Circumstances and Issues of Health Care for Thai Homebound Elderly
สถานการณ์และสภาพการดูแลสุขภาพของผู้สูงอายุกลุ่มติดบ้านที่อาศัยในชุมชนเมือง ภายใต้มุมมองของผู้สูงอายุ ผู้ดูแล ชุมชน และผู้ให้บริการสุขภาพ

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Abstract

The number of homebound elderly is rising dramatically in Thailand. However they are an understudied population which are undiscovered in research and impropriate in health services which emphasize the development process for social stability. The purpose of this research was to study the situations about health care of Thai home bound elderly in perspectives of elderly, caregiver and health care provider. The researcher used descriptive research by collecting both quantitative and qualitative data. The population was the 332 homebound elderly in 30 communities in an area of Muang Maha- Sarakham Municipality. The data collecting methods were questionnaire, group discussion and brainstorming. The result showed that most sample groups were females at 64.4 percent, had medium quality levels of general health, 87.3 percent of this group had diabetes 81.9 percent had high blood pressure (hypertension) and 76.8 percent had Arthritis/Gout/Rheumatoid/Joint Pain and the elderly need more knowledge and updated information to support themselves. The result reviewed the significant information for the stakeholder such as limitation of resource, less of skill and knowledge in practice for the caregiver and volunteers and lack of operation evaluated which can be used to develop the appropriate health care for homebound elderly group in Thailand context.

Keywords: homebound elderly, health status, health care

บทคัดย่อ

การเปลี่ยนแปลงอย่างรวดเร็วของจำนวนผู้สูงอายุในประเทศไทยได้ก่อให้เกิดปัญหาและความท้าทายสำหรับสังคมไทยในการเปลี่ยนผ่านการเข้าสู่สังคมผู้สูงอายุ โดยเฉพาะอย่างยิ่งผู้สูงอายุกลุ่มติดบ้านที่อาศัยอยู่ในชุมชนเมือง ซึ่งเป็นประชากรกลุ่มที่ยังขาดการศึกษาวิจัยที่ครอบคลุมและขาดรูปแบบการดูแลสุขภาพที่มีความเหมาะสมกับสังคมที่ตนดำรงชีพอยู่ งานวิจัยนี้มีวัตถุประสงค์ เพื่อศึกษาสถานการณ์และสภาพการดูแลสุขภาพของผู้สูงอายุกลุ่มติดบ้านที่อาศัยในชุมชนเมือง ภายใต้มุมมองของผู้สูงอายุ ผู้ดูแล ชุมชน และผู้ให้บริการสุขภาพ โดยเป็นการศึกษาเชิงพรรณนา ประชากรที่ศึกษาคือผู้สูงอายุกลุ่มติดบ้านจำนวน 332 คน ที่อาศัยอยู่ในเขตเทศบาลเมืองมหาสารคาม ซึ่งรวบรวมข้อมูลทั้งเชิงปริมาณและเชิงคุณภาพ เครื่องมือในการวิจัยคือแบบสอบถาม การสนทนากลุ่มผู้มีส่วนเกี่ยวข้องและการระดมสมอง ผลการศึกษาพบว่า ผู้สูงอายุส่วนใหญ่เป็นเพศหญิง ร้อยละ 64.4 โดยมีการรับรู้ภาวะสุขภาพอยู่ในระดับปานกลาง และมีโรคประจำตัว 3 ลำดับแรก คือโรคเบาหวานร้อยละ 87.3 โรคความดันโลหิตสูง ร้อยละ 81.9 และ ปวดข้อ/ข้อเข่าเสื่อมร้อยละ 76.8 ตามลำดับ และผลการสนทนากลุ่มจากผู้มีส่วนเกี่ยวข้อง พบว่าผู้สูงอายุมีความต้องการความรู้ที่ทันสมัยเพื่อให้

สามารถนำมาปรับใช้ในการดูแลด้วยตนเองเพิ่มขึ้น จากผลการศึกษาได้แสดงให้เห็นข้อมูลและแนวทางที่มีความสำคัญ เช่น ข้อจำกัดด้านบุคลากรและทรัพยากรการขาดทักษะและความรู้ของผู้ดูแลและอาสาสมัคร และขาดการประเมินผลการดำเนินงาน สำหรับผู้เกี่ยวข้องอันสามารถนำไปใช้เป็นข้อมูลพื้นฐานในการดูแลสุขภาพให้แก่ผู้สูงอายุกลุ่มติดบ้านได้อย่างเหมาะสมมากขึ้นภายใต้บริบทของสังคมไทยในปัจจุบัน

