



PRIMARY RESEARCH

Study of access to health services of the elderly in Tambon Ban Khetmuang district health promotion hospital, Tambon Lat Yai, Samut Songkhram province

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Abstract. This research aims to study on the accessibility of elderly to health services in district health promotion hospital, specifically in Lad Yai district, Samut Songkhram for the development of healthcare's procedure. The data gathering method is interviewing, which is from 72 samples that accessed in local health services in Lad Yai district, Samut Songkhram. The analytical method includes percentages, mean and standard deviation, which found that 73.6% are female, 29.2% are between 75-79 years old, 48.6% are married, 63.9% are graduated at primary degree, and 66.7% are unemployed, and 65.0% have a lower salary than 5,000 baht. In addition, 18.1%, 16.7%, and 9.7% have only hypertension, hypertension & diabetes, and hypertension & heart disease respectively. Furthermore, this research found that the opinions against the accessibility to overall healthcare at high levels ($\bar{X} = 2.89, S.D = 0.10$), service location was appropriate lighting and personnel in highest levels ($\bar{X} = 3.00, S.D = 0.00$), personnel found that understand the mean scores were at the highest level ($\bar{X} = 3.00, S.D = 0.00$) which was resulted from the staff said verbally polite, the staff expressions annoyed when asked, the staff was attentive and enthusiastic about the service, the staff willing to assist you, staff advised the relatives of elderly health care and description of the staff was easy to understand. Finally, the tools and equipment were given in highest levels ($\bar{X} = 2.99, S.D = 0.12$) which was resulted from the tools and equipment were up-to-date. while proper procedures also offer in highest levels ($\bar{X} = 3.00, S.D = 0.00$).

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INTRODUCTION

Foundation of Thai Gerontology Research and Development Institute (TGRI) announced the situation of the Thai Elderly in 2015 that, within 65.1 millions population, 11 millions or 16% of the population are over 60 years old and Thailand has become aging society since 2005 where 10% of population would become elderly which means that it would be 20% of elderly among the population in 2022 and at its peak of 28% in 2032 [1, 2, 3, 4]. In order to respond to The Twelfth National Economic and Social Development Plan (2017-2021), there are 6 key principles which are Sufficient Economy Philosophy, Human Centered Development, 20-year National Strategy framework (2017-2036) Sustainable Development Goals, Inequality Reduction Economic Growth, Knowledge Based Economy, and Practicality & Long Term Achievements. Moreover, Human Centered Development

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aims to increase the Thai's quality of life, developed them to be disciplined, skilled, knowledge, creative, and having good attitude, social responsibility in order to be prepared to getting into elderly society efficiently [5, 6, 7].

The 2nd National Plan on Elderly (2002-2021) simulated the situation that affect operations. According to the plan, they found out that these elders would likely have a chronic disease and 20% of elders lack caretakers while 28.9% are taken care or able to access in local district health promotion hospital. In addition, only 1.9% of disabilities are taken care. As a result, those elders who would likely not receive the proper treatment are the most concerned group. Therefore, the development structure for the accessibilities and services of medical and public health is developed to increase the potential of healthcare services, disease control, treatment, and health recovery. In the end, diseases will turn into the aging degeneration, which is the reason why the need of services increase tremendously in elderly society [8, 9, 10, 11].

When the population of elders increase, social characteristics have to change and adapt to consider the existence and facilitate elders, especially healthcare. Other facilitations must also consider the accessing increment, which would face issues with healthcare allocations, tools, and equipment. Moreover, the reserve personnel must be sufficient enough that would not let the patient wait for more than an hour, which means that the preparedness of personnel, service, and correctness. Therefore, it would affect the lessening of mortality rate, increment of lifespan during illness, increment of accessibility, which directly affect the nursing workload particularly outpatient that cause the imbalance between staff and patient [12]. The current problem must be assigned to district health promotion hospital in order to reduce traveling cost and time consumption by the instruction of economic policy from Ministry of Public Health. Looking forward to being standardized, the formal criteria are established equally. By using this method, time consumption and workload are reduced. Also, the cost, intensity, and inequality between local hospital, general hospital, and hospital center are reduced, which will lead to the improvement of quality of life and service [13]. According to the fact that the population in Samut Songkhram has the highest number of elders in Thailand, consists of 18,093 people in total and 2,685 people or 14.84% in Lad Yai district, the primary target for research field of accessibility and hospitality condition of district health promotion hospital in this location. The expected results will be used as a guideline to future development and management of the service and staff, which would help in being standardized as well as other healthcare institutions.

Objective of the Study

This research aims to study on the accessibility of elderly to health services in district health promotion hospital, specifically in Lad Yai district, Samut Songkhram for the development of healthcare's procedure.

