THE OPINION OF CLIENTS ON SERVICE QUALITY OF ASSISTIVE DEVICES FOR DISABLED IN GENERAL HOSPITALS, KANCHANABURI PROVINCE

SORNSIREE PUMMARIN

A THESIS SUBMITTED IN PARTIAL FUFILLMENT
OF THE REQUIREMENTS FOR
THE DEGREE OF MASTER OF ARTS
(REHEBILITATION SERVICE FOR PERSONS WITH DISABILITIES)
FACULTY OF GRADUATE STUDIES
MAHIDOL UNIVERSITY
2003

ISBN 974-04-3014-7
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Thesis

Entitled

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THE OPINION OF CLIENTS ON SERVICE QUALITY OF ASSISTIVE DEVICES FOR DISABLED IN GENERAL HOSPITALS , KANCHANABURI PROVINCE

was submitted to the Faculty of Graduated Studies, Mahidol University

for the degree of Master of Arts (Rehabilitation Service for persons with disabilities)

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ACKNOWLEDGEMENT

This thesis study was possible with the kind help of various people. I would like to take this opportunity to thank the Thesis Research Department to especially Mr. Viraman Niyompol, chairman of thesis committee, Assoc.Prof. Wilai Kusolvitkul, Mr. Piyavit Sorachaimetha, Mr. Narong Patibatsarakich. This thesis is not possible without their special attentive help and support in me.

Finally, I am grateful to my family for their financial support, entirely care, and love. I would like to thank family and friends. Highest thank to Mr. Thanya Tangkitikul, whom is one the most important people in my life to give me support. The usefulness of this thesis, I dedicate to my father, my mother, my sister and all the teachers who have taught me since my childhood.

Sornsiree Pummarin

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THE OPINION OF CLIENTS ON SERVICE QUALITY OF ASSISTIVE DEVICES FOR DISABLED PERSONS IN GENNERAL HOSPITALS, KANCHANABURI, PROVINCE.

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ABSTRACT

The objective of this survey research was to explore the opinions of clients on the service quality of assistive devices for disabled persons in general hospitals, Kanchanaburi province. The sample of 140 disabled persons consisted of blind persons, deaf and hard of hearing persons, and persons with physical disabilities who were over 18 years old. The researcher collected data by interviewing disabled persons who have received assistive devices from the disabled persons service in general hospitals, Kanchanaburi province from May to August 2002. Statistical used for data analysis were percentage, average, standard deviation and analysis of variance (ANOVA), and the difference in each pair of data was test by Least Significance Different (LSD).

The results of the study found that the opinion of clients on the service quality entirely is at a good level. The average is 3.51. It was classified according to the reliability, the friendliness of officers, the acknowledgement, and the morality of officers which were all at a good level. Meanwhile, the concreteness of service, the facilities in using service, the readiness of providing service were at a fair level. Moreover, it was found that the difference in the clients' careers, salaries, information sources, aided equipments types and frequency of receiving service alters the opinion of clients on the service quality different at a statistically significant level lower than 0.05. In addition, the difference of gender and marital status does not alter the opinion of clients on the service quality.

This research suggests that the rapidity of charge in to steps offering the service should be improved and also that the officers ought to undergo continuous training in order to gain knowledge and understanding on service functions.

KEY WORDS: OPINION / SERVICE QUALITY / DISABLED PERSON

92 p, ISBN 9740430147

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บทคัดย่อ

การวิจัยเชิงสำรวจนี้มีวัตถุประสงค์ เพื่ออธิบาย คุณภาพบริการเครื่องช่วยคนพิการ ตามความคิดเห็นของผู้ใช้บริการ ในโรงพยาบาลทั่วไปของรัฐ จังหวัดกาญจนบุรี กลุ่มตัวอย่างคือ คนพิการทางการมองเห็น , คนพิการทางการได้ยินและสื่อความหมาย , และคนพิการทางกายหรือการเคลื่อนไหว ที่มีอายุตั้งแต่ 18 ปีขึ้นไป จำนวน 140 คน เก็บรวบรวมข้อมูลโดยใช้แบบสัมภาษณ์คนพิการที่เคยใช้บริการเครื่องช่วยคนพิการในโรงพยาบาลทั่วไปของรัฐ จังหวัดกาญจนบุรี ตั้งแต่เดือน พฤษภาคม-สิงหาคม 2545 วิเคราะห์ข้อมูลโดยใช้ ร้อยละ ค่าเฉลี่ย ส่วนเบี่ยงเบนมาตรฐาน และสถิติวิเคราะห์วิเคราะห์ความแปรปรวน (ANOVA)ทดสอบความแตกต่างของคู่ที่แตกต่างใช้ Least Significant Different (LSD)

ผลการศึกษาพบว่า ความคิดเห็นเกี่ยวกับคุณภาพบริการโดยรวม อยู่ในระดับดี ค่าเฉลี่ย 3.51 จำแนกตามรายด้านได้แก่ ความเชื่อมั่นไว้วางใจ, อัธยาศัยไมตรีของเจ้าหน้าที่, การให้ความรู้ คำแนะนำและคำปรึกษาและจริยธรรมของเจ้าหน้าที่ อยู่ในระดับดี ส่วนด้านความเป็นรูปธรรมของบริการ, ความสะดวกในการใช้บริการ และความพร้อมในการให้บริการอยู่ในระดับพอใช้ นอกจากนี้ยังพบว่า ผู้ใช้บริการที่มีอาชีพ รายได้ต่อเดือน แหล่งข้อมูลข่าวสาร ประเภทของเครื่องช่วยคนพิการและจำนวนครั้งในการใช้บริการ ที่ต่างกัน มีความคิดเห็นเกี่ยวกับคุณภาพบริการแตกต่างกันอย่างมีนัยสำคัญทางสถิติที่ระดับ 0.05 นอกจากนั้นพบว่า เพศ และสถานภาพสมรสที่แตกต่างกัน มีความคิดเห็นกับคุณภาพบริการไม่แตกต่างกันอย่างมีนัยสำคัญทางสถิติที่ระดับ 0.05 ข้อเสนอแนะที่ได้จากการวิจัยควรมีการปรับปรุงขั้นตอนการให้บริการ รวดเร็ว จัดอบรมเจ้าหน้าที่ให้มีความรู้ ความเข้าใจในงานบริการ อย่างต่อเนื่อง

92 หน้า , ISBN 9740430147

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CHAPTER I
INTRODUCTION

Background and the main problems

The residents of a country take the most important role in developing their own countries. Therefore, it is advantageous if the people in a country are mostly healthy with completed physical pasts of a person. Such a country as mentioned above, can be expected to hold competitive advantage through their personnel resources which are indispensable for their efficient development.

Throughout, history beside the people with excellent physical condition , there are some people with the physical impairment who can be called people with disabilities. The disability is the problem of human beings' health condition which make them lose their abilities to do their routine and social activities in society. The disability can also be the effect of their health difficulties, such as ailment, injury or being poisoned, etc.

According to World Health Organization (1995), the disability is the impairment of psychology condition or the disorder of physiological or anatomical structure or function. This impairment focuses on the disability. In other words, the disability can be defined as the limitation of capabilities in perfroming activities. The is emphasized on the diminution of individual 's capabilities such as the inabilities to work or walk. The disabled persons will have disadvantages or handicap in that they have the limitation of carrying out their daily life because of many social difficulties.

According to a Rehabilitation Act (1991), The disabled persons can classified into 5 categories.

1. The disabled persons with visual disability.
2. The disabled persons with hearing disability.
3. The disabled persons with mobility disability.

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4. The disabled persons with mental or behavior disability.
5. The disabled persons with talent and learning disability.

As can be seen from the survey of health and welfare (1996), done by the national statistics institute, it is found that there is 1,024,100 disabled people or 1.7 percent of overall population in Thailand. There is ratio 7.21 of the disabled persons with mobility disability per 1,000 people in general population which is the highest population furthermore there is ratio 3.47 of the disabled persons with hearing disability per 1,000 population finally, there is about 1.84, 2.49, 0.97 ratio of the disabled persons with visual disability, mention and learning disability and behavior disability respectively per 1,000 population (The National Statistics Institute, 1996)

Recently, there is more awareness of protecting, remedying and recovering the disabilities. As The United Nations' announcement, the year of 1983-1992 is the decade of the disabled in which the disables persons can gain more opportunity as same as others. The continuous project is the decade of the disabled persons in Asia (Including Thailand) and Pacific during the years of 1993-2002. The members of these regions have to follow an international action plan for the disabled which aims to support the effective act of protecting the disability, recovering the disabled's competence and reinforcement of participation and equality of the disabled persons. The disabled persons are also believed to be an important national resource whose standard of living has to be improved.

Furthermore in accordance with section 55 of Thailand's constitution, it is defined that the disabled persons has the right to gain any public facilities and assistance from the government. Section 80 of an Act parliament has enacted that the government has to give assistance and comfort to the elderly, poors, disabled and disadvantage groups with better standard of livings and self-reliance. As the declaration of the disabled persons's rights (1999) has defined, the disabled' s potential has to be supported and developed to better their standard of living and there by develop themselves by providing them with the protection of right, freedom as human beings and citizenship of Thailand who can take part in any political situation, has the right to define principles and gain

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any support from family, community, society and government, together with gaining informations, facilities and the protection against being taken an advantage from society.

From Rehabilitation Act of 1991, recovering the disabled person's capabilities is the way to develop the potential of the disabled. This act is compatible with section 80 of Thailand's constitution in 1997 which is declared as the support of potential or capabilities of the disabled by means of the medical treatment, education, society and vocational training in order to provide the disabled with the chance to work or live as same as other normal people. This act is also compatible with the fact that although the disabled is inferior of the chance they can live without being anyone's burden if they are provided with provision, treatment, caring and capabilities recovering in the right and proper way.

Disability rehabilitation leads to reinforcing and supporting the disabled's physiological, emotional and mental health and learning what have been developed again. Disabled people have the abilities to use their left capabilities in emotional, physiological, social and vocational perfromance. This is aimed to let the disabled to carry out activities for the medical purpose, recommended by the specific experts, especially interpersonal activities in recovering capabilities. The renovated skills can make the disabled persons to be able to direct their now life and feel comfortable with their daily life, work and relation with hope.

Disability recovering is the responsibilities of human beings in society for the disabled people. Since the disabled are one part of social members, the disabled's capabilities must be recovered and developed in order to be able to work, study and carry out their daily life properly. In the competitive environment of business and workplace, the unsuccessful people will be called as unvaluable people. The disabled also think that they themselves are unuseful for their society because they cannot work and live, like ordinary people. Therefore, disability recovering is useful and worthwhile for enabling the disabled in whatever age or sex to have the chance to do some profitable social activities again.

The service of disability aided equipment for the disabled is the activity for recovering the disabled's capabilities to be able to have happier, healthier and more

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comfortable life. This activity is for an investment of disability recovering of the public's act and takes an important role in hospital service for the disabled. This activity is prominently supported after the campaign and the declaration of Rehabilitation Act 1991. Furthermore, Department of Medical Service, Ministry of Public Health has set up the National Medical Center for disability recovering at Sirinthorn Center as the center for disability recovering service and the coordinated center of disability aided service from different hospitals in Thailand.

Nowadays, many hospitals have an attempt to develop service quality is encouraged to satisfy the customers' needs and this service has to be compatible with the requirements of customer, along the process of servicing and after-service. In addition, this service has to respond the customers' basic needs, together with their expectation. As a result, it can make the service receivers more satisfied.

Service Quality is the capabilities to respond to the need of service receivers by which patients intend to gain the medical service from service providers at last, it is the duties of service gainers to provide the feedback of service quality.