คำสำคัญ: กลุ่มติดบ้าน, สถานะสุขภาพ, การดูแลสุขภาพ

Introduction

Globally, the growing number of current elderly populations is fully changing world societies towards the "aging society". According to the world's population in 2006, the number of population aged 60 years old and above had reached 690 million, or 11 percent of the total world population. It is also expected that the number of world elderly population would increase 3 times by the year 2050 (Butler, 2007). As other developing countries, Thailand's elderly population is also rapidly increasing. According to the report (UNFPA, 2006), it is estimated that in 2020, Thailand would become the country with the largest elderly population in the Southeast Asia region. This will cause health problems just like the developed countries, especially the illness of non-communicable chronic diseases which will lead to the change in a way of life from normal elderly to homebound counterparts who demand more in-home health care.

The increasing number of the homebound elderly people in many countries (Qiu et al., 2010; Ishibashi et al., 2013) has created health service problems and challenges for these people. For example, the Medicare home care benefits program project (Musich et al., 2015) in US has been established, or the public long-term care insurance (LTCl) (Japan Ministry of Health Labor and Welfare, 2006) in Japan. The overall outcome represented that the operations did not enough for homebound elderly health care. The studied found that (Qiu, 2010) the homebound elderly in US had received incorrect health care because they had many chronic diseases (40.8% of them had more than 2 diseases). They usually also had psychological disorders and faced with high health care expenses. Moreover, the studied also showed that [6] the homebound elderly in US suffered from social isolation because of their emotional problems, lack of social support and has less research in homebound elderly when compared to other elderly groups. Research showed that these people were at risk for incorrect care, incorrect knowledge and continuity and less important on public service, community, and society. Finally they might become too sick to take care themselves and become to bed-bound. That research results related to other research in the Japan which showed that the homebound elderly people had got lower life quality than other elderlies (Ishibashi et al., 2013). Besides, the studies (Herr et al., 2013) also showed that the homebound elderly have got higher risk of premature death.

The homebound elderly in Thailand have increased rapidly the prediction showed that there would be 412,000 in 2020) (Tharathep, 2007) and also at high risk with health problems [9]. The health samples of Maha Sarakham province showed that the homebound elderly have the most chronic diseases 31.1 percent have high blood pressure, 12.9 percent have diabetes and 7.2 percent have heart disease infraction respectively (Social Media Department, 2014). The health care on homebound elderly was provided via primary health care services (Srisaenpang, 2011) such as medical survey services, exercise promotion, and disease screening. Unfortunately, those operations had been most parted by

healthy elderly, not the homebound elderly because of their travelling limitation. The 'Home Visiting' service was provided but it emphasized on bed-bound more than homebound elderly group (1-2 times a week by public health people for bed-bound, but twice a month by public health volunteers and people for homebound elderly). The information from health service in Maha Sarakham province showed that only 14.4 percent of elderly around Muang Municipality could reach the health service. This is clearly demonstrated the inappropriately health care of homebound elderly group. This kind of problem could be easily found throughout the country. Some evidence from research showed that the home-vising could not cover, lack of communication between health service places, nor the lack of professional referrals or consulting (Srisaenpang, 2011).

The research to response to the homebound elderly group's requirement were in focus. They are an understudied population which is undiscovered in research (Herr, 2013) and lacks proper health care (Qiu, 2010) because they were isolated without social support (Tanner et al., 2014). Also being sick with many diseases, they lacked of living in freely created the various dimensions of health care requirements, not only physical but also social and mental requirements. The research results (Liu et al., 2015) on Chinese elderly people's health care requirement, who only live indoor, showed that they needed self-health care at home with the employed housekeeper or government sector support. They require to mainly live in their home without going to the elderly care center, and needed for help and supported by the society. Staying at the elderly care worrying them about the expense, service standards, lack of freedom, also did not want to change their life style. Some of them thought that living at the elderly care damaged their family's honor.