LITERATURE REVIEW

Elderly Health Problem

The main health problems that are found in elderly, according to the report of IHPP, Ministry of Public Health, listed in top five are stroke, coronary artery disease, chronic obstructive pulmonary disease, diabetes, and liver cancer respectively in men and stroke, diabetes, coronary artery disease, Alzheimer's disease, and depression respectively in women. Health promotion program and disease control [14] mention the threat of the hospitality of elders, which is shown in the following list:

- Caring system and treatment system of elderly is not specifically from other target group of patients, which is the emphasize of disease management rather than case management.

- The standard of elderly treatment in general and local area need the development.
- The treatment needs proper management system and structure.
- The personnel that is intellectual and expert in the field of elderly treatment is needed.
- The service model in the future must support the physically and mentally.

Degeneration treatment of the elders, which also includes the disease prevention. 2%, and 19% of elders are bedridden and independence respectively. 58%, 24%, 19%, 4%, and 3% of elders are having physical movement, hearing, visibility, learning, and mental control difficulties respectively, and 2% of them are having unintellectual respond [15].

The health problems in elders are mainly focused on the higher aging states when tissue and organ structure are unavoidably degenerated, but can be diminished and minimize with health management and understanding. The problems are separated into two groups where the first group is the general disease that can occur at any state such as diabetes, heart and liver diseases which has a higher risk when becoming older. Another group is the symptoms that occur only in elders, which are the physical degeneration from aging and debilitating disease.

Changes in Elderly

The changes when human becomes elders are not only occurred on their physical, but also their mental and social status [16].

Constitutions and Elderly

Provision of Elder's Rights Protection in National Constitution specify to aid elderly and disables both physically and mentally, encourage and raise their quality of life and self-reliance, as stated in National Constitution 1994, 1997, and 2007.

Diseases and its Statistics in Elders

According to the research report of National Statistical Office in 2014, the population of elderly in Thailand is over 10 million or 15% of 65 million in total. Moreover, 3.3% or more than 0.3 million of elders said that they are healthy, while 16% or over 1.6 million said that they are worrisome and unhealthy. Including with an additional report from Department of Health in 2013, 41%, 18%, 13%, and 9% of elderly are having health problems, which are hypertension, diabetes, both respectively, and knee osteoarthritis [17].

Access to Health Services

The amount of elders who admitted to hospitality at 3 National Primary funds, which are Social Security, Health Insurance, and Government or State Enterprise Officer, is 13% of the total population in 2009. Therefore, the fact clearly point out that the number of patients is not low at all when compared to the population.

Nowadays, the amount when compared to the population is arranged in small portion. However, the rising number of service providing and fund usage has affected the health service system, and tend to gradually grow. Therefore, the funds are suitably distributed to the usage amount of each hospital [18]. Dr. Sutayut Osornprasop, the expert of World Bank's human development, closed the gap of elderly's accessibility to health services between health impartiality and comprehensiveness. Although all Thai people

have received Health Insurance fund since 2002, there are elderly who still suffer from the difficulties of accessing the healthcare service. One of the main reason is the incapability of self-reliance and ministrations of their relatives, especially over 80 years old and poor which is additionally affected by the lacking of inexpensive public transportation. Therefore, local administration and local village candidates has an important role to aid the elderly healthcare service [19].

District Health Promotion Hospital or Alternatives

District Health Promotion Hospital has an important role in the healthcare system of Thailand since it is the department that is intimately and expediently to their inhabitants. The main roles are primary care and rehabilitation, which covers the citizen from birth to death including first aid, pregnancy care taking, vaccination, nutrition care, school health, and consumer protection, which also includes abnormalities treatment and rehabilitation from diabetes, hypertension, breast cancer, cervical cancer, care for the disabled and elderly, rehabilitation and other services to the community. The major obstacle in the developing well-standardized and efficient local district hospital is that the quantity of well-qualified personnel is not associated with the number of patients. The problem exists long, and improvement is delayed in action.

Guidelines for the Development of Star District Health Promotion Hospital

The concept of developing local district hospital to Star district health promotion hospital has the objective to improve the quality by establishing the formal criteria to all district health promotion hospital, which will result in the reduction of intensive usage on local hospital, general hospital, and hospital center. Also, the cost, intensity, and inequality between these hospitals will be reduced.

RESEARCH MODEL

Population and Sample

The population group in this research is either over 60 years old male or female that access the service in district health promotion hospital at Lad Yai district, Samut Songkhram. The population size is 477 which is calculated for sample size selection at 15-30% of population [20] or at least 72 people by using Simple Random Sampling.