The main characteristics of service quality are that it is abstract and various. Moreover, it cannot be stored and separated. Service quality can thereby be assessed by the service process and outcome, especially by the interaction between service providers and service receivers.

The disabled people are service receivers of disability aided equipment of hospitals. However, it is found that the disabled have the difficulties in gaining the service and thereby the potential service are unreachable for the disabled. For reacting to this problem, the public hospitals in The Ministry of Public Health, in Kanchanaburi make the survey of service quality by assessing service quality which is accessible. It aims to gain the knowledge of service quality outcome and the difficulties or problems, derived from the service quality and thereby to be able to find the solution and finally to have the capacity to develop higher service quality for the disabled.

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The objectives of research

1. To study and have an investigation into the level of service quality of assistive devices for disabled in general hospital, Kanchanaburi.

2. To compare the opinions towards the service quality among different service receivers.

3. To study and have an investigation into problems and different of assistive devices for disabled in general hospital, Kanchanaburi province.

The hypotheses of research

1. Clients with different sex had the difference in service quality's opinion.
2. Clients with different age had the difference in service quality' s opinion.
3. Clients with different marital status had the difference in service quality's opinion.
4. Clients with different education degree had the difference in service quality's opinion.
5. Clients with different salaries had the difference in service quality's opinion.
6. Clients with different career had the difference in service quality's opinion.
7. Clients with different information sources had the difference in service quality's opinion.
8. Clients with different assistive devices had the difference in service quality's opinion.
9. Clients with different frequency of receiving service had the difference in service quality's opinion.

Variables, used in this research are defined as followings:

1. Basic independable variable are the characteristics of the clients which are sex, age, status, education, careers, salarie, information, the categories of assistive devices and the frequency of gaining the service.

2. dependable variables are the service quality of assistive devices for disabled in general hospital, Kanchanaburi which can be classified into 7 as followings :

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2.1 The concrete status of service.

2.2 The facilities in using service.

2.3 The reliability.

2.4 The readiness of providing service.

2.5 The friendliness of officers.

2.6 The acknowledgement.

2.7 The morality of offers.

The basic agreement

The study the opinion of client on service quality of assistive devices for disabled in general hospital, Kanchanaburi is conducted by the survey of opinion of service receivers who are disable persons with visual, hearing, mobility in Kanchanaburi and gain the assistive devices service from hospitals which are consisted of Paholpolpayuhasena Hospital and Makarak Hospital. This survey is applied in accordance with Parasuraman and team (Parasuraman. et al.,1991) and accordance with development service quality of the ministry of Public Health.

The definitions of research variables

1. service quality is the capacity of responding to the disabled's needs in consideration of different criteria : the concreteness for disablled persons of service, the facilities in using service, the reliability, the readiness of providing service, the friendliness of officers, the acknowlegement, the morality of officers.

2. The concrete status of service means the physical appearances which are obviously seen. These include different facilities in hospitals, such as, clean and comfortable rooms or buildings, clean restroom and good atmosphere. There should be gardens, surrounded with trees and flowers for relaxation. Furthermore, there should be a lot of parkings with useful maps, signs to inform the direction and introduce various places. The water service and waiting seats should be provided as well.

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3. The comfortability of gaining service means an access of facilities while using service which involve the speed of service in different sections, the welcomings, the introduction of any facilities in hospitals. In addition, The doctors have to be punctual and active. There should be the clear queueing system and an inform of the estimated waiting time, with the efficient reception system. The collection of information should be systematic, avoiding the loss of important information. The service receivers should be informed coninuously. The perfect service are provided in every process in one area. At last, the service process should not be too complicated.

4. The confidence and expectation of service receivers to gain the disability aided equipment service which is standard and proper. The expectation of the service receivers to be treated by expert doctors and nurses with the enough quality of disability aided equipment service.

5. The readiness of providing service is to have adequate service time space by helpful officers. There is also a plenty of available modern or-up-to date medical assistive devices.

6. The disposition means the personnels in hospitals should be friendly, good-looking and lively. They should speak politely and modestly with caring mind service. Moreover, They should be investigative and willing to provide any consult and assistant to customers.

7. Providing consult and knowledge means that personnels in hospitals should provide customers with knowledge and suggestion about disability assistive devices and the correct and clear process of using disability assistive devices. Also, they should be good consultants for customers who can introduce and direct the service place in the following process.

8. The morality of officers means that personnels of hospitals are kind, helpful and enthusiastic to provide the service to the disabled people. Furthermore, they should have the vocational ethics to pay the respect to the disabled and treat the disabled people as same as ordinary people without disability discrimination.

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9. General hospitals under the Ministry of Public Health in Kanchanaburi include Paholpolpayahasena Hospital, Makarak Hospital which all provide disability aided equipment in Kanchanaburi.

10. The service receivers are the disability people who gain the service of disability aided equipments in general hospitals under the Ministry of Public Health in Kanchanaburi. These disabled involve the disabled people with physiological disability, The disabled people with avdible disability and the
disable with visual disability who are older than 18 years old with the good conciousness.

11. Disability assistive devices mean the inventives which are used as substitutes for the lost natural organs of the disabled people or mate those organs work properly as usual while gaining service in hospitals.

Expected gains

1. To know the level of quality service of disability assistive devices of various general hospitals under the Ministry of Public Health in Kanchanaburi.

2. To know the variables which are related to the service quality of disability assistive devices, applied in public hospitals under the Ministry of Public Health in Kanchanaburi.

3. To know the problems and difficulties in the service of disability aided equipment of general hospitals under the Ministry of Public Health in Kanchanaburi in accordance with opinions of the services in order to find the approach to develop this service.

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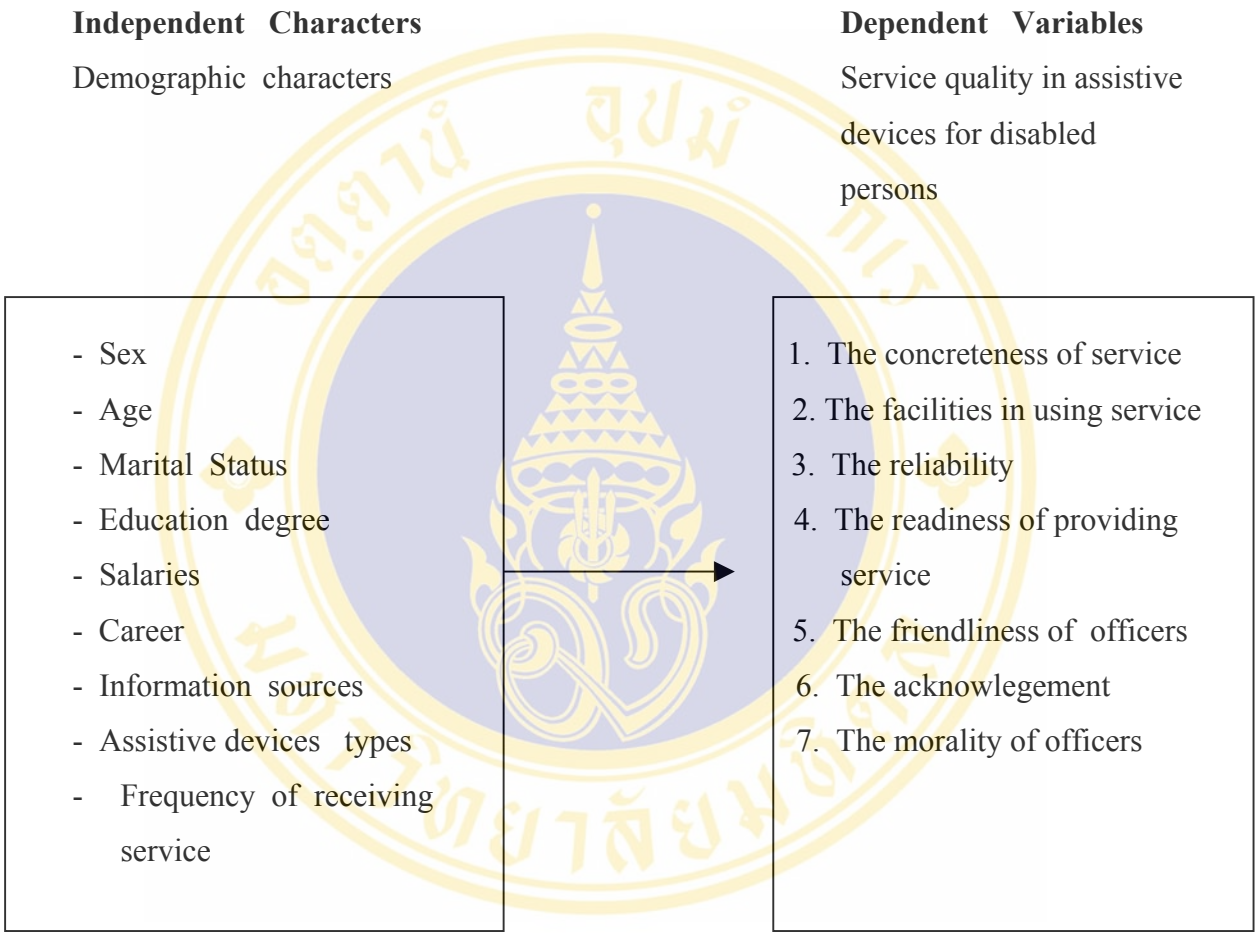
Research Framework



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CHAPTER II
LITERATURE REVIEW

In this chapter, 1 shall present the survey about the pinions of clients toward disabled aided eqiupments in general public hospitals in Kanchanaburi. The researcher has collected the idea in research according to these topics.

1. theoretical idea about service quality
2. basic knowledge about disabled
3. General knowledge about disabled aided equipment
4. Other related research

1. Theoretical idea about service quality

Service quality means the ability to fulfill the clients's needs and has the special characters in that it is tangible in various way. Service quality can be evaluated form service – providing process and service outcome, especially form the interaction between service providers and users. It is sometimes more important than service outcome in evaluating service quality (Parasuraman,1985). If service–providing process is satisfied for clients, clients can accept it, even if the outcome is not good enough. For example, after the treatment, the patient is dead, his or her relatives might be able to understand that it is not the doctor's fault, since they have seen that during the treatment. The doctor and all officers did the beat with good attention and caring and have explained and informed the relative along the treatment. Service quality in health care has different components which can be defined form the efficiency of clinical work in accordance with clients feelings, including the participation and the response of clients group who have an interest and attention in performance (Bittle, Lois. 1995:429).

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Jirut Srirattanabun (1994:171-173) suggests that service quality means the capability in responding to clients' needs. What the clients want has to be done and provided by medical service providers. However, most medical service is defined by service providers because clients cannot know their own problem by themselvers, including their actual needs of their health. In fact, clients are the persons who gain the advantage form service and thereby they should also be the people who evaluate medical service quality. They have to judge whether the service provided can meet their needs. The service providers take the role in putting the standard and evaluate whether the service is in the defined standard.

Weerapong Chaleumrat (1996) puts forward more argument that service quality is the consistency of clients' wants, the degree of service capacity in fullfiling clients' wants and the degree of the satisfaction of clients after they have experience service.

Denjan Sanprasarn (1996) has defined service quality that is the to satisfy customers' needs. The service has to be consistent to customers' need along with service providing process to after-service. It also has to respond to the basic needs and cover the expectation of clients which can satisfy clients' needs.

