Service quality affects the satisfaction of using the service at Thanyarak Center

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Received June 24, 2022& Revise November 01, 2022 & Accepted April 20, 2023

Abstract

The objective of this research is to study the quality of service that affects the satisfaction of users at the Thanyarak Center. Populations used in this study were 400 service users at Thanyarak Center. Questionnaires were used, together with the frequency, percentage, mean, standard deviation, and one-way ANOVA. In addition, results indicated that the overall factors were rated at the high level for all factors, namely, Tangibles ($\bar{x}$ = 4.14, S.D = 0.54), Reliability ($\bar{x}$ = 4.50, S.D = 0.51), Responsiveness ($\bar{x}$ = 4.43, S.D = 0.50), Assurance ($\bar{x}$ = 4.45, S.D = 0.52), Empathy ($\bar{x}$ = 4.41, S.D = 0.60) and summarize the variables that affect the decision to use the service, sorted by 1) Reliability 2) Assurance 3) Responsiveness 4) Empathy 5) Tangibles. The hypothesis testing of consumers showed that the different demographic characteristics of the consumers in terms of sex, age, career, and average income per month reflected no significant difference on the mean of the service quality of Tangibles, Reliability, Responsiveness, Assurance, Empathy. The quality of service is the factor that affect the satisfaction of using the service at the Thanyarak Center.

Keyword: Service quality, Service satisfaction, Thanyarak Center

Introduction

Cancer is now a major public health problem among people all over the world, including Thailand. According to the World Health Organization, in the next two decades, the number of cancer cases will increase by 60%, especially in low- to moderate-income countries. The number of cases will skyrocket to 81%. In 2018, it is estimated that around 18 million people worldwide will be diagnosed with cancer and around 9.6 million will die from cancer, or It is said that 1 in 6 deaths will be developed from cancer. (World Health Organization, 2021) From the overall cancer situation in Thailand, statistics show that cancer is the number 1 cause of death, accounting for 16 percent of all deaths, 2 to 3 times higher than the average death rate from accidents and heart disease, or an average of 8 deaths from cancer per hour. By ranking the most common cancers are: liver and bile duct cancer, lung cancer, gallbladder cancer, breast cancer and colon cancer. (Mahidol University, 2021) The number one cancer found in women is breast cancer and the number one cancer in men is colon cancer. It can be shown as shown in Figure 1.

