnam. I would not access to the program of MPH and complete the course without supports from Bread for The World. I am pleased to sincerely thank leaders and staff in Health Department of Cantho City, leaders of Omon District Health Center, those creating all advantages for my study.

I would like to express my honest gratitude to my Major Advisor, Lect. Wirat Kamsrichan, Ph.D. and my Co-Advisor, Lect. Jumroon Mikhanorn, M.D., M.P.A., D.P.H for their whole-hearted guidance, kindness and great encouragement to me. I am deeply indebted to Assoc.Prof. Chounchom Charoenyooth, Ph.D., my Co-Advisor, not only for her giving me practical knowledge and invaluable experience on research but also for her dedicated heart to her student. I also would like to show my thankfulness to Asst. Prof. Junya Pattaraarchachai, Sc.D, my External Advisor and my Biostatistics Teacher, for her kindly instruction and precious suggestion to me as well as to all teachers of MPH course, those gave me precious knowledge.

I also would like to express my honest gratitude to my colleagues and friends, those shared to me in hard time and helped me reach good results; to all staff of AIHD and Asean House, those who contributed to my success on the course.

Lastly, special love and thanks to my family and relatives. All the success in my life would never be achieved without their affection.

TRAN THI HANH

HEMECARE STATUS FOR THE ELDERLY IN OMON DISTRICT, CANTHO CITY, VIETNAM

TRAN THI HANH 4737969 ADPM / M

M.P.H.M. (PRIMARY HEALTH CARE MANAGEMENT)

THESIS ADVISORS: WIRAT KAMSRICHAN, Ph.D., JUMROON MIKHANORN, M.D., M.P.A., D.P.H., CHOUNCHOM CHAROENYOOH, Ph.D.

ABSTRACT

The aim of this cross-sectional descriptive study was to reveal homecare status and define the factors relating to it for the elderly in Omon District, Cantho City, Vietnam. The respondents, consisting of 171 elderly, were interviewed through a structured questionnaire in order to collect data regarding the elderly's demography and socio-economic status, health belief, family and community resources, needs for health care and homecare status. The respondents' age ranged from 60 to 98, of which those 90 and over occupied 5%. Of the subjects, 66% of them were female, 58% were married; 67% were household head, 37% were illiterate, 41% were without a monthly allowance, 94% had family members with a poor income.

The study results showed that 91% of the elderly used self-care for their daily activities and 51% of them use self-care when sick; 84% of them had chronic diseases, of which multiple diseases were the most common type (23%); 51% of them perceived that their health status was poor; the highest percentage of discomfort or minor illness was back-ach or join-ach (42%) but 57% of them ignored their discomfort or minor illness.

For the factors relating needs for health care, chronic disease is related to the area where the elderly live; perceived health status depended on age, education, working status and house condition of the elderly. Age and working status is associated to self-care of the elderly. The results also refer to the elderly's relationship between self-care and needs for health care of the elderly.

The researcher suggests that annual health care check-ups for the elderly should be carried out and that it is necessary to encourage the elderly to care about their discomfort or minor illnesses.

KEY WORDS: ELDERLY HOMECARE SELF-CARE

CONTENTS

	Page
ACKNOWLEDGEMENT	iv
ABSTRACT	iv
LIST OF TABLES	viii
LIST OF FIGURES	ix
LIST OF ABBREVIATIONS	x
CHAPTER	
1 INTRODUCTION	1
1.1 Rationale and justification	1
1.2 Research objectives	7
1.3 Conceptual framework	9
1.4 Operational definition of variables and terms used in the study	11
1.5 Limitation of the Study	14
1.6 Usefulness of the study	15
2 LITERATURE REVIEW	16
2.1 Theory applied of this study	16
2.2 Population aging	19
2.3 Aging and Health	19
2.4 Primary Health care in aging society	20
2.5 HC for elderly	22
2.6 Some studies relating to HC for elderly	24
3 RESEARCH METHODOLOGY	26
3.1 Study design	26
3.2 Study area	26
3.3 Target Population	26
3.4 Sampling techniques and Sample Size	27

CONTENT (Cont.)

	3.5 Research Instrument	29
	3.6 Validity of the questionnaires	29
	3.7 Data Collection	29
	3.8 Data Processing and Analysis	30
	3.9 Measurement of variables	30
4	RESULTS	32
	4.1 Socioeconomic status and demographic characteristics of the respondents	32
	4.2 Household sanitation	35
	4.3 Health belief	36
	4.4 Family resources	37
	4.5 Community resources	38
	4.6 Needs for health care	40
	4.7 Homecare status	41
	4.8 Factors relating to needs for health care	47
	4.9 Factors relating to perceived health status	51
	4.10 Factors relating to HC status	56
	4.11 Relationship between needs for health care and HC status	59
5	DISCUSSION	61
	5.1 Individual characteristics and living context of the respondents	61
	5.2 Health care context of the respondents	62
	5.3 HC status for the elderly	62
	5.4 Factors relating to needs for health care	63
	5.5 Factors relating to HC status, self-care	65
	5.6 Relationship between HC status and needs for health care of the elderly	66

CONTENT (Cont.)

6	CONCLUSION AND RECOMMENDATION	67
6.1	Conclusion	67
6.2	Recommendation	69
	REFERENCES	71
	APPENDIX	79
	BIOGRAPHY	107



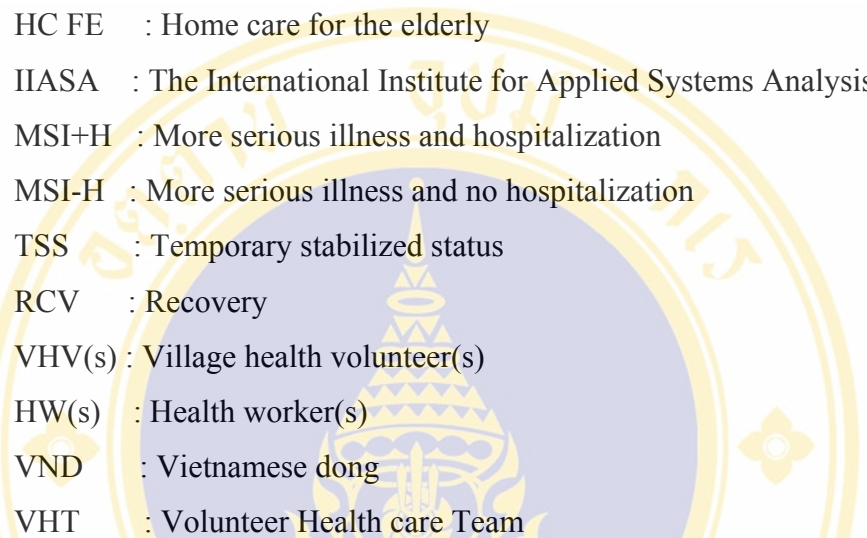
LIST OF TABLES

TABLE		Page
1	Socio-economic and demographic characteristic of the respondents.....	33
2	Household sanitation.....	36
3	Elderly health knowledge and health behavior.....	37
4	Family resources.....	38
5	Community resources.....	39
6	Chronic diseases of the elderly.....	40
7	Levels of HC for daily activities.....	41
8	Care providers for daily activities.....	42
9	Levels of care when the elderly getting sick.....	43
10	Care providers when the elderly getting sick.....	44
11	The elderly's self-care in homecare status.....	45
12	Discomfort, minor and moderate illness.....	46
13	Special solutions for taking care.....	47
14	The relationship between selected factors and chronic disease.....	49
5	The relationship between selected factors and perceived health status.....	52
16	The relationship between selected factors and self-care of the elderly.....	57
17	Relationship between needs for health care and HC status.....	60
18	The result of test normal distribution (Kolmogorov-Smirnov Test).....	99

LIST OF FIGURES

FIGURE		Page
1	Trend of World Population 1950 - 2050	1
2	Percentage of world population under age 15, aged 60 or over, and aged 80 or over, 1950-2150 (43)	2
3	Population trends (%) in Asian countries (38)	3
4	Conceptual framework	9
5	Application of The initial behavioral model (1960s)	18
6	New Scope of Care for Older Persons.....	20
7	Who, What and Where of Community Health	21
8	Who, What and Where of Community Health	22
9	Location of Cantho city	26
10	The map of Cantho City	27
11	Sampling Techniques	28

LIST OF ABBREVIATIONS



HC	: Homecare
CHC	: Community health care
HC FE	: Home care for the elderly
IIASA	: The International Institute for Applied Systems Analysis
MSI+H	: More serious illness and hospitalization
MSI-H	: More serious illness and no hospitalization
TSS	: Temporary stabilized status
RCV	: Recovery
VHV(s)	: Village health volunteer(s)
HW(s)	: Health worker(s)
VND	: Vietnamese dong
VHT	: Volunteer Health care Team

CHAPTER 1

INTRODUCTION

1.1 Rationale and justification

1.1.1 Demography trends of age group of 60 years old and over

World population is expected to increase by 2.6 billion over the next 45 years. By July 2005, the world will have 6.5 billion inhabitants, 380 million more than in 2000 or a gain of 76 million annually (1). World population will increase to a level of nearly 8 billion persons by the end of the next quarter century, and will reach 9.3 billion persons by 2050 (2, Figure 1).

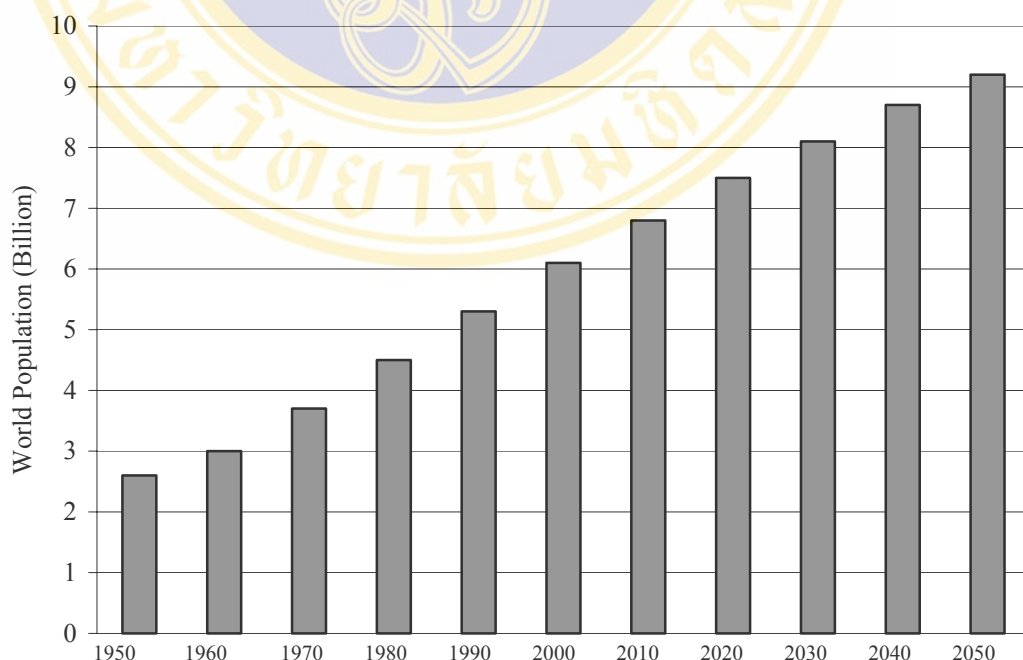


Figure 1 Trend of World Population 1950 - 2050

In developed countries, 20 percent of today's population is aged 60 years or over, and by 2050 that proportion is projected to be 32 percent. The elderly population in developed countries has already surpassed the number of children (persons aged 0-14), and by 2050 there will be two elderly persons for every child. In the developing world, the proportion of the population aged 60 or over is expected to rise from 8 percent in 2005 to close to 20 percent by 2050 (1).

As a result, world population will become progressively older during the coming decades (2). Old-age dependency ratios will rise in every major world region because of population aging. And the world community will face an elderly support burden nearly 50 percent larger in 2025 than in today (2). (Figure 2)

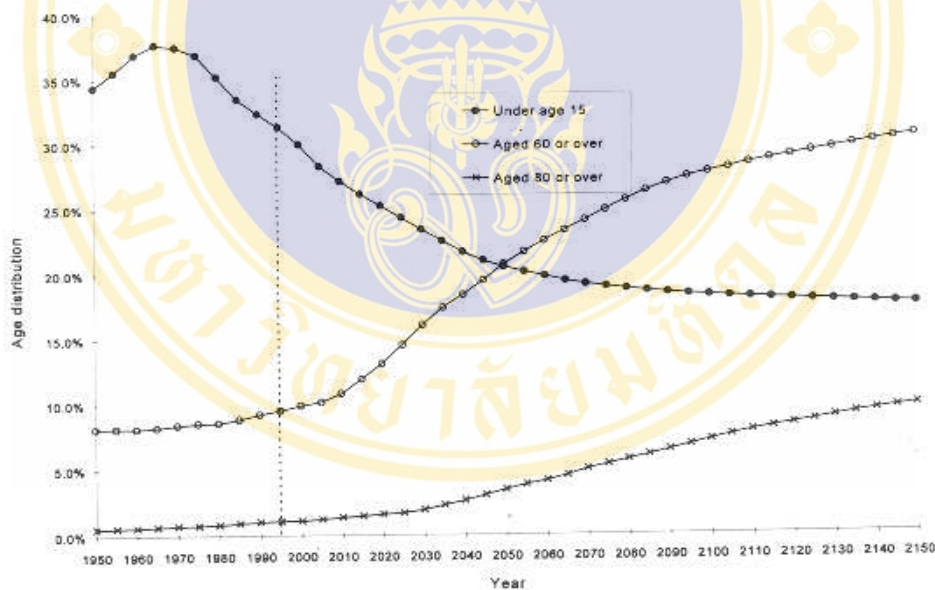


Figure 2 Percentage of world population under age 15, aged 60 or over, and aged 80 or over, 1950-2150 (43)

As of mid-2000, over 3.6 billions, which is roughly three-fifths of the total population of the globe, resided in Asia (3). Over the past half-century, the population of this region has grown on a scale and at a tempo without historical precedent. Between 1950 and 2000, according to the UNPD's estimates, the population of the collectivity of countries multiplied by a factor of 2.5 — rising by almost 2.2 billion in

absolute numbers and at an average annual pace of over 1.8 percent per year (4). Over the last 25 years, the number of Asian elders has more than doubled and will do so again over the next 25 years. For the period between 2025 and 2050, the population of Asians aged 60 and older is anticipated to increase by more than 75 percent. (5), (Figure3)

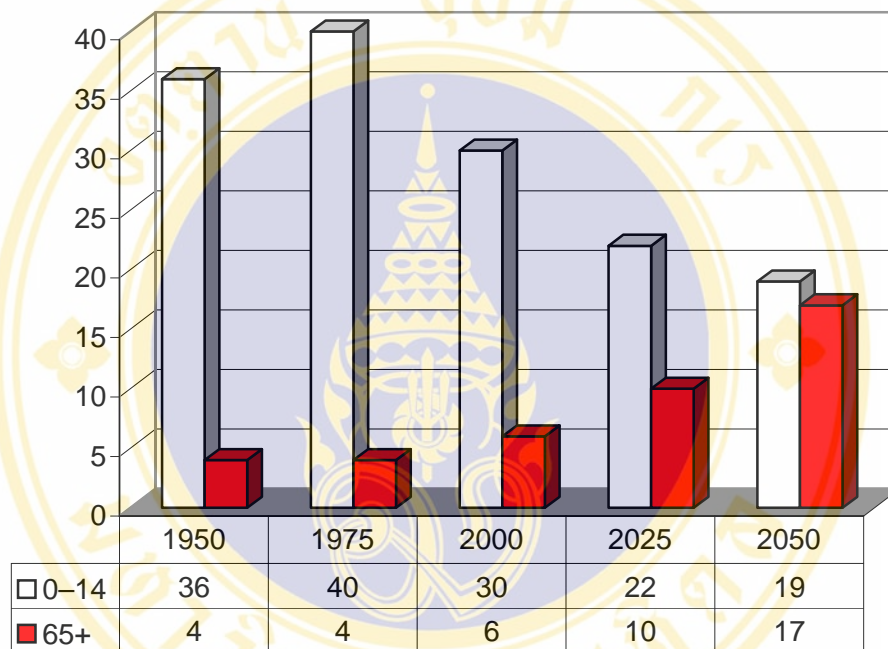


Figure 3 Population trends (%) in Asian countries (38)

A conference, “The Actions for the elderly”, was held in Hanoi, Vietnam on February 12th, 2004. It is predicted that by 2014, Viet Nam's elderly will probably account for over 10 percent of the population (7, 8). Vietnamese life expectancy at birth has now risen to a high level (7). Partially as a result of higher life expectancy, the number of people 60 years old and older has risen remarkably (7). It is estimated that the number of elderly people in Viet Nam will rise from 6.19 million in 1999 to 16.49 million in 2029 (8).

1.1.2 Influencing of socioeconomic to the elderly

Urbanization, industrialization and modernization cause young people's migration to study and look for better jobs, better opportunities. This unabated migration causes the elderly physically, psychologically and socially segregated from their family members who could provide them better support. In fact, even the elderly who live with their families often feel that they can not get adequate care, most are physical and financial care, since nowadays most of younger generations are more and more involved in this competitive society outside their families, resulted in having no times to take good care for their elderly (6).

1.1.3 Higher needs for health care of elderly

The effects of usual ageing sometimes merge with the abnormal. Some physical changes are obvious. There is a decline in neurological function with increasing age. There are also changes in neurotransmitter system. Changes in the dendrites may be more significant than in the cells. Eyesight deteriorates as age advances and become symptomatic. Respiratory efficiency is reduced along with the total lung volume. The arteries in old age become thicker and hard, probably due to an increase in arterial collagen, that leads dangers to cardiovascular system. Changes in the skin are very noticeable. (36)

As well as physical changes, old age brings with it an alteration in psychological outlook. Elderly withdraw from social contact and become isolated; capacity to solve new problems deteriorates (36)

Pathology is more common in old age and there is a general increase in morbidity. Not surprisingly, multiple disabilities are so common as to be almost the rule. Many of the conditions found are degenerative in type of multiple and symptomaticology are also common findings. Infections, thyroid over-and under activity, heart diseases, confusion and restlessness, diabetes mellitus...are usually present (36). On average, an elderly individual suffers from at least three common

afford the elderly conditions such as a cough or cold while expenditures on health care are up to seven times that of a healthy person. The demand on health check-ups for the elderly is still on the rise, with 75.8 percent expecting to receive better health care services in the future. (7).

Old age also brings with it some changes in attitude and behaviors. It seems that old people cannot tell when they are unwell and in need for help. This means that disease is not detected at an early stage and “There is an iceberg of un-reported illness among the old people in the community” (36).

1.1.4 Health care for elderly in Vietnam

Respect for the elderly is a fundamental, traditional value in Vietnam. Older people have an important role to play and make significant contributions to the development of the community through their experiences and abilities. The government has paid considerable attention to care for the elderly and this is well reflected in many legislative documents (7). To further promote the roles of and care for the elderly, the Ordinance on the Elderly was approved by the National Assembly of Vietnam on April 28, 2000 (No.23/2000/PL-UBTVQH10 of April 28, 2000). This is the first time such a comprehensive policy dealing with issues of older people has been promulgated in Vietnam (7).

The Ordinance for Vietnamese Elderly consists of 31 articles included four chapters about general provisions; supporting and caring for elderly people, state management over the elder-related work, rewards and handling of violations (9):

“...When they were younger, today's elderly people had the task of giving birth to, bringing up and educating children about dignity, and they still play an important role in families and the society. Caring for the material and spiritual needs of elderly persons and continuously promoting their role are the responsibilities of families, the State and the entire society, which reflect the fine nature, morality and traditions of our nation;

Pursuant to the 1992 Constitution of the Socialist Republic of Vietnam;

Pursuant to the Resolution of the 10th National Assembly, sixth session, on its 2000 legislative program;

This Ordinance provides for the support of and care for, as well as the promotion of, the role of elderly people...” (9)

The health status of Vietnamese elderly has greatly improved in the past few decades. The average life expectancy of Vietnamese people was 65.2 years in 1995 (34), 67.8 years in 2001 (34) and 71.3 years in 2002 (35). The rise is attributed to an increase in per capita spending and better health care services (34). However, it remains one of their most significant concerns. Average monthly expenditure per person rose to 268,000 Vietnamese dong (17 US dollars) in the 2001-2002 period, up 28.1 percent from 1995 (24). In addition, Vietnamese elderly cannot avoid consequences of urbanization, industrialization and modernization mentioned previously. Rapid economic progress in Vietnam has been accompanied by an increase in the citizen's expectations for improved health care. The health system is beginning to contend with difficulties in meeting these challenges, although the task is formidable (29). Young people who can support the elderly have less and less time for their elderly, especially in hospital care. As well as the impact on socio-economical aspects causes increasing of public social spending and higher health expenditures (10). This seems to force elderly have to be took care of them in their home more and more.