Thongloa dochthai (1997) said that service quality in medicine is the continuous attempt of all members in organization to provide user service with what they want which can be summarised into 3 main idea as followings :

1. The continuous attempt.
2. All members in organization.
3. The expectation of clients.

The Canada Council of Health service Accreditation (CCHSA) has defined the quality that it is the doing of the right thing which can satisfy customers' needs (guoted in Anuwat Supchutikul, 1997)

According to, David Blumental (1996), service quality is increasing indispensable for the doctors and clients until the next decade, service quality can be

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measured into 2 way

1. Providing service appropriately is to be aware of responding clients' valuable needs regarding to letting clients to be the persons who evaluate or give feedback of that service quality.

2. Providing service professionally is that service providers can apply the service in the limited time with increasing service quality.

Medical service quality is the effective interaction between doctors and patients. This service quality has many factors, such as

1. communication quality.
2. The capacity of medical treatment.
3. The confidence of patients in the medical treatment.
4. The ability to take care of patients.

With good attention and understandings.

It can be concluded that service quality depends on the comparative thinking of service between the expected service and perceived services(Kotller, 1994). service quality is the indication of measurement in service providers' works in the perspective of expectation and standardization. Service measurement is in fact a tough work. (Couch,T.B.)

Service quality is consistent to the idea that the patient is the center of planning the medical treatment. Inplanning and organising, there should be an awareness of an importance of service quality along the service system, for example, an access to the service which can be measured form the waiting time before the medical treatment or the providing of the special service. Relying to what the clients want in that specific service places. On the other hand, service quality is the satisfaction of clients which is clients' wants. It means the response to customers' needs, including the work standard in which clients cannot understand in the aspects of that health service techniques and vocation.

Measuring service quality for the patients is important. Therefor measuring, controling and organising health service quality should be improved by evaluating the degree of service quality and rely on factors or components of service in different

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characteristics which can be checked, measured, tested, evaluated or calculated or marking or the degree of satisfaction which is acceptable for others or CIS (Customer Satisfaction Index) of customers after experiencing that service. (Weerapong Chaleumjirarat, 1996)

1. Service Characteristics and Attributes. In evaluating service quality of various service centers, the satisfaction of customers can be considered along the service cycle. Therefore service characteristics are consisted of 2 components.

1.1 Characteristics of service quality is focused on the characters or the special characteristics of service providers or of that service.

1.2 Attributes of service quality are emphasised on the measurement unit or comparative point or general measurement, the comparative degree of quality between 2 service center such as speed, preciseness and cleanliness.

According to the Medical Bueeau in Ministry of Public Health Medical service quality has to be focused at all stage of process. Medical service quality depends on 2 main characteristics.

1. Service which is qualified to fulfill people's needs and to be able to provide service which is consistent to problems and needs of local people. service centers can provide service rapidly and safely. Clients are satisfied in the received service.

2. Service management of each organization is consisted of 5 components which have to be considered.

2.1 The efficient personnel management.

2.2 Which is consistent to problems and clients'needs.

2.3 Executive management.

The executive have to define the standard of structure about planning policies, management of assignment rate, control of evaluating performance, including parcels and budget, building and places which are supporting factors of efficient providing service.

2.4 The performers in providing service have vocational qualification and unity in vocation and performance. Furthermore, they can perform their work in the

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dynamic way and can regularly improve and update their performance.

2.5 The quality is done for protecting clients and controling the performers in providing service with quality.

Anuwat Supchutikul (1997) said that service in the perspectives of medical care for patients is to consider these followings facters:

1. The competence of providing service means the competence and skills of service providers which have to be suitable for their responsibilities and to be evaluated all the time.

2. The acceptability of clients : can all activities fulfill patients'expectation, family, service providers and service receivers?

3. The effectiveness: can the treatment and service cause less rate of death and more quality of people's life?

4. The appropriateness: Is the medical care appropriate ?

5. The efficiency in using the resources (time, test, instruments and land) : can they save the cost of using resources with the desired outcome?

6. An accessibility in service : can they provide the service at the right place and at the right time in order to let the patients to access the service comfortable ?

7. The safety : Is there any security system which can lessen the risk? Is there any explanation or inform to patients and their family?

Furtheremore, evaluating service quality can be considered these following 2 components:

1. The deliverables of service is to define how to provide characteristics or which service has to be ordered.

2. The interaction is different characteristics of officers instrument and equipments which can cause the perception of service process.

An interaction is not only face-to-face contact, but also service provided via other ways, such as the contact in written form, telephoning or applying various electronic equipments. According to Tenners Datoro (1992), service quality index is suggested accord to 3 basic values as can be seen in table 1

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Table 1 : Service quality index is suggested accord to 3 basic values.

Service Quality	The capacity in providing service	Interaction
Faster	Readiness to provide service	Tangibles
	Facilities	Responsiveness
Better	Performables	Reliability
	Appearance	Stability
	Reliability	Capacity
	Standardization	Credibility
	Usability	Mercy
	Mellifluous value	Communication
	Perceived value	Courtesy
	Price	
Cheaper		

Sources : Tenner&Detoro,1992

In addition, medical service has different characteristics form other service in that medial service is determined by service providers since clients may not know their own problems, including their actual needs of their own health or are not competent enough to define what service is indispensable to respond to their own needs. It may be misunderstood that service providers are the persons who judge those service quality. Actually, the persons who can judge or make the decision whether medical service is qualitied should be clients or patients.

The idea and theory about service quality aim to fine out which factors are used to determine the degree of service quality in perspectives of clients or customers.
Therefore, the survey about developing service pattern in accordance with service receivers' expectation can be categorised into 3 patterns :

Pattern 1 Developed by Parasuraman et al. (1985) to develop service pattern regarding to clients' acceptability in the best service quality, service quality is essential to distinguish service by 10 determinants of service quality:

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1. Reliability : service provide has to be precise and appropriate at first time. Moreover consistency means all service have to have the same outcomes which make service providers reliable for clients.

2. Responsiveness : service providers have to be ready and provide service with good attention. Furthermore, they have to be able to respond to clients' needs in time. for example, the hospital has to be ready and willing to provide the service, especially to emergency patients rapidly and can efficiently communicate and inform about the service every times ect.

3. Competence : service providers have to be skillful and competent in providing the service. Moreover, they can let clients to be aware of the provided service which can meet clients' wants. For example, the medical doctor has to be expert and competent in medical treatment while others in the health care team have to be competent in their own field and can apply and combine their knowledge together for the perfect service.

4. An access to service : It should be easy and comfortable for clients to access and use service. The service – providing process should not be too complicated and should be reachable in the broader area. For example, the transport has to be comfortable, the service should be in order, and rapid with the right time and the right places for clients equally, ect.

5. Courtesy : The personnels related to service quality have to have courtesy, good attention and service mind to clients with the good manner, dress and characters.

6. Communication is very important for service quality. It is not only one stage of providing service, but it is also one characteristic of service. Service providers should thereby provide the relevant information to clients, such as the information about the bill of the treatment and option of the treatment, ect, which should be clearly informed according to clients' conditions. It may be in the form of conversation or various public relation.

7. Credibility : comes form the honesty, sincerity and actual interests of service providers. These above characters are indisponsable in providing service and can cause more clients. In addition, the credibility may be caused by other factors, such as the fame of hospital and all personnels in health care team.

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8. Security is the feelings of being secured in their property and life, including fame without the feelings of being in risk and any doubt, such as keeping the secret of patients and the security system, ect.

9. Understanding and knowing the customer : service providers have to understand and know clients. For example, the nurse can remember patients' names and there are the collected files of patients' information of treatment in the past. Which can be searched raoidly.

10. Tangibles : since service quality can be evaluated by comparative aspects between the expected service and the actual received service, the provided service should be in the concrete form which clients can easily and clearly perceive. For example, the hospital with luxurious building, and modern and expensive equipments can make clients feel that they have got better service even though they have got the same medical treatment as usual.

Pattern 2 Developed by Zeithaml etal.(1988), evaluating process of service quality is developed to satisfy the customers by producing the tools for evaluating service quality which can be classified into 5 . In order to make them easier to memorize, they are called " SERVQUA" or "RATER" which can be tested as followings:

1. Reliability mean: the promise to provide the service which is reliable with precise and right quality.

2. Assurance means: the personnels competent skillful and friendly. They can make clients confident in the received service.

3. Tangibles means the tangible facilities, like equipments, personnel and tools or sources for communication.

4. Empathy means: the caring performance or service mind which service providers have for clients.

5. Responsiveness means the willingness and readiness to help clients and provide service.

Pattern 3 Developed by Parasuraman et al. (1991), Pattern 2 including Reliability, Assurance, Tangible, Empathy and Responsiveness are developed to be more

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appropriate by focusing on quicker and more up-date communication development and control in an organization.

Moreover, public health center (1996) has determined the service quality standard for patients in order to make the service clearly cover all work direction with appropriate resources and performance system or process. Evaluating service quality system reflects the performance outcome and thereby leads to activities for developing quality:

1. Mission, goals and objectives: are determined in the clear written form.
2. Organization and Executive management can efficiently develop and support service according to determined mission.
3. Human Resource management aims to efficienlty proride service in accordance with determined mission.
4. Developing Human Resource Management is to train their officers to be more ready competent and skillful for efficient performance.
5. Principles and Performance methods are in written form which reflects the up-to-date knowledge and vocational principles, consistent to service characteristics and can be held as the performance approaches for officers.
6. Environment and Building can support the comfortable service providing safely with quality and efficiency.
7. Equipment, tools and facilities have the standard for providing service with security and good quality.
8. Performance system or service- providing process has the vocational standard which can meet clients' needs.
9. Activities for developing quality are in the form of teamwork which have to be continuously developed.

Pichai Rattanadilok Na Phuket (1994) suggests that the related factors which cause the satisfaction or unsatifaction of clients in receiving service are consisted of 3 variables as followings:

1. Variables in service-providing system.

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2. Variables in service-providing process.

3. Variables in officers who provide the service.

The satisfaction combination and cause the reflexive feelings. For other factors, like age, salary, career and education which used to be the main topic for the past researches whether they have the relationship to the satisfaction. These variable are only the explanation of classification and cannot be used in identifying any causes of satisfaction and they are unsoluable. These 3 variables can be explained as following:

1. Variables in service-providing system are components and interelation of all activities. Measurement indications for finding out these causes are:

1.1 The facilities in receiving service condition whose difficulties and quantities have to be considered. These facilities can cause the right of receiving service. For examples which conditions have to be considered when issuing the identity card of patients or aiding card for health care free medical service. The facilities of issuing with less conditions can cause more satisfaction of customers.

1.2 The adequacy of provided service the quality of provided service has to be considered whether it cover all areas and all groups of people. For example, we should consider whether the health care service cards are issued in all villages.

1.3 The utility value of received service can be considered form outcomes of that performance process. These above values have to be taken into consideration now far that utility service is useful for clients. For example, the outcome of service form setting up the medical cooperative society in village is that it is the source of effective medication with affordable price in that village. In addition, the outcome of service in medication is that the medication can relieve the pain form illness without any expired medication.

1.4 The worth and fairness of provided service means the consideration whether the charge is appropriate, such as the charge of room in hospital and x-ray.

1.5 The development and progress of provided service system when compared with the past performance should be better in both quantity and quality. For example there are the use of computer system and medical registration can collect and keep more registers of patients with more precise and adroit service providing.

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2. Variables in service providing process which has many stages of continuous servicing form initial work flow to Final Work Flow. The indication of this topic is consisted of the followings:

2.1 The comfortability in contacting for receiving the service which is the facilities in asking for service.

2.2 The speediness of providing service process which is the quantity of process and adroitness of different stages in the process with efficient timing.

2.3 The regularity of provided service which is the constancy or unconstancy of providing service. For example the opening time of clinic TB should be regular.