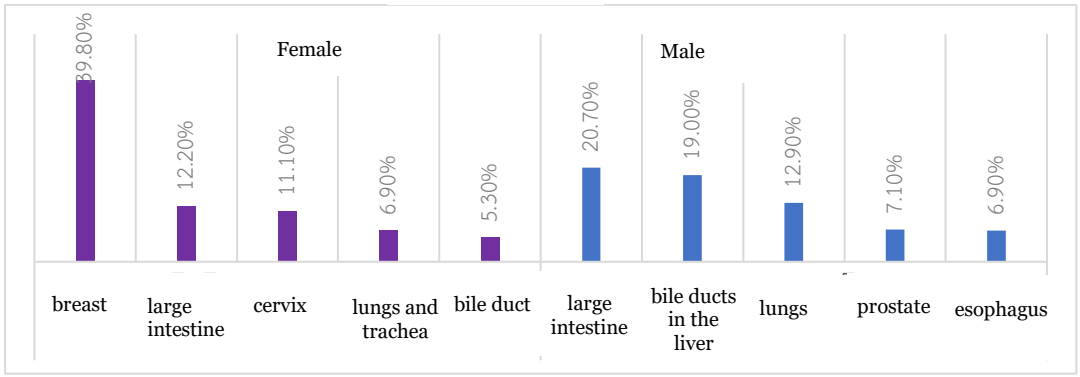


Figure 1: Cancer registration report at the hospital level 2020

Thanyarak Foundation under the Royal Patronage of Her Royal Highness Princess Maha Chakri Sirindhorn, Thanyarak Center was established at Siriraj Hospital with the great cooperation of the Faculty of Medicine Siriraj Hospital. The center provides a comprehensive breast diagnostic service and training to doctors and medical personnel in regard to the diagnosis of breast cancer with the readiness of all aspects. The center is the first in Thailand to offer tools and modern equipment that meets international standards with Quality Control and Quality Assurance System (QC&QA System). The radiologists, nurses and radiation technicians with expertise are available. Thanyarak Center has a large number of visitors and has received attention from government and private hospitals, sending doctors and radiation technicians to study and visit at large scale. Moreover, in collaboration with the Faculty of Medicine Siriraj Hospital, research studies are conducted for the benefit of prevention and treatment of breast cancer of Thai women. To prepare for future growth and develop to keep up with the changing of cancer problems and the country's environment, it is necessary to have a good management system. Resources are managed in the most efficient way, considering "people" as the most important human capital. Whether or not an organization can achieve its goals depends on humans because humans are the ones who set goals, plan and take action. (Nattawut Chompuphong, 2010). In addition to people being an important factor. The quality of the service is considered to be important in the service business because it is the main factor in doing business that gives the customer what he expects. This leads to satisfaction in receiving services and confidence in what has been received. It also allows organizations to differentiate themselves in terms of market advantages. Improving service quality is therefore an important strategy that should be incorporated into the business. Providing fast service, taking good care of the service users with quality and efficiency, thus resulting in credibility. All this will affect the impression of the service users, resulting in word of mouth and recommendation to others, causing admiration and leading to transfer to others, making the business a good image, leading to word of mouth. (Olgun, Ceylan & Ibrahim, 2014)

In this study, the researcher has emphasized only on the quality of service which leads to satisfaction of service users. Due to this, it will drive the competitiveness of the hospital/hospital business. This is to deliver more quality of service or exceeds the expectations of service users. It shows the quality that users will receive by this is consistent with the theory related to service quality satisfaction. (Parasuaman, et al., 1988) This is the discussion of the components of the quality of service divided into 5 dimensions 1) The concreteness of the service (Tangibility) 2) Reliability (Reliability) 3) Fast response to customers. (Responsiveness) 4) Quality assurance or confidence to customers (Assurance) 5) Taking care of individual customers (Empathy). In order to use the results obtained to benefit in developing, improving, to have potential and compete service and in the long-term, competitive excellence

Research Objective

To study the quality of service that affects the satisfaction of using the service at the Thanyarak Center.

Hypothesis

Different personal factors had no significant in the level of opinion on the quality of service that affects the satisfaction of using the services at the Thanyarak Center.

Conceptual Framework

From the study and the related research results, the researcher has defined a conceptual framework as shown in Figure 2.

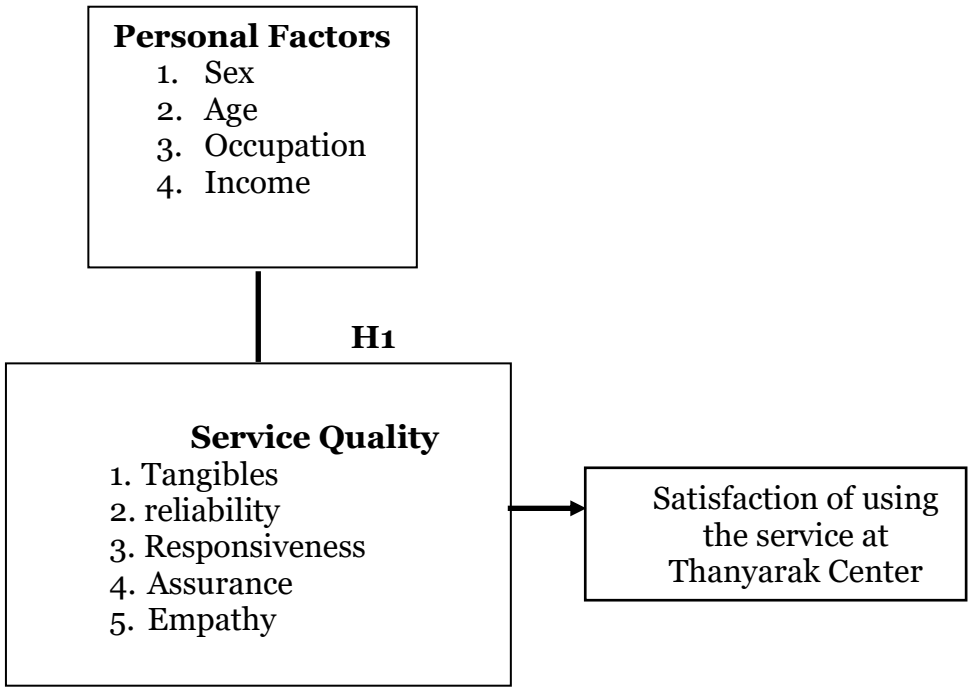


Figure 2: Conceptual Framework

Methodology

1. Research Scope

This research is quantitative research. Using a survey research method, the research team collected data by using a questionnaire with the service users of the Thanyarak Center. In order to come to a conclusion that can be used to discuss the results of the quality of service, which can be divided into various issues.