The reasons above show the necessity and importance of doing research for the appropriate health care for homebound older people. It is a broad widen and related topic for new problems of elderly in society especially for homebound elderly in Thailand who got inappropriate health care and lack of health service from the relevant which can support their living and researches on those fields. The studies on homebound elderly people's requirement in Thailand in elderly people themselves, health service provider, and community views were studied and emphasized. This research could give new information and knowledge. The purposes of this research were studying of the health care situation of homebound elderly people in Meuang Municipality, Maha Sarakham Province which could be a prototype model for appropriate health care on elderly people in Thailand society.

Literature Reviews

There are several study on the homebound elderly: Musich, Shirley et al (2015) had studied the prevalence rates of homebound older adults, their characteristics and the impact of homebound status on health care utilization, expenditures and quality of medical care measures. The result found strongest predictors of being homebound included serious memory loss, being older, having more chronic conditions, taking more prescription medications and having multiple hospitalizations. Homebound elderly had significantly higher health care utilization and expenditures and were more likely to be noncompliant with medication adherence and care pattern rules. Ongoing screening and subsequent interventions for new enrollees classified as homebound may be warranted. Herr, Marie et al. (2013) had examined the prevalence and the role of homebound status on mortality in a representative sample of the French non-institutionalized population. The result reviewed prevalence of homebound status increases with age and reaches 33.9% in people aged 95-99 years. When compared to non-homebound subjects, homebound elderly were more likely to be

female, widower and tend to live alone with a low level job. Homebound status was associated with a number of physical and mental impairments and it increased the risk of dying within two years. So the homebound status should be considered as an indicator of frailty and used in the identification of old people likely to benefit from preventive interventions.

From the mention above, reviewed significant of the study purpose of this research to study the health care situation of homebound elderly people in Meuang Municipality, Maha Sarakham Province which could be a prototype model for appropriate health care on elderly people in Thailand society.

Research Objective and Methods

1. Research Objective

The objective of our study was to study the situations about health care of Thai home bound elderly in perspectives of elderly, caregiver and health care provider.

2. Research Model

The researcher used descriptive research by collecting both quantitative and qualitative data.

3. Definition of Homebound Status

A person was considered homebound if he or she can help themselves or need some help due to their limit in life and in society and a group of older people with chronic diseases or with uncontrollable complications or many diseases and symptoms of significant influence seniors to freely travel or leave home.

4. Populations and Sampling

Populations in this research were the 332 homebound elderly who lives in 30 communities in Mueang Maha Sarakham Municipality area, Maha Sarakham province and sampling by purposive sampling method with the sampling size at 332 persons.

5. Research Process and Methods

Data in this research were collected for 2 parts: the quantitative and qualitative data. The quantitative data was collected the health status of homebound elderly by using the questionnaires that the researcher adapted some information from health assessment; developed the collection methods by Phongphan Arunsaeng et al. (2010). In part 1 collect demographics of the elderly such as gender, age, occupation and body mass index (BMI) values. For part 2 consisted of questions about physical health of the elderly such as perspective on their health status, need of medical equipment and diseases. In part 3 Thai Geriatric Depression Scale: TGDS (The Brain Forum Committee, 1994) was used as a tool to collect a mental health status of the elderly and part 4: questions about social determinants of health of elderly such as relationship status, financial support, caregiver support and source of social support were used. The collected data analyzed by descriptive statistic.

For qualitative data, information about health care issues and need for homebound elderly was collected through activities of group discussions and brainstorming by 4 primary providers, 8 representatives of homebound elderly, 2 representatives of local government organization and 1 chairman of Taksila Elderly Club in the issue of the problems and barriers; and the advantage of elderly care in the present time and the guideline for elderly health care implementation. In the part of brainstorm, 30 persons of homebound elderly joined in this activity by using the guideline of brainstorm about health problems of homebound elderly and requirement of health care

6. Ethical Consideration

Approval for this study was obtained from office of the Maha Sarakham University ethics committee in human research (approved year: 2014, code: 290/2558)

Results and Discussion

1. Health Status Report of Homebound Elderly: A Quantitative Study

The collected quantitative result data form questionnaire was divided into 4 parts:

In part 1, the general information of elderly showed that most sample groups were females at 64.4 percent and males at 35.7 percent which the maximum age was 96 years old and minimum age at 60 years old; average age was 71.9 years old and standard deviation was 7.3 and we found that it was the median age of elderly the most which age between 70-79 years old at 65 percent; followed by the beginning age of elderly between the ages of 60-69 years old at 27.1 percent; and elderly aged over 80 years old at 7.6 percent, respectively. In the field of status, we found that most of them were married at 58.1 percent; widower at 38.5 percent; single at 3.1 percent; divorce/separate at 0.3 percent, respectively. In the field of occupations, we found that most of them were unemployed (or retired) at 85.5 percent; were farmers at 7.5 percent and retired government official/pension government officials at 3.1 percent.