Majority of the elderly health problems in Vietnam is solved in their homes by the ways that both HC providers and receivers consider as temporarily stable solutions due to main reasons.

The first reason is provision in health services. Self-treatment is common practice and private providers are an important source of health services not only for those who are better off but also for poor households (37).

The second reason is expense for health care. The costs for health care are substantial for households, and lower income groups spent a significantly higher proportion of their income on health care than the rich did. The poor are deterred from seeking health care more often than the rich for financial reason. A burden of high

cost for treatment implies high risks for families to fall into “a medical poverty trap” (37).

The third reason is the use of “southern medicine”. “Southern medicine” is the traditional folk medicine of Vietnam by using a material medication of native Vietnamese plants and animals (39). Using “southern medicine” also benefits for the poor because of its availabilities and low cost.

Those reasons cause homecare more and more expanse spontaneously. Either the elderly and their family members or relatives and neighbors with or without supports have done this homecare from the local health care system.

1.1.5 Research questions

It is necessary for the responsibe people in the district to know that:

- 1) How have the elderly been taken care in their homes?
- 2) What are the factors relating to HC status for the elderly?

1.1.6 Research hypothesis

- 1) The factors relating to HC status are individual characteristics consisting of demography characteristics and socioeconomic status.
- 2) The factors relating to HC status are health belief, family resources and community resources
- 3) The factors relating HC status are needs for health care.

1.2 Research objectives

1.2.1 General objectives

To describe the present situation and the factors relating to homecare status for the elderly in Omon District, Cantho City, Vietnam

1.2.2 Specific objectives

- 1) To assess needs for health care or the elderly in the district, including:
 - Chronic diseases
 - Health status
- 2) To assess health care for the elderly in the district according to following aspects:
 - Levels of HC status
 - HC providers
 - Activities in HC
- 3) To identify factors infor the elderlyuencing Needs for health care for the elderly in the district, including:
 - Demography
 - Socio structure
 - Health belief
 - Family resources
 - Community resources
- 4) To determine factors relating HC status for the elderly in the district, including
 - Demography
 - Socio structure
 - Health belief
 - Family resources
 - Community resources
- 5) To define the relationship between Needs for health care and HC for the elderly in the district

1.3 Conceptual framework

The conceptual frameworks is illustrated in figure 3

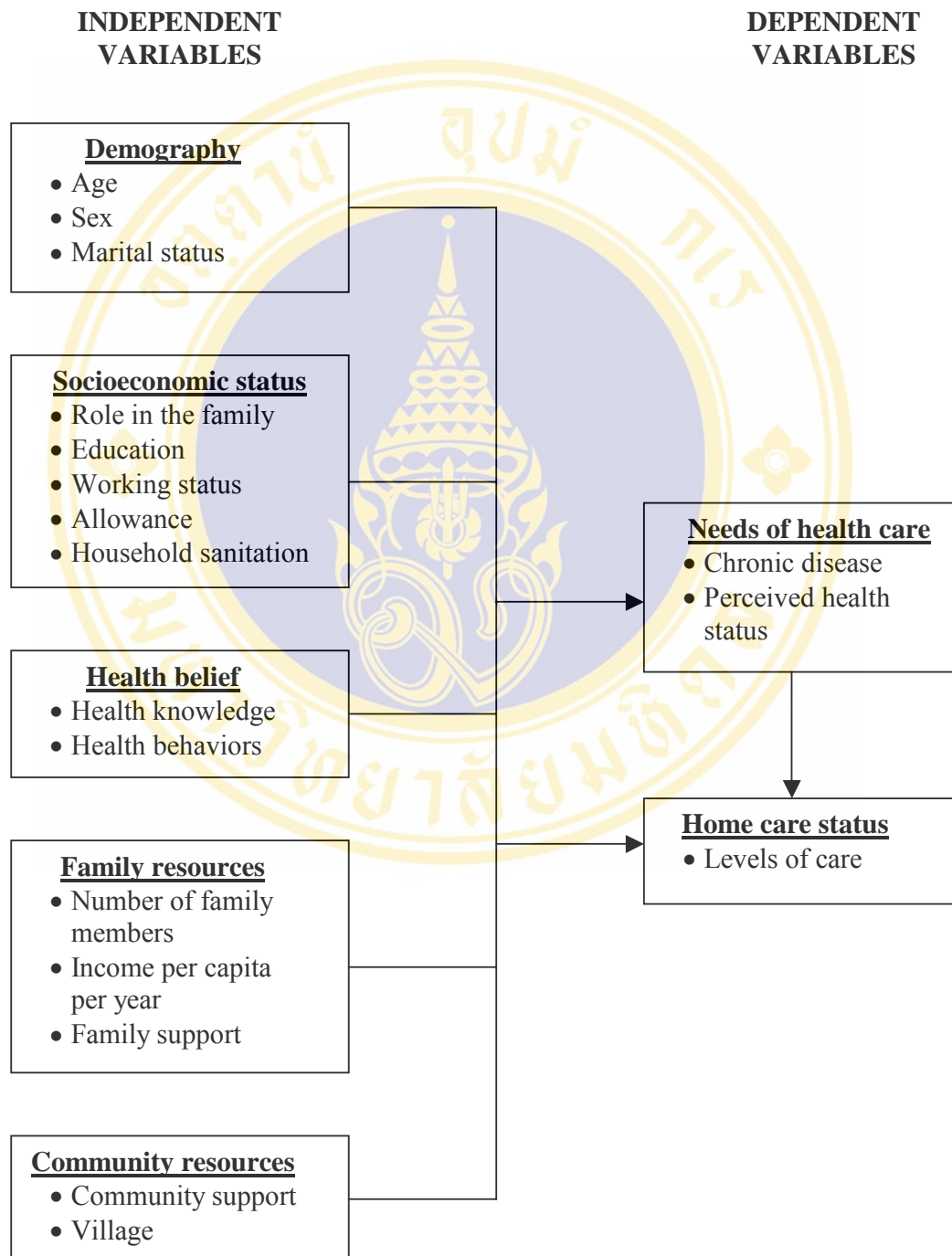


Figure 4 Conceptual framework

1.3.1 Independent variables

For independent variables, 5 following possible groups are assigned:

Demography group

This group consists of 3 following variables:

- Sex and marital status are measured by nominal level data
- Age is measured by ratio level data

Socioeconomic status group

This group is combined by 5 variables

- 3 variables of role in the family, education, current working status are measured by nominal level data
- Living condition is also measured by nominal level data and it is divided further into 4 sub variables: house condition, toilet, drinking water resource, household water resource and garbage treatment
- Allowance is measured by ratio level data

Health Belief group

This group consists of 2 composite variables and will explore data relating health knowledge and health behaviors. Both health knowledge and health behavior are measured by ratio level data.

- Health knowledge including 6 questions
- Health behavior consisting of 10 questions

Family resource group

This group of 3 variables will refer the elderly care resources that the elderly have in their family:

- Number of family members and income per person are measured ratio scale
- Family support: This is a composite variable including 20 questions and is measured by ratio data.

Community resource group

This group will show care resources the elderly have from the community.

It contain 2 variables:

- Community support: This variable is also a composite one, consisting of 13 questions, and measured by ratio data.
- Village: It refers 5 villages in Omon District and measured by nominal scale.

1.3.2 Dependent variables

In this study, HC status and Needs for health care are assigned to be the dependent variables.

Needs for health care

This group of variables includes two variables:

- Chronic disease of the elderly is measure by nominal level dada
- Perceived health status is measured by visual analog scale

Homecare status

HC status is measured by nominal data. Levels of care represent for homecare status. Besides, homecare status is also described by health problems within 2 weeks and specific solutions.

1.4 Operational definition of variables and terms used in the study

1.4.1 Demography:

- Age in the study is calculated by year
- Sex in the study refers only two categories: male and female.

- Marital status in the study refers terms refer to the marital status at the time of the enumeration. This term has four major categories: single, married, widowed or bachelor, and divorce or separate.

1.4.2 Socio-economic status:

- Role in the family: This term in the study refers two categories: header or member of the family.
- Current working status: Current working status in the study describes working status of the elderly in their home by which they can either earn money or do house work at the time interviewed.
- Allowance: Allowance is the money that the elderly have every month by any supporting resources.
- Household sanitation: This variable consists of five sub variables: house condition, toilet, drinking and household water resources and garbage treatment. House condition is evaluated by interviewers and considered as “Good” when the house is stable, “Moderate” when semi-stable and “Poor” when unsettled. Toilet refers 3 types of toilets: Water sealed, pit privacy and latrine pool. Drinking water resources refers 6 positive resources of drinking water: mineral/boiled, tap water, well water, decontaminated, sediment deposited, and rain water. Household water resources refers 6 positive resources: Tap water, well water, decontaminated, sediment deposited, rain water and river/canal. Garbage treatment is described by four ways used to deal with garbage. They are public service, burn, buried or thrown.

1.4.3 Health belief

- Health knowledge is the knowledge about health maintenance: diet and drinking; exercise and rest; screening and prevention of diseases; and self medication
- Health behavior refers elderly habits on eating, drinking, sleeping, smoking, nutritional balance, physical exercise, and entertainment.

1.4.4 Family resources

- Number of family members: This variable only refers the members who usually live with the elderly in the same house.
- Income per capital in family per year: Income is the average money having from total earnings in a family divided number of members in that family per year.
- Family support: This variable refers support resources in family in terms of material, financial, information, and psychological support.

1.4.5 Community resources

- Community support: Community support refers sources of health social supports, availability of the local health services and accessibility of the local health services
- Village characteristics: The researcher will collect village characteristics in the study. It refers the main statistics of the village where the elderly living. It is describe by aspects of Income per capita in the village, Percentage of poor household, Drug expenditure per capita in the village and Percentage of households using hygienic sanitation

1.4.6 Needs for health care

- Chronic disease refer typical chronic diseases of Asian elderly (41 and 6) such as cardiovascular and hypertension, asthma and respiratory system, injury, mental disorder, cataract, diabetes mellitus, cancer...
- Perceived health status refers the elderly sensation about their health status at the point interviewed. They will score their health status themselves from 1 to 10 for poor perceived health status to good perceived health status.

1.4.7 Homecare status

- Homecare: This term in the study refers both formal and informal care, by

which the elderly receive in their homes. Health workers provide formal care and family, relatives or friends provide informal care...

- Levels of care: Levels of care in the study include 6 levels (44):
 - 1) Self management or self-care:
 - 2) Self managed with some help from family members
 - 3) Total help from family member without self manage
 - 4) Helps from neighbors or VHVs.
 - 5) Helps from HWs or professionals at elderly homes
 - 6) Helps from professionals at health stations or hospitalized.
- Homecare providers or care providers are those who directly take care of their elderly in the homes. They can be family members, someone having good relationship to the elderly, neighbors, VHVs or health workers.
- There are 17 activities (44) divided into two groups. They are daily activities, consisting of 8 activities, and the activities when the elderly get sick, containing 9 activities.

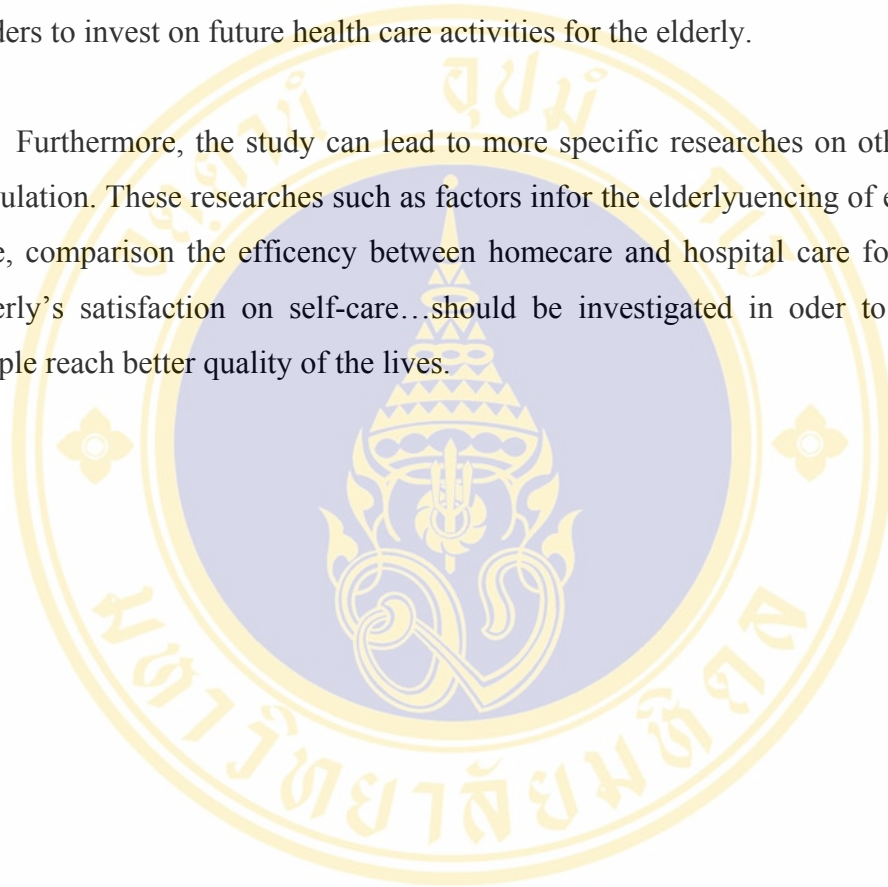
1.5 Limitation of the Study

The study may have some unavoidable limitations. Due to the study is done in Omon District, Cantho City, the results would specifically refer to the elderly who live in the district only. In addition to, the questionnaire can cause less power to gain more information from the elderly because it is written as short and simple as possible for the elderly. In cases of interviewing the elderly proxies, there may cause bias and health knowledge may not be representative for the elderly health knowledge.

1.6 Usefulness of the study

Findings from the study will be considered as basis information for the district health center staffs to plan health care strategies for the elderly in order to help them reach better quality of life. The study's findings also refer a vision to the health center leaders to invest on future health care activities for the elderly.

Furthermore, the study can lead to more specific researches on other groups of population. These researches such as factors infor the elderlyuencing of elderly's self-care, comparison the efficency between homecare and hospital care for the elderly, elderly's satisfaction on self-care...should be investigated in oder to health elder people reach better quality of the lives.



CHAPTER 2

LITERATURE REVIEW

2.1 Theory applied of this study

2.1.1 The basis theory of this study

This study is based on The Initial Behavioral Model 1960s shown figure 4 (20).

2.1.2 Application of the Initial Behavioral Model in the study

Research has shown that the use of personal health care services is determined by individuals' responses to their health and illness levels, as well as preconditioned by demographic, socio structure, psychological, familial and community resources, and health care organizational factors (39).

Three broad approaches have been used to explain the complicated relationship between various predictors and utilization of health care services. The first incorporates both psychological and social variables to predict utilization behaviors. The second approach studies the societal and personal factors that affect the equity of health services. This approach can be divided into three classes of variables:

- Personal attributes that may predispose individuals to seek care
- Enabling factors such as low income, inadequate insurance coverage, no regular source of care, and other barriers to care
- Need-for-care factors as evidenced by subjective (perceptive) health and objective (assessed) health status and functional level

The third approach considers that variation in use is contingent on organizational constraints, indicated by the level of market competition and incentives for developing cost-effective alternatives for care, and personal choice or decision factors (39).

Older adults face many psychosocial challenges associated with the life events of later life. Stressful events, social resources, economic resources, occurrence of major life events will cause depression and mental changes. (21) Health behaviors are considered as collective patterns of health-promoting behavior based on choices from actions available to people according to their life chances. (22). Health behaviors are also influenced by age, gender, race, socioeconomic status and perception of social support (22). Social supports also affect elderly ability on their functional impairment. The more dependent the older person, the more important the social supports (21). Some researchers encourage consideration of the family as a unit of health services (22).

Therefore, each elderly, with his or her own characteristics and in the context of enabling factors and their Needs for health care, will choose appropriate patterns of health services.

The basis theory of the study

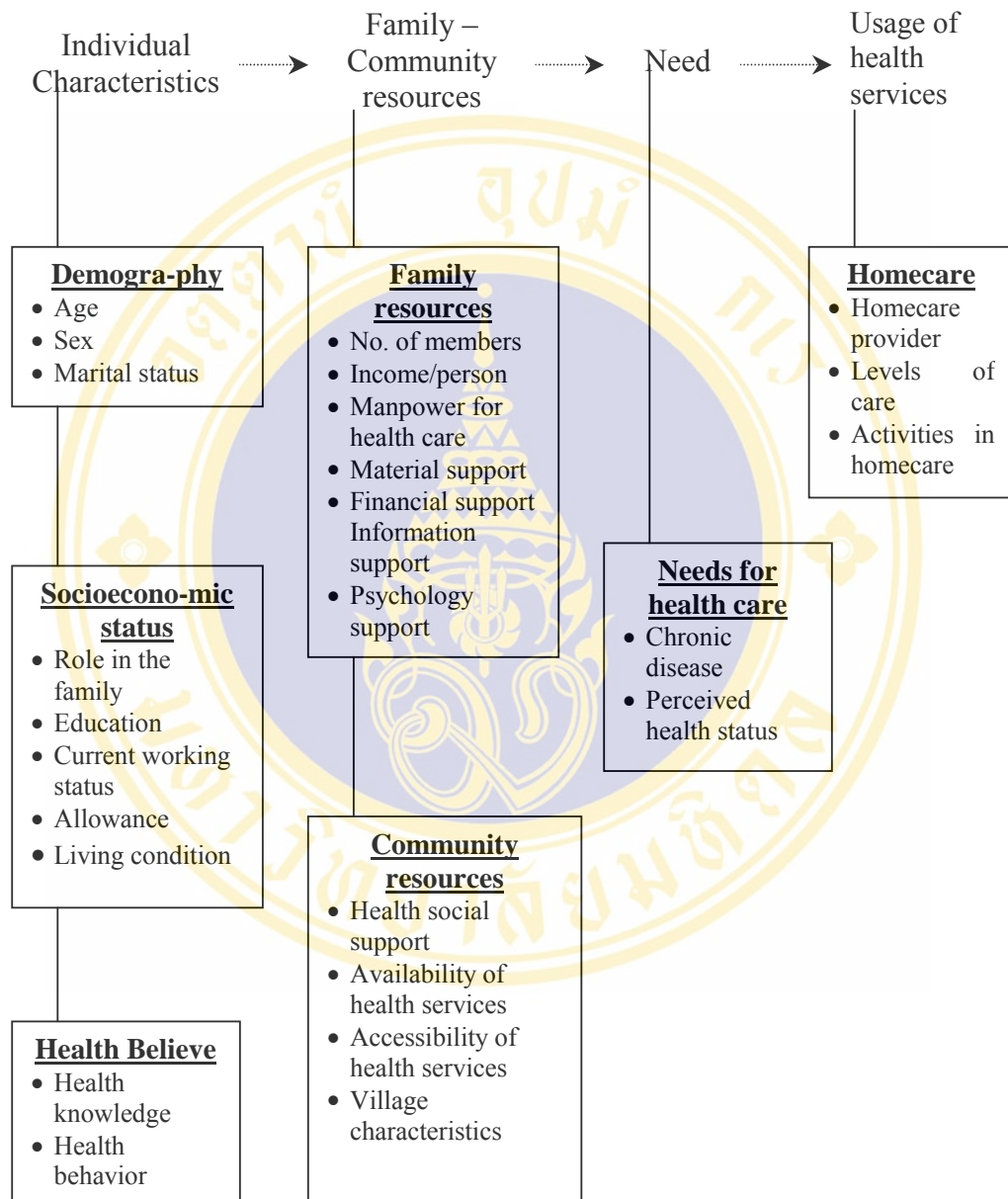


Figure 5 Application of The initial behavioral model (1960s)

2.2 Population aging

The population aging, in the sense of demographers, refers to an increase in proportion of the elderly population, while policy providers, especially in developing countries, see it as a challenge arising from the rapid increase in the absolute size of the old age population (23).

Aging, as a global phenomenon, can be understood by considering a change in which population shifts from high to low levels of fertility and mortality. At the first phase of this demographic transition, starts with the declining mortality and constant fertility that result in an increase in the same size of population, with the high proportion of the younger generations. Then, following by the second phase which not only declining mortality but also fertility. This slows down the growth of the population and the proportion of young-age population decreases. Finally, the number of elderly people is rising and becomes the larger group of population; contribute to population aging, (6)

By the year 2000, the majority of the world aging population will be in Asia. About 48 percent of the world total and 82 percent of total aging population are in developing countries (12).

2.3 Aging and Health

Aging is a complex process involving physical, psychological, socio-cultural, environmental and spiritual elements. As an individual, every human being in a period of 24 hours gets one day older, wherever that person lives.

Generally, the age when someone becomes “elderly” has been considered to start around the age of retirement at 60 to 65 years. Most of this population is relatively fit and vigorous. From a health perspective therefore, a more realistic definition of old age begins around 75 years and upwards. It is this sector of the population that has increased concomitant medical disorders and resultant physical and mental disability.