2. Population and sampling

Population, including service users at the Thanyarak Center. A total of 400 samples were selected by purposive sampling, using a computational method to determine the sample size, using the Yamane sample size formula (Yamane, 1967) at 95% confidence level using 0.05 error.

3. **Tools used to collect data**

This research used questionnaires to collect information. The questionnaires consist of 3 parts as follows: Part 1 Personal Information as a checklist. The objective is to survey the basic information of the respondents. Part 2 is a questionnaire on the quality of service. The question format was a 5-level rating scale, applied according to Likert's guidelines, and

set the score of the weight range to 5 levels, stated by Thanin Sincharu (2009). Part 3 is a questionnaire about the satisfaction of service users of the Thanyarak Center. The score for the responses of the questionnaire was determined by a scale of 5 rating scale, for the respondents to choose from 1 meaning the lowest level of opinion, respectively, to a level of 5, meaning the highest level of opinion. The criterion was used to interpret the meaning of the five-level mean, with a mean score of 4.21 – 5.00 indicating the highest opinion level and a mean of 1.00 – 1.80 indicating the lowest opinion level. It was examined by 3 experts and the accuracy of the content (IOC) was between 0.78-1.00, after which the questionnaire was used for experimentation, and then used to analyze the confidence value (Reliability) by method of finding the alpha coefficient (Alpha Coefficient according to Cronbach method) got the confidence value of the instrument at 0.86 level.

4. Data Analysis

The researcher used descriptive statistics to analyze the data using a mean percentage. (Percentages), frequency (Arithmetic Mean), standard deviation (Standard deviation) and hypothesis testing statistics (Hypothesis Testing), including Independent Samples t-test and f-test (One-Way ANOVA). Level 0.05 is set to meet the research conceptual framework.

Research Results

General information of the 400 respondents in this research, most of the service users were females (99.3%) and males (8%). The majority of respondents were aged 51, representing a hundred. 35.8% of each, followed by 41-45 years of age, representing 21.5%, aged 46-50 years, equivalent to 13.5 p%, 31-35 years of age, equivalent to 10.3%, aged 36-40 years, or 8.3%, aged 26-30 years, representing 7.2%, and aged 20-25 years, accounting for 3.8 %, respectively. The occupation of the respondents found that mostly government service accounted for 31.3%, employees accounted for 18.8%, other occupations accounted for 13.8%, state enterprises accounted for 12.5%, trade accounted for 10.8%, self-employed. accounted for 8.3% and students accounted for 4.8%, respectively. The income of the respondents found that income of 40,000 or more, accounting for 28%, followed by income between 30,000-35,000 baht accounted for 18.5%. 30,000-35,000 baht or 18.5% income between 15,001-20,000 baht, equal to 11%. 20,001-25,000 baht or 10.8% income between 35,001-40,000 baht, representing 10.3%, and income 15,000 baht, accounting for 10.3%, respectively. The opinion of the quality of service found that the majority of respondents had the highest level of opinion. ($\bar{x}$ = 4.44 , S.D.= 0.53) in all aspects, which are described as follows:

1. Concreteness of the service (Tangibles) emphasis is placed on staff/personnel within the service facility to dress neatly, cleanly and provide courteous service, ranked number 1 ($\bar{x}$ = 4.44 , S.D.= 0.68) By sorting the items from the
most to the least in 3 orders which are: the service place is clean, well ventilated, and there is a space to sit and wait to receive services that are sufficient and spacious. ($\bar{x}$ = 4.41 , S.D.= 0.74), feeling of safety when visiting the center ($\bar{x}$= 4.37 , S.D.= 0.78) and the convenient communication within the service facility, not complicated ($\bar{x}$= 4.25 , S.D.= 0.72).