Part 2: The physical health status of the elderly, in section of general health data. The study results showed that the lowest weight of sample group was 36 kilograms and the highest weight was 94 kilograms. For the height, the tallest was 192 centimetres and the shortest was 130 centimetres. When we assessed BMI, we found the most at level 2 of BMI was at 66.2 percent. The highest Body Mass Index equated with 37 and the lowest Body Mass Index equated with 12 as showed in Table 1.

Table 1

Maximum and minimum weight, height and body mass index (BMI)

Physical Health of Elderly		Value		Number (n= 332)	Percentage
		Highest	Lowest		
BMI		37.04	12.04		
< 18.5 kg/ m^2	below standard			11	3.4
18.5-22.9 kg/ m^2	normal			23	6.9
23.0-24.9 kg/ m^2	fat stage 1			75	22.6
25.0-29.9 kg/ m^2	fat stage 2			220	66.2
> 30 kg/ m^2	fat stage 3			3	0.9

Body Mass Index (BMI): (< 18.5 Kg. / Sq.m) Thin, (18.5-24.9 Kg. / Sq.m) Normal, (>25 Kg. / Sq.m) Fat

Note: From "Appropriate body-mass index for Asian populations and its implications for policy and intervention strategies", by WHO expert consultation, 2004, *Lancet, 363*(9403), 157-163.

In section of health status perception, the study results showed that the sample groups thought about their health care quality levels of general health as medium level at 52.4 percent and good level at 39.4 percent. Moreover, for the question: "how healthy they were when they compared their health with others", we found that their health status were the same as others at 66.5 percent; worse than others at 26.2 percent; and better than others at 7.3 percent. In question about using medical devices and aids, we found that they most used walker, eye glasses and false teeth as their medical devices at 64.7, 62.6 and 59.6 percent respectively.

For disease and illness, the study results showed that the first 3 diseases of sample groups were diabetes

at 87.3 percent followed by the high blood pressure (hypertension) at 81.9 percent and Arthritis/Gout/Rheumatoid/Joint Pain at 76.8 percent as showed in Table 2

Table 2

Number and percentage of disease or illness

Disease or Illness	Number	Percentage
1. Diabetes	290	87.3
2. High blood pressure (hypertension)	272	81.9
3. Arthritis/Gout/Rheumatoid/Joint Pain	255	76.8

For the major problems of elderly the result showed that the first major problems of elderly were the eating problem at 94.8 percent as showed in Table 3.

Table 3

Number and percentage of major problems of elderly (within 6 months)

Problems	Number	Percentage
1. Eating Problem	315	94.8
2. Constipation/Stool	280	84.3
3. Insomnia	242	74.0
4. Moving Problem	187	56.3

And for the health behaviors, the study results showed that most of sample groups always checked their health at 28.0 percent; ate fruit/vegetable regularly at 31.3percent, but 5.9 percent of them usually smoked at 5.9 percent and had no hobbies at 73.7 percent.

Part 3: Mental Health of Elderly

The data were collected by using Thai Geriatric Depression Scale: TGDS (The Brain Forum Committee, 1994). The result showed that the depression was in low criteria at 98.2 percent as showed the details in Table 4

Table 4

Number, percentage and level of depression

Level of Depression	Value Score	Depression	
		Number	Percentage
Low	7-12	326	98.2
Moderate	13 – 18	6	1.8
Severe	Higher than 18	0	0

Part 4: Social Determinants of Health in Elderly and Financial Support

The study results showed that the government agencies were the main sources of financial support at 90.6 percent; followed by the children at 88.0 percent and the spouses at 15.3 percent. Most elderly patients used Gold Card for health insurance at 96.1 percent and 3.0 percent using the government health welfare. The

sample groups at 28.4 percent could pay for all expense by themselves. The elderly got some suggestion to any future update to financial plan for self-care at 61.7 percent of. However, they were still worried about money at 77.4 percent as showed in Table 5.