From the medical point of view, the elderly face some rather specific problems in addition to their needs for health promotion. Their extended life span also means that chronic diseases start to emerge and may affect several organs at the same time. Generalized reduction in functional capacities as well as structure changes in the body such as increasing body weight and degenerative of elastic tissues of the skin, resulting in wrinkling. Other changes are related to a reduction in hearing, vision, muscle and bladder control, reduced efficiency of the heart and blood circulation, reduction of learning and memory. Specific diseases commonly prevailing among the elderly includes senility, hypertension, cataract, diabetes mellitus, and diseases of digestive, respiratory systems and present psychotic conditions (6)

2.4 Primary Health care in aging society

Based on Primary Health Care Approach, it has been formed the new scope of care for older person in CHC (23).

Provision	Health		Social		WHAT
Form	Self-care	Informal Care	Formal Care		WHO
Coverage	Preventive	Curative	Rehabilitative	Hospice	WHEN
Level	Individual	Family	Community		HOW
Location	Home		Institutional		WHERE

Figure 6 New Scope of Care for Older Persons

The care provision of CHC ranges over both health and social services (WHAT). The health and social welfare are provided in such forms as self-care, informal care, and formal care (WHO). CHC should cover the full spectrum from preventive care, curative care, and rehabilitative care, to even the terminal stage of life and hospice care (WHEN). The level of care provided through CHC is focused on individual,

family and community (HOW). The CHC integrated services could be delivered either at home or in institutions (WHERE).

The care provision itself of who, what, and where is focused on the needs of older adults and their families. Then we evaluate the self-care, family and social network care (family, friends, and neighbors), and institution-based care as options to be available for their choice. (Figure 5)

As CHC should first focus on the needs of older persons and their families to maximize self-reliance care potentials, it also considers social network care (family, friends, and neighbors), and institutional care as options to be available for their choice. (Figure 6, 7)

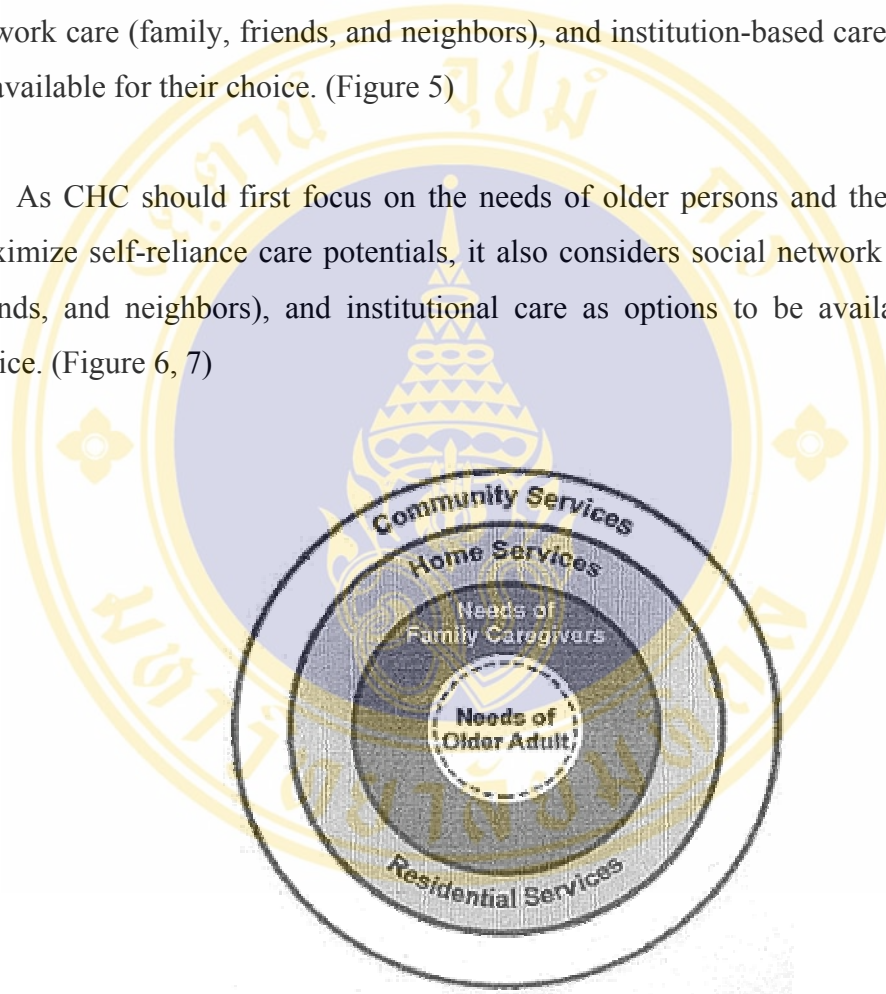


Figure 7 Who, What and Where of Community Health

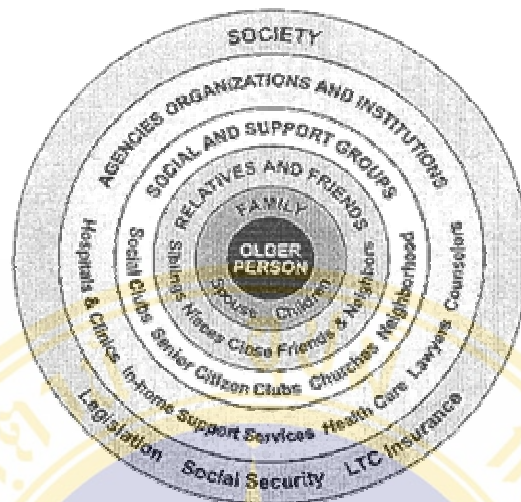


Figure 8 Who, What and Where of Community Health

2.5 HC for elderly

2.5.1 Homecare

The role of HC has undergone a steady transformation during the last several decades (2). Originally considered as a substitute for long-term care for patients with chronic custodial needs, HC is increasingly being used as a substitute for part of acute hospital care (13). **HC** can refer to health care provided in the home by health care professionals (often referred to as home health care or formal care) or by family and friends (informal care) (2). Some authors have divided home health care into four general models: “low-tech care comprising predominantly housekeeping services, “skill care” provided by health workers, “hospice care” serving ill elderly who have a life expectancy of less than six months and “High-tech care” transferring technology from the hospital to the home settings.

2.5.2 HC and elderly

HC may be needed, for short or longer periods, by persons of all ages: but its need occurs most commonly in older people with failing health (14). Most often, older persons needing supportive care at home have multiple health problems simultaneously (14). Over 70% of elderly live in community, receiving care at home rather than in hospitals (14). HC programs for elderly population have been used as an alternative or supplementary to hospital assistance (28)

2.5.3 HC and elderly families

Exactly who should provide HC is still an open question. It will depend on the level of disability of the individual receiving the care (28). In fact, most family members serve three-fourths or more of HC needs for older persons. Family members perform activities of simple medical and health procedures; personal care; house hold help; transportation and help with errands outside the home and general supervision if the elderly loss memory (14). In general, family care is, unglamorous, repetitive, labor-intensive but family care providers believe that they are irreplaceable (14). Most of them satisfy from seeing they could help their relatives more comfortable, making them feel needed and wanted (15).

2.5.4 The growth of HC for elderly

In the world, there have been organizations involving HC such as the World HC and Hospice Organization (16), Ontario Home Health Care providers Association (17) with the mission of dedicating to the interests of all patients, providers, HC associations, public and private sector agencies, hospices, and personal services practitioners. Responding to a worldwide need, key leaders in HC and hospice came together to formulate and advance the concept of an international clearinghouse as a forum for communication, business development, as well as information and technology sharing.

The development of appropriate policies for supplying HC to the elderly requires first an assessment of who needs it and who uses it as measured by such parameters as age, sex, functional status, and socio-economics class. The needs will change over time and the health care system must be able to be for the elderlyexible in this regard. (28).

There is not any formal HC program in Vietnam so that most of HC in Vietnam is considered as informal. Due to Vietnamese traditional value, the members in family are responsible in most of HC cases. In the South, a pilot HC program collaborated to Cascodem Organization, Switzerland has been performed in some villages of Cantho city since 2002. The main power of this program is based on VHVs. They are trained primary health care skills and supported basis medical equipment such as thermometers, bandages, sphygmomanometers as well as common medicine and other equipment supporting for their activities in the program. The VHVs in the program have responsibilities on help the people living surroundings them to deal with their primary health problems. This program benefits for the Cantho rural area dwellers, especially for the elderly. However, how to maintain and expand this program is still an open question and the elderly of Omon district have not been involved this program.

2.6 Some studies relating to HC for elderly

2.6.1 Socio demography of elderly in homecare

Terri R. Fried and Collaborators found out large proportion of elderly (43%) lived with their spouse, 37% live alone and 20% lived with others. More than one half (55%) had received home health aid assistance and functionally dependent older patients had more positive perceptions of treatment at home (2).

Said about health problems among gender of older people, Karin Stenrenzelius and Collaborators concluded that women need special attention with more health problems (26).

2.6.2 HC providers and Social supports

A researcher in Taiwan (27) found out the predictors for family health providers were self-care ability of their elderly patients, support groups and social services. Some authors figured out cost on HC was lower than hospital care (28), especially Robert W. Griffith calculated the cost of “usual care” purchased or obtained from local agencies, health volunteers...was more than 2 times that of “intensive care” providing in elderly homes (30).

2.6.3 Health status of elderly in HC

Cretien van Campen and Isolde B. Woittiez found that elderly chronically applicants have greater chance of being referred for domestic help only, while applicants with psychosocial disorders are more liable to be offered packages that include social support. Patients discharged from hospital have a greater chance of a referral to domestic help only when they are slightly disable, and are more likely to be offered packages including physical care when they are more disable (18).

2.6.4 The growth of HC

Netta Bentur said that it seems to be related to a number of other factors: the increase in the number of elderly and chronically ill people, the lack of availability and accessibility of acute and sub-acute inpatient services, technological innovation, improvements in the standard of living and the preference of some patient to be treated at home (19).

However, it has not been found out any studies relating HC for all age groups in Vietnam.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Study design

This study is a descriptive study in which the data will be collected by interviewing, using structured questionnaires.

3.2 Study area



The data will be collected in Omon District, Cantho City (Figure 8, Figure 9). This is the third biggest city in Vietnam and considered as the western capital in the South of Vietnam. Its population group of age 60 years old and over occupies .67% (32).

Omon District still belongs rural area of Cantho city and includes 5 villages: ChauVanLiem, Phuocthoi, Truonglac, Thoilong and Thoian. Each of villages has from 12 to 18 wards according to every village population. Total population of Omon District is about 128 thousands inhabitants in which the elderly is approximately 9670 (32)

Figure 9 Location of Cantho city

3.3 Target Population

The target population of this study has the following criteria:

- The elderly aging 60 and over.

- They can understand and answer independently or their proxies in cases of the elderly lose memory or too weak.
- They live in Omon District, Cantho City



Figure 10 The map of Cantho City

3.4 Sampling techniques and Sample Size

3.4.1 Sampling techniques

Studied people are selected by cluster, random and systematic sampling (30) from the elderly living in each of 5 villages of Omon District, Cantho City according to the percentage of sample size in the target population (Figure 11). The sampling technique is also based on the proportion of the elderly in each village and ward in the district.

3.4.2 Sample size

The sample size is at least 165 and calculated by the following formulas (1) and (2).

$$n = \frac{Z_{\alpha/2}^2}{e^2} p(1 - p) \quad (1)$$

$$n' = n (1 + 0.1) \quad (2)$$

$$n' \approx 169$$

Where n = Accurate sample size,
 n' = Provided sample size
 $Z_{\alpha/2}$ = 1.96 (due to setting confident level by 95%)
 e = .04 (error within .04)
 p = .076 (proportion of the elderly in Omon district population)

The elderly who meet the criteria will be recruited as the sample size for this study, at least 169 people.

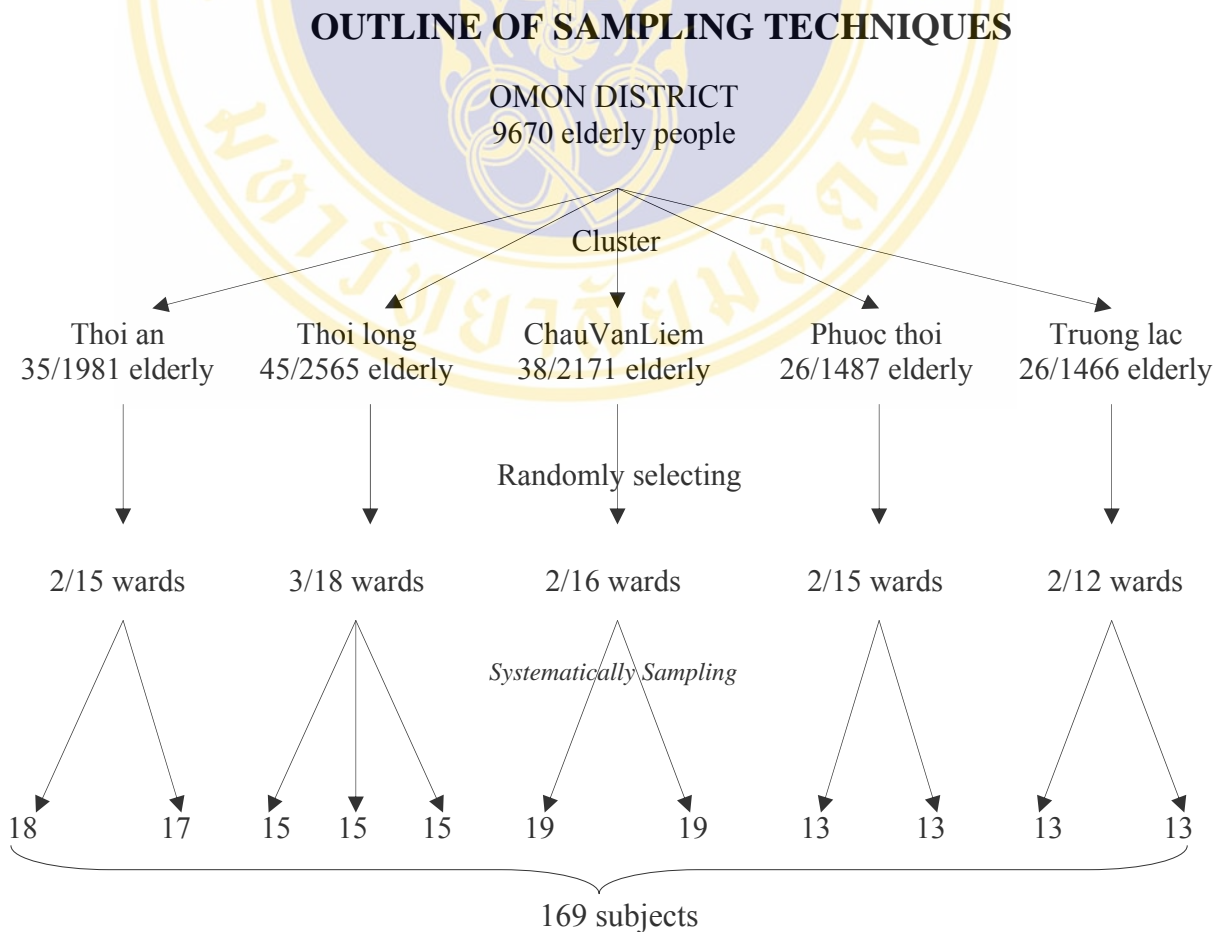


Figure 11 Sampling Techniques

3.5 Research Instrument

The instrument for data collection is a structured questionnaire designed by the researcher. The questionnaire is also translated into Vietnamese and most of questions are closed-ended, which consist of 5 following parts covering the whole variables (Appendix A, B):

- 1 – General data of household
- 2 – Individual data
- 3 – Family support
- 4 - Community support
- 5 – HC status

3.6 Validity of the questionnaires

After three times for being adjusted the original questionnaire by academic advisors' suggestions, the questionnaire was allowed keeping on next steps for evaluation of validity in Vietnam.

The validity of the questionnaire was evaluated by six Vietnamese health professionals and was improved to be appropriate in Vietnamese context (Appendix C). The questionnaire was also adjusted according to pre-interview 30 elderly people who were exclusive in the study to supplement real situations.

3.7 Data Collection

After the structured questionnaires had been tested and revised, the data were collected. Firstly the Director of Omon District Health Center was contacted and informed about the purpose of this study. Five VHVs living in each village are trained by the researcher to interview. The researcher supervised, observed and recorded interesting information. An interview took 20 to 30 minutes. The researcher also

collected the data of villages' characteristics as well as the data support these characteristics in both Omon District and Cantho City.(Appendix D).

3.8 Data Processing and Analysis

Data were coded (Appendix F) and entered in Minitab13 program for analysis. The descriptive statistic was used for all variables, according to the objectives and the conceptual framework of this study.

Test for normality of distribution was carried out for the variables of age, income, allowance, health knowledge, health behavior, family support and community support (Appendix E).

Chi square test was used to estimate association among the variables. Then data were recoded and regrouped for testing invalid data (Appendix F).

3.9 Measurement of variables

3.9.1 The composite variables

The composite variables in the study include health knowledge, health behavior, family support and community support. The value of each variable was summed of scores getting from its questions.

Based on the variables' normality of distribution, their scores were divided into two or three levels consisting of Good and Poor or Good, Fair, and Poor based mean, meadian and SD (Appendix E).

3.9.2 Perceived health status

Perceived health status refor the elderlyected by question 33 would be scored by visual analog scale (48). It would be also classified into 3 levels with the criteria mentioned in 3.9.1 previously.

3.9.3 The variables having ratio level data

They consist of Age, Allowance and Income.

- Age was classified into four groups and was regrouped in processing of data analyze:

Group 1: 60-69

Group 2: 70-79

Group 3: 80-89

Group 4: 90 and over

Regroup 1: 60-79

Regroup 2: 80 and over

- Income was divided into two groups based on the criteria for Vietnames income (63):

Good: From 7.7 million VND per year and above

Poor: Less than 7.7 million VND per year

- Allowance was divided into two groups based on the criteria for Vietnames poor household (63):

Good: From 120,000 VND per month and above

Poor: Less than 120,000 VND per month

Nominal levels of “Yes” and “No” also measure allowance.

3.9.4 The other variables

The remainders of variables will be measured by common methods according to each variable.

CHAPTER 4

RESULTS

This chapter will reveal findings from HC status for the elderly in Omon district, Cantho city, Vietnam. It will be divided into following eleven parts:

1. Socioeconomic status and demographic characteristics of the respondents.
2. Household sanitation where the respondents living
3. Health belief
4. Family resources
5. Community resources
6. Needs for health care of the elderly
7. HC status for the elderly
8. The factors relating to chronic diseases of the elderly
9. The factors relating to elderly health status
10. The factors relating to HC status for the elderly
11. Relationship between needs for health care and HC status

4.1 Socioeconomic status and demographic characteristics of the respondents

We have carried out 171 interviews consisting of 149 subjects and 22 proxies. Our information we get refor the elderlyects HC status within two weeks for 171 elderly who live in five villages of the district. Table 1 will describes the distribution of their socio-economic status and demographic characteristics.

Table 1 Socio-economic and demographic characteristic of the respondents

Characteristics	Number N=171	Percent
Respondents		
Proxy	22	12.87
Subject	149	87.13
Village		
Chau Van Liem	37	21.64
Phuoc Thoi	26	15.20
Thoi an	31	18.13
Thoi long	56	32.75
Truong lac	21	12.28
Age		
60 - 69	64	37.43
70 - 79	65	38.01
80 - 89	34	19.88
90 and over	8	4.68
Min = 60, Max = 98	Mean = 73.02	SD = 8.56
Gender		
Female	112	65.50
Male	59	34.50
Marital status		
Single	4	2.34
Married	98	57.31
Widow/Bachelor	66	38.60
Divorced/Separate	3	1.75
Relationship to household header		
House hold header	115	67.25
Father/Mother and in law	9	5.26
Spouse	46	26.90
Relatives	1	.58
Education		
Illiterate	63	36.80
Primary school	105	61.40
Secondary school	3	1.75
Current job		
Business	5	2.92
Farmer/gardener	47	27.49
Housewife	31	18.13
None	88	51.46
Monthly allowance		
Yes	100	58.48
No	71	41.52
Good	27	15.79
Poor	144	84.21

4.1.1 Age

The respondents' age ranks from 60 to 98 years old with average age of 73.02. Two groups of 60–69 and 70-79 occupied mostly, 37.43% and 38.01% respectively. Nearly 20% of them are in the age of 80 – 89. Some are at 90 and over (4.68%)

4.1.2 Gender and marital status

Majority of the respondents is female (65.50%). Over half of them (57.31%) are married and 38.60% is widow. Single and divorce occupied small percentage (2.34% and 1.75%)

4.1.3 Relationship with household header

Most of the elderly are household headers (67%) and spouses of household headers make up a quarter of them approximately (27%). Some of them are parents or parents in law of household headers (5.26%).