2. Service reliability (Reliability) emphasis is placed on specialist doctor
who is confident in providing services and is able to diagnose the disease ($\bar{x}$ = 4.61 , S.D.= 0.59). In order of 3 items from the most to least, namely the results of the laboratory examination, the x-ray results are accurate and reliable. ($\bar{x}$ = 4.53 , S.D.= 0.65), certified by government agencies or other with credibility ($\bar{x}$= 4.53 , S.D.= 0.64), the provision of services on time as specified or as informed ($\bar{x}$= 4.53 , S.D.= 0.63).

3. Responding to service Demands (Responsiveness) focus on staff to provide fast service politeness and willingness ($\bar{x}$ = 4. 61 , S.D.= 0.59). By sorting the items from the most

to the least in order of 3, including the staff giving advice, including giving details about the service including clear service rates ($\bar{x}$= 4.56 , S.D.= 0.58), queues are served properly without skipping the queue or insert the queue. ($\bar{x}$= 4.35, S.D.= 0.64), comment box for users are available to offer their opinions on the service in order to listen to problems/compliments that occur in each service visit ($\bar{x}$= 4.33, S.D.= 0.70).

4. Confidence to service recipients (Assurance) Emphasis is placed on ensuring that users receive the best service every time ($\bar{x}$= 4.48, S.D.= 0.65). In order of 3 items from most to least, namely, the service provider has regular follow-up of appointments and medical examination results. ($\bar{x}$= 4.47, S.D.= 0.63), staff/personnel provide good service nimble ($\bar{x}$= 4.46, S.D.= 0.70) and the cost is worth the service received ($\bar{x}$= 4.45, S.D.= 0.60).

5. Service recipient's sympathy (Empathy) arranged in order from the most to least, emphasis is placed on service personnel that meet the needs of each individual ($\bar{x}$= 4.44, S.D.= 0.61), feeling compassion every time received the service. ($\bar{x}$= 4.41, S.D.= 0.66), and staff/personnel provide services with an understanding of the individual ($\bar{x}$= 4.40, S.D.= 0.63) as in Table 1.

Table 1 Affects of service quality towards satisfaction of service at Thanyarak Center

Service Quality	Mean	S.D.
Tangibles		
1) The journey to receive the service is convenient and flexible.	4.37	0.76
2) The property is clean, well ventilated and there is adequate area to sit and wait.	4.41	0.74
3) The property has convenient parking and sufficient for service users.	3.08	1.31
4) There are various symbols clearly show both inside/outside property.	3.96	0.82
5) Tools, equipment, and facilities are complete and modern.	4.29	0.72
6) Communication within the service place are well provided with no complication.	4.25	0.72
7) Staff/personnel within the service facility dress neatly and cleanly, the service is provided with politeness and gentleness.	4.43	0.68
8) Feel safe every time when receiving the service.	4.37	0.87
Total	**4.14**	**0.54**
Reliability		
1) Availability of specialist in a specific field that the service user is confident the diagnose with the disease.	4.61	0.59
2) Results of laboratory examinations and the x-ray results are accurate and reliable.	4.53	0.61
3) Providing services on time or notified.	4.45	0.63
Reliability (Continue)		
4) Officers who have undergone standardized knowledge training in providing medical services.	4.45	0.65
5) Accredited by government agencies or others with credibility.	4.45	0.64
Total	**4.50**	**0.51**
Responsiveness		
1) Fast service staff politeness and willingness.	4.61	0.59
2) Staff provides advice in detail about service visit including clear service charges.	4.56	0.58

3) The duration of service at each stage is appropriate, fast no need to wait long.	4.31	0.67
4) Queues are served properly without skipping the queue or insert the queue.	4.35	0.64
5) There is a comment box to allow users to offer their Opinions on problems/compliments that occur in each service visit	4.33	0.70
Total	**4.43**	**0.50**
Assurance		
1) Staff/personnel offers communication for the service user with ease to understand and to the point.	4.44	0.68
2) Staff/personnel provide good service actively.	4.46	0.70
3) The service received is the best service every time you visited.	4.48	0.65
4) The provider has regular follow-up of appointments and medical examination results.	4.47	0.63
5) The money spent on the service is worth the service received.	4.45	0.60
6) The communication channel that is accessible with convenient.	4.40	0.74
Total	**4.45**	**0.52**
Empathy		
1) Officers/personnel provide services with compassion.	4.41	0.66
2) Officers/personnel provide services that meet the needs of each individual.	4.44	0.61
3) Officers/personnel provide services with an understanding of the individual.	4.40	0.63
Total	**4.41**	**0.60**
Total quality of service	**4.44**	**0.53**