In social determinants of health in elderly: For the sources of caregiver, the result showed that 97.8 percent had the caregiver which was found that it was the children at72.2 percent, followed by the spouse at 15.0 percent. The primary caregiver had a job at 88.8 percent.

In the sources of social psychology, the result showed that the sample groups had a confidant at 93.6 percent. Those people could be children at 68.8 percent, spouses at 29.3 percent or other relatives at 1.9 percent. In the part of participation in social activities, we found that the participants in sample groups who never joined in any activities at 75.4 percent and there were only 24.6 percent who joined in some activities. When we separated the types of activities, we found that the sample groups preferred to go to the temples at 78.0 percent as .showed in Table 6.

Table 5

Number and percentage of sources of financial support

Sources of Financial Support	**Number** (n= 332)	**Percentage**
1. Financial Sources/Assistants		
- Spouse	51	15.3
- Government or Community	301	90.6
- Children	295	88.8
- Relatives	8	2.4
- Retirement / Pension	10	3.0
2. Health Insurance		
- Gold card	319	96.1
- Government welfare	10	3.0
- Private Insurance	3	0.9
3. To pay all expense by oneself		
- Yes	94	28.4
- No	238	71.6
4. To get some suggestion about financial plan for self-care		
- Yes	205	61.7
- No	127	38.3
5. To be worried about money		
- Yes	257	77.4
- No	127	22.6

Table 6

Number and percentage of sources of caregiver

Sources of Caregiver	Number (n= 332)	Percentage
1. When get illness who is the primary caregiver		
- No	7	2.2
- Yes, please specify	325	97.8
- Spouse	50	15.0
- Children	240	72.2
- Niece / Nephew	35	10.5.2
- Friend	7	2.3
2. Primary caregiver worked or not		
- No	40	11.2
- Yes	295	88.8
- work outside	224	82.4
- work at home	31	11.4
3. Reliable People		
- No	21	6.4
- Yes, please specify	311	93.6
- Children	214	68.8
- Spouses	91	29.3
- Relatives	6	1.9
4.Frequency of joining in social activities		
- No participate	250	75.4
- Participate	82	24.6
- Going to the temples	64	78.0
- Activities for supporting elderly health	18	28.1

2. Information of Health Care for Homebound Elderly: A Qualitative Study

To collect a qualitative data about homebound elderly health care information, researcher had performed 2 activities which were focus group discussion and brainstorming.

Section 1: focus group discussion

In this section, we performed a focus group discussion of provider, local government organization representatives and representative of homebound elderly we could conclude as follows:

The topic of *"Problems and barriers in the process of health care for homebound elderly"*

Providers Group: They found that the number of personnel is limited, which made the service was not covered. Especially in the community, they had the insufficient time for the home visits and there was not enough money for activities. Therefore; they were not implemented as effectively. They found that the medical devices such as wheelchair were not enough. Furthermore, they found the problems in operating procedure were that there was no clear plan in health care service and no evaluation of the activities. Moreover, the plan was

too ambiguous caused of the limitation of period in the preparation of different activities and the fixed area in each community.

In discussion of local government organization representatives: Because the elderly had physical problems; they could not participate in every activity. Moreover, the elderly received incomplete health care information and news that caused of lacking of good coordination for health care operation.

Representative of homebound elderly found that the caregiver still lacked knowledge and understanding of correct method of health care, especially in physical problems that sometimes, most of elderly refused to get the care from the caregiver because they cannot wait too long while the caregiver wait for the explanations and suggestions from the providers. Therefore, due to the limitation of personnel and the care services made the elderly did not follow to the suggestion of the caregiver.

In conclusion, we found there were discontinued operations, insufficient information in community and lack of participation. Because the activities which were created by the providers and the practices were not clear so the activities could not be fully implemented. Therefore, the health problems of elderly tended to increase continuously. Moreover, the lack of evaluation influenced to the awareness of occurred problems. The implementation does not take into account that the elderly will attend the activities or not. In the part of the budget, it hardly met the goal of response to the elderly's requirements because there was not enough money to support all activities.

The topic of *"Advantage of Elderly Care in Present Time"*

The providers and local government organization representatives found that the current operation covered every part such as physical, mental, social and soul that it emphasized on health promoting, prevention, treatment and recovering various conditions in community. They were trying to support everyone in community to play the role in care of elderly who lived only at homes such as participating in activities with elderly.