2.4 The security of provided service which is the avoidance of danger form providing service process. For example, the medical operation should be clean without any infection or it should not cause any illness which is call “Done by medical doctor or nurse”. Therefor providing service in hospital should be awared of its importance.

3. Variables in providing service officers means officers have to take any responsibility in any activities in hospitals. The indications of this topic are as following :

3.1 The good willing and attention of officers means how far they are interested in and pay attention to their providing service performance such as an interest in asking their patients about their purposes of contact or the responsibility of working. For example, the medical doctors have to work permanently in hospitals and not to work in any clinic.

3.2 The equality of provided servicing means people who receive service should be provided service equally without any bias.

3.3 The good characters and manner in servicing means the way the service providers behave to clients friendly or arrogantly, including the way they speak tenderly or harshly.

3.4 The honesty of service providers means the trust, reliability and frankness in their providing service duties.

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Anuwat Supachutikul suggests that service quality is more remarktable with more important goals of health care service as same as the morality and efficiency. The meaning of quality has changed form the consistency of products with the determined standard to the consistency of product with the needs and expectation of clients or customers. For expectation used for the definition of quality, it should be considered in objectives or the solution which cannot be solved by themselves. The expectation in technical term should not be involved. The patients do not know which medical examination or treatment they should take so they expect experts or service providers who have more knowledge and expertise in deciding for them. In the case of having more than 1option, same patients may expect to gain some unnecessary or inappropriate service because of the advertisement or the suggestion of their relatives. Therefore it is service providers' duties to provide the right information to patients rather than providing what patients want. This is because quality covers the aspects of security and avoidance of risk or unnecessary cost. Quality is consisted of 4 components: the access to service, the satisfied physical attributes, friendliness and service techniques, the morality the efficacy the efficiency, the continuity and the security which should be used with the standard in evaluating 4 components as can be seen in table 2

Table 2 : Quality components and evaluating standard.

Quality Compo-Nents	**the con sistency**	**the accep-tability**	**The morality**	**The efficacy**	**The effi-ciency**	**The conti-nuality**	**The security**
The access to service	+	+	+	-	+	-	-
Satisfied physical Attribute	+	+	+	-	+	-	+
Friendliness	+	-	+	-	-	-	-
Service tech Niques	+	+	+	+	+	+	+

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According to supachai Kunaratanapluek and Anuwat Supachutikul(1993), the quality of public health can be evaluated form followings:

1. the opinion of people who are clients the unsatisfaction in public hospital mostly comes form the inadequacy of facilities, the delay, the crowdedness, the uncleanliness, the unfriendliness, the unability to access the information. The clients in private hospital often upset with service charge and too much medical examination without the awareness of importance. These unsatisfaction is sometimes shown not only in the speech, but also in their action. For example, they will not accept the service in the early stage because they have seen the impotentiality for their own illness.

2. problems in service techniques. Apart form clients' opinions, quality can be assessed form problems of quality in service techniques. For example, the treatment outcomes is not like what patients and their relatives expect, and the status of a secondary disease form the medical treatment.

John D. (1954) put forward more argument that service which can cause satisfaction among people should have these following principles and ideas :

1. Equitable service is to provide service to everybody fairly and equally without discrimination and use the same standard in providing service with everybody.
2. Timely service is provided according to clients'needs.
3. Ample service is to provide place, personnel, and instruments edequately and appropriately.
4. Continuous service is to provide service and take care them until they are in good condition.
5. Progressive service is to provide service with developed and improved quality and make them to be more progressive.

Tenner and Detoro (1992) said that clients want to make their expectation fulfilled completely what service they have experience before paying the bill for that service. Unsatisfied service charge of clients means that their expectation is not responded. Clients will be satisfied whenever they are responded and will be more

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satisfied when they are responded the most. The successful bureau is the one who can predict clients' needs and satisfaction complete all the time. Factors for defining clients' expectation are as followings:

1. Service attributes which clients want.
2. The degree of satisfied performance for clients.
3. The interrelation of indispensable service attributes.
4. The satisfaction of clients in performance cycle.

As a result, the study of importance, needs expectation and satisfaction of clients is normal for clients which can be called "The request of clients." Service quality is the feelings of clients and clients will gain the worthwhile and suitable exchange in return.

Pollert (1971), suggest that the expectation of patients mostly want to know their illness, including treatment process. Furthermore, they expect to meet friendly nurses who can take care patients very well.

Millet (1954) put forward more argument that important goals of providing service is to make their customers or clients satisfied by these following approaches:

1. Equitable service means the fairness in executive work in the public department in the belief that everybody is equal so people will be treated equally or the same. In the aspect of law, there will not be the discrimination in providing service. People will be treated as the individual who use the same standard of providing service.

2. Timely service means providing service in the public has to be timely. The outcome of public service will not be efficient without being timely which can cause unsatisfaction among people.

3. Ample service means providing public service has to have the right quantity at the right geographical location. Millet (1954) agrees that the equitable and timely service will not be efficient if there is no ample service and geographical location for providing service cause unfairness to clients.

4. Continuous Service means that providing public service should be continuous regarding to public benefit and not for satisfaction of bureau who provide service.

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5. Progressive Service means the public service which has to be improved in its quality and performance outcome. In other words it means the increasing efficiency or more ability to do their duties.

However for the study of clients' attitude towards service quality of aided equipment for the disabled persons in public hospitals in Kanchanaburi, the researcher choose to apply service quality pattern according to Parasursman et al. (1985) with the outcomes of the study of quality in accordance with the disabled ideas in Kanchanaburi as the earlily stage regarding to the acceptance and the consistent cover with service status of public hospitals in Ministry of Public health which can be summarised as followings: 1) the concreteness of providing service 2) the facilities in using service 3) the reliability 4) the readiness in providing service 5) the friendliness 6) the acknowledgement and consultancy 7) the morality of officers.

2. General knowledge about the disabled persons

2.1 The definition of the disabled persons

Deborah A stone (1981,guoted in Kulnarce Harnpattanakul.1995) has defined disability that it means the person who has the limitation in taking the role and working in accordance with the expectation of society which is related to self-care, the education, the family relation, entertainment, the earning and career, even if it is shot term or long term disability.

National statistics Bureau (1991) defined disability that it means the person who is disabled form losing some parts of his or her organs, such as losing his hand, leg or some organs works abnormally, such as blind ect.

An act of legislation of restoring disability's ability, 1991, section 4 has defined disability that it is the person who has an impairment in his physical, intelligence or psychological status, classified according to standard defined by Ministry' s principle.

In summary, disability means people who has impairment in their physical, intelligence or psychological status. The person who has an impairment in his physical

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status so that he cannot do any activities as usual and there by has limitation in playing his role as usual. physical status so that he cannot do any activities as usual and there by has limitation in playing his role as usual.

2.2 The classification of disable persons.

An act of restoring disability' s abilities,1991, section 4 and section 20 has Classified disability into

1. The disabled persons with visual disability are the disability who has merely one good visual while wearing glasses and can see less than 6/18 or 20/70 or cannot see even the sunlight or who is bazzled less than 30 degree.

2. The disabled persons with hearing communicative disability are the ones who have the ability of hearing at the frequency of 500 hertz, 1,000 hertz or 2,000 hertz with one side of ear with better frequency as following :

2.1 The children with the age of 1-7 with less than 40 decibel til 0 decibel.

2.2 The normal persons with more than 55 decibel til 0 decibel or persons with an impairment in understandings or incapability of using spoken language for communicating with others.

3. The disabled persons with physiological mobility disability are the persons who has clear physical impairment and cannot follow their daily-life activity and who lose the mobility abilities of their arms, legs or body which are weak or paralysis. The arthritis including the chronic disease of physical work system are also disenable them to do their daily life activities as usual.

4. The disabled persons with mental or behavioral disability is the person who has the impairment of their psychological or intelligence status in perception, idea and emotion so that they cannot control their necessary behavior in take care of themselves or ling with others.

5. The disabled people with talent and learning disability is the person who has an impairment of their intellect or brain so that he cannot learn in the normal education.

Nevertheless, in this study, the researcher conduct the research specifically with 3 disabilities including people with physical, visual and hearing disability.

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2.1 The causes of being disabled

According to the study of the committee of experts in World Health Organization, the cause of being disabled has been classified in medical term as followings:

1. Pre-natal and perinatal disability is cause form

1.1 Genetic or chromosomal abnormalities can cause disability, such as Down's syndrome, audible disability, blind and retard cerebral growth, ect.

1.2 Non genetic causes, such as taking non-prescrible drugs which can cause abnormalities and abnormalities form an infection during pregnancy and giving birth. These cause can make babies have physical, psychological, behavioral and cerebral abnormalities, ect.

2. The infectious disease can cause the disability in many ways, such as Polio make the malformation of arms and legs.

3. The uninfectious disease that is disease of mobility system, such as beckache, gout the abnormabilities of bone muscles, paralysis heart disease, pneumonia, diabetes, deaf , herd of hearing, blind and cramps.

4. The mental disorders such as drowsiness and reiterated thinking.

5. Reiterated and drugs abusement.

6. Disease caused by environmental pollution, bad community condition, accidents on the road, board and airways and accident at work and war.

7. Malnutrition and undernourishment during pregnancy and childhood cause both intellectual and physical disability.

8. Other cause such as taking toxicants, mercury, lead, the hearing of loud noise regularly causes the audible disability. The wrong treatment, such as taking- prescribed medicine, taking the wrong injection. For example dropping a herbal ointment into the eyes is dangerous and can cause the blindness.

As a consequence, the cause of disablement form both pre-natal and perinatal or after birth are form many above mentioned causes and they make disabled persons have changing behavioral disability in following their daily life.

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3. Assistive devices for disabled persons

Assistive devices for disabled persons is service management in medically restoring the capabilities for all kinds of the disabled persons. Providing the assistance of physically aided equipment or aided equipment for the disabled persons should be appropriate with the disability conditions. The registered disabled persons can request for the mentioned service without any cost form the public medical center or medical center as announcement of Ministry of Health care, such as the main hospitals in each provinces, hospitals in Ministry of Public Health or hospitals of universities in the United Kingdom of Thailand. According to National medical Sirinthorn Center for restoring the capabilities, assistive devices for the disabled persons of Ministry of Public Health in providing service can be classified in accordance with the disability as followings.

3.1 Assistive devices for the disabled persons with visual disability.

1. Foldaway walking stick with flexible handle for the blind.
2. Unfoldaway walking stick for the blind.
3. Compact electric lighted mangnifying glasses with hand model 15104,151041,15107,151010.
4. Compact electric lighted magnified glasses model 1575,1571.
5. Carrying magnifying glasses model 261240,261260,261280,2612950.
6. Magnifying glasses for half eyesighted picture, size +6×8 , +8×10, +10×12.
7. Magnifying lens for putting on things model 1420, 1436.
8. Magnifying glasses equipments model 2628, 2626, 155771, 155471, 15591.
9. Monocular varioplus model 16734, 16733.
10. Monocular varioplus with prism system model 2034.
11. Compact carrying magnifying glasses with adjustable setting on the table.
12. Binocular model 84165821, 841661251.
13. Electric lighted lamp without heating.
14. An alter with adjustable height.

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3.2 Assistive devices for disabled persons with hearing disability and communication disablement

1. Speaking articulator.
2. A box of listening aid kit for matured persons who have moderate loss of hearing.
3. A box listening aid kit for matured persons who have a big loss of hearing.
4. Listening aid kit for matured persons who have extreme loss of hearing (wearing behind the ear).
5. Listening aid kit for matured persons who have a big loss of hearing (wearing behind the ear).
6. Listening aid kit for the children who have extreme loss of hearing (wearing behind the ear).
7. Listening aid kit for the children who have a big loss of hearing (wearing behind the ear).
8. Listening aid kit for the children who have moderate loss of hearing (wearing behind the ear).