4.1.4 Education

Majority is at the level of primary school (61.40%) and illiterate elderly occupied 36.80% of the respondents. Rare is ones with higher than primary school (1.75%)

4.1.5 Current job

Over half of them are not working (51.46%). Some are still farmers (27.49%) and housewives (18.13%). Business is in small percentage (2.92%)

4.1.6 Allowance

Monthly allowance data is recorded with both “Yes/No” and ratio. It is also classified into two levels based on Vietnamese criteria (63) by which it was considered as “Poor” if less than 120,000 VND or “Good” if equal 120,000 VND and above.

Most of the respondents have monthly poor allowance (84%). Over 40% of the respondent has not monthly allowance.

4.2 Household sanitation

Table 2 will describe household sanitation with housing conditions, drinking water resources, household water resources, and toilet and garbage treatment.

The percentage of moderate and good house condition is approximately tantamount, 37.43%. The remainders are poorhouse condition, 25.15%. Principle of their drinking water resources is mineral or boiled (84.80%). Sediment deposited and tap water are major resources for household, 36.84 and 33.92, respectively. Well water for household using is 15.59% and 11.11% of them still use river or canal water for their daily activities directly. They use various ways for garbage treatment in which burning is mainly (42.11%). Using latrine pool toilet is still popular for the respondents (78.95%). There are not many ones using water sealed (15.20%).

Table 2 Household sanitation

Living conditions	Number (N=171)	Percent
House condition		
Poor	43	25.15
Moderate	64	37.43
Good	64	37.43
Drinking water resources		
Mineral/Boiled	145	84.80
Rain waters	16	9.36
Tap water	9	5.84
Household water resources		
Rain water	4	2.34
River/Cannel	19	11.11
Sediment deposited	63	36.84
Tap water	58	33.92
Well water	27	15.59
Garbage treatment		
Buried	18	1.53
Burn	72	42.11
Public service	13	7.60
Thrown	36	21.05
Other	32	18.71
Types of toilet		
Water sealed	26	15.20
Pit privacy	6	3.51
Latrine pool	135	78.95
Others	4	2.34

4.3 Health belief

Health belief consists of health knowledge and health behavior of the respondents. They are scored and classified into 2 levels based on their mean. Health knowledge or health behavior is considered as “Good” if score equal mean and above; “Poor” if score less than mean. Findings of these variables will be refer the elderlyected in Table 3

Table 3 Elderly health knowledge and health behavior

Health knowledge and behavior	Number N=171	Percent
Health knowledge		
Good	95	55.56
Poor	76	44.44
Mean=2.55, Median=3.0, SD=1.199	Min=.00	Max=6.00
Health behavior		
Good	91	53.22
Poor	80	46.78
Mean=21.86, Median=22, SD=2.093	Min=17	Max=28

The percentage of the respondents with poor health knowledge occupied nearly half of them, 44%. It has the same situation when considering health behavior; nearly half of them are those with poor health behaviors.

4.4 Family resources

The number of elderly family members, income of each of them per year and the levels from their support for the elderly are considered as family resources. The levels of income and family support are based by mean and SD. Table 4 explains what we found out from these resources.

4.4.1 Number of family members

There has 4.68% elderly living alone. Over half of the respondents live in family having 5 – 7 members (5.29%). Those living in the family with 2 – 4 members are over 40%. Ones living with family having more than 8 members are rare (3%).

Table 4 Family resources

Family resources	Number N=171	Percent
Number of family members	Min = 1	Max = 10
Alone	8	4.68
2 – 4	72	42.11
5 – 7	86	5.29
8 and over	5	2.92
Income each member per year		
Good	10	5.85
Poor	161	94.15
Family support levels		
Good	33	19.30
Moderate	94	54.97
Poor	44	25.93
Score: Min = 20, Max = 58	Mean = 41.78	SD = 8.45

4.4.2 Income each member per year

Income per year of each family member was divided into two levels based on Vietnamese criteria (63). It was considered “Good” if equal 7.7 million VND and above or “Poor” if less than 7.7 million VND. From result of the study, almost the elderly have family members with poor income (94%)

4.4.3 Family support for the respondents

Family support was scored and classified into 3 levels based on mean and SD. Over a quarter of elderly get poor support from their family. Only 19.30% of them get good support, over one half (54.97%) receives the moderate support and 25.93 % get poor support from their family.

4.5 Community resources

Community resources in the study consist of community support and villages or area where the respondents live. Community support for the elderly is also scored and

divided into 3 levels based on mean and SD. Community resources are shown in Table 5.

Table 5 Community resources

Characteristics	Chau Van Liem	Thoi an	Truong lac	Thoi long	Phuoc Thoi
Poor household (%) [*]	3.36	3.25	5.30	3.01	1.08
Income per capita per year (Million Vietnamese dong) ^{**}	7.27	5.72	4.33	5.45	7.70
Drug expenditure per capita (Thousand Vietnamese dong) ^{***}	36.55	34.20	49.53	38.42	18.74
Using hygienic toilet (%) ^{***}	68.45	43.00	15.30	3.04	27.04
Using hygienic household water (%) ^{***}	89.48	74.60	71.16	69.99	83.80
Using bath room (%) ^{***}	92.00	76.00	7.70	66.48	76.76
Garbage treatment (%) ^{***}	10.00	78.00	86.90	97.95	88.02
Community support levels	Number (N=171)		Percent		
Good	24		14.04		
Moderate	120		7.18		
Poor	27		15.59		

* : Source : Socio and Labor Department of Cantho City; Socio and Labor Office of Omon District

** : Source : The Statistics Office of Omon District

*** : Source : Omon District Health Center and its 5 Health Commune Stations

4.5.1 Characteristics of villages where the elderly live

Phuocthoi is the village having lowest percentage of poor households (1.08%). In contrast, drug expenditure per capita is highest in Truonglac (50 thousands Vietnamese dong approximately). Generally, percentage of household using hygienic toilet is still low except Chauvanliem belonging town area; 68.45%. Most of households have accessed using hygienic water and using bathroom. About from 78% to 100% of households dealt with their garbage well.

4.5.2 Community support

Those getting good support from community are rare (14%). Most of the respondents get moderate support from community (70%). Nearly 16% of them is one having poor support from community.

4.6 Needs for health care

In the study, chronic diseases and perceived health status of the elderly are considered as elements of needs for health care. Chronic disease are typical diseases of the elderly such as cardiovascular diseases, cataract... (41 and 6). Perceived health status was scored by visual analog scale (48) from 1 to 1. It would be considered as “Good” if its score is equal mean or higher and as “Poor” if its score is less than mean. Findings from needs for health care are presented in Table 6.

Table 6 Chronic diseases of the elderly

	Number (N=171)	Percent
Elderly chronic disease		
None	27	15.79
Cardiovascular disease	33	19.30
Rheumatic disease	26	15.20
Mental disorder	13	7.60
Cataract	13	7.60
Injury	4	2.34
Multiple diseases	39	22.81
Others	16	9.36
Perceived health status		
Good	87	5.88
Poor	84	49.12
Mean = 4.632 Median = 6.00	SD =2.50	Min = 1, Max = 9

Most of the respondents have chronic diseases, except about 16% of the respondents not having chronic diseases. The number of those having multiple diseases is highest in all groups (22.81%). Cardiovascular and rheumatic diseases are

rather common (19.30% and 15.20%). Some have mental disorder, cataract, injury and others (7.60%, 7.60%, 2.34% and 9.36%)

Nearly half of the respondents perceived that their health status was poor (49%). This suggests that demand for health check-up is so urgent.

4.7 Homecare status

In the study, the events of HC status are recorded within two weeks. HC activities (44) are divided into two groups of daily activities and the activities when the elderly getting sick. According to these activities, we will describe HC status with levels of care and care providers. Some discomfort or minor diseases as well as moderate diseases occurring within those two weeks are also recorded. In addition to, the special solutions used in these situations are considered.

4.7.1 Care for daily activities

There are eight daily activities such as bathing, cleaning, dressing, feeding,...(44). Table 7 and Table 8 will describe levels of care and care providers for these activities.

Table 7 Levels of HC for daily activities

Activities	Self-care	Self-care with family help	Family care only	Care from neighbor /VHVs
	No (%)	No (%)	No (%)	No (%)
Bathing	153 (89.47)	10 (5.85)	8 (4.68)	0 (0)
Cleaning: laundry, dishes	117 (68.42)	21 (12.28)	33 (19.30)	0 (0)
Dressing	153 (89.47)	9 (2.26)	9 (5.26)	0 (0)
Feeding	153 (89.47)	5 (2.92)	13 (7.60)	0 (0)
Watching over	150 (87.72)	6 (3.51)	14 (8.19)	0 (0)
Lifting and moving	150 (87.72)	9 (5.26)	12 (7.02)	0 (0)
Helping with the toilet, changing soiled linens	145 (84.80)	7 (4.09)	19 (11.11)	0 (0)
Shopping for food	77 (45.03)	14 (8.19)	78 (45.61)	2 (1.17)

Table 7 demonstrates that most the respondents are those perform their daily activities themselves (from 68% to 90% approximately) except shopping for food (45.03%). The roles of their families for daily activities are low (from 2% to 10%), except shopping for food and cleaning (46% and 20%).

Table 8 Care providers for daily activities

Activities	Self-care	Spouse	Son or daughter	Son or daughter in law	Grand – child	Neighb or or VHV's
	No (%)	No (%)	No (%)	No (%)	No (%)	No (%)
Bathing	153 (89.47)	1 (.58)	15 (8.77)	1 (.58)	1 (.58)	0 (0)
Cleaning: laundry, dishes	117 (68.42)	5 (2.92)	34 (19.88)	10 (5.85)	5 (2.92)	0 (0)
Dressing	153 (89.47)	1 (.58)	12 (7.02)	2 (1.17)	3 (1.75)	0 (0)
Feeding	153 (89.47)	0 (0)	12 (7.02)	5 (2.92)	1 (.58)	0 (0)
Watching over	150 (87.72)	0 (0)	14 (8.19)	4 (2.34)	2 (1.17)	1 (.58)
Lifting and moving	150 (87.72)	1 (.58)	15 (8.77)	3 (1.75)	2 (1.17)	0 (0)
Helping with the toilet, changing soiled linens	145 (84.80)	2 (1.17)	21 (12.28)	2 (1.17)	1 (.58)	0 (0)
Shopping for food	77 (45.03)	6 (3.51)	57 (33.33)	24 (14.04)	5 (2.92)	2 (1.17)

Like levels of care, most of the elderly are those providing care for themselves, from 68% to 90% approximately, for their daily activities. Their sons/daughters help them partly in daily activities (from 7% to 12% approximately) and more frequency in shopping for food (33.33%) and cleaning (20%). The roles of remained people are not important for their daily activities (Table 8).

4.7.2 Care when the elderly getting sick

There are nine activities for instance preparing and giving medicine, consulting with health care providers... (44) when the elderly getting sick. Table 9 and Table 10 will show the findings form levels and care providers for these activities.

Table 9 Levels of care when the elderly getting sick

Activities	None	Self-care	Self-care with family help	Family care only	Care from neighbor /VHVs	Care from HWs in home	Care from HWs in hospital
	No (%)	No (%)	No (%)	No (%)	No (%)	No (%)	No (%)
Preparing and giving medicine	0 (0)	151 (88.30)	4 (2.34)	16 (9.36)	0 (0)	0 (0)	0 (0)
Cleaning wounds	0 (0)	153 (89.47)	4 (2.34)	13 (7.60)	1 (.58)	0 (0)	0 (0)
Transportation (taking to clinic or hospital)	6 (3.15)	103 (6.25)	9 (5.26)	48 (28.07)	5 (2.92)	0 (0)	0 (0)
Consulting with health care providers	12 (7.02)	104 (6.82)	8 (4.68)	45 (26.32)	2 (1.17)	0 (0)	0 (0)
Helping of applying for welfare benefits	14 (8.19)	102 (59.65)	8 (4.68)	45 (26.32)	2 (1.17)	0 (0)	0 (0)
Arranging legal and financial affairs	15 (8.77)	100 (58.48)	7 (4.09)	46 (26.90)	3 (1.75)	0 (0)	0 (0)
Care of some minor illness or discomfort	43 (25.15)	46 (26.90)	39 (22.81)	41 (23.98)	0 (0)	1 (.58)	0 (.58)
Care of some moderate illness or discomfort	5 (2.92)	8 (4.68)	18 (1.53)	34 (19.88)	3 (1.75)	5 (2.92)	98 (57.31)
Care of serious illness	6 (3.51)	9 (5.56)	17 (9.94)	51 (29.82)	13 (7.60)	25 (14.62)	50 (29.24)

When the elderly get sick, over half of them are still self-care (from 58% to 90%), except activities on taking care diseases directly. Their family also plays an important role for homecare. It make up from 20% to 30% for the whole activities when the elderly get sick but preparing drug and cleaning wounds; less than 10%. The elderly only need care from hospitals when they get moderate and serious illness, 57.31 % and 29.24% respectively. Care form VHVs, neighbors and HWs at home when the elderly get serious illness is noticeable (Table 9). In particular, some

activities in this case are ignored, especially in care for discomfort or minor illness (25.15%, Table 9).

Table 10 Care providers when the elderly getting sick

Activities	None	Self-care	Spouse	Son or daughter	Son or daughter in law	Grand-child	Neighbor or VHVs	Health worker
	No (%)	No (%)	No (%)	No (%)	No (%)	No (%)	No (%)	No (%)
Preparing and giving medicine	0 (0)	151 (88.30)	1 (.58)	15 (8.77)	2 (1.17)	2 (1.17)	0 (0)	0 (0)
Cleaning wounds	0 (0)	153 (89.47)	0 (0)	14 (8.19)	2 (1.17)	2 (1.17)	0 (0)	0 (0)
Transportation (taking to clinic or hospital)	6 (3.51)	103 (6.23)	2 (1.17)	44 (25.73)	5 (2.92)	6 (3.51)	5 (2.92)	0 (0)
Consulting with health care providers	12 (7.02)	104 (6.82)	5 (2.92)	36 (21.05)	5 (2.92)	7 (4.09)	2 (1.17)	0 (0)
Helping of applying for welfare benefits	13 (7.60)	103 (6.23)	3 (1.75)	39 (22.81)	4 (2.34)	6 (3.51)	3 (1.75)	0 (0)
Arranging legal and financial affairs	15 (8.77)	100 (58.48)	4 (2.34)	39 (22.81)	4 (2.34)	6 (3.51)	3 (1.75)	0 (0)
Care of some minor illness or discomfort	45 (26.32)	44 (25.73)	9 (5.26)	63 (36.84)	4 (2.34)	3 (1.75)	0 (0)	3 (1.75)
Care of some moderate illness or discomfort	3 (1.75)	10 (5.85)	7 (4.09)	34 (19.88)	6 (3.51)	0 (0)	6 (3.51)	105 (61.40)
Care of serious illness	7 (4.09)	10 (5.85)	9 (5.26)	34 (19.88)	12 (7.02)	13 (7.60)	12 (7.02)	74 (43.27)

Table 10 also proves that when getting sick, the elderly need more help from others but over half of care providers are still those taking care themselves; 58%-90% except the activities for taking care of diseases directly. Their children help them approximately from 20% to 36% for the whole activities in this case but preparing

drug and cleaning wound (less than 10%). The roles of their spouses, sons/daughters in law, grandchild, neighbor, VHVs is not important. About half of the elderly is dependent on HWs only when they get moderate and serious illness (61.40% and 43.27%, respectively).

Like levels of care when elderly get sick, some particular activities are ignored by both elderly and other people, especially in care for discomfort or minor illness (26.32%).

4.7.3 The elderly's self-care in homecare status

According scores of levels of care, the elderly's self-care is found out, recoded and grouped into three groups. They consisted of selfcare for daily activities, self-care when sick and selfcare for the whole activities in homecare status. The elderly's self-care is presented in Table 11.

Table 11 The elderly's self-care in homecare status

Self-care	Yes	No
	No (%)	No (%)
For the whole activities	131 (76.64)	40 (23.39)
For daily activities	155 (90.61)	16 (9.36)
For activities when sick	87 (50.88)	84 (49.12)

We figured out that it was the elderly who had performed over three fourth of the whole activities in homecare status themselves, in which the elderly had done most of daily activities (91%) and over half of activities when they got sick (51%).

4.7.4 Some discomfort, minor and moderate illness

Throughout homecare status within two weeks, the elderly's health problems were recorded. They were described based on some discomfort, minor and moderate illness, showing in Table 12.

Table 12 Discomfort, minor and moderate illness

Discomfort/illness	Number	Percent
N=171		
Discomfort or minor diseases		
None	20	11.70
Fever	5	2.92
Back/Join – ach	73	42.69
Moving/seeing difficulty	25	14.62
Memory decrease/loss	17	9.94
Digestive disorder	2	1.17
Multiple symptoms	29	16.96
Moderate illness		
None	69	4.35
Sore throat	10	5.85
Pneumonia	22	12.87
Stomach-ach	13	7.60
Diarrhea	8	4.68
Urination disorder	8	4.68
Multiple diseases	33	19.30
Others	8	4.68

The most frequency symptom of discomfort or minor diseases that the elderly got is back-ach or join-ach, 42.69%. Besides, moving or seeing difficulty and multiple symptoms are partly (14.62% and 16.96%). About 10% of the elderly is ones decreasing or losing their memory. 11.70% of them do not get any minor troubles.

Nearly half of the respondents do not get any moderate diseases, (4.35%), while 19.30% of them get multiple diseases. Pneumonia, stomach - ach and sore throat are also moderate diseases that the respondents get sometimes (12.87%, 7.6% and 5.87% respectively).

4.7.5 Solutions used in HC status

We grouped these solutions into five categories:

- None: Nothing preformed when it is necessary
- Medical skills used by health professionals
- Traditional ways such as coin-rubbing remedy, hebal lotion...

- Superstition methods such as wearing a charm, praying...
- Self taking tablets or buying drugs
- These solutions in HC status are illustrated in Table 13

Table 13 Special solutions for taking care

Special solutions	Discomfort/Illness		
	Minor No (%)	Moderate No (%)	Serious No (%)
Do nothing	98 (57.31)	3 (1.75)	7 (4.09)
Traditional methods	45(26.32)	25 (14.62)	60 (35.09)
Self taking/buying drug	16 (9,36)	25 (14.62)	23 (13.45)
Medical skills	9 (5.26)	104 (6.82)	23 (38.01)
Superstition methods	3 (1.75)	7 (4.09)	16 (9.36)

Over half of cases (57.31%) do nothing when they get minor diseases or discomfort symptoms. Using tradition methods is rather common in for minor and serious diseases; 26.32% and 36%. Medical skill is the most common when the elderly get moderate diseases (61%). Self-buying of taking tablets is some time used in three situations, (9.36%, 14.62% and 13.45%). Using superstition methods increases when getting more serious troubles (1.75%, 4.09% and 9.36% for minor, moderate and serious diseases respectively)

4.8 Factors relating to needs for health care

In the study, we selected some factors, which are predicted that having relationship with needs for health care. They are following 12 selected factors:

- | | |
|------------------------|----------------------------------|
| 1 – Age | 2 – Sex |
| 3 - Marital status | 4 – Role in family |
| 5 - Education | 6 - Working status |
| 7 - House condition | 8 - Health knowledge |
| 9 - Health behavior | 10 - Family support |
| 11 - Community support | 12 - Area that the elderly live. |

We use χ^2 tests to explore relationship between needs for health care among these selected factors. The capabilities of their relationship will show in Table 14.

4.8.1 Age and chronic diseases

In both of group 60 – 79 and 80 and above, majority of the elderly get chronic diseases, 82.05% and 88.10%. Then, the relationship between chronic diseases and elderly age is not statistically significant ($p=.427$).

4.8.2 Sex and chronic diseases

Most of elderly have chronic diseases in both of two sexes, 87.50% for female and 77.91% for male. Although the proportions of those have and not have chronic diseases are different between two sexes, their difference is not statistically significant ($p=.104$). Marital status and chronic diseases

Like elderly age and sex, the ratios of those having and not having chronic diseases in both of married and unmarried group are different, this is also not statistically significant ($p=.518$).

4.8.3 Education and chronic diseases

In two levels of education, the percentage of elderly having chronic diseases is higher than that of those not having (85.71% and 14.29% for illiterate; 83.33% and 16.67% for primary school or higher). Nevertheless, this variety is not statistically significant ($p=.680$).

4.8.4 Current working status and chronic diseases

Majority of both those working and those not working have chronic diseases, 85.23% and 83.13% respectively. It is not statistically significant ($p=.707$).