Research Methods & Tools

The research method is interviewing, which mainly focus on the study of the accessibility to district health promotion hospital at Lad Yai district, Samut Songkhram by using the established standard as the instruction of the interviewing pattern. The questions are separated into two parts. The first part is about general information, which includes gender, age, marital status, graduation, career, personal income, congenital disease from aging, and other comments against service providing. Another part is about the accessibility of the elderly service, which includes staff, service, and tools & equipment. The opinion is ordered in 3 levels, which are agreed, uncertain, and disagree. Each part consists of 10 questions, 8 positive questions and 2 negative questions, in total of 40 questions, 32 positive questions, and 8 negative questions.

After collecting the data, the scores from each question are combined to find the average score which is compared to 2, as the mean of all questions [21]. Finally, the result will be translated as shown in the following list:

Positive Question		Negative Question	
Agree	3 points	Agree	1 point
Uncertain	2 points	Uncertain	2 points
Disagree	1 point	Disagree	3 points
Average Score > 2	Treated as Agree	Average Score > 2	Treated as Disagree
Average Score < 2	Treated as Disagree	Average Score < 2	Treated as Agree

The method is verified by 3 experts by using Index of Item-Objective Congruence or IOC. The given score is equal to 0.8 and confidence level, that is tested with elderly who are not listed in the sample size at the amount of 3, 10, and 30 people, gives 0.7 level of confidence.

The Method for Data Analysis and Translation

The statistical analysis method is Descriptive Statistics that extracts from frequency, percentage, average mean, and standard deviation.

DATA ANALYSIS

The results from the study found out that 73.6% were women as shown in Table 1, 29.2% were between 75-79 years old as shown in Table 2, 48.6% were married, 63.9% were graduated at primary degree, and 66.7% were unemployed, and 65.0% had a lower salary than 5,000 baht. In addition, 18.1%, 16.7%, and 9.7% have only hypertension, hypertension & diabetes, and hypertension & heart disease respectively as shown in Table 3. Furthermore, this research found that the opinions against the accessibility to overall healthcare at high levels ($\bar{X} = 2.89, S.D = 0.10$), service location was appropriate lighting and personnel in highest levels ($\bar{X} = 3.00, S.D = 0.00$), personnel found that understand the mean scores were at the highest level ($\bar{X} = 3.00, S.D = 0.00$) which was resulted from the staff said verbally polite, the staff expressions annoyed when asked, the staff was attentive and enthusiastic about the service, the staff willing to assist you, staff advised the relatives of elderly health care and description of the staff was easy to understand as shown in Table 4. Finally, the tools and equipment were given in high levels ($\bar{X} = 2.99, S.D = 0.12$) which was resulted from the tools and equipment were up-to-date, while proper procedures also offer in highest levels ($\bar{X} = 3.00, S.D = 0.00$).

TABLE 1. The amount and percentage of elderly's gender in sample group ($n = 72$)

Gender	($n = 72$)	Percentage
1. Male	19	26.4
2. Female	53	73.6
Total	72	100.0

The overall opinion against the service accessibility found that 2.97, personnel, provides the best score, follow up with 2.91, tools & equipment.

According to the opinion of 72 samples, most of elders felt that the service provide good procedure and correctness, which gave average score of 3.00, the highest score. The second highest score was 2.99, low quality service and hardly cure. Finally, the lowest

TABLE 2 . The amount and percentage of elderly age in sample group ($n = 72$)

Age (years)	($n = 72$)	Percentage
1. 60 - 64 years old	10	13.9
2. 65 - 69 years old	12	16.7
3. 70 - 74 years old	19	26.4
4. 75 - 79 years old	21	29.2
5. 80 - 89 years old	10	13.9
6. More than 90 years old	1	1.4
Total	72	100.0

TABLE 3 . The amount and percentage of congenital disease in elderly ($n = 72$)

Congenital Diseases	($n = 72$)	Percentage
1. Healthy	11	15.3
2. Diabetes	5	8.3
3. Heart Disease	4	5.6
4. Kidney Disease	2	2.8
5. Hypertension	13	18.1
6. Dyslipidemia	2	2.8
7. Rheumatoid arthritis	1	1.4
8. Diabetes and Hypertension	12	16.7
9. Diabetes and Dyslipidemia	2	2.8
10. Hypertension and Gout	1	1.4
11. Diabetes, Hypertension and Dyslipidemia	2	2.8
12. Heart Disease, Hypertension and Dyslipidemia	1	1.4
13. Kidney Disease, Hypertension and Dyslipidemia	1	1.4
14. Heart Disease and Hypertension	7	9.7
15. Diabetes, Kidney Disease, and Hypertension	1	1.4
16. Diabetes and Heart Disease	1	1.4
17. Diabetes and Gout	1	1.4
18. Hypertension and Dyslipidemia	4	5.6
Total	72	100.0