3.3 Assistive devices for disabled persons with mobility disablements.

1. Under elbow-leveled artificial arms with metal hook form.
2. Usable 5 inched under elbow-leveled artificial arm.
3. Over elbow-leveled artificial arms with metal hook form.
4. Usable 5 inched over elbow-leveled artificial arms.
5. Over elbow-leveled artificial arms controlled by cable.
6. Usable 5 inched under elbow levelled artificial arm.
7. Usable 5 inched over elbow levelled artificial arm.
8. Under knee-levelled artificial legs in the form of outer spindle.
9. Knee-levelled artificial legs in the form of outer spindle.
10. Ankle-levelled artificial legs.

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11. Knee-levelled artificial legs in the form of outer spindle with automatic break.
12. Buttock-levelled artificial legs in the form of inner spindle.
13. Extra over knee-levelled orthesis.
14. Extra under knee-levelled physically used equipments.
15. Big sized standard wheelchair for disabled persons.
16. Small sized standard wheelchair for disabled persons.
17. Self-aid wheeled chair for disabled persons.
18. A pad of wheeled chair for disabled persons.
19. Aluminium walking stick with 1 button.
20. Aluminium tripodcane.
21. Aluminium cane used with armpits.
22. Aluminium cane with arm hoop form matured persons.
23. Aid device for walking with quadcane.
24. Wheeled parallel line for children.
25. Aluminium cane with arm hoop for children.
26. Lineage for doing aurinary catherization by themselves.

Service management is the medical help to disabled persons by using aided equipment for disabled. The disabled persons have to register according to section 14 of disabled persons registeration before receiving service without any cost regarding to the public hospital in Minister of Public Health as following process.

1. The disabled who register as the disabled ark for receiving service of aided equipment for the disabled with the social welfare section in hospital by submitting registeration application form to officers.

2. The social welfare department proves registeration application form and contacts and cooperates with physical treatment department or requiring aided equipment department of that hospital requiring aided equipment for the disabled.

3. Physical treatment department or physical treatment equipment department tests the disabled persons for finding out the appropriate degree of disabilities of the

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individual handicapped. If the required equipments are available, those equipment should be provided to the disabled and keep the evidence and copy of identify document of the handicapped at the page which has the photo and signature of the disabled and at the has the classification of duties and information about service providing, including the instruction of using.

4. In case of unavailable required equipments, the department will process of arking for those required assistive devices of the disabled form Sirinthorn Center for the next retoration and make an appointment with the disabled persons to get those assistive devices.

The process of requiring assistive devices for the disabled persons in accordance with the disabled persons. Act is to provide the service to the registered disabled persons of Sirinthon center for potential restoration of national medication.

1. In the case that hospitals never ask for that equipments form Sirinthon center for restoration. It will be allowed to have those in the stock for being ready to provide that service to the disabled persons.

2. After providing those equipments, the evidence of requirement has to be conducted in accordance with the report ศสช 2 and the copies of identity evidence has to be collected. These copies include:

2.1 The page at which photos with signatures of the disabled or benefactor appear.

2.2 The page at which the classification of service with the information of providing service of medical centers and the signature of the medical doctor or articular doctor or related officers and the disabled or guardian.

3. The report with the copies of handicapped identity has to be submitted to the center every 2 months for the requirement of those equipments. Report form of ศสช2 should be submitted with the form page to the director of hospitals and then to the director of Sirinthon Center for restoration in order to avoid losing.

4. The submitted report form of ศสช2 will be seen for the next requirement of equipments.

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4. Related research

4.1 Local Research

Sompon Tangsasom (1993) has studied the satisfaction of insurance of the medical service in Bangkok zone under the social insurance Act in 1990 : in the case of having an accident or being sick not form working. Literate section in the faculty of developing society, Graduate institute of educational outcomes has found that the degree of education, gaining the information of medical service and the classification of organization have the relationship with the medical satisfaction. Gender, age, income, the experience of using service in other hospitals have no relationship to the satisfaction of the medical service.

Piyachart Jarconwatanapanich (1994) has studied the medical service behavior of insurers. Of industrial community in Laem Chabang by studying form examples of 993 of 8,557 insurants. According to main hospitals partners who sign the contract, form collecting information by applying questionnaires, the result of the study found that the rate of outpatients who use service in main hospitals who sign the contract is 1.5 times per person per year. The rate of inpatients is equal to 0.037 times per person per year (The percentage of 33.3). choose to use service in medical center, especially in clinic of factory which has nurses and medical doctor. The rain reason why the insurants. Do not use service in main hospital partners who sign the contract is that they think that they do not feel sick that much and are not satisfied with those main hospital partners who sign the contract. The main factors which have the relationship with using service in main hospital partner is having and providing medical service in factory. The satisfaction of the insurants after using medical service in these main hospital partner, it found that most insurants are moderately satisfied.

According to Panida Kamya (1995) form the study of quality service which the patients expect form the private hospitals in Bangkok, it is found that service quality witch patients expect form hospitals are in the high degree in every sections, which are

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the access to service, the communication, the potential of treatment, the friendliness, the reliability, the confidence, the response of patient' needs, the security, the concreteness of service and the understandings and knowing clients.

Wiroj Tangcharoen satien and the team (1996) has studied and surveyed the attitude of patients towards service quality in a hospitals in Bangkok. The result of the study is that service quality is in the good position at the precentage of 77. Medical doctors are evaluated to be good and excellent at the percentage of 82. General physical and service quality are good and excellent at the lowest percentage of 6.7.

Saisamorn Boonyasatit and team (1996) has studies the factors related to the satisfaction of patients who use service of hospitals in Mahasarakarm and it is found that clients has the positive belief and perpectives towards medical treatment of hospitals at the high percentage respectively service providing, the good attention to quality is in the satisfactory level since nurses give the best assistance to patients, medical doctors can provide the efficient treatment by the delicate testing, and the good service of hospital in that officers can contact other sections for patients.

Rangsit Sanwiset (1996) has studied the behavior in receiving medical service of the people who make an insurance in Nakorn Sritharmarad province by using questionnaire. The sampling group is 605 people who have made an insurance in Nakornsritharmarad province and choose Maharad Nakornsritharmarad hospital as their medical center for receiving medical service. These people come form industrial business, commerce, service and others in 10 amphoes. The result of the study is that the satisfaction of the insurants in receiving medical service generally are satisfied with that service at the percentage of 27.0 and not satisfied with that service at the percentage of 38.0 in many aspects, such as the facilities and service speediness are satisfied at the percentage of 24.0 and are not satisfactory at the percentage of 5.0. Furthermore, the medical treatment is satisfactory at the percentage 53.0 and is not satisfactory at the percentage of 21.0 and the confidence in service of hospital is satisfactory at the percentage of 36.0 and is not satisfactory at the percentage of 23.0. For the receiving of

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medical treatment of the insurants who have their life insured and receive the medical treatment at the medical center appeared in their insurance card or in the same areas, the insurants inform of the disappearance at the percentage of 61.0 and of the appearance, the percentage of 14.0 people wand to receive the medical treatment in the same hospitals and the percentage of 11.0 people who have made the insurance and cannot be effectively cured would like to change the hospitals.

Sannicha Setthachaiyan (1996) has evaluated the outcome of using service of patients who have made social insurance in Lampang by focusing on 3 results: The satisfaction of patients who have made social insurance of the received service and the difficulties in providing service, the satisfaction of service provider to the service for patients who have made social insurance and the difficulties of providing service and repetitive choosing rate of people who have made insurance of Lampang hospital. The sampling group is 385 patients who have made social insurance by specific sampling and 147 professional nurses by orderly sampling and the tool is questionnaire. It is found that these the high rake of patients who have a social insurance with the satisfaction of received service in general and in every aspects : information, places, environment, personnel, instrument, facilities and medicine and the result of these service is in the high degree. The 33.1 percentage of sampling group find the difficulties : the delay of providing service, the in appropriate information of using service, the uncomfortability of places, the imbalance of personnel and clients' quality, the old equipments with small quantities, the unconfidence in provided medicine and the received right in receiving other service. Finally, there is 73.8 percentage of repetitive choosing rate of people who have made an insurance.

Sujitta Nillert (1996) has studies the satisfaction of outpatients to the service of public hospitals in Suphanburi province. In this study, the quantitative data are derived form the interview with sampling people who are patients who receive service at section of 10 public hospitals in Suphanburi province during the 10th September to the 8th August 1996. 100 people form each hospitals are chosen in the total of 1,000 people who

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are the old patients who come to receive service more than 1 time. It is found that patients have the moderate satisfaction with the service of hospitals. There is the lowest satisfaction to the facilities in receiving service and the highest satisfaction to service quality. For the relationship between demographic, economic and social factors, and factors of accessing service with satisfactory degree, It is found that gender, education, career, income, the distance form house to hospital, the period of the journey have no relationship with the satisfaction to service and hospitals. On the orders hand, age and understandings in communication are found to have the relationship with the satisfaction to service of hospitals.

4.2 **Foreign Research**

Wilson (1970) has studied the difference between gender and consultancy. The research outcome is that female come to receive the medical consultancy about the own health more than male do since female have more time and chance to gain the medical treatment. In addition female are more comfortable in getting used to principles and process of hospitals than male are.

Fisher (1971) has should the quality evaluation and efficiency of treatment. It is found that patients will evaluate quality form the attention of medical doctor to patients, the willing to listening to dominate their time for the conversation with patients.

Richardson (1972) has studied the using of health service. The result of the research is that the wealthy people come to receive the service more than the poor people come to receive the service more than the poor people that are the percentage of 73.0 and 4.0 respectively. It can be said that the people with high salaries have more chance in choosing more efficient service center than the people with lower income.

Tessler and Mechanic(1975) have studied the basic treatment in the United States of America by comparability service receiver groups who have paid the bill in advance

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and other health insurance groups of 712 people during summer in 1973. In addition, the data have been collected groups. The result of the study is that the satisfaction of personnel to received service will be different form each other because of different expectation and experience.

Fronch (1976) has suggested that the person who is well-educated and in high society will expect higher standard of medical service than the person who has the lower education. They will not be satisfied if their expectation is not responded and fulfilled.

Klaumer (1981) has studied the reception of information and communication. It is found that having the good transportation, radio, and newspaper, including having the chance to contact the capital city community make people have wider perception. Therefore people who receive quality.

Habib and Vaghan (1982-1983) have surveyed the decision in using health service of people in the southern past of Irag by applying the interview of heads of 324 families. It is found that using service in health care center will be decreased if there is longer distance of journey because of the uncomfortability in using service.

Mariyn T. Oerst (1984) has studied the approach of measuring service quality the satisfaction according to the perception of patients with cancer by studying the basic data of patients' perception and questioning the opinion of the facilities which cause the perfect service quality. Among 20 patients who gain the chemical treatment who are 12 female and 8 male at the age of 23-74 years old and used to receive the chemical treatment in more than 6 months. The result of study is that the facilities have to be consisted of the waiting time, the suggestions, facilities, the adequacy of providing the medical care and treatment, the appropriate relaxing places and the communicative behavior of nurses.

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Spitzer(1988) has suggested that the most indispensable factors of medical service are treatment quality which is consisted of physical and psychological factors by having the measurement indication of quality as followings:

1. The friendliness.
2. Receiving the good care and attention form medical care team.
3. Receiving the health care individually.
4. Using modern technology.
5. Having the well-known and acceptable medical doctors team.
6. Having the service in all sections.
7. The comfortable place.