The effect of overall service satisfaction ($\bar{x}$= 4.34, S.D.= 0.59) when considering the items with the highest scores in 3 orders, it was found that in the first place, the service recipients felt confident and safe throughout the service ($\bar{x}$= 4.62, S.D.= 0.66), the user can inquire about medical expenses before using the service and get complete information. ($\bar{x}$= 4.50, S.D.= 0.69) and 9) You are facilitated every step of the way while receiving the service. ($\bar{x}$= 4.44, S.D.= 0.71) as in Table 2.

Table 2 **: Service satisfaction**

Service Satisfaction	Mean	S.D.
1) The user feels confident and safe throughout the service.	4.62	0.66
2) The user can inquire for medical expenses before using the service and get complete information.	4.50	0.69
3) Service recipients can communicate and search for information of service providers from phone and websites in detail.	4.25	0.80
4) In receiving services, doctors give good examinations and advice that are easy to understand relieve anxiety.	4.33	0.76
5) The user can choose to pay for treatment with many payment options.	4.16	0.84

6) Service providers have a discount or benefits that are given to those who receive services according to the terms and occasions.	3.90	1.11
7) Service providers are treated willingly and courteously.	4.37	0.79
8) Knowledge and ability to provide services of staff such as answering questions, clarifying doubts, as well as giving advice to service users	4.40	0.77
9) The user are facilitated every step of the way while receiving the service.	4.44	0.71
10) In receiving this service, the user was impressed and would like to recommend others to receive the service.	4.42	0.71
Total	**4.34**	**0.59**

Hypothesis testing revealed that:

Hypothesis 1, The differences between personal factors in sex and service quality were not significantly different at the 0.05 level of opinion.

Hypothesis 2, found that the difference between personal data on age and service quality in terms of service provision service reliability responding to service demands and the sympathy of the service recipient, there was no difference in opinion level with statistical significance at the 0.05 level.

However, there is a difference between the age of personal data and the quality of the assurance service provided to the recipient. There were statistically significant differences in opinion levels at the 0.05 level.

Hypothesis 3, found that the difference between the personal data; occupation and quality of service in the concrete aspect of the service, service reliability, responding to service demands and the sympathy of the service recipient. There was no difference in opinion level with statistical significance at the 0.05 level.

However, there is a difference between the age in the personal data and the quality of the assurance service provided to the recipient. There were statistically significant differences in opinion levels at the 0.05 level.

Hypothesis 4, found that the difference between personal data on income and quality of service services in the concrete form of service responding to service demands confidence to the service recipient and the sympathy of the service recipient. There was no difference in opinion level with statistical significance at the 0.05 level.

However, there is a difference between personal data on age and service quality in terms of service reliability. There were different opinion levels with statistical significance at the 0.05 level as shown in Table 3.

Table 3 : The results of the hypothesis test

Service Quality	Sex	Age	Occupation	Income
Concreteness of the service	0.42	0.33	0.17	0.90
Service reliability	0.99	0.06	0.51	0.00*
Responding to Service Demands	0.84	0.13	0.02	0.12
Confidence to service recipients	0.40	0.01*	0.04*	0.14
Service recipient's sympathy	0.07	0.98	0.10	0.38

*Reject the statistical hypothesis at the level of significance. 0.05 ($p < 0.05$)

Discussion

The study found that the level of opinion on the quality of service that affects the satisfaction of the service at Thanyarak Center in order of highest importance: The first priority is 1) Reliability - This helps bringing up the positive profile and the image of the organization. This results in good services as well as word of mouth and repeated users. The reliability of the service provider is important. There are enough specialist doctors for users who can give service with confident as well as being able to diagnose the disease correctly along with giving advice on aftercare. In addition, the results of laboratory examinations and X-ray results are accurate and reliable. It has also been certified by government agencies, followed by 2) Assurance