Table 14 The relationship between selected factors and chronic disease

Selected factors	Chronic diseases		χ^2	P_value
	No N= 27 (%)	Yes N= 144 (%)		
Age				
60 – 79	22 (17.05)	107 (82.05)	.632	.427
80 and over	5 (11.90)	37 (88.10)		
Sex				
Female	14 (12.50)	98 (87.50)	2.642	.104
Male	13 (23.03)	46 (77.97)		
Marital status				
Married	17 (17.35)	81 (82.65)	.419	.518
Unmarried	10 (13.70)	63 (86.30)		
Role in the family				
Header	21 (18.10)	95 (81.90)	1.452	.228
Member	6 (1.91)	49 (89.09)		
Education				
Illiterate	9 (14.29)	54 (85.71)	.170	.680
Primary school/higher	18 (16.67)	90 (83.33)		
Current working status				
Not working	13 (14.77)	75 (85.23)	.141	.707
Working	14 (16.87)	69 (83.13)		
House condition				
Bad	4 (9.30)	39 (9.70)	3.287	.193
Moderate	14 (21.88)	50 (78.12)		
Good	9 (14.06)	55 (85.94)		
Health knowledge				
Good	16 (16.84)	79 (83.16)	.178	.673
Poor	11 (14.47)	65 (85.53)		
Health behaviors				
Good	16 (17.58)	75 (82.42)	.470	.493
Poor	11 (13.75)	69 (86.25)		
Family support				
Poor	12 (13.64)	76 (86.36)	.632	.427
Good	15 (18.07)	68 (81.93)		
Community support				
Poor	11 (13.25)	72 (86.75)	.780	.377
Good	16 (18.18)	72 (81.82)		
Area				
Remote	20 (22.99)	67 (77.01)	6.903	.009*
Town	7 (8.33)	77 (91.61)		

*: Significant at $\alpha = .05$

4.8.5 House condition and chronic diseases

Most of respondents in 3 levels in house condition are ones having chronic diseases; 9.70%, 78.12% and 85.94% in poor, moderate and good levels, respectively. There is not significance differences ones having and not having chronic diseases among different levels of house condition, $p=.193$.

4.8.6 Health knowledge and chronic diseases

In both groups having good and poor health knowledge, most of the respondents are ones having chronic diseases; 83.16% and 85.53%. The difference between those having and not having chronic diseases among 2 groups is not statistically significant ($p=.673$).

4.8.7 Health behaviors and chronic diseases

For considering on health behaviors, 86.25% of those having poor health behaviors are ones having chronic diseases. The percentages of those having chronic diseases is also high good health behavior groups; 82.42%. Then, this difference is not statistically significant ($p=.493$).

4.8.8 Family support and chronic diseases

In different levels of family support, most of the respondents are those having chronic diseases; 86.36% and 81.93%. The different number of those having and not having chronic diseases among 2 levels of family support is not statistically significant, $p=.427$.

4.8.9 Community support and chronic diseases

Most the elderly having chronic diseases is in both group having good and poor community support; 86.75% and 81.82%. Then, the levels of community support is not associated to chronic diseases of the elderly ($p=.377$)

4.8.10 The areas where the elderly live and chronic diseases

Meanwhile elderly chronic diseases and the areas where they live associate each other, with $p=.009$. In this situation, the number of the elderly having chronic diseases occupied 77.01% in remote area and 91.61% in town.

4.9 Factors relating to perceived health status

To find out the factors having relationship to health care status, we also select 12 factors mentioned previously in 8. Chi-square is also used in these cases. Findings will be presented in Table 15.

Table 15 The relationship between selected factors and perceived health status

Selected factors	Good N=87 (%)	Poor N= 84 (%)	χ^2	P_value
Age				
60 – 79	76 (58.91)	53 (41.09)	13.576	.000*
80 and over	11 (26.19)	31 (83.81)		
Sex				
Female	52 (46.43)	60 (53.57)	2.570	.109
Male	35 (59.32)	24 (4.68)		
Marital status				
Married	54 (55.10)	44 (44.90)	1.640	.200
Unmarried	33 (45.21)	40 (54.79)		
Role in family				
Header	61 (52.59)	55 (47.41)	.421	.516
Member	26 (47.27)	29 (52.73)		
Education				
Illiterate	25(39.68)	38 (6.32)	5.002	.025*
Primary or higher	62 (57.41)	46 (42.59)		
Working status				
Not working	35 (39.77)	53 (6.23)	8.945	.003*
Working	52 (62.65)	31 (37.35)		
House condition				
Bad	23 (53.49)	20 (46.51)	6.284	.043*
Moderate	25 (39.06)	39 (6.94)		
Good	39 (6.94)	25 (39.06)		
Health knowledge				
Good	53 (55.79)	42 (44.21)	2.064	.151
Poor	34 (44.74)	42 (55.26)		
Health behavior				
Good	52 (57.14)	39 (42.86)	3.055	.080
Poor	35 (43.75)	45 (56.25)		
Family support				
Poor	17 (38.64)	27 (61.36)	4.089	.129
Moderate	50 (53.19)	44 (46.81)		
Good	20 (6.61)	13 (39.39)		
Community support				
Poor	15 (55.56)	12 (44.44)	2.081	.353
Moderate	57 (47.50)	63 (52.50)		
Good	15 (62.50)	9 (37.50)		
Areas				
Remote	44 (5.57)	43 (49.43)	.006	.936
Town	43 (59.19)	41 (48.81)		

* : Significant at $\alpha=.05$

4.9.1 Age and perceived health status

Meanwhile the number of those good perceived health status and poor perceived health status in age of 60 – 79 are not too different, 58.91% and 41.09%, most of elderly aging 80 and over are poor perceived health status, 83.81%. This difference is statistically significant with $p=.00$.

4.9.2 Sex and perceived health status

There are differences between those good perceived health status and poor perceived health status among male and female. For female, the proportion of those good perceived health statuses is higher than that of those poor perceived health status (53.57% and 46.43%). In contrast, for male, the percentage of those good perceived health statuses is lower than that of those poor perceived health status (4.68% and 59.32%). However, this difference is not statistically significant. ($P=.109$)

4.9.3 Marital status and health status

The gap between the numbers of elderly good perceived health status and poor perceived health status is not wide in married and unmarried group. These varieties are not statistically significant, with $p=.20$.

4.9.4 Role in the family and health status

The ratio of those poor perceived health status and good perceived health status is opposite each other among two groups of header and member; 52.59% and 47.41% in header group: 47.27% and 52.73% in member group. In spite of this, there is not a significant difference, $p=.516$.

4.9.5 Education and perceived health status

The number of elderly who illiterate are good perceived health status is lower than that of poor perceived health status, 39.68% compared to 6.32%. In contrary, in the group with primary school or higher, the percentage of good perceived health status ones is higher than poor perceived health status ones. This difference is statistically significant, $p=.007$.

4.9.6 Current working status and perceived health status

There is a difference between those working and not working. For those not working, the percentage of those with good perceived health status is lower than poor perceived health status. Conversely, for those working, the percentage of those with good perceived health status is higher than poor perceived health status. This is statically significant, $p=.003$

4.9.7 House condition and perceived health status

In the group of those having bad house condition, the number of good perceived health status elderly is higher than in poor perceived health status ones; (53.49% and 46.51%). This percentage is opposite in the group of those having moderate house condition; 39.06% and 6.94%. In the group of having good house condition, the number of good perceived health status respondents is higher than poor perceived health status ones, 6.94% and 39.06%. These difference is statistically significant, $p=.043$.

4.9.8 Health knowledge and perceived health status

Over half of those with good health knowledge are ones with good health status (55.59). In similarity, over half of those with poor health knowledge are ones with poor health status. Therefore, there is not significant differences ($p=.151$).

4.9.9 Health behaviors and perceived health status

Like health knowledge, Over half of those with good health behavior are ones with good health status (57.14). In similarity, over half of those with poor health behaviors are ones with poor health status (56.25). Therefore, there is not significant differences ($p=.08$).

4.9.10 Family support and perceived health status

In the group having poor family support, the ratio of good perceived health status elderly is lower than that of poor perceived health status ones; 38.64% and 61.36%. Then, the ratios of good perceived health status and poor perceived health status respondents in the group having moderate family support are not so different (53.19% and 46.81%). Otherwise, in the group having good health behaviors, the ratio of good perceived health status elderly is greater than that of poor perceived health status ones, 6.61% and 39.39%. However, these differences are not statistically significant due to $p=.129$.

4.9.11 Community support and perceived health status

Instead of these differences between good perceived health status elderly and poor perceived health status ones in three levels of community support, those differences are not statistically significant ($p=.353$).

4.9.12 Area where the respondent live and perceived health status

There is not so different between the percentages of those good perceived health status and poor perceived health status who live in remote area; 5.57% and 49.43%. Then, the ratio of those with good perceived health status is higher than that of those with poor perceived health status for those living in town; 59.19% and 48.81%. Despite these varieties, there are not significant differences ($p=.936$).

4.10 Factors relating to HC status

We selected the same factors mentioned previously in 8 and used Chi-square to discover their relationships to HC status. HC status, which is represented by self-care, is classified based on 2 levels of care:

- Yes : Only self-care for the whole activities.
- No : Need help from others

Table 16 will refer the elderlyect findings found out.

4.10.1 Self-care and age

Most of the elderly aging of 60 – 79 are self-care; 86.82%. When they get older, in the age of 80 and over, over half of them is not self-care. (54.76%). This difference is statistically significant, $p=.00$.

4.10.2 Self-care and sex

Although the number of those who are self-care is greater than that of those who are not in both of male and female groups, (78.57% self-care and 21.43% not self-care in female group; 72.88% self-care and 27.12% not self-care in male group), there are not significant differences ($p=.403$)

4.10.3 Self-care and marital status

The numbers of those who are self-care are greater than that of those who are not self-care in both of married and unmarried group. Then, this difference is not statistically significant ($p=.152$)

Table 16 The relationship between selected factors and self-care of the elderly

Selected factors	Self-care		χ^2	P_value
	No N=40 (%)	Yes N=131 (%)		
Age				
60 – 79	17 (13.18)	112 (86.82)	3.574	.000**
80 and over	23 (54.76)	19 (45.24)		
Sex				
Female	24 (21.43)	88 (78.57)	.698	.403
Male	16 (27.12)	43 (72.88)		
Marital status				
Married	19 (19.39)	79 (8.61)	2.054	.152
Unmarried	21 (28.77)	52 (71.23)		
Role in family				
Header	26 (22.41)	90 (77.59)	.193	.661
Member	14 (25.45)	41 (75.55)		
Education				
Illiterate	12 (19.05)	51 (8.95)	1.050	.305
Primary or higher	28 (25.93)	80 (74.07)		
Working status				
Not working	33 (37.50)	55 (62.50)	2.137	.000*
Working	7 (8.43)	76 (91.57)		
House condition				
Bad	8 (18.60)	35 (81.40)	2.304	.316
Moderate	19 (29.69)	45 (7.31)		
Good	13 (2.31)	51 (79.69)		
Health knowledge				
Good	17 (17.89)	78 (82.11)	3.604	.058
Poor	23 (3.26)	53 (69.74)		
Health behavior				
Good	19 (2.88)	72 (79.12)	.685	.408
Poor	21 (26.50)	59 (73.75)		
Family support				
Poor	11 (25.00)	33 (75.00)	.624	.732
Moderate	23 (24.47)	71 (75.35)		
Good	6 (18.18)	27 (81.82)		
Community support				
Poor	5 (18.32)	22 (81.48)	2.665	.264
Moderate	32 (26.67)	88 (73.33)		
Good	3 (12.50)	21 (87.50)		
Area				
Remote	44 (5.57)	43 (49.43)	.006	.936
Town	43 (51.19)	41 (48.81)		

* : Significant at $\alpha < .05$, ** : λ^2 and t Test, significant at $\alpha = .01$, Mean=78.8 and 71.26

4.10.4 Self-care and role in family

Although most of the respondents are self-care in both groups of headers and members (77.59% and 75.55%), this is not statistically significant ($p=.661$).

4.10.5 Self-care and education

The percentage of respondents those are self-care is higher than that of those are not in both groups with illiterate and primary school or higher, 8.95% for illiterate and 74.07% for primary school or higher group. However, this difference is not statistically significant ($p=.305$)

4.10.6 Self-care and current working status

There is an obvious difference for those who are self-care and those who are not between 2 groups of working and not working. In the group not working, 37.50 % of the respondents are not self-care and the remainders (62.50%) are self-care. In the group still working, almost the respondents (91.57%) are self-care. These differences are statistically significant at $p=.00$.

4.10.7 Self-care and house condition

The percentage of respondents those are self-care is higher than that of ones those are not self-care among the levels of house condition; 81.40% and 18.60% for poor house condition; 7.37% and 29.69% for moderate; 79.69% and 2.31% for good house conditions. However, these differences are not statistically significant ($p=.316$)

4.10.8 Self-care and health knowledge

Most of the respondents in different levels of health knowledge are those who are self-care; 82.11 in good health knowledge group and 70% in poor health knowledge group. Therefore, it is not significant differences in those cases ($p=.058$)

4.10.9 Self-care and health behaviors

Over 70% of the elderly in both groups with good and poor health behaviors are self-care. Then, there is not statistically significant ($p=.408$).

4.10.10 Self-care and family support

In different levels of family support, over 75% of them are self-care. This difference is not statistically significant ($p=.732$).

4.10.11 Self-care and community support

Over third fours of the respondents are self-care among different levels of community support. This is not significant difference ($p=.264$).

4.10.12 Self-care and area where the elderly live

There are approximately equal between self-care and not self-care among different areas. Then, this is not statistically significant ($p=.936$).

4.11 Relationship between needs for health care and HC status

As mentioned previously, self-care is represented for HC status to discover relationship between it and needs for health care including chronic diseases and health status. Finding will show in Table 17.

Table 17 Relationship between needs for health care and HC status

Needs for health care	Self-care		χ^2	P_ value
	No N=40 (%)	Yes N=131 (%)		
Chronic diseases				
No	2 (7.41)	25 (92.59)	4.571	.033*
Yes	38 (26.39)	106 (73.61)		
Perceied health status				
Good	12 (13.79)	75 (86.21)	9.106	.003*
Poor	28 (33.33)	56 (66.67)		

*: Significant at $\alpha=.05$

4.11.1 HC status and chronic diseases

In the group of those not having chronic diseases, most of them are self-care (92.59%). The percentage decreases in the group of those having chronic diseases (73.61%). This difference is statistically significant ($p=.033$).

4.11.2 HC status and health status

Approximate 86% of those good perceived health status are self-care while two third of those poor perceived health status are self-care. This difference is statistically significant ($p=.003$)

CHAPTER 5

DISCUSSION

The main objectives of the study are to describe HC status the elderly and to define the factors relating to it. In order to fulfill this, a descriptive study was carried out. The findings from results will be discussed as following contents:

1. Individual characteristics and living context of the respondents
2. Health care context of the respondents
3. HC status for the elderly
4. Factors relating needs for health care
5. Factors relating to HC status for the elderly
6. Relationship between HC status and needs for health care

5.1 Individual characteristics and living context of the respondents

5.1.1 Individual characteristics of the respondents

The elderly in the study age from 60 to 98 in which is mostly from 60 to 79. Over half of them are female (65%). Approximate 40% is widow and 57% are married.

In generally speaking, they are household headers (67%) and half of them are still working. Over 80% of them have a monthly allowance less than 120,000 VND. In particular, over 40% of the elderly have no monthly allowance.

Their educational level is limited. Over a quarter is illiterate. Their health knowledge and health behavior need to be improved because of nearly half of those with poor level (44%).

5.1.2 Living context of the respondents

A quarter of the elderly are ones living in poorhouse condition. Approximate 15% has not accessed safe drinking water. About 25% of them have not used bathroom. Using latrine pool toilet is still popular.

Over 90% of the elderly live with the family having 2-7 members. Especially, 4.68% live alone. In generally speaking, income of their family member is low. Most of the elderly live with family members having poor income, less than 7.7 million VND per year (94%). A quarter of them are those having poor support from the family. There are not many ones getting good support from community (14%).

5.2 Health care context of the respondents

In the study, it is estimated 84% of the respondents having chronic diseases in which multiplied chronic diseases occupied in the highest percentage. This is a burden on public and individual resources because many chronic diseases impose significant activity limitations that change people's physical and mental health, social life, and employment (54).

Based on mean of score from visual analog scale to measure their perceived health status, half of the respondents perceived that their health status is poor. This suggests that demand on health check-ups for the elderly in the district is very urgent.

5.3 HC status for the elderly

For daily activities, approximate 68% to 90% of them are self-care, except shopping for food (45.03%). Then, care providers are mostly themselves (from 68% to 90% for their daily activities. Their sons/daughters help them partly in daily activities (from 7% to 12%) and more frequency in shopping for food (33.33%) and cleaning (20%). The roles of remained people are not important in this situation.

For the activities when they get health troubles, over half of them still self-care, except activities on taking care diseases directly. They get care from their family from 20% to 30% for this situation. They only need care from hospitals when they get moderate (57%) and serious diseases (29%).

In particular, a quarter of them ignored discomfort or minor illness; 3% of them ignored moderate illness and 4% ignored serious illness. These can be explained from their economic status and family resources. Findings from the study show that 84% of the elderly are those with a monthly poor allowance, less than 120,000 VND. Further, 94% of the elderly live with family members with a poor income, less than 7.7 million VND. These meant that the elderly have to be involved insufficiency on their daily living; activities for their discomfort or minor illness have become secondary. In the other side, 26% of them have not received appropriate support from their family. The explanation form psychological factors should be invested more deeply.

Therefore, HC status for the elderly in the district mostly is self-care. This is a positive factor that helps elder people reach quality of life better. Rather than usages medical services, self-care is seen as a continuum of self-initiated behaviors which may enhance the health and independent functioning of individuals as they age (51).

5.4 Factors relating to needs for health care

5.4.1 Factors relating to chronic diseases

According to the findings from the study, most of socioeconomic status, demographic characteristics, health knowledge, health behavior, family and community support did not relate to chronic diseases. In contrast, area where the elderly live related their chronic diseases.

For those living in remote area, percentage of ones having chronic diseases is lower than that of that living town area. This can be explained that ones living in town

area accessed the diseases relating city life more frequently than those living in remote area.

5.4.2 Factors relating to perceived health status

Age, education, working status and house condition are factors relating perceived health status.

The findings show that for those aging 80 and over, the percentage of poor perceived health status respondents is approximately 2 times higher than those aging 60-79; 84% compared to 41%. It is obvious that health status decrease when people get older, because of the inverse relationship between health status and aging. It is not suppressed that the older people get, the unhealthier they are.

To considerate on education, those who are illiterate seem to be less good perceived health status than the others (39% compared to 57%). We can assume that general knowledge help elderly healthier because it manages their life style infor the elderlyuencing health status (49). Specially, education in financial term is important to health because those with higher education have adequate financial resources to support the purchase of good housing, nutrition, private health care. They are also more likely to have financial security, better employment options, safer work condition, which are tied to better health (56). These benefit for their health status

In the study, for those working, the percentage of good perceived health status people is higher than those not working. This is understandable. Working is considered as physical activities infor the elderlyuencing health status. Regular physical activity can provide many benefits to individuals. These include improved cardiovascular function, better posture and balance, better self-esteem, stronger muscles and bones, feeling more energetic, greater relaxation and reduced stress and continued independent living later in life (59).

When considered on house condition, those living in good house condition are healthier than the others. This is not a strange phenomenon because environmental

conditions affected their health. Since elder people spend most of their time in home environment, the possible origins of many of these health risks can be traced to homes and other indoor environments.

In addition to, poorhouse condition also means low economic status. Low economic status has been shown to be a strong risk factor for poor health. People with lower incomes may not be able to afford all of their prescription medicines, doctor visits, preventive screenings and health care costs in general (58).

5.5 Factors relating to HC status, self-care

Among the selected factors, only age and working status have relationships to HC status, self-care, for the elderly.

5.5.1 Age and self-care

In the study, findings shows that the percentage of those who self care in age of 60-69 is higher than that in age of 80 and above. This is reasonable. Health status decreases when people get older, because of the inverse relationship between health status and aging. This leads capability of self-care decreases concurrently.

5.5.2 Working status and self-care

To refer working status and self-care in home, over 90% of ones working are those self-care, comparing to 62.20% of ones not working. This can be explained that working status is commonly physical activities that provide overall muscle toning and increase elderly range of motion. Therefore, those working are less dependent, more self-care, than those not working.

5.6 Relationship between HC status and needs for health care of the elderly

According to the findings from the study, HC status, or self-care relates to both chronic diseases and health status.

5.6.1 Relationship between self-care and chronic disease

In the study, the percentage of the elderly who are self-care in ones not having chronic diseases is higher than that in ones having (93% and 74% approximately).

We know that physical disability appears to result, primarily, from chronic diseases, especially in elderly populations (57). NT.net suggested that chronic diseases increase disability, such as reduced physical activity, muscle weakness, and poor balance (55). This can explain why capability for self-care decreases in those having chronic diseases.

5.6.2 Relationship between self-care and perceived health status

The findings show that 86% of good perceived health status elderly are ones self-care meanwhile 67% of poor perceived health status elderly is self-care.