According to the study of satisfaction of patients to the medical doctors of Devid S. Brody, et al. (1980) it is the study of evaluation, the relationship between the perception of patients towards different activities which are satisfactory with the medical doctors, the selection of the access to service and the required characters of activities and the received one. It is found that the acceptability of service depends on the providing of knowledge, suggestions and costs.

Donald M. Berwick (1989) has studied the health service and health care and treatment. It is found that 4 components of providing health service are work efficacy, the used resources, the best work performance and objectives of health care. Moreover, it is found that health care service quality has to be measured evaluated and developed continuously for the next successful work performance.

Bopp D. Kenneth (1990) has studied health care service in performing way of 394 beds sized hospitals. The result of research has found that

1. The important component of performing service quality in health care which service receivers want are the mercy, the satisfaction, the acceptability, the participation, the modesty and the friendliness.
2. The indispensable components of performing vocational quality which service receivers want are warm welcome, the comfortability of opened mind and the sincerity.

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3. The important components of performing service quality in potentiality which service receivers want are using the knowledge, the capacity and skill in solving the problems efficiently.

Emin Babakus (1991) has studied the factors defining service quality form the best reliable information sources of service receivers of breast surgery are the medical doctors, television, newspaper and radio respectively.

Al Turiki M.H. & al Falahila (1992) has proposed the result of research about the study of possibilities in training and developing the research of physically assistive devices project in Saudi Arabia. It is found that there is no evidence of training program and only on research center of physical equipments. It is found that there are 3 difficulties of working are that personnel lack of the appropriate quality. There is no continuous personnel training project, including the lack of equipments and instuments.

Damino P.C.,Monany E.T. (1995) has studied the processing of developing quality of emergency patients plan in the medical school of the United States of American. There is an attempt of developing the satisfaction of patients by setting up the project of service receivers who are the key people. The basic standard of timetabling comes form the perception of patients, development, teamwork service and principled performance by letting everyone participate in providing service form the theoretical study, ideas and related research result. The research has concluded the framework of attitudes towards the research study by using the idea about service quality of Parasuraman et.al. which is consisted of reliability, assurance, tangibles, empathy and responsiveness (Parasuraman, Berry and Zeithaml,1991)

Aday and Anderson (1978) has studied the satisfaction of people to the health care service in the United States of American in 1970 by conducting an interview of people about their ideas towards health care service center. It is found that the most unsatisfactory for people are the uncomfortability of receiving service and cost in

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receiving service which derived form 6 basic factors, related to the satisfaction of medical clients and the feeling of patients about received service as the following :

1. The satisfaction to the comfortability form received service has been classified as the followings :

1.1 The waiting time in the service center.

1.2 Receiving the health care whenever they want.

1.3 The comfortability form received service in the service center.

2. The satisfaction to the cooperation of service can be classified as the followings:

2.1 Receiving all service in one place is that patients can ask for any kinds of service of whatever they need.

2.2 The medical doctors are interested in all health of patients in both physical and psychological aspects.

2.3 The medical doctors has followed the outcome of treatment.

3. The satisfaction of friendliness and the interest of service providers that are the friendliness and good personality of service providers and the empathy to patients.

4. The satisfaction of information received form service which can be classified as the followings:

4.1 Providing information about the cause of disease.

4.2 Providing information about the health care treatment to patients, such as the performance of patients, the use of medicine, ect.

5. The satisfaction to service quality is the quality in all health care service which patients towards service of health care center.

6. The satisfaction of cost when using service is all costs which patients have to pay for the treatment of the disease.

Boesch (1972) the German medical doctors has conducted the research in Thailand about the relationship between the medical doctors and patients during November in 1970 and June in 1971 by collecting data form 4 hospitals and a health care center in the first class. The result of study is that patients are not satisfied with service

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and hospitals, such as the waste of waiting time, the unfriendliness of patients, the uninformed treatment result, the expensive cost of treatment for the lower quality of medicine. What patients want to know are in these 3 questions: what their illness are whether they are in danger and how long it takes for the medical treatment.

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CHAPTER III
METHODOLOGY

The study of the opinion of clients on service quality of assistive devices for disabled persons in general hospitals, Ministry of Public Health , Kanchanaburi province is a research with the important objectives to study the opinion of clients on service quality of assistive devices for disabled persons in general hospitals, Ministry of Public Health, Kanchanaburi province, to compare the opinion of different population of clients on service quality of assistive devices for disabled persons, and to study problems and obstruction of service quality of assistive devices for disabled persons.

Research Methods :

1. Population and Sample
2. Research Instrument
3. Making Research Instrument
4. Data Collection
5 Data Analysis

1. **Population and Sample**

1.1 Target population

- Two hundred and twenty of blind persons, deaf and hard of hearing persons, and persons with physical disabilities who are over 18 years old and ever received assistive devices for disabled persons service form January 2001 to April 2002 at Paholpolpayuhasena Hospital, Makarak Hospital. Both are general hospitals in Kanchanaburi province.
- These disabled persons live in Kanchanaburi province.

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1.2 Sample

1. Calculation sample size : Cochran (1977)

$$n = \frac{n_0}{1 + \frac{n_0}{N}}, \quad n_0 = \frac{Z^2_{\alpha/2}\ CV^2}{r^2}, \quad CV = \frac{s}{\bar{x}}$$

N = The number of disabled persons who ever received assistive devices for disabled persons service at Paholpolpayuhasena Hospital and Makarak Hospital form January 2001 to April 2002 equals 220 persons.

n = Sample size.

α = Probability of the difference between estimate value and real value which exceeds error value (d = 1.205), set $\alpha = 0.05$ consequently $Z_{\alpha/2} = 1.960$.

CV= Coefficient of variation of opinion on service quality gets form pilot study by collecting data form 20 persons of 3 categories disabled persons who are not in this sample and ever received assistive devices for disabled persons service at Paholpolpayuhasena Hospital and Makarak Hospital, both are general hospitals in Kanchanaburi province. It is found that the average point of clients' opinion on service quality ($\bar{x}$) equals 120.50 points and standard deviation (s) equals 12.68.

The formula is $CV = \frac{s}{\bar{x}} = \frac{12.68}{120.50} = 0.105$

r = Relative error set at 1%

$$n_0 = \frac{(1.96)^2 \times (0.105)^2}{(0.01)^2} = 422.54$$

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$$n_0 = 422.54 = \frac{144.7}{1 + \frac{(422.54)}{220}} = 145 \text{ persons}$$

Consequently, the sample is 145 persons.

1.3 Random Sampling

Another step of this study is ramdom sampling. Kanchanaburi province has 13 districts : Muang, Tamuang, Tamaka, Panomtuan, Huaykrachao, Boploy, Nongprue, Thongpapum, Srisawad, Danmakhamtia, Saiyok, Laokwan, Sangkhla. The sample of 145 disabled persons is brought to calculate the number of disabled persons sample of the total disabled persons in proportion.

See Table 3.

Table 3 : Number of population and sample classified by district.

District	Population	Sample
Muang	111	73
Tamaka	37	24
Boploy	20	13
Tamuang	18	12
Huaykrachao	8	5
Panomtuan	7	5
Danmakhamtia	7	5
Saiyok	4	2
Laokwan	4	2

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Table 3 : Number of population and sample classified by district. (continued)

District	Population	Sample
Nongprue	2	1
Tongpapum	2	1
Sangkhla	2	1
Srisawad	1	1
Total	220	145

After getting the number of disabled persons sample, the researcher surveyed the disabled persons' names and addresses in each district by using simple random sampling method to get the data of the disabled persons who ever received assistive devices for disabled persons service at Paholpolpayuhasena Hospital and Makarak Hospital until the data was correct as calculating in each district. When the researcher collected data and did not find disabled persons as the random, the researcher randomized disabled persons sample in that district until it was correct as the number of disabled persons sample. However, the researcher collected data just 140 disabled persons because of not seeing the disable as the address, the death of disabled persons, the change of disabled persons' addresses, etc.

2. **Research Instrument**

Collecting data in this research used questionnaire. The idea of making research instrument came form studying reviews and related researches. The questionnaire can be divided into 3 sections as the following :

Section 1 is general information which includes gender, age, education, careers, salaries, information sources, aided equipments types, and frequency of receiving service by using open questions and close questions.

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Section 2 is details about service quality of assistive devices for disabled persons in general hospitals, Kanchanaburi province which includes the contents of 7 aspects of service quality :

1. The concreteness of service	5	choices
2. The facilities in using service	5	choices
3. The reliability	5	choices
4. The readiness of providing service	5	choices
5. The friendliness of officers	5	choices
6. The acknowledgement	5	choices
7. The morality of officers	5	choices

The type of questions is rating scale and includes the following scores :

Positive Question		Negative Question	
Highest	5	Lowest	5
High	4	Low	4
Moderate	3	Moderate	3
Low	2	High	2
Lowest	1	Highest	1

Analysis by Calculating Measurement Interval (Best,1977)

$$\text{Measurement Interval} = \frac{\text{Highest score} - \text{Lowest score}}{\text{Numbers of Level}}$$

$$= \frac{5 - 1}{5} = 0.8$$

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Questionnaire's Average Scores

1.00 – 1.80	means	quality level should be urgently improved
1.81 – 2.60	means	quality level should be improved
2.61 – 3.40	means	fair quality level
3.41 – 4.20	means	good quality level
4.21 – 5.00	means	very good quality level

Section 3 is problems, obstruction, suggestions on service by using open questions.

3. **Making Research Instrument**

Making research instrument has the following steps :

1. Study information, concept, theory about service quality of assistive devices for disabled persons in general hospital, Kanchanaburi province form reviews and related researches, books, and articles in many journals.

2. Interview disabled persons who ever received assistive devices for disabled persons service in general hospitals, Kanchanaburi province and related officers about service for finding basic information of research.

3. Collect and analyze information for creating conceptual framework and questionnaire which are used as research instrument.

4. Consult or ask the thesis advisor for advice about the research instrument, then prove and edit contents and language more clearly.

5. Present the improved research instrument to 3 experts for verifying correction of content, criticizing to solve problems and then improve as those suggestions.

6. Try out the improved research instrument with 20 disabled

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persons who ever received assistive devices for disabled persons service in Paholpolpayuhasena hospital and Makarak hospital and are not in the 140 disabled persons sample for verifying the clearness of content and meaning of language and calculate reliability value of questionnaire section 2 as formula of Cronbach Alpha coefficient to be equal to 0.9025.

7. Use the improved research instrument to collect data form the sample in research.

4. **Collecting Data**

In this study of the opinion of clients on service quality of assistive devices for disabled persons in general hospitals, Kanchanaburi province :

1. The researcher interviewed as the questionnaire by herself for collecting data form May to August 2002 with 2 assistant researchers who are the officers form Council of Disabled People of Kanchanaburi province and received explanation of objectives including understanding the questionnaire for being able to explain to the sample correctly.

2. The researcher sent questionnaires by mail to disabled persons who were in so long distant area that it was not convenient for her research team to go to interview them. The districts where questionnaires were sent by mail are Muang, Nongprue, Tongpapum, Srisawad, Saiyok, Laokwan, Sangkhla. 80 questionnaires were sent and 40 questionnaires were returned.

5. **Statistics of Data Analysis**

Analyze data by statistical package program. The following details are :

5.1 Descriptive statistics were used to describe data of service quality level, problem, and suggestions by number, percentage, arithmetic mean, and standard diviation.