The service providers track appointments and results of receiving services on a regular basis. This demonstrates credible, dependable, responsible service with honesty. This allows the service recipients to fully benefit from the quality in its entirety. In which each visit makes users feel satisfied and willing to pay for the cost that is worth the service received. 3)Responsiveness - In each service visit, users receive convenience, speed, willingness to provide the service of the staff, receiving advice on how to receive services before and after receiving services with clear service charges. In addition, the service provider has a comment box for users to offer their opinions on the service in order to listen to the problems encountered in the service in order to bring the problems that arise to improve further. 4) Empathy

Service providers take into account the feeling that the user thinks, feel, or suffering from. It is important to pay attention to what is the leading cause which the provider may anticipate the problems the client is facing, recognize and understand the individual's internal state of affairs both in terms of emotions, feelings as if being or being that person himself. The study found that this research is consistent with the research of Parichat J. (2019), The study found that the opinion level on the quality of service that affects the satisfaction of using the service of the Thanyarak Center as a whole was found to be at the highest level. When considering income, it was found that Reliability, Assurance, Responsiveness, Empathy and Tangibility are important respectively. In accordance with the research, Parichat J. (2019), The study on the quality of service that affects service satisfaction of Kasemrad Hospital Prachachuen Kasemrad found the opinions of the service recipients about the quality of the hospital's services overall is at a high level in credibility, which is regarded as a result of quality of service, with standardized knowledge training in medical services. In addition, there must be a high standard of service and ethics in medical treatment and service certified by

standards from government agencies that are reliable or have received standards as well as having specialist doctors.

The result is also in accordance with Kamonwan M. (2013), The study on the quality of service towards the decision to use private hospitals in Bangkok and its vicinity, found that confidence is reliable with the maintenance of ready-to-use equipment, reliability with good-natured staff, concreteness of the service and the environment, understanding and empathetic to the staff, providing complete information. The service recipient must be with the service system that is fast and accurate. But not in accordance with the research of Nitikorn K. (2010), The study on the quality of services in the outpatient department department of Buriram Hospital, Buriram Province.

The objective was to study the opinions of the people who received services regarding the quality of service, outpatient department Buriram Hospital Buriram Province in 8 aspects which are ease of use, the concrete aspect of services details and advice, reliability, readiness to provide medical care, staff ethics and pricing. It was found that the quality of outpatient services Buriram Hospital, Buriram Province overall, it's at a high level. However, it was not consistent with the research of Ampai A. (2016), The study on factors related to the perception of nursing service quality among outpatients in a private hospital in Nakhon Ratchasima province found that patients had a perception of the quality of nursing services in a private hospital. The concreteness of the service is at a very high level. It can be said that the hospital has continuously improved the quality of nursing care until the quality of service is up to the standard by emphasizing the patient as the center. Patients can be perceived and assessed. Hospitals have taken such action, perhaps because private hospitals have a value of working to bring the best health services to their providers as services above their expectations. It is expected to be a leader in innovative treatments and medical personnel with internationally recognized competence to ensure that Health delivered to consumers with internationally recognized standards (Ethics Subcommittee, 2002). The management has a vision to be an excellent private hospital. In terms of service quality, the service quality assessment was conducted and received a quality certification from the Hospital Development and Accreditation Institute.

Conclusion

Results of the study contribute to improvement of service quality as concluded below:

1. Trust considered to be the most important factor of those who receive services at the Thanyarak Center. Provider must provide accurate service and the least error occurred. In addition, in providing the credibility of the image of the organization is an important part. Therefore, formal meetings should be organized as well as providing knowledge, information, important and necessary information. The center also needs to train staffs to develop knowledge always and continuously in order to prepare for the service in order to give customers with confidence and trust.

2. Confidence to service recipients is a secondary factor. The service provider, whether it is a doctor or staff must provide services with confidence in the treatment as well as creating an atmosphere of friendly service that leads to anxiety relief.

3. Responding to service needs, there should be staff to explain the process clearly so that the service recipient understands and able to act properly which in explaining these steps has a positive effect on speed. It also reduces duplication of work systems.

4. Service the recipient with sympathy throughout the service period. Personnel at Thanyarak Center should have compassion for the service users, regardless of behavior, expression, attitude or tone, it should be polite and friendly.

5. Concreteness of the service must be defined as a clear standard of service provided. The Center's service procedures must be followed as clearly defined.

Acknowledgments

Appreciation to Thanarak Center and all service users who participate in this research article, in which the results could be contributed as guidelines for quality improvement and future use.

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