Some other researches can prove it. Poor perceived health status is considered as insufficiency of capability to perform normal activities of human being. It can be impairment, activity limitation and participation restriction (61). Pitak (62) found out a high rate of independence and a low rate of disability in the sample (60-69 years of age only). In addition to, Pitak (62) found out an improvement in self-care of elderly at clubs even in areas where elderly health care was already of high standard.

CHAPTER 6

CONCLUSION AND RECOMMENDATION

6.1 Conclusion

6.1.1 Circumstance of the elderly in the district

A descriptive study had been carried out in order to reveal HC status and to define the factors relating it for the elderly in Omon District, Cantho City, Vietnam.

The sample in this study consists of 171 the respondents, which age was from 60 to 98 and third fourths was in age of 60-79. Female occupied 66%, over half were married and 38% were single. Most of the respondents were household headers (67%), have limited education (98% of illiterate or primary school). Over half of the subjects were not working. Most of them have mothly allowance less than 120,000 VND. In particular, 41% of them have not got monthly allowance.

Although most of the elderly have accessed safe water and their households dealt with garbage well, a quarter of them live in poorhouse condition and 79% of them still use latrine pool toilet.

Of the subject, 12% are those with poor health knowledge and health behaviors, 84% of them have chronic diseases in which multiple diseases is most common type (23%). Nearly half of them are poor perceived health status.

Most of the respondents live with the family having 2-7 members. In particular, 4.68% of them live alone. 63% of them have family member with income less than 7.7 million VND per year. Over a quarter of the elderly are those having poor support from their family.

The elderly live in community having good environmental health but 16% of them have not received good support from it.

6.1.2 Home care status for the elderly in the district

Most of the elderly perform daily activities for themselves (from 68% to 90), except shopping for food. The roles of their families for daily activities are low; from 2% to 10%.

When the elderly get sick, it is the elderly those performed over half of activities to take care of them, except care for diseases directly. Their family members are responsible of from 20% to 30% for the whole activities. The elderly need care from hospitals when they get moderate (57%) and serious diseases (29%).

In both of situations, their children are those helping them more than the others. The others in their families contribute partly. Unless the elderly get moderate and serious health troubles, the roles of neighbors, VHVs, HWs are vague.

The discomfort symptom that the elderly have in the most frequency is back/joint aches (42.69%). Multiple symptoms occupied 20% of moderate diseases for the elderly.

When getting discomfort symptoms or minor diseases, over half (57%) of the respondents ignore these symptoms. The main solution when they get moderate diseases is medical skills performing by HWs but using this solution decreases when their health problems more serious. Using traditional methods, self-taking tablets or buying drugs are performed in all situations. Superstitious practices increase, as their health problems are more serious.

6.1.3 Factors relating to needs for health care and HC status for the elderly

When considered needs for health care, chronic disease relates to the area where the elderly live. Findings showed that a higher percentage of those living in town area was chronic disease.

Meanwhile, health status associates to age, education, working status, house condition and health behaviors of the elderly. Results present that those aging 80 or over, poor educations, not working, poorhouse condition or poor health behaviors are those less good perceived health status than the others.

For HC status for the elderly, age and working status are factors relate to self-care. Those still working or aging less than 80 years old are more capable of self-care than the others.

In discovery the relationship between needs for health care and HC status, both chronic diseases and health status associate to self-care. The study concludes that those with chronic diseases or poor perceived health status are likely less ability of self-care.

6.2 Recommendation

On consideration of factors relating to needs for health care and HC status, the factors of age, education, and location are impossible to intervene. Working status and house conditions can be improve and depend on economic levels.

In order to help the elderly in the local community reach better their quality of life, basing on the findings, we would like to suggest following solutions on health care plan for the elderly in the district:

1 - Annually health care check-ups for the elderly should be carried out

Although health care check-ups for the elderly in the district have been performed for a long time, many of them have not accessed these programs. Therefore, it is necessary that annually health care check-ups be popularized officially.

2 - Set up home visiting nurse teams

Basing on findings of the study, demand on health care for the elderly in community is so essential and urgent. HC status in the district consists of self-care mostly. For those who get more serious health problems and unable to reach health care services, it is important for them to get help from home visiting nurse teams.

3 – Intensify the activities of volunteer healthcare team (VHT)

Presently, VHT consists of HWs those working the district health center. VHT's activities are expressed only special occasions. The demand on health check-up of the elderly is too urgent with approximate half of the elderly at poor perceived health status. It is necessary to pay attention to those disabled, living alone, in poorhouse condition, with no allowance. The local community should manage to help VHT get better resources of financials, drugs, manpower and other facilities for its activities.

4 – Further researches

This study can lead to more specific researches on other groups of population. These researches such as factors influencing the elderly's self-care, comparison the efficiency between homecare and hospital care for the elderly, elderly's satisfaction on self-care...should be investigated in order to help elderly people reach better quality of the lives.

REFERENCES

1. United Nation. Population to increase by 2.6 billion over next 45 years with all growth occurring in less developed regions. [Online]. 2005. Available from: <http://www.un.org/News/Press/docs/2005/pop918.doc.htm>. [Accessed 2005 Feb 24].
2. Terri RF, Carol VD, John RO, Mary ET, Margaret AD. Older persons perceptions of home and hospital, as a site of treatment for acute illness. [Online]. 1999. Abstract from: http://www.sciencedirect.com/science?_ob=QuickSearchListURL&_method=list&_aset=V-WA-A-W-A-MsSAYVW-UUW-U-AAAVEEVVAV-AAAWCDCWAV-WWBBVWWZ-A-U&_sort=d&view=c&_st=13&_acct=C000014278&_version=1&_useid=206209&md5=23b970e54ede0496b408380eeb7b3e90. [Accessed 2004 Sep 22].
3. Natiomaster. Map & Graph: South East Asia: People: Age structure (0-14 years) (Top 100 Countries) [Online]. 2003. Available from: www.nationmaster.com/graph-/peo_age_str_014_yea/SEA [Accessed 2004 Sep 22].
4. Eberstadt N. Power and population in Asia. Strategic Asia, 2003–2004 (National Bureau of Asian Research) [Online]. 2004. Available form: <http://www.policyreview.org/feb04/eberstadt.html> [Accessed 2004 Oct 19].
5. Knodel J. The Demography of Asian Ageing: past accomplishments and future challenges. Asia Pac Popul J. [Online]. 1999; Available from: <http://www.unescap.org/esid/psis/population/journal/1999/v14n4a4.htm>. [Accessed 2004 Oct 19].
6. Roongruangratana A. Self health care practice of the elderly attending health center 19 Wongsawang, Bangkok metropolitan administration [M.P.H.M. Thesis in Primary Health Care Management]. Nakhon Pathom: Faculty of Gradute Studies, Mahidol University; 1998.

7. Haub C. Huong PTT. An overview of population and development in Vietnam. [Online]. 2003. Available from: <http://www.prb.org/Template.cfm?Section=PRB&template=/ContentManagement/ContentDisplay.cfm&ContentID=8230>. [Accessed 2004 Oct 19].
8. Global Action on Aging. Vietnam's elderly population on the rise. [Online]. 2004. Available from: www.globalaging.org/health/world/2004/vietnam.htm. [Accessed 2004 Feb 16].
9. Vietnam, Law, Policies and Regulations. Ordinance on elderly people No.23/2000/PL-UBTVQH10 of April 28,. Available from http://www.unescap.org/esid/psis/population/database/poplaws/law_viet/vi_035.htm. [Accessed 2004 Oct 20]
10. Cai JG. Community health care in aging society. AUICK Newsletter. [Online]. 2003 Mar; 40: [2 screens]. Available from: <http://www.auick.org/database/apc/apc040/apc04003.html>. [Accessed 2004 Oct 19].
11. Terms beginning with H. [Online]. Available from: www.umanitoba.ca/centres/mchp/concept/thesaurus/thesaurus_H.html. [Accessed 2004 Oct 22].
12. Malthus T. Human population growth. . [Online]. Vecom Scientific Series. 1999. Available from: www.darwin.bio.uci.edu/sustain/bio65/lec16/b65lec16.htm. [Accessed 2004 Oct 24]
13. Ramos MLT, Ferrez MB, Recardo Sesso. Critical appraisal of published economic evaluations of home care for elderly. Arch Gerontol Geriatr [Online]. 2004 Nov-Dec; 39(3): 255-67. 2004. Abstract from: http://www.sciencedirect.com/science?_ob=QuickSearchListURL&_method=list&_aset=V-WA-A-W-A-MsSAYVW-UUA-U-AAAVEECCEU-AAAWCDZBEU-WWBCAWUB-A-U&_sort=d&view=c&_st=13&_acct=C000014278&_version=1&_useid=206209&md5=0f6a21e2b4c33a253d4af4d32da6882f. [Accessed 2004 Oct 26].

14. Connie Z, Nancy ND, Bart C. Home health care options: a guide for older persons and concerned families. New York: Insight Books; 1990.
15. Merja K, Akiko S, Kouko Y, Noriko A, Setsu S. Family care for older relatives: Sources of satisfaction and related factors in Finland. *Int J Nurs Stud.* [Online]. 2003. Available from: http://www.sciencedirect.com/science?_ob=QuickSearchListURL&_method=list&_aset=V-WA-A-W-A-MsSAYZW-UUA-U-AAAVEECDWC-AAAWCDZCWC-WWBCBUZY-A-U&_sort=d&view=c&_st=13&_acct=C000014278&_version=1&_use_rid=206209&md5=9c1459856c60d26aeda90d8cf307292f [Accessed 2003 Nov 25].
16. AllRefer.com Reference and Encyclopedia Resource. World: people. [Online]. 2003. Available from: <http://reference.allrefer.com/world/countries/world/people.html> . [Accessed 1990 Oct 25].
17. Ontario Home Health Care Providers Association. [Online]. 2004. Available from: www.ohhcpa.on.ca. [Accessed 2004 Nov 21]
18. Van Campen C, Woittiez IB. Client demands and the allocation of homecare in the Netherlands: a multinomial logit model of client types, care needs and referrals. *Health Policy.* [Online]. 2003 May; 64(2): 229-41. Available from: http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=12694958&dopt=Abstract. [Accessed 2004 Oct 22].
19. Bentur N. Hospital at home: what is its place in the health system?. [Online]. 1990. Available from: http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=11137189&dopt=Abstract. [Accessed 2004 Oct 22]
20. Suwan P. Theories and models of health behavior research methodology: ADPM 628. Asian Institute for Health Development, Mahidol University; 2005.
21. Miller CA. Nursing care of older adults: theory and practice. 2nd ed. London and New York: J.B.Lippincott; 1995.

22. Gochman DS. Handbook of health behavior research I: personal and socio determinants. New York : Plenum Press; 1997.
23. Cai JG. Community health care in aging society. AUICK Newsletter. [Online]. 2003 Mar; 40: [2 screens]. Available from: <http://www.auick.org/database/apc/apc040/apc04003.html>. [Accessed 2004 Oct 19].
24. Zuckerman C, Dubler NN, Collopy B. Home health care options: a guide for older persons and concerned families. New York: Insight Books; 1990.
25. Robyn Rice. Key concepts of self-care in the home: implication for Home Care nurses. [Online]. 1998; Available from: http://www.sciencedirect.com/science?_ob=MImg&_imagekey. [Accessed 2004 Nov 22].
26. Karin S, Albert W, Gunilla T, Ingalill RH. Patterns of health complains among people 75+ in relation to quality of life and need of help. [Online]. 2005; Available from http://www.sciencedirect.com/science?_ob=QuickSearchListURL&_method=list&_aset. [Accessed 2005 Jan 14].
27. Yea-Ing Lotus Shyu, et al. Caregiver's needs as predictors of hospital readmission for the elderly in Taiwan. Soc Sci Med. [Online]. 2004; Available from: http://www.sciencedirect.com/science?_ob=QuickSearchListURL&_method=list&_aset. [Accessed 2005 Jan 14].
28. Maggi SK. Steel, planning home care services: which data do we need? archives of gerontology and geriatrics. [Online]. 1996; Available from http://www.sciencedirect.com/science?_ob=MImg&_imagekey= [Accessed 2004 Dec 15]
29. Alto WA. Emergency health services in rural Vietnam. Am J Emerg Med. 1998; [Online]. Available from: http://www.sciencedirect.com/science?_ob=QuickSearchListURL&_method=list&_aset=. [Accessed 2004 Oct 12].
30. Griffith RW. Getting help (e.g. tools and structural changes) in the home. London and New York: Careproviders' Center, Health and Age; 1999.

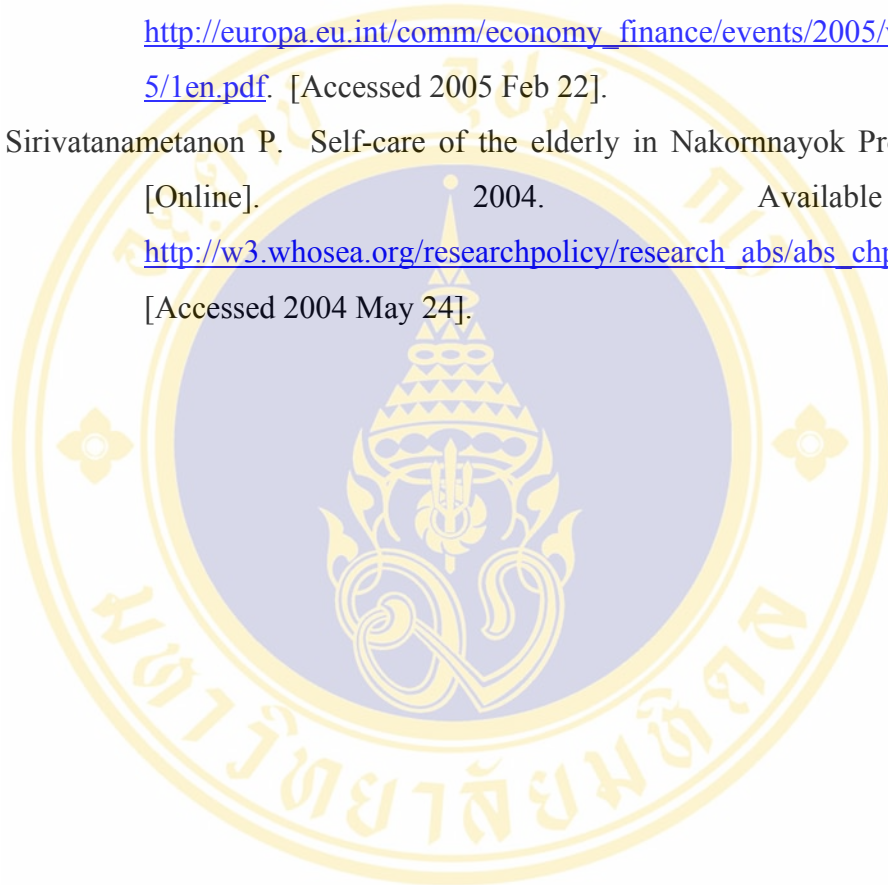
31. Allan G. Bluman. Elementary statistics: a step by step approach. 5th ed. New York. McGraw Hill. 2004.
32. Data sources from Socio and Labor Office of Omon District, Socio and Labor Department of Cantho City. Socio and Labor Office of Omon District. 2004.
33. Okolo EN. Health Research Design and Methodology. USA: CRC Press; 1990.
34. Xinhua. Life expectancy increases in Vietnam. [Online]. 2003. Available from: <http://perso.wanadoo.fr/patrick.guenin/cantho/vnnews/lifeex.htm>. [Accessed 2003 Oct 30].
35. Vietnam. Ministry of Public Health. Health statistics yearbook 2002: HSID, Planning-Financial Department; Hanoi. 2003.
36. Idris WE. Caring for elderly people in the community. London: Chapman & Hall. 1989.
37. Khe ND, Toan NV, Xuan LT, Eriksson B, Hojer B, Diwan VK. Primary health concept revisited: where do people seek health care in a rural area of Vietnam?. National Library of Medicine. [Online]. 2002; Available from: http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=12173499&dopt=Abstract. [Accessed 2004 Dec 12].
38. Westley S. A “Snapshot” of populations in Asia. [Online]. 2002. Available from <http://www.peopleandplanet.net/pdoc.php?id=1684>. [Accessed 2002 Jul 12].
39. Gibson NP. Coexisting systems of medicine. Naturopathic Medicine. [Online]. 2004. Available from: <http://npgibs.fatcow.com/naturopathicmedicine/Coexistingsystems1.htm>. [Accessed 2004 Dec 12].
40. Ory MG, Bond K, editors. Aging and health care: socio science and policy perspectives. London: Routledge; 1989.
41. Peterson C, Walker C. From episodic treatment to chronic disease management: shifting the over 65 population to an alternative model of care. Family Medical Practice On-line. [Online]. 2005. Available from: <http://www.priory.com/fam/chrondisman.htm>. [Accessed Jan 9].

42. Sribunrapapirom C. Self health care practice of elderly in Bangkok, Thailand. [M.P.H.M. Thesis in Primary Health Care Management]. Nakhon Pathom: Faculty of Graduate Studies, Mahidol University; 2002.
43. Population Division, Department of Economic and Social Affairs United Nations Secretariat. New York: World Population Projections to 2150. [Online]. 1998. Available from: <http://www.chem.brown.edu/chem12/un%20population/unPopulation.html> [Accessed 1998 Feb 1].
44. Cox CL. The health self – determinism index. *Nurs Res.* 1985; 34(3), 177 – 83.
45. Kespichayawattana J, VanLangdingham M. *J Nurs Sch* 2003; 35(3): 217 – 24.
46. Yaffee RA. Enhancement of reliability analysis: application of Intraclass correlations with SPSS/Windows v.8. [Online]. 1998. Available from: <http://www.nyu.edu/acf/socsci/Docs/intracls.html>. [Accessed 2004 Dec 6].
47. Lutz W. IIASA Population Projection Results. [Online]. 1996. Available from: www.iiasa.ac.at/Research/POP/docs/Population_Projections_Results.html [Accessed 2004 Dec 12].
48. Johnson JM. Visual analog scales: part 1. *DCI Research Review.* [Online]. Available from: <http://www.bamc.amedd.army.mil/DCI/articles/dci01975.htm> [Accessed 2005 Jan 12].
49. Paul C, Andrea MJ. Socioeconomic status: health and lifestyle. [Online]. 1993. Available from: <http://netec.mcc.ac.uk/WoPEc/data/Papers/yoryorken01-19.html>. [Accessed 2004 Dec 8].
50. Johansson SE, J Sundquist. Change in lifestyle factors and their influence on health status and all-cause mortality. *Int J Epidemiol.* [Online]. 1999; 28: 1073-80. Available from: <http://ije.oupjournals.org/cgi/content/abstract/28/6/1073> [Accessed 2005 Jan 19].
51. James. Health Behavior. [Online]. 1989. Available from: <http://www.arond-thomasonline.com/template.asp?articleid=420> [Accessed 2005 Jan 20].

52. American Psychological Association. NIA self-care behaviors and aging. [Online]. 1997. Available from: <http://www.apa.org/science/niaselfcare.html>. [Accessed 2005 Jan 21].
53. Doolittle Mark, Judy Bray, Rosenbaum EH. Relaxation, self-care and activities of daily living. [Online]. Available from <http://www.cancersupportivecare.com/selfcare.html> [Accessed 2005 Jan 29].
54. Utah Department of Health. Chronic diseases. Community & Family Health Services Division Plan and Report. [Online]. 2001. Available from: [http://hlunix.hl.state.ut.us/cfhs/drp/reports/Chronicfinal.PDF#search='percentage %20of%20chronic%20disease%20in%20elderly](http://hlunix.hl.state.ut.us/cfhs/drp/reports/Chronicfinal.PDF#search='percentage%20of%20chronic%20disease%20in%20elderly) [Accessed 2005 Feb 19].
55. Nursing Time Online Clinical News. Falls linked to chronic disease. [Online]. Available from: <http://www.nursingtimes.net/nav?page=nt.news.story&resource>. [Accessed 2004 Sep 26].
56. Prus SG. The relationship between age, socio-economic status and health among adult Canadian. SEDAP research paper. [Online]. 2001. Available form: <http://socserv2.socsci.mcmaster.ca/~sedap/p/sedap57.pdf>. [Accessed 2005 Feb 26].
57. Fried LP. Chapter 19: aging and functional health status. [Online]. 1995. Available from: <http://www.fhcrc.org/phs/cvdeab/chpt19.html>. [Accessed 2005 Feb 26]
58. Gordon county. Community health status assessment. [Online]. 2000. Available from: <http://health.state.ga.us/pdfs/counties/gordon.pdf> [Accessed 2005 Mar 2].
59. Grenville L, District L. Health status measures, physical activities. Health Unit. [Online]. 2000. Available from: http://www.healthunit.org/chsr/measure/chronic/phy/phy_act.htm. [Accessed 2005 Mar 2].
60. Parissopoulo S, Kotzabassaki S. Orem's self-care theory, transactional analysis and the management of elderly rehabilitation S. [Online]. 2004.