5.2 Analytical statistics were used to try out the difference of over 3 independent data groups of the opinion of clients on service quality. Use analysis of variance (ANOVA) to try out the difference of the different pairs of data by LSD

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CHAPTER IV
RESULTS

Data analysis from the interview of the clients who ever received assistive devices for disabled persons service in general hospitals, Kanchanaburi province, from May to August 2002 has the total amount of 140 persons. The result of data analysis is presented 4 sections as the following :

Section 1 : Characteristics of clients are sex, age, marital status, education, careers, salaries, frequency of receiving service, information sources, and assistive devices types.

Section 2 : Level of Service Quality of Assistive Devices for Disabled Persons.

Section 3 : Comparative Analysis of the Opinion of Clients on Service Quality of Assistive Devices for Disabled Persons, classified as characteristics of clients.

Section 4 : Problems, obstruction, and suggestions on service quality of assistive devices for disabled persons.

Section 1 : Characteristics of clients.

Characteristics of clients are mostly male, the percentage is 64.3 , the remainder is female, the percentage is 35.7. The majority of clients' age is 35-49 years old, the percentage is 44.3, and the sequence is between 20-34 years old, the percentage is 30.0. Entirely, the clients' average age is 37.07 years old. Marital status is mostly married, the

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percentage is 47.1, and the sequence is single, the percentage is 40.0. The majority of education is primary education, the percentage is 42.9, and the sequence is non-education, the percentage is 27.1. The majority of careers is private business owner, the percentage is 31.4, and the sequence is employee, the percentage is 28.6. Salaries of clients are mostly between 1,000-2,999 baths, the percentage is 34.3, and the sequence is clients who do not have any salaries, the percentage is 27.1. The average salaries of clients is 1,000 baths. Information sources effect clients to receive service mostly come from relatives and neighbors, the percentage is 40.0, and the sequence is from doctors, the percentage is 22.9. Aided equipments types which the clients mostly received are assistive devices for persons with physical disabilities, the percentage is 67.1, and the sequence is assistive devices for blind persons, the percentage is 18.6. Frequency of receiving service is mostly 1 time, the percentage is 64.3, and the sequence is 2 times, the percentage is 31.4. (See Table 4)

Table 4 : Number and percentage of the clients, classified as personal information.

Personal Information	Number	Percentage
Sex		
Male	90	64.3
Female	50	35.7
Total	140	100.0
Age (years)		
15-19	16	11.4
20-34	42	30.0
35-49	62	44.3
50 and over	20	14.3
Total	140	100.0
$\bar{X}$= 37.1 years SD = 11.27 min = 18 years max = 80 years		

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Table 4 : **Number and percentage of the clients, classified as personal information. (Continued)**

Personal Information	Number	Percentage
Marital Status		
Single	56	40.0
Married	66	47.1
Widowed, Divorced, Separated	18	12.9
Total	140	100.0
Education		
Non-education	38	27.1
Primary education	60	42.9
Secondary education	32	22.9
Vocational education	4	2.8
Diploma	6	4.3
Total	140	100.0
Careers		
Government official	6	4.3
Government enterprise official	2	1.4
Employee	40	28.6
Private business owner	44	31.4
Unemployed	48	34.3
Total	140	100.0
Salaries (bahts)		
No Salary	38	27.1
Salaries	102	72.9
< 1,000	34	33.3
1,000-2,999	48	47.1
3,000-5,999	16	15.7

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Table 4 : **Number and percentage of the clients, classified as personal information. (Continued)**

Personal Information	Number	Percentage
6,000 +	4	3.9
Total	140	100.0
min = 300 bahts, max = 11,000 bahts, quartile deviaton = 1,500 bahts.		
Information Sources		
Doctors	32	22.8
Mass communication	26	18.6
Relatives-Neighbors	56	40.0
Associations	26	18.6
Total	140	100.0
Assistive devices Types		
Assistive devices for blind persons	26	18.6
Assistive devices for deaf and hard of hearing persons	20	14.3
Assistive devices for persons with physical disabilities	94	67.1
Total	140	100.0
Frequency of Receiving Service		
1	90	64.3
2	44	31.4
3 +	6	4.3
Total	140	100.0

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Section 2 : Level of service quality of assistive devices for disabled persons.

The level of service quality is entirely good, on average by 3.51. When it is already classified as aspects of service quality, it is found that 4 aspects are good level. Service quality of officers' morality is the highest, the average is 3.89. The sequence is the friendliness of officers, the acknowledgement, the reliability with the averages of 3.73, 3.49, 3.48 respectively. 3 fair level aspects of service as the clients' opinion are the concreteness of service, the facilities in using service, the readiness of providing service, the averages are 3.37, 3.31, 3.28 respectively. (See Table 5)

Table 5 : **Average and standard deviation of the opinion of clients on service quality of assistive devices for disabled persons, classified as the following aspects.**

Service Quality	Average	Standard Deviation	Quality Level
Concreteness of service	3.37	0.69	Fair
Facilities in using service	3.31	0.67	Fair
Reliability	3.48	0.53	Good
Readiness of providing service	3.28	0.56	Fair
Friendliness of officers	3.73	0.61	Good
Acknowledgement	3.49	0.67	Good
Morality of officers	3.89	0.64	Good
Entire of Service Quality	3.51	0.48	Good

Section 3 : Comparative analysis of the opinion of clients on service quality of assistive devices for disabled persons, classified as characteristics of clients :

Comparison of service quality is found that the female's average of service quality equals 3.54 and the male's average of service quality equals 3.49, so the female's

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average is slightly higher than the male's. When comparing the averages of service quality between female and male, it is found that their difference is not significant (p-value = 0.143). Therefore, both male and female are not different in the service quality's opinion.

The group of 15-19 year-old clients is the highest service quality's average of 3.71. The group of 20-34 year-old clients is the lowest service quality's average of 3.43. When comparing the difference of all 4 groups' averages, it is found that it is not significant (p-value = 0.268). Therefore, the different clients' age does not make any difference in the service quality's opinion.

The widowed, divorced, and separated are the highest average of 3.58. The married clients are the lowest average of 3.47. When comparing the difference of all 3 groups' averages, it is found that it is not significant (p-value = 0.644). Therefore, the different marital status of clients does not make any difference in the service quality's opinion.

The group of vocational education is the highest service quality's average of 3.64 and the group of the secondary education is the lowest service quality's average of 3.44. When comparing the difference of all 5 groups' averages, it is found that it is not significant (p-value = 0.873). Therefore, the different education of clients does not make any difference in the service quality's opinion.

The clients who are government enterprise officials are the highest average of 4.03. The clients who are employees are the lowest average of 3.37. When comparing the difference of all 5 groups' averages, it is found that there is a difference in statistical significance (p-value = 0.031). The different 3 pairs are between government official and government enterprise official, between government official and unemployed, and between employee and unemployed. Therefore, the clients in the group of different careers differ in opinion on service quality.

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The clients who earn no salary are the highest average of 3.68, and those who earn 1,000-2,999 bath per month are the lowest average of 3.36. When comparing the difference of all 5 groups' averages, it is found that there is a difference in statistical significance (p-value = 0.052) . The different clients are those who earn 1,000-2,999 bath and those who earn no salary. Therefore, the clients who earn different salaries differ in opinion on service quality.

Information sources from doctors are the highest average of 3.76. Information sources from associations are the lowest average of 3.33. When comparing the difference of all 4 groups' averages, it is found that there is a difference in statistical significance (p-value = 0.004) . The different pairs are between the clients who received information from doctors and those who received information from relatives-neighbors, between the clients who received information from doctors and those who received information from associations. Therefore, the clients who received information from the different information sources have the different opinion in service quality.

The clients who received the service of assistive devices for persons with physical disabilities are the highest average of 3.57 and those who received the service of assistive devices for deaf and hard of hearing persons are the lowest average of 3.24. When comparing the difference of all 3 groups' averages it is found that there is a difference in statistical significance (p-value = 0.01). The different pair is between the clients who received the service of assistive devices for persons with physical disabilities and those who received the service of assistive devices for deaf and hard of hearing persons. Therefore, the clients who received the different assistive devices have the different opinion in service quality.

The clients who received service for over 3 times are the highest average of 4.96. The clients who received service for 1 time are the lowest average of 3.45. When comparing the difference of 3 groups' averages it is found that there is a difference in statistical significance (p-value = 0.021). The different pair is between the clients who

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received service for 1 time and those who received service for over 3 times. Therefore, the different frequency of receiving service makes the opinion of service quality different (See Table 6).

Table 6 : **The comparison of service quality on assistive devices for disabled persons, classified as the characteristics of the clients.**

Variables	Service Quality			F-ratio	p-value
	n	$\bar{x}$	S.D.		
Sex					
Male	90	3.49	0.52	2.2	0.143
Female	50	3.54	0.41		
Age (years)					
15-19	16	3.71	0.46	1.3	0.268
20-34	42	3.43	0.45		
35-49	62	3.51	0.48		
50 and over	20	3.51	0.55		
Marital Status					
Single	56	3.53	0.45	0.4	0.644
Married	66	3.47	0.53		
Widowed, Divorced, Separated	18	3.58	0.43		
Education					
Non-education	38	3.49	0.47	0.3	0.873
Primary education	60	3.54	0.48		
Secondary education	32	3.44	0.54		
Vocational education	4	3.64	0.45		
Diploma	6	3.55	0.36		

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Table 6 : **The comparison of service quality on assistive devices for disabled persons, classified as the characteristics of the clients. (Continued)**

Variables	Service Quality			F-ratio	p-value
	n	$\bar{x}$	S.D.		
Careers					
Government official	6	3.21	0.32	2.7	0.031*
Government enterprises official	2	4.03	0.00		
Employee	40	3.37	0.45		
Private business owner	44	3.52	0.52		
Unemployed	48	3.62	0.46		
Salaries					
No Salary	38	3.68	0.43	2.4	0.052*
Salaries					
<1,000	34	3.45	0.52		
1,000-2,999	48	3.36	0.40		
3,000-5,999	16	3.54	0.58		
6,000+	4	3.56	0.78		
Information Sources					
Doctors	32	3.76	0.27	4.7	0.004*
Mass communication	26	3.49	0.48		
Relatives-Neighbors	56	3.46	0.49		
Associations/charity organizations	26	3.33	0.58		

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Table 6 : **The comparison of service quality on assistive devices for disabled persons, classified as the characteristics of the clients. (Continued)**

Variables	Service Quality			F-ratio	p-value
	n	$\bar{x}$	S.D.		
Assistive Devices Types					
Assistive devices for blind persons	26	3.47	0.55	4.2	0.01*
Assistive devices for deaf and hard of hearing persons	20	3.24	0.52		
Assistive devices for persons for with physical disabilities	94	3.57	0.44		
Frequency of Receiving Service					
1	90	3.45	0.48	3.9	0.021*
2	44	3.57	0.45		
3+	6	3.96	0.46		

* Statistical Significance at level of 0.05

Section 4 Problems Obstruction and Suggestions on Service of Assistive Devices for Disabled Persons in General Hospitals, Kanchanaburi Province

Interview from the questionnaires with the disabled persons who ever received the assistive of devices for disabled persons service in general hospitals, Kanchanaburi province are amount of 140 persons. There are 63 disabled persons who did those questionnaires. It is 45.0 %. The following details are :

1. Service Problems of Assistive Devices for Disabled Persons

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Making an appointment: making an appointment but not correct as schedule is the most service problem. It is 57.1%. Making an appointment to receive assistive device for disabled person but failed is 23.8%. The sequence is the topic of assistive device for disabled person. A few choices of kinds of assistive devices for disabled persons are 15.9%. A long time step of repairing assistive device for disabled person is 12.7% and a difficult step of requesting assistive device for disabled person is 9.5%. The last one is service officer as the following details: Waste time for calling name is 11.1%. No officer to give information is 6.3%. Officers did not know service steps of assistive devices for disabled persons are 12.7% (See Table 7)