The topic of *"Guideline for Elderly Health Care Implementation"*

The providers found that the operation should be obviously and be evaluated in order to know the information and the problems of health care demand of homebound elderly that affected to health care development in the future included increasing skill and knowledge in practice for health service both for providers and volunteers who worked in community and operated together continuously.

Community: They found that the community should play the role in order to support the participation in community. In the field of information, it should provide knowledge and promote modern and current health information continuously. The community should enhance to have various activities for elderly; for instance, to establish the elderly club in community for meeting and changing opinions that it would make the elderly to be proud and aware to their value in themselves.

Family: They found that it should be closely monitored to provide elderly with warmth and should be encouraged to do activities in family order that it could be the reason for elderly to think that they were also important in their families.

Section 2: brainstorming of 30 homebound elderly

The topic of "Problems in Health Care for Homebound Elderly":

In physical point: as the record, most of them had chronic diseases so they should get health service regularly, but the elderly lacked knowledge and understanding of their own health needs. The issue of

the unfortunate circumstances such as environmental issue in the community affected the elderly's health. In the issue of health care services, they found that the homebound elderly were inconvenient to get the health care service. In the service problems, they found that the officials have not described clearly so the elderly did not understand and became confused with information. In the expenses problem the elderly were serious about high cost of health services because most of elderly had low income and lived in the poor families.

Mental point: They found that the homebound elderly often lived alone because caregivers or family members had to go to work outside. This was one reason for them to be alone and thoughtful.

Social point: They found that the communication was not covered and not clear; especially, promoting the activities participation in the community.

The topic of *"Requirements of Health Care of homebound elderly"*

Physical point: they found that the elderly need to get health care at homes by the proactive home visits by staff and volunteers for encouragement regular. The elderly require getting health service in the community because of the inconvenience of going to a health center. They wanted more channels to serve health care for elderly in order to solve the problems of taking too long time and they also wanted the staff to serve them willingly and cheerfully.

Mental point: they found that elderly would like someone to visit them at their homes they and also needed to get attention from families.

Social point: they found that elderly need the staffs in community to communicate and update the health information in the community continuously and to cover every area in order to understand about health care. However, the elderly still want to join in activities in community such as exercising, making merit and going to the temple.

Conclusion

In this study we examined the health situations of homebound elderly in urban area in Maha Sarakham Province. The study results showed that most of homebound elderly suffered from the chronic non-communicable diseases and they often suffered from physical deterioration. According to past research, it was quite necessary for elderly to have knowledge or to get the service from caregiver who were the experts. For considering health behavior, the result of this research indicated that the elderly have the appropriated behaviors such as getting enough nutrients. When we considered BMI, we found that the BMI was below the standard of around 3.4 percent which it showed that consumption behavior was not appropriate. Therefore, the relevant persons should pay attention to health care relating to consumption in order to adapt health behavior to be better. As considering dependency, the homebound elderly got the support from their families especially their children, who serve as primary caregivers and supporters, moreover when considering the psychosocial circumstances it was clearly indicated that people who are supportive and encouraging, for the sample group trust, were their own children. However, for homebound elderly with no children, the main psychological dependence were spouses and relatives. This demonstrated the important role of children, spouses and relatives in providing the psychological and social support. When considering the social activity participation, it was found that 75.4 percent of homebound elderly did not attend the activities. The homebound elderly who attend the activities preferred to go to the temples. It was found that the temple activities held for health promotion, was only 28.1 percent of participants. Therefore, it was clearly demonstrated that the activities of the government policy to promote the

health of the elderly was unable to respond to the context of health care of homebound elderly.

In the perspective of the health care for the elderly using group discussion in the issue of problems and barriers in elderly health care, advantage of elderly care in the present time and guideline for elderly health care implementation, we found that the main problems were discontinuity in operation process, lacking of communication in community, no participation, etc. The focusing on activity was created by providers. Health problems of elderly tended to increase continuously and the lack of evaluation influenced to the awareness of occurred problems. Some activities were not considered based on each aging population. In the part of budget; it hardly met the goal of response the elderly's requirement because there was not enough money to support. In the point of view about health care requirement, elderly need to know and update information about their own health continuously, covering all areas. However, elderly still want to join in activities in community such as exercising, making merit and going to the temple etc. This showed the important role of community to support the operation and the response of health care service appropriately to the homebound elderly.