Available from: <http://www.nursing.gr/OREM.pdf>. [Accessed 2005 Mar 2].

61. Gaetan Lafortune. Impact of population ageing on health and longterm care expenditure: Assessing the effect of morbidity, disability and other cost drivers. [Online]. 2005. Available from: http://europa.eu.int/comm/economy_finance/events/2005/workshop0205/1en.pdf. [Accessed 2005 Feb 22].
62. Sirivatanametanon P. Self-care of the elderly in Nakornnayok Province THA. [Online]. 2004. Available from: http://w3.whosea.org/researchpolicy/research_abs/abs_chp5.htm. [Accessed 2004 May 24].





A - INTERVIEW QUESTIONNAIRE

ID.....

Household No:/Village.....

**HEMOCARE STATUS FOR THE ELDERLY
IN OMON DISTRICT, CANTHO CITY, VIETNAM**

In order to have basis information on planning a health care program for the elderly in the district, would you please complete the following questionnaire:

Date of interviewing Interviewer's name.....

Interviewee's name.....

As [1] Subject [2] Proxy

I - GENERAL DATA OF THE HOUSEHOLD:

1. No. of members.....
2. Housing condition:
[1] Good [2] Moderate [3] Bad
3. Types of toilet:
[1] Water sealed [2] Pit privacy [3] Latrine pool
[4] Others, specify.....
4. Drinking water
[1] Mineral/Boiled [2] Tap water [3] Well water
[4] Decontaminated [5] Sediment deposited [6] Rain waters
[7] Other, specify.....
5. Household use:
[1] Tap water [2] Well water [3] Decontaminated
[4] Sediment deposited [5] Rain water [6] River/Cannel
[7] Other, specify.....
6. Garbage treatment:
[1] Public service [2] Burn [3] Buried
[4] Thrown [5] Other, specify.....
7. Family income per year..... Vietnamese dong

II – INDIVIDUAL ELDERLY DATA

8. Household name:
9. Elderly name.....
10. Age/Year of birth.....
11. Gender: [1] Male [2] Female
12. Marital status:
1) Single [2] Married
3) Divorced/Separated [4] Widow/Bachelor

13. Relationship with the head of the family:
 [1] Household header [2] Father/Mother [3] Father/Mother-in-law
 [4] Spouse [5] Relatives [6] Other, specific
14. Which grade of school did the elderly finish? (Only one choice)
 [1] Illiteracy [2] Primary school [3] Secondary school
 [4] High school [5] Vocational/Technical diploma [6] University or higher
15. What is elderly occupation nowadays? (Only one choice)
 [1] None [2] Business [3] Farmer/Gardener [4] Service
 [5] Housewife [6] others, specific
16. How much money have the elderly got from any supporting resources each month?.....Vietnamese dong
17. **Elderly health knowledge (Only one choice)**
18. Which is the most appropriate menu for the elderly?
 [1] Rice, fish, green vegetable soup, fresh fruit
 [2] Rice, fried chicken, omelet egg, beer, fresh orange
 [3] Rice, salted port with egg, fried beef with potato, white wine,
 [4] All are corrected
 [5] All are uncorrected
19. The problems of excretion in the elderly can be solved by:
 [1] Taking the alcoholic drinks since it can improve in the process of digestion
 [2] Drinking a lot boiled water to improve in excretion
 [3] The action of diuretic substances in tea, coffee or caffeine-contained drink
 [4] All are corrected
 [5] All are uncorrected
20. Which is the most appropriate exercise for the elderly?
 [1] 15-30 minutes, walk along the roadsides, 3 days per week
 [2] Every day 30 minutes, Chinese aerobic exercise in the park
 [3] 1 hour shopping in department store
 [4] Doing the housework continuously, at least 30 minutes
 [5] All are uncorrected
21. Which is the most appropriate sleeping patter for the elderly?
 [1] In the period of 24 hours, sleep at least 8 hours, no matter daytime or night
 [2] Sleep as early at possible, particularly, immediately after dinner to have more time for sleeping
 [3] Not to take nap during the daytime, otherwise the insomnia may develop during the night
 [4] Have at least 6 -8 hours sleeping per night

[5] All are uncorrected

22. About dental care for the elderly, which one is correct?

[1] Tooth brushing in the morning is enough for the elderly

[2] Oral chronic ulcer normally happens in you. It is not necessary to have a special care or to do further investigation.

[3] Tooth brushing after eating and having dental check up every 6 months

[4] For gumming exercise, it is nice to chew the firm or hard foods

[5] All are uncorrected

23. Because of multiple chronic diseases, it is common for the elderly to use various drugs at the same time, thus.....

[1] They can share the drugs with their family members who got the same diseases.

[2] They can share the drugs with other elderly who got the same diseases.

[3] They should buy drugs with doctor's prescription for their own.

[4] All are corrected

[5] All are uncorrected

Elderly health behavior (Only one choice)

23. Do you eat green vegetable with high fiber?

[1] Never

[2] Sometime

[3] every day

24. Do you eat fish?

[1] Never

[2] Sometime

[3] every day

25. Do you eat fresh or ripe fruit?

[1] Never

[2] Sometime

[3] every day

26. How many times you eat a day?

[1] 1 time

[2] 2 times

[3] 3 times

27. Do you usually drink alcohol/beer?

[1] Every day

[2] Sometime

[3] Never

28. Do you usually smoke?

[1] Every day

[2] Sometime

[3] Never

29. Do you do morning exercise every day?

[1] Never

[2] Sometime

[3] every day

30. How many hours do you sleep at night?

[1] Less than 3 hours

[2] From 3 hours to 6 hours

[3] More than 6 hours

31. Do you usually watch film/reformed theatre, listen to radio...?

[1] Never

[2] Sometimes

[3] Everyday

32. Do you have any diseases for along time?

[1] Yes

[2] Don't know

[3] No

If yes, specific.....

33. Which stage are you in your health status? (Stick below the number)

1 2 3 4 5 6 7 8 9 10

Poor

Good

III – FAMILY SUPPORT

About your HC status, are these following statements true?

34. My family has never let me alone in my home.
 [1] *Never true* [2] *Sometime true* [3] *Always true*
35. My family always arranges person looking after me
 [1] *Never true* [2] *Sometime true* [3] *Always true*
36. My family has never let me go out alone
 [1] *Never true* [2] *Sometime true* [3] *Always true*
37. When I get health problem(s), my family always tries to help me
 [1] *Never true* [2] *Sometime true* [3] *Always true*

About the material you need, are these following statements true?

38. I always have enough food and safe drinking water
 [1] *Never true* [2] *Sometime true* [3] *Always true*
39. I have enough warm cloth, mosquito net, blanket and pillow...
 [1] *Never true* [2] *Sometime true* [3] *Always true*
40. My home always has means of transportation for taking me to go pagoda, health checkup, visiting relatives...
 [1] *Never true* [2] *Sometime true* [3] *Always true*
41. I have my own facilities such as radio, cassette...to entertainment
 [1] *Never true* [2] *Sometime true* [3] *Always true*

Are these following statements true about your family financial support?

42. When I want buying something, my family money is always available
 [1] *Never true* [2] *Sometime true* [3] *Always true*
43. My family gives me money to save every month
 [1] *Never true* [2] *Sometime true* [3] *Always true*
44. My family has enough money to buy drugs for me
 [1] *Never true* [2] *Sometime true* [3] *Always true*
45. My family has enough money to invite health professions for treatment of my diseases in my home
 [1] *Never true* [2] *Sometime true* [3] *Always true*

About the information you need, are these statements true?

46. My family always tries to find information relating my health problems
 [1] *Never true* [2] *Sometime true* [3] *Always true*
47. There is always someone in my family help me when I read news paper
 [1] *Never true* [2] *Sometime true* [3] *Always true*
48. My family always let me know what events outside are
 [1] *Never true* [2] *Sometime true* [3] *Always true*
49. In my family, there are some ones who always remind me what I forget or what I should do for my health.
 [1] *Never true* [2] *Sometime true* [3] *Always true*

Are these following statements true about your family psychological support?

50. There are always some ones who listen to me in my family.
 [1] *Never true* [2] *Sometime true* [3] *Always true*
51. There are always some ones who talk to me in my family.
 [1] *Never true* [2] *Sometime true* [3] *Always true*
52. My family always makes me pleased.
 [1] *Never true* [2] *Sometime true* [3] *Always true*
53. In my family, there is always someone whom I can confide in
 [1] *Never true* [2] *Sometime true* [3] *Always true*

V – COMMUNITY RESOURCES:**Health Social Support (Only one choice)**

54. How often are the activities of health promotion club for the elderly in the village performed?
 [1] *Rarely* [2] *Every month* [3] *Every week*
55. How often do you receive health services supplying by health insurance scheme this year?
 [1] *None* [2] *About 1 – 3 times* [3] *More than 3 times*
56. Have you receive any health care service free of charge this year?
 [1] *None* [2] *About 1 – 3 times* [3] *More than 3 times*
57. Have you get any financial support from any organization every month?
 [1] *None* [2] *About 1 – 3 times* [3] *More than 3 times*

Are these statements true about availability of the local health care service for the elderly? (Only one choice)

58. There are health care services provided for the elderly in the village.
 [1] *Never true* [2] *Sometime true* [3] *Always true*
59. Health professionals always provide health care information for the elderly in the village.
 [1] *Never true* [2] *Sometime true* [3] *Always true*
60. Health volunteers or local health workers always come for helping the elderly in the village every month.
 [1] *Never true* [2] *Sometime true* [3] *Always true*
61. There are drug stores for the elderly in the village?
 [1] *Never true* [2] *Sometime true* [3] *Always true*

About the accessibility of the local health service, do you think the following statements are true for your situation?

62. When you get sick, you can go to the local health care services without any problem.
 [1] *Never true* [2] *Sometime true* [3] *Always true*
63. It is not very far from your home to the local health services.
 [1] *Never true* [2] *Sometime true* [3] *Always true*
64. It takes short time to get to the local health services.
 [1] *Never true* [2] *Sometime true* [3] *Always true*
65. I can you afford traveling cost to get to the local health services without any difficulty.
 [1] *Never true* [2] *Sometime true* [3] *Always true*
66. The waiting time for treatment in the local health services is not too long.
 [1] *Never true* [2] *Sometime true* [3] *Always true*

V – HOMECARE FOR THE ELDERLY

How has the elderly been taking care in the home within 2 weeks ago? Please answer this question by filling in the following the table.

	Activities	Level of care					Care givers (Specify)	Remarks for Activities (Specify)
		Self	Self + Family help	Total family help	Help from neighbors/VHVs	Help from HWs at elderly home		
67	Bathing							
68	Cleaning: laundry, dishes							
69	Dressing							
70	Feeding							
71	Watching over							
72	Lifting and moving (such as from bed to chair)							
73	Helping with the toilet, changing soiled linens							
74	Preparing and giving medicine (pills or oral for the elderlyuids)							
75	Cleaning wounds							
76	Shopping for food							
77	Transportation (taking to clinic or hospital)							
78	Consulting with health care providers							
79	Helping of applying for welfare benefits							
80	Arranging legal and financial affairs							
81	Care of some minor illness or discomfort Specify							
83	Care of serious illness Specify							

Thanks for your collaboration

Instruction of filling the table (for interviewers)

This table only describes homecare status for the elderly within 2 weeks
(From 2 weeks ago to the date interviewed)

1. Levels of care (only one choice)

- (1) – Self managed
- (2) - Self managed with **some help** from family member
- (3) – Total help from family member without self managed
- (4) – Helps from neighbor/VHV.
- (5) – Helps from health workers or professions at the elderly homes
- (6) - Helps from professions at the health stations or hospitalization

2. Care givers (Can be more than one choice)

Can be: Self-care, Spouses, Son/daughter, Son/daughter in-law, Grand child, Neighbors, Friends, VHV, Nurse, Medical doctors...

3. Remarks for activities (Can be more than one choice)

Can be:

- Nothing
- Medical skills (for the care givers are health professions)
- Using traditional methods: Acupuncture, Coin rubbing remedy, Exhale medicine, Drinking “Southern medicine”, Smearing traditional oil, “Southern” medical lotion...
- Using superstition methods such as wearing a charm, praying, using magic...

4. Some minor illness or discomfort (Can be more than one choice)

Can be fever, back-ach, joint-ach, itchy skin, digestive disorder, insomnia, movable difficulty, memory loss, seeing difficulty.....

5. Some moderate illness or discomfort (Can be more than one choice)

Can be sore throat, pneumonia, stomach ach, diarrhea, and urination – disorder.....

6. Some serious illness (Can be more than one choice)

Can be air hunger, heart diseases, hypertension, injury, mental disorder, cataract, diabetes mellitus, cancer, others....

B – VIETNAMESE QUESTIONNAIRE

ID:.....

Số hộ khẩu.....

Phường.....

THỰC TRẠNG CHĂM SÓC SỨC KHỎE TẠI NHÀ CHO NGƯỜI CAO TUỔI QUẬN ÔMÔN, TP.CẦN THƠ, VIỆT NAM

Để có những thông tin cơ sở cho việc lập kế hoạch chăm sóc sức khỏe người cao tuổi tại địa phương, Xin Ông/Bà vui lòng trả lời những câu hỏi sau đây:

Ngày phỏng vấn:..... Tên cán bộ phỏng vấn:.....

Tên người được phỏng vấn:.....

Là [1] Người cao tuổi [2] Đại diện

I – THÔNG TIN CHUNG VỀ HỘ GIA ĐÌNH

1 - Tổng số người trong hộ

2 - Tình trạng nhà ở

[1] Tốt [2] Trung bình [3] Kém

3 - Loại nhà vệ sinh

[1] Hố xí tự hoại [2] Hố xí thấm [3] Cầu cá

[4] Loại khác, cụ thể:

4 - Nước uống

[1] Nước khoáng/chín [2] Nước máy [3] Nước giếng

[4] Nước khử nhiễm [5] Nước lãng phèn [6] Nước mưa

[7] Loại khác, cụ thể:

5 - Nước sinh hoạt

[1] Nước máy [2] Nước giếng [3] Nước khử nhiễm

[4] Nước lãng phèn [5] Nước mưa [6] Nước sông/ao hồ

[7] Loại khác, cụ thể:

6 - Xử lý rác thải

[1] Dịch vụ công cộng [2] Đốt [3] Chôn

[4] Vứt đi [5] Cách khác, cụ thể:

7 - Thu nhập bình quân của gia đình hàng năm:..... đồng

II – DỮ LIỆU CÁ NHÂN CỦA NGƯỜI CAO TUỔI

8 - Tên chủ hộ.....

9 - Tên ông/bà.....

10 - Tuổi/Năm sinh của ông/bà.....

11 - Giới tính: [1] Nam [2] Nữ

12 - Tình trạng hôn nhân của ông/bà

[1] Độc thân [2] Có gia đình

[3] Ly dị/Ly thân [4] Góa vợ/chồng

13 - Quan hệ của ông/bà với chủ hộ:

- [1] Là chủ hộ [2] Cha/mẹ ruột [3] Cha mẹ vợ/chồng [4] Chồng/vợ [5] Hộ hàng [6] Khác, cụ thể
- 14 - Ông/bà đã học xong cấp lớp nào? (Chỉ chọn một)
 [1] Mù chữ [2] Cấp 1 [3] Cấp 2
 [4] Cấp 3 [5] Trường nghề/Kỹ thuật
 [6] Đại học hoặc trên đại học
- 15 - Nghề nghiệp của ông/bà hiện giờ?
 [1] Không làm gì [2] Buôn bán [3] Làm ruộng/vườn
 [4] Services [5] Housewife [6] Nghề khác, cụ thể.....
- 16 - Hàng tháng, ông/bà có khoảng bao nhiêu tiền nhận được từ bất cứ nguồn hỗ trợ nào.....đồng

Kiến thức về sức khỏe của ông/bà (Chỉ chọn một)

- 17 - Thực đơn nào dưới đây phù hợp nhất cho ông/bà?
 [1] Cơm, cá, canh rau xanh, trái cây tươi
 [2] Cơm, gà chiên, trứng ốp la, cam tươi.
 [3] Cơm, thịt kho hột vịt, bò xào khoai tây, rượu đế
 [4] Tất cả đều đúng
 [5] Tất cả đều sai
- 18 - Những khó khăn về bài tiết của ông/bà có thể giải quyết như sau:
 [1] Uống rượu/bia vì nó có thể cải thiện quá trình tiêu hóa
 [2] Ăn rau quả có chất xơ/uống nhiều nước chín để cải thiện việc bài tiết
 [3] Dùng các hợp chất lợi tiểu có trong trà, cà phê hoặc thức uống khác có chứa caffeine
 [4] Tất cả đều đúng
 [5] Tất cả đều sai
- 14 - Bài thể dục nào dưới đây thích hợp nhất cho ông/bà?
 [1] Đi bộ khoảng 15-30 phút, cách mỗi ngày
 [2] Mỗi ngày 30 phút, thể dục dưỡng sinh
 [3] 1 giờ đi mua sắm mỗi tuần
 [4] Làm công việc nhà, ít nhất 30 phút mỗi ngày
 [5] Tất cả đều sai
- 20 - Giấc ngủ nào dưới đây là phù hợp nhất cho ông/bà?
 [1] Trong 24 giờ, ngủ ít nhất 8 giờ, cho dù ngày hay đêm
 [2] Ngủ càng sớm càng tốt, đặc biệt ngay sau khi ăn cơm chiều để có nhiều thời gian ngủ hơn
 [3] Không ngủ trưa, để không bị mất ngủ vào ban đêm
 [4] Có ít nhất 6 đến 8 giờ ngủ mỗi đêm
 [5] Tất cả đều sai
- 21 - Về việc chăm sóc răng miệng, cách việc nào là tốt nhất cho ông/bà?
 [1] Chỉ cần đánh răng mỗi buổi sáng
 [2] Những vết loét mãn tính ở họng thường xảy ra đối với người già, cho nên không cần thiết phải có chăm sóc đặc biệt hoặc khám xét kỹ hơn.
 [3] Đánh răng sau khi ăn và nên khám răng miệng mỗi 6 tháng.

[4] Nhai singgum thường sẽ có ích khi nhai thức ăn cứng.

[5] Tất cả đều sai

22 - Do những bệnh mãn tính phối hợp, thông thường người cao tuổi sử dụng nhiều loại thuốc khác nhau, cho nên...

[1] Họ có thể dùng chung thuốc với người trong gia đình có cùng bệnh

[2] Họ có thể dùng chung thuốc với người cao tuổi khác có bệnh giống như họ.

[3] Họ nên mua thuốc với toa bác sĩ cho riêng họ.

[4] Tất cả đều đúng

[5] Tất cả đều sai

Hành vi sức khỏe của ông/bà (Chỉ chọn một)

23 - Ông/bà có thường dùng rau xanh không?

[1] Không bao giờ

[2] Thỉnh thoảng

[3] Hàng ngày

24 - Ông/bà có thường ăn cá không?

[1] Không bao giờ

[2] Thỉnh thoảng

[3] Hàng ngày

25 - Ông bà có thường ăn trái cây tươi hoặc chín không?

[1] Không bao giờ

[2] Thỉnh thoảng

[3] Hàng ngày

26 - Ông/bà dùng bữa mấy lần trong một ngày?

[1] 1 lần

[2] 2 lần

[3] 3 lần

27 - Ông/bà có thường uống rượu/bia không?

[1] Hàng ngày

[2] Thỉnh thoảng

[3] Không bao giờ

28 - Ông bà có thường hút thuốc không?

[1] Hàng ngày

[2] Thỉnh thoảng

[3] Không bao giờ

29 - Ông/bà có thường tập thể dục buổi sáng không?

[1] Không bao giờ

[2] Thỉnh thoảng

[3] Hàng ngày

30 - Ông/bà ngủ một đêm mấy giờ?

[1] Dưới 3 giờ

[2] Khoảng từ 3 - 6 giờ

[3] Hơn 6 giờ

31 - Ông bà có thường xem phim, cải lương, nghe đài...không?

[1] Không bao giờ

[2] Thỉnh thoảng

[3] Hàng ngày

32 - Ông/bà có bị bệnh nào lâu ngày không?

[1] Có

[2] Không rõ

[3] Không

Nếu có, là bệnh gì?.....

33 - Ông bà cho rằng mình đang ở giai đoạn nào của sức khỏe? (Chọn một trong số dưới đây)

1 2 3 4 5 6 7 8 9 10

Không khỏe

Khỏe mạnh

III – HỖ TRỢ CỦA GIA ĐÌNH

Đối với việc chăm sóc tại nhà cho ông/bà, những câu sau đây có đúng không?