TABLE 4 . The mean, standard deviation, and opinion against the healthcare accessibility of elderly ($n = 72$)

Healthcare Accessibility	Mean \bar{X}	Standard Deviation (S.D)	Translated Opinion
1. Service Location	2.85	0.22	Likely Agree
2. Personnel	2.97	0.08	Likely Agree
3. Tools & Equipment	2.91	0.13	Likely Agree
4. Service Quality	2.84	0.15	Likely Agree
Total	2.89	0.10	Likely Agree

score at 2.47 was the long waiting queue and process before having a service provided. The tested result was shown the following Table 5.

TABLE 5. The mean, standard deviation, and opinion against the service accessibility of elderly ($n = 72$)

Service Accessibility	Mean (\bar{X})	Standard Deviation (S.D)	Translated Opinion
1. Service provides good procedure and Correctness	3.00	0.00	Likely Agree
2. Provide free beverage	2.88	0.41	Likely Agree
3. Staff provides knowledge and demonstrate hand washing	2.92	0.40	Likely Agree
4. Provide good quality service	2.67	0.75	Likely Agree
5. Low quality service and hardly cure	2.99	0.12	Likely Agree
6. Long waiting queue and process before having a service provided	2.47	0.71	Likely Agree
7. Correctness of receiving medicine after medical check	2.94	0.33	Likely Agree
8. Proper queuing process from case control	2.90	0.30	Likely Agree
9. Local and public telephone call number are presented	2.83	0.38	Likely Agree
10. Witness the comment boxes and notice the feedback from the comments	2.81	0.49	Likely Agree
Total	2.84	0.15	Likely Agree

DISCUSSION

As a result from this research found out that the sample group that received the service from district health promotion hospital at Lad Yai district, Samut Sakhon, had positive opinion against healthcare service and accessibility ($\bar{X} = 2.89$, $S.D = 0.10$) which was ordered in the following list:

Service Location

This research found out that elderly has the highest positive opinion against appropriate lighting and ventilation ($\bar{X} = 3.00$, $S.D = 0.00$) while the highest negative opinion of low amount of medical checking room and hot & stuffy environment ($\bar{X} = 2.58$, $S.D = 0.71$), so the suggestion to this improvement was increasing medical checking room and controlling the room temperature

Personnel

This research found out that elderly had the highest positive opinion against politely, attentive, rarely instruct, and easy to understand while discussing with the staff ($\bar{X} = 3.00$, $S.D = 0.00$) while the highest negative opinion was the staff showed the sign of feeling annoyed ($\bar{X} = 3.00$, $S.D = 0.00$) which needed greatly improvement. In addition, the least positive opinion was the frequent house visiting rate ($\bar{X} = 2.86$, $S.D = 0.39$), which also needed a little bit of improvement.

Tools & Equipment

This research found out that the elderly had highest positive opinion against the modernized tools and equipment ($\bar{X} = 2.99$, $S.D = 0.12$) while the highest negative opinion was ineffectiveness of tools to the patient's health ($\bar{X} = 2.63$, $S.D = 0.76$), so the suggestion to this improvement was to demonstrate the importance and efficiency of the tools & equipment to their health.

Service Quality

This research found out that the elderly had highest positive opinion against the correctness ($\bar{X} = 3.00$, $S.D = 0.00$) and the highest negative opinion was the long waiting ($\bar{X} = 2.47$, $S.D = 0.71$), so, as being stated in the research result of Tanucha Tunwong, 2016, the suggestion to this improvement was to reduce the patient's waiting time. Also, it was

found that the hospital had to have preparedness on service location, cleanness, patient reserves, efficient tools & equipment, well-qualified personnel, and the confidence of service providing, so that the patient could trust and accept the service.

CONCLUSION

According to the result, it is concluded that the opinion against the accessibility of district health promotion hospital at Lad Yai district, Samut Songkhram, likely agrees, which follows the assumptions. However, there are several points that need improvements, particularly the lowest average score of low reserve medical checking room and hot & stuffy environment, which need to be handle in order to prevent the risk of fainting or any possible risk of severe illness condition, frequent house visiting rate, which provides the tracing of the patient's health status and properly instruct the risk to other feasible disease, annoying sign of the staff, and the waiting time that can be settled by several ways such as additionally arrange for elderly patient since this patient group is considered to be the group of having health risk.

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— This article does not have any appendix. —