All of the results above demonstrated the situation and problems of taking care on homebound elderly group in Thailand in the perception of elderly people themselves, health service providers, and the community. The real truth reflected in the Thailand context has helpful to discover the new information and knowledge about obstacles and inappropriate operations. The main problem which should be considered was how to emphasizing self-health care of the elderly with correct knowledge and support by the provider and community (Knodel et al., 2013). This study also has an aspect that the operation emphasized on elderly people to be the main role of self-health care which were supported by health service provider, appropriate activities, caretaker, and community. Besides that, the local administrative organization can play a major role as a supporting organization and supporting social welfare for the elderly. Furthermore, from the result reviewed disadvantages of Thailand policy and health care services that focus on the elderly who already entered into aging stage only, but the prevention and health promotion policy for the pre-elderly were skipped. And the results of this research could be developed on the appropriate health care for homebound elderly group in Thailand context.

References

Bereau of Non Communicable Disease. (2013). *Chronic diseases surveillance report*. Bangkok: Ministry of Public Health.

Butler, R. N. (2007). *Global health and global aging*. San Francisco: John Wiley & Sons.

Herr, M., Latouche, A. & Ankri, J. (2013). Homebound status increases death risk within two years in the elderly: results from a national longitudinal survey. *Archives of Gerontology and Geriatrics, 56*(1), 258-264.

Ishibashi, Y., Yamada, T., Kobayashi, N., Hashimoto, M. & Forsyth, K. (2013). The relationship between homebound status and occupational competence and its effects on health-related quality of life. *Journal of Occupational Therapy, 23*(1), 4-13.

Japan Ministry of Health Labour and Welfare. (2006). *Overview of the revision of the long-term care insurance system*. Tokyo: Author.

Knodel, J., Prachuabmoh, V. & Chayovan, N. (2013). *The changing well-being of Thai elderly: An update from the 2011 survey of older persons in Thailand*. Bangkok: HelpAge International.

Liu, J. E., Tian, J. Y., Yue, P., Wang, Y. L., Du, X. P. & Chen, S. Q. (2015). Living experience and care needs of Chinese empty-nest elderly people in urban communities in Beijing, China: A qualitative study. *International Journal of Nursing Sciences, 2*(1), 15-22.

Musich, S., Wang, S. S., Hawkins, K. & Yeh, C. S. (2015). Homebound older adults: Prevalence, characteristics, health care utilization and quality of care. *Geriatric Nursing, 35*(2), 65-68.

National Commitee on the Elderly. (2009). *The 2nd national plan on the elderly (2002-2021)*. Bangkok: The ministry of Social Development and Human Security of Thailand.

Qiu, W., Dean, M. & Liu, T. (2010). Physical and mental health of the homebound elderly: An overlooked population. *J Am Geriatr Soc., 58*(12), 2423-2428.

Rittirong, J., Prasartkul, P. & Rindfuss, R. R. (2014). From whom do older persons prefer support ? The case of rural Thailand. *Journal of Aging Studies, 31*(1), 171-181.

Social Medicine Department. (2014). *Social medicine department report 2014*. Mahasarakham: Mahasarkham Hospital.

Srisaenpang, P. (2011). *Application of the chronic care model to develop health care service for older persons with comorbidity: Case study of a primary care unit*. Khon Kaen: Khon Kaen university.

Tanner, E. K., Martinez, I. L. & Harris, M. (2014). Examining functional and social determinants of depression in community-dwelling older adults: Implications for practice. *Geriatric Nursing, 35*(3), 236-340.

Tharathep, C. (2007). *Senior citizen, policies & activities CTOP and LTOP projects*. Bangkok: Ministry of Public Health.

The Brain Forum Committee. (1994). Thai geriatric depression scale-TGDS. *Siriraj Hosp Gaz, 46*(1), 1-9.

UNFPA. (2006). *Population ageing in Thailand: Prognosis and policy response*. Retrieved from https://books.google.co.th/books?id=f8HqXwAACAAJ

WHO expert consultation. (2004). Appropriate body-mass index for Asian populations and its implications for policy and intervention strategies. *Lancet, 363*(9403), 157-163