- 34 - Ông/bà không bao giờ ở nhà một mình
[1] Sai [2] Thành thạo đúng [3] Luôn luôn đúng
- 35 - Luôn có người trong gia đình chăm sóc cho ông bà
[1] Không đúng [2] Thành thạo đúng [3] Luôn luôn đúng
- 36 - Luôn có người đi cùng khi ông bà đi dạo, thăm bà con, đi chùa...
[1] Không đúng [2] Thành thạo đúng [3] Luôn luôn đúng
- 37 - Gia đình luôn theo dõi báo, đài, đọc sách báo có liên quan bệnh trạng của ông/bà, hỏi thăm y bác sĩ... để chăm sóc ông/bà tốt hơn
[1] Không đúng [2] Thành thạo đúng [3] Luôn luôn đúng

Đối với thứ mà ông/bà cần đến, những câu sau đây có đúng không?

- 38 - Ông/bà luôn có đủ thức ăn và nước uống
[1] Không đúng [2] Thành thạo đúng [3] Luôn luôn đúng
- 39 - Ông/bà có đủ quần áo ấm, mùng, mền, gối...
[1] Không đúng [2] Thành thạo đúng [3] Luôn luôn đúng
- 40 - Trong nhà luôn có phương tiện để chở ông/bà đi khám bệnh, thăm họ hàng, đi chùa...
[1] Không đúng [2] Thành thạo đúng [3] Luôn luôn đúng
- 41 - Ông/bà có phương tiện riêng như là radio, cassette... để giải trí
[1] Không đúng [2] Thành thạo đúng [3] Luôn luôn đúng

Những câu dưới đây có đúng không khi nói về việc hỗ trợ tài chính của gia đình đối với ông/bà?

- 42 - Khi ông/bà muốn mua sắm cho mình, tiền trong gia đình luôn sẵn có
[1] Không đúng [2] Thành thạo đúng [3] Luôn luôn đúng
- 43 - Gia đình luôn cho tiền để cho ông/bà dành dụm hàng tháng
[1] Không đúng [2] Thành thạo đúng [3] Luôn luôn đúng
- 44 - Gia đình luôn có đủ tiền để mua thuốc cho ông/bà
[1] Không đúng [2] Thành thạo đúng [3] Luôn luôn đúng
- 45 - Gia đình luôn có đủ tiền để mời y bác sĩ đến nhà điều trị bệnh cho ông/bà
[1] Không đúng [2] Thành thạo đúng [3] Luôn luôn đúng

Đối với những điều mà ông/bà cần biết, những câu sau đây có đúng không?

- 46 - Gia đình luôn cho ông/bà biết những thông tin liên quan đến sức khỏe của ông/bà
[1] Không đúng [2] Thành thạo đúng [3] Luôn luôn đúng
- 47 - Khi ông/bà đọc sách báo, trong gia đình luôn có người giúp ông/bà
[1] Không đúng [2] Thành thạo đúng [3] Luôn luôn đúng
- 48 - Khi địa phương có tin tức hoặc sự kiện đặc biệt, gia đình luôn cho ông/bà biết
[1] Không đúng [2] Thành thạo đúng [3] Luôn luôn đúng
- 49 - Gia đình luôn có người nhắc nhở những gì ông/bà quên hoặc những gì ông/bà nên làm để chăm sóc sức khỏe cho mình
[1] Không đúng [2] Thành thạo đúng [3] Luôn luôn đúng

Những câu sau đây có đúng không khi nói về sự hỗ trợ tinh thần của gia đình đối với ông/bà?

- 50 - Ý kiến của ông/bà luôn được gia đình lắng nghe
 [1] Không đúng [2] Thành thạo đúng [3] Luôn luôn đúng
- 51 - Trong nhà luôn có người trò chuyện với ông/bà.
 [1] Không đúng [2] Thành thạo đúng [3] Luôn luôn đúng
- 52 - Ông/bà luôn hài lòng về gia đình mình
- 53 - Gia đình luôn luôn là nơi chia sẻ buồn vui của ông/bà
 [1] Không đúng [2] Thành thạo đúng [3] Luôn luôn đúng

V – NGUỒN HỖ TRỢ TRONG CỘNG ĐỒNG**Hỗ trợ xã hội cho sức khỏe của ông/bà**

- 54 - Những hoạt động của câu lạc bộ sức khỏe cho người cao tuổi tại địa phương có thường xuyên không?
 [1] Hiếm khi [2] Hàng tháng [3] Hàng tuần
- 55 - Trong năm qua, ông/bà được khám chữa bệnh bằng thẻ bảo hiểm y tế mấy lần?
 [1] Không [2] Khoảng 1 – 6 lần [3] Hơn 6 lần
- 56 - Trong năm qua, ông/bà có được khám chữa bệnh miễn phí mấy lần?
 [1] Không [2] Khoảng 1 – 3 lần [3] Hơn 3 lần
- 57 - Trong năm qua, ông/bà có mấy lần nhận được tiền trợ cấp từ bất cứ nguồn nào?
 [1] Không [2] Khoảng 1 – 3 lần [3] Hơn 3 lần

Về tính sẵn có của cơ sở chăm sóc sức khỏe tại địa phương, những câu sau đây có đúng không?

- 58 - Cơ sở y tế tại địa phương luôn có người phục vụ khi ông/bà đến khám chữa bệnh.
 1 – Không đúng 2 – Thành thạo đúng 3 – Luôn luôn đúng
- 59 - Ông/bà luôn được nhân viên y tế hướng dẫn kiến thức chăm sóc sức khỏe mỗi khi đến kiểm tra sức khỏe
 1 – Hiếm khi 2 – Thành thạo đúng 3 – Luôn luôn đúng
- 60 - Nhân viên sức khỏe cộng đồng hoặc y bác sĩ tại địa phương hàng tháng đến giúp đỡ ông bà trong chăm sóc sức khỏe.
 1 – Hiếm khi 2 – Thành thạo đúng 3 – Luôn luôn đúng
- 61 - Tại địa phương luôn có cửa hàng thuốc để ông/bà tiện sử dụng.
 1 – Không 2 – Thành thạo đúng 3 – Luôn luôn có

Về khả năng tiếp cận của ông bà với dịch vụ y tế tại địa phương, những câu sau đây có đúng không?

- 62 - Khi bị bệnh, ông/bà có thể đến cơ sở y tế địa phương có gặp khó khăn gì.
 1 – Không đúng 2 – Thành thạo đúng 3 – Luôn luôn đúng

63 - Từ nhà ông bà đến cơ sở y tế địa phương không xa lắm.

1 - Không đúng 2 -Thỉnh thoảng đúng 3 - Luôn luôn đúng

64 - Ông/bà không mất nhiều thời gian để đến cơ sở y tế khi bị bệnh

1 - Không đúng 2 -Thỉnh thoảng đúng 3 - Luôn luôn có

65 - Ông/bà không gặp khó khăn trong chi phí xe cộ khi đi khám chữa bệnh

1 - Không đúng 2 -Thỉnh thoảng đúng 3 - Luôn luôn đúng

66 - Thời gian chờ đợi để điều trị tại cơ sở y tế không lâu lắm

1 - Không đúng 2 -Thỉnh thoảng đúng 3 - Luôn luôn đúng



V – CHĂM SÓC SỨC KHOẺ TẠI NHÀ CHO NGƯỜI CAO TUỔI

Ông/bà đã được chăm sóc tại nhà như thế nào trong 2 tuần qua? Xin vui lòng trả lời câu hỏi này bằng cách điền vào bảng dưới đây.

	Các hoạt động chăm sóc	Mức độ chăm sóc						Người chăm sóc, Cụ thể	Ghi chú đặc biệt trong hoạt động chăm sóc
		Tự chăm sóc	Tự chăm sóc và hỗ trợ của gia đình	Gia đình chăm sóc hoàn toàn	Có sự giúp đỡ của hàng xóm, TNVSKCB	Toàn bộ chăm sóc tại nhà bởi nhân viên y tế	Chăm sóc tại cơ sở y tế		
67	Tắm rửa								
68	Giặt giũ								
69	Ăn mặc								
70	An uống								
71	Trông nom								
72	Nâng đỡ và di chuyển (như từ giường qua ghế...)								
73	Giúp di vệ sinh, thay đổi đồ vải bẩn								
74	Chuẩn bị và giúp uống thuốc (thuốc viên hoặc thuốc nước)								
75	Chăm sóc vết thương								
76	Mua thức ăn								
77	Đi lại (đưa đi khám bệnh hoặc đi bệnh viện...)								
78	Tham khảo ý kiến của y bác sĩ								
79	Tranh thủ để sử dụng các phúc lợi cho người cao tuổi								
80	Sắp xếp những hỗ trợ hợp lý và tài chính								
81	Chăm sóc các nhẹ Cụ thể								
82	Chăm sóc bệnh nặng hơn Cụ thể								
83	Chăm sóc các bệnh rất nặng Cụ thể								

Cảm ơn sự hợp tác của ông/bà

Hướng dẫn điền vào bảng câu hỏi (Dành cho người phỏng vấn)

Bảng câu hỏi chỉ mô tả việc chăm sóc tại nhà cho người cao tuổi trong vòng 2 tuần kể từ ngày phỏng vấn

6. Mức độ chăm sóc (Chỉ chọn một)

- (1) – Tự chăm sóc
- (2) – Tự chăm sóc cùng với hỗ trợ của các thành viên trong gia đình
- (3) – Toàn bộ chăm sóc do gia đình và không có tự chăm sóc
- (4) – Toàn bộ hỗ trợ từ láng giềng hoặc TNVSKCD
- (5) – Nhân viên y tế chăm sóc tại nhà của người cao tuổi
- (6) – Chăm sóc tại cơ sở y tế hoặc bệnh viện

7. Người chăm sóc tại nhà (Có thể hơn một chọn lựa)

Có thể là tự chăm sóc, chồng hoặc vợ, con, cháu/rể, cháu, hàng xóm, bè bạn, NVSKCD, y bác sĩ...

8. Ghi chú đặc biệt trong hoạt động chăm sóc (Có thể hơn một chọn lựa)

Có thể là:

- Không có gì đặc biệt ghi chú
- Thủ thuật y tế (đối với người chăm sóc tại nhà là chuyên viên y tế)
- Sử dụng các biện pháp dân gian : Cạo gió, xông thuốc, uống thuốc nam, thoa dầu, đắp thuốc nam...
- Sử dụng các phương pháp khác như đeo bùa, cúng bái, làm phép...

9. Các bệnh nhẹ hoặc những dấu hiệu sức khỏe không thoải mái (Có thể hơn một chọn lựa)

Có thể là cảm sốt, đau lưng, đau khớp, ngứa ngứa, rối loạn tiêu hóa, mất ngủ, đi đứng khó khăn, quên, nhìn kém...

10. Các bệnh nặng hơn (Có thể hơn một chọn lựa)

Có thể là viêm mũi họng, viêm phế quản, đau dạ dày, tiêu chảy, tiểu khó...

6. Các bệnh rất nặng (Có thể hơn một chọn lựa)

Có thể là khó thở, bệnh tim, cao huyết áp, chấn thương, rối loạn tâm thần, cùm mắt, tiểu đường, ung thư...

C – LISTS OF EVALUATORS FOR THE QUESTIONNAIRE AND INTERVIEWERS

C1 - List of Vietnames evaluators

1 – Tran Xuan Mai

Academic background: Associate Professor

University/Institute:

- University of Medicine & Pharmacy, HCM City, Vietnam
- Cantho University of Medicine & Pharmacy, Vietnam

Special fields: Medical Mycology, Medical Parasitology, Medical Paedagogy

Current position:

- Chairman, Department of Mycology & Parasitology, University of Medicine & Pharmacy, HCM city
- Dean, Faculty of Medicine, Cantho University of Medicine & Pharmacy.

Office address:

217 Hong Bang, Q.5, HCM City, Vietnam
or Khu I – Dai Hoc Cantho, duong 30/4, Tp. Cantho, Vietnam

2 – Le Ngoc Cua

Academic background: Master of Public Health

University/Institute: Mahidol University/Faculty of Public Health

Special field: Urban Health

Current position: Permanent secretary of Health Research Committee,
Health Department of Cantho City

Office address: 71 Ly Tu Trong, Can Tho city – Viet Nam

3 – Doan Anh Luan

Academic background: M.D. Special. 1st Degree

University/Institute: Medicine and Pharmacy University of HoChiMinh City

Special field: Medicine

Current position: Vice Director of Omon District Health Center

Office address: Omon District Health Center, Can Tho city – Viet Nam

4 – Nguyen Ngoc Lien

Academic background: Bachelor of Science

University/Institute: Medicine and Pharmacy University of HoChiMinh City

Special field: Obstetric and Gynaecology

Current position: Vice Chief of Nurse office, Omon District Health Center

5 – Vo Thi Thanh Thuy

Academic background: Physician

University/Institute: Cantho Secondary Medical School

Special field: General

Current position: Leader of Infection-Control Team, Omon Dist.Health Center

6 – Nguyen Thi Tuong Van

Academic background: Physician

University/Institute: Cantho Secondary Medical School

Special field: General

Current position: Staff, Nurse Office, Omon Dist.Health Center

C2. List of Interviewers

- | | |
|-------------------------|---------------------|
| 1 – Tran Thanh Phong, | Phuocthoi Village |
| 2 – Nguyen Van Hien | Truonglac Village |
| 3 – Lam Huu Tinh | ChauVanLiem Village |
| 4 – Tran Van Hoai | Thoian Village |
| 5 – Pham Thi Thanh Loan | Thoilong Village |

D - ACTIVITIES OF DATA COLLECTION



Departing for data collection by following The Local Elder Association



An interview

E - THE RESULT OF TEST NORMAL DISTRIBUTION

Table 18 The result of test normal distribution (Kolmogorov-Smirnov Test)

Variables	No	Mean	SD	Test-value	P-value
Age	171	73.023	8.566	1.279	.076
Income per capita per year	171	2.724	2.984	2.368	.000*
Allowance	171	.104	.278	4.631	.000*
Health knowledge	171	2.55	1.199	2.641	.000*
Health behaviors	171	21.86	2.093	1.663	.008*
Family support	171	41.784	8.453	.978	.294
Community support	171	24.456	4.240	1.293	.070
Perceived health status	171	4.632	2.504	2.830	.000*

F - CODING AND SCORING OF THE QUESTIONNAIRE

1 – Demography

VARIABLES	VALUE	CODE	RECODE
Respondent	Subject	1	
	Proxy	2	
Age (4 group)	60 - 69	1	
	70 - 79	2	
	80 - 89	3	
	90 and over	4	
Age (2 group)	60 - 79	1	
	80 and over	2	
Gender	Male	1	
	Female	2	
Marital status (four groups)	Single	1	
	Married	2	
	Divorced/Separate	3	
	Widow/Bachelor	4	
Marital status (2 groups)	2		Married
	1, 3, 4		Unmarried

2 - Socioeconomic status

VARIABLES	VALUE	CODE	RECODE
Relationship with household header	House hold header	1	
	Father/Mother	2	
	Father/Mother in law	3	
	Spouse	4	
	Relatives	5	
Roles in family	1		Header
	>1		Member
Education (6 groups)	Illiterate	1	
	Primary school	2	
	Secondary school	3	
	High school	4	
	Vocational/Technical diploma	5	
	University or higher	6	
Education (2 groups)	Education=1		Illiterate
	Education>1		Primary school or higher
Current job (6 groups)	None	1	
	Business	2	
	Farmer/gardener	3	
	Services	4	
	Housewife	5	
	Others	6	
Current working status	Current job=1		Not working
	Current job>1		Working
Allowance	<120,000VND		Poor
	≥120,000 VND		Good
	=0	No	
	>0	Yes	

3 - Living conditions

VARIABLES	VALUE	CODE	RECODE
House condition	Good	1	
	Moderate	2	
	Bad	3	
Toilet (4 types)	Water sealed	1	
	Pit privacy	2	
	Latrine pool	3	
	Others,	4	
Toilet (2 types)	Toilet=3	3	Latrine pool
	Toilet≠3		Others
Drinking water (6 types)	Mineral/Boiled	1	
	Tap water	2	
	Well water	3	
	Decontaminated	4	
	Rain water	5	
	Others	6	
Drinking water (2 levels)	Drinking water=1		Safe
	Drinking water> 1		Unsafe
Household water (7 types)	Tap water	1	
	Well water	2	
	Decontaminated	3	
	Sediment deposited	4	
	Rain water	5	
	River/Cannel	6	
	Other	7	
Household water (2 levels)	Household water=[1:5]		Hygienic
	Household water>5		Unhygienic
Garbage treatment (5 ways)	Public service	1	
	Burn	2	
	Buried	3	
	Thrown	4	
	Others	5	
Garbage treatment (2 levels)	Garbage treatment =[1:3]		Correct
	Garbage treatment >3		Incorrect

4 – Health belief

VARIABLES	VALUE	CODE	SCORE	RECODE
Health knowledge				
Q ₁₇ – Q ₂₂	Correct		1	
	Uncorrected		0	
	Sum of (Q ₁₇ :Q ₂₂)		<Mean	Poor
			≥Mean	Good
Health behavior				
Q _{23, 24, 25, 29} and 31	Never		1	
	Sometimes		2	
	Everyday		3	
Q _{27, 28}	Every day		1	
	Sometimes		2	
	Never		3	
Q ₃₀	<3 hours		1	
	3:6 hours		2	
	>6 hours		3	
Q ₃₂	Yes		1	
	Don't know		2	
	No		3	
	Sum of (Q ₂₃ :Q ₃₂)		<Mean	Poor
			≥Mean	Good

5 – Family resources

VARIABLES	VALUE	CODE	SCORE	RECODE
Number of family members (4 groups)	1			Alone
	2:4			2 – 4
	5:7			5 - 7
	>7			8 and over
Number of family member (2 groups)	1:4			1 – 4
	>4			5 and over
Income per capita per year	<7.7 Mil.VND			Poor
	≥7.7 Mil.VND			Good
Family support				
Q ₃₄ : Q ₅₃	Never true		1	
	Some time true		2	
	Always true		3	
	Sum of (Q ₃₄ – Q ₅₃)		<(Mean-SD)	Low
		Mean ± SD	Moderate	
		>(Mean+SD)	High	

6 – Community resources

VARIABLES	VALUE	CODE	SCORE	RECODE
Community support Q ₅₄	Rarely		1	
	Every month		2	
	Every week		3	
Q ₅₅	No		1	
	1 – 6 times		2	
	More than 6 times		3	
Q ₅₆ and 57	No		1	
	1 – 3 times		2	
	More than 3 times		3	
Q ₅₈ : Q ₆₆	Never true		1	
	Some times true		2	
	Always true		3	
	Sum of (Q ₅₄ : Q ₆₆)		<Mean-SD Mean±SD >(Mean+SD)	Low Moderate High
Village	Thoi an	1		
	Chau Van Liem	2		
	Phuoc Thoi	3		
	Thoi long	4		
	Truong lac	5		
Area	1 or 4			Remote
	2, 3 or 5			Town

7 – Needs for health care

VARIABLES	VALUE	CODE	SCORE	RECODE
Chronic diseases	None	0		
	Cardiovascular	1		
	Cataract	2		
	Rheumatic disease	3		
	Injury	4		
	Combined disease	5		
	Mental disorder	6		
	Other	7		
Perceived health status	Visual analog scale		1:10	
	Less than Mean		<Mean	Poor
	From Mean and higher		≥Mean	Good

8 – Home care status

VARIABLES	VALUE	CODE	SCORE	RECODE
Levels of care	None		0	
	Self managed		1	
	Self managed with some help from family member		2	
	Total help from family member without self managed		3	
	Helps from neighbor/VHV		4	
	Helps from HWs at Helps from HWs at the health stations or hospitalization		5 6	
Selfcare for daily activities	Sum of score for 8 daily activities		0:15 16:48	Yes No
Selfcare when sick	Sum of score for 9 activities when sick		0:17 18:54	Yes No
Selfcare for the hold activities	Sum of score for 17 activities)		0:33 >33	Yes No
Care providers	None	0		
	Self-care	1		
	Spouses	2		
	Son/daughter	3		
	Son/daughter in-law	4		
	Grand child	5		
	Neighbors/VHVs Health workers	6 7		
Special solutions	0 – Do nothing	0		
	1 - Medical skills	1		
	2 - Traditional methods: Using superstition methods	2 3		
	Self taking/buying drug	4		
Minor illness	0 – None	0		
	Fever	1		
	Back-ach/Joint-ach	2		
	Other	3		
	Digestive disorder	4		
	Insomnia	5		
	Seeing/Movable difficulty Memory loss	6 7		
Moderate disease	None	0		
	Sore throat	1		
	Pneumonia	2		
	Stomach ach	3		
	Diarrhea Urination – disorder	4 5		

BIOGRAPHY

NAME	Tran Thi Hanh
DATE OF BIRTH	February 16 th , 1966
PLACE OF BIRTH	Omon District, Cantho City, Vietnam
INSTITUTION ATTENDED	Medicine and Pharmacy University of HoChiMinh City 1989 – 1993 Bachelor of Nurse Asian Institute for Health Development Mahidol University, Salaya, Thailand 2004 – 2005 Master of Primary Health Care Management
FELLOWSHIP	Bread for The World (BdfW)
PRESENT POSITION	Chief of Nurse Office Omon District Health Center Cantho City, Vietnam