Table 7 : **Number and percentage of service problems.**

Problems	Number	Percentage
Service Officer		
- Waste time for calling name	7	11.1
- No officer to give information	4	6.3
- Officer did not know service steps of assistive devices for disabled persons	8	12.7
Making an Appointment		
- Making an appointment but not correct as schedule, waiting	36	57.1
- Making an appointment to receive assistive device for disabled person but failed	15	23.8

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Table 7 : **Number and percentage of service problems. (Continued)**

Problems	Number	Percentage
Assistive Device for Disabled Person		
- A few choices of kinds of assistive devices for disabled persons	10	15.9
- A long time step of repairing assistive device for disabled person	8	12 .7
- A difficult step of requesting assistive device for disabled person	6	9.5

2. Suggestions of Assistive Devices for Disabled Persons Service

Interview from questionnaires with the 140 clients who ever received assistive devices for disabled persons service returned with 48 clients' suggestions. It is 34.3%. In their opinions, the clients suggest that the service steps should be: reducing delay of steps of service is 16.7%, making an appointment on time is 20.8%, a few assistive devices for disabled persons are 8.3%. Evaluation after receiving service of assistive devices for disabled persons is 12.5%. Readiness of assistive devices for disabled persons to receive service every time is 14.6% and repairing assistive devices for disabled persons when they are damaged is 6.3%. For suggestions of the durable quality of assistive devices for disabled persons, the clients suggest that they should be improved to be strong and durable which the percentage is 18.8 and assistive devices for disabled persons should be lightweight, beautiful, and convenient which the percentage is 25.0. The suggestions of convenience, coordinating, and support are divided into the following subtopics: reducing difficult steps of receiving the support is 12.5%, providing officers to give information is 6.3%, needing officers to take care them as same as normal persons is 4.2%, and needing sympathy more than anything else is 4.2%. (See Table 8)

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Table 8 : Number and percentage of suggestion on service.

Suggestions on Service	Number	Percentage
Durable Quality of Assistive Devices		
- Should be improved to be strong and have good quality	9	18.8
- Lightweight, beautiful, convenient, durable	12	25.0
Steps of service		
- Delay of steps, reducing steps, not waiting for a long time	8	16.7
- Making an appointment to receive assistive devices for disabled persons should be on time	10	20.8
- Some kinds of assistive devices for disabled persons are few and it causes to receive service late	4	8.3
- Evaluation after receiving service of assistive devices for disbled persons	6	12.5
- Assistive devices for disabled persons should be ready for service every time	7	14.6
- Damaged assistive devices for disabled persons should be changed or repaired	3	6.3
Convenience, Coordinating, Support		
- Difficult and complex steps of receiving the support	6	12.8
- Providing officers to give information and help the clients to understand the potential assistive devices for disabled persons	3	6.3
- Needing officers to take care disabled persons as same as normal persons	2	4.2
- Needing sympathy more than anything else	2	4.2

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CHAPTER V
DISCUSSION

From the result of data analysis, the opinions of clients of assistive devices for the disabled persons in general hospitals in Kanchanaburi province can be discussed as the followings:

Service quality of assistive devices for the disabled persons in general hospitals in Kanchanaburi according to the opinion of clients in general.

From an interview of clients of assistive devices for the disabled persons in general hospitals in Kanchanaburi province, it is found that the opinion of clients about service quality in general is in positive level, the average of 3.51. This average is consistent to the study of Panida Kamya (1995) which find out that service quality is expected to be in the high level and degree in every sections in the private hospitals in Bangkok. Furthermore, Sakaowadee Duangden (1995) has found out that expected medical service quality in the public hospitals in Bangkok is also at the high percentage, In addition, quality is the capacity in responding the clients' need (Jiroot Sriratanaban,1994) so that it aims to make customers satisfied (Penjan saeprasarn, 1996) . As a result, service quality according to clients of assistive devices for the disabled persons in general hospitals in Kanchanaburi is at the high percentage. This means that clients think that service providing is appropriate regarding to the pinion of clients. They also think that service providers can provide service skillfully and there is the good relationship between clients and service providers in the communicative quality aspects.

Service quality of assistive devices for the disabled persons in the general hospital in Kanchanaburi regarding to clients' opinion, classified in the aspects of income.

In the tangibles aspect, clients think that service quality is in the moderate

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percentage the average of 3.37 or at the fifth rank in all 7 aspects of service quality. Since clients know that apart from service of assistive devices for the disabled persons, there should be service in other facilities : thinking water, newspapers and televisions which still be less than what clients want. It can be said that clients want other service which is irrelevant to service of assistive devices of the disabled persons and can facilitate them while waiting for the long time. Even if it is the crowded and uncomfortable place, these facilities may be able to entertain them and thereby make them relaxed.

Clients think that the comfortabilities in using service is at the moderate level (the average of 3.31). Clients can access to that service conveniently and gain the facilities in using service. Furthermore, the process should not be complicated or confused. The moderate level of facilities in using service in clients' opinions means that the process of using service is complicated in some ways, and takes some time in waiting, including the uncomfortable journey for coming to use the service on the other hand, according to the study of Wiroj Tangjaroensatien and team about service quality in hospitals in the perspectives of patients, it is found that the reason of choosing to use the service because of the most comfortable journey.

Clients think that the reliability and confidence in using the service is in the good level (the average of 3.48). The reliability is thereby indispensable. Service user access that received service has to be reliable and believable. Finally, it should be able to provide medical treatment to tormented patients and make them relieved in their pain (Youssef, et al.1996) which is at the good level, since clients know that they come to use the service so they have confidence in service providing with assistive devices for the disabled persons.

For the readiness in providing service, clients that service quality is in the moderate level (the average of 3.28) which is the lowest average among 7 aspects. It can be said that service providers is not ready and willing to provide service as efficient as they can. This might be because of many reasons: there is the inadequate assistive

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devices for the disabled persons and the speed of providing service is not efficient enough since the process in purchasing is still be complicated and slow for clients.

For the friendliness of officers, clients think that quality of providing service in this aspect is good (the average of 3.73). It can be explained that clients are aware of the friendliness, modesty, caring and empathy of service providers to clients. In addition, the disableds often feel that they themselves have the emotional attack from being disabled. From the study about quality the perfroming aspects, it is found that in the health care aspect, service receivers want the mercy, the satisfaction, the acceptability, the cooperation, the modesty and the friendliness (Bopp D.Kenneth, 1990). As a consequence, it can be interpreted that officers in providing service of assistive devices for the disabled persons respond to clients' wants very well and can take care of clients according to their needs. This can be used for supporting the restoration of the disabled‘ s potentiality in accordance with the opinions of the United Nations.

According to clients opinions in providing knowledge, suggestions and consultancy is in the good level (the average of 3.49). It can be explained that clients profitably gain the in fromation, knowledge, and consultancy related to assistive devices for the disabled persons in the appropriate way. Apart from suggestions, consultancy, there are suitable documents and published papers related to assistive devices for the disabled.

In the expect of morality of officers, according to clients' ideas, it is in the good level (the average of 3.89). It can be interpreted that officers for providing service regarding to the needs of clients, both of the disabled and the normal people. The disabled gain the right according to legislation low of restoring the potentiality of disabled persons rightly.

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A comparison of difference of service quality according to clients' attributes

In the perspective of gender, it is found that female has the higher percentage of service quality than male has that is 3.49 and 3.54 respectively when compared to the opinion about service quality among male and female, there is insignificance between them (p-value = 0.143). On the other hand in the study of Wilson(1970) it is found that female has more chance in taking the health care and is more comfortable and familiar to the principles, processes of hospitals than male has. Therefor, female has more perception of service than male has. It can be explained that clients of assistive devices for the disabled in the public hospitals in Kanchanaburi have different emotional and physical status from the normal people. When coming to use service here, they thereby think that they are the disabled people. Both male and female who use the service of assistive devices for the disabled for better quality of their life can increasingly take care of themselves so the disabled, both male and female have insignificance in their attitudes towards service quality.

For the age, it is found that service receivers with the age of 15-19 years old has the highest average of service quality, the average of 3.71. The group of 20-34 years old service receivers has the lowest service quality averange, the average of 3.43 when compared to the difference of the average among 4 group, it is found that there is insignificance (p-value=0.268). It can be interpreted that providing service of assistive devices for the disabled in general hospitals is providing service to everybody equally so that clients with different age have no different opinions about service quality of assistive devices for the disabled persons.

In the perspectives of marital status, it is found that clients with married, window, divorced, separated status have the highest average of 3.58 and clients with married status have the lowest average of 3.47. When comparing the difference of the average among 3 group, it is found that there is insignificance (p-value=0.644). It can be said that clients have experience in using service. The received service should have high quality with the

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right principle and approach. Furthermore, service providers understand and take care have different marital status, everyone is equal, Not separated according to the marital status for service providers, people with different marital status have no different attitudes towards service quality.

For the education, it is found that clients with vocational education have the highest average of service quality, that is the average of 3.64 and clients in the secondary schools have the lowest service quality average of 3.44. When comparing the difference of the average of 3 groups, it is found that there is insignificance (p-value=0.873). It can be explained that most disabled persons is not well- education since in the past they had journey and education etc. This cause the similar education level among the disabled persons.

In the perspective of career, it is found that clients who work in state enterprise have the highest average of service quality, 4.03 and clients who work for government have the lowest average of service quality, 3.21. When comparing the difference of average of 5 groups, it is found that there is the significance (p-value=0.031). There are 3 different pairs, which are government officers and persons who work in state enterprise, government officers and unemployed persons, and employees and unemployed persons, It can be explained that most clients who are disabled and work in state enterprise, including unemployed persons do not know the process of the public hospitals. The amount of these above persons are equal to clients who are government officers who know the process and principle of the public section. Therefor both group have different opinions about service quality. As a result, opinions about service quality.

According to salary, it is found that clients without income have the highest average of service quality, that is 3.68 and clients with the income of 1,000-2,999 baths have the lowest average of service quality, 3.36. When comparing the difference of average among 5 group, it is found that there is the significance (p-value = 0.052). The different pair is clients without income and clients with the income of 1,000-2,999 baths

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per month. It can be interpreted that people with different income have some difference in the attitude towards service quality. This may be because the general hospital in Kanchanaburi are the public hospitals which provide service of assistive devices for the disabled persons without any cost because of the supported money from the government. The disabled people can use the right in using service of assistive devices for the disabled persons without any cost according to the legislation low of restoring the potential of the disabled people. Providing service is equal to all riches or poors of clients. The disabled people with the moderate income expect that provided service will better and as valuable as the money they spent for it. When clients is not as what they expect it will cause the different opinion about service using.

The infromation source find out that clients gain most infromation sources from the doctors which have the highest average of service quality, 3.76. it is mass communication, relatives-neighbors, association/charity organization the average of 3.49, 3.46, 3.33 respectively. When comparing the difference among 4 groups, it is found that the significance (p-value=0.004). The different pair is the doctors and the relatives-neighbors. The pair that gain the infromation from the doctors and the association/charity organization. Emin Babakus (1991) finds out that the most reliable infromation sources, often used by service is the doctors because of their specific experts. Two way communication which makes clients, especially the disabled persons understand. These disabled persons need to know clearly about assistive devices for the disabled persons for the right using method. For the one-way reception of infromation from different medias is television, newspapers, radio. Clients have no chance for asking for the details so they perceive the low quality. The study of Klaumer (1981) is found that the persons who gain different infromation will have different evaluation of service quality.

The classification of assistive devices finds out that clients of assistive devices for the disabled persons for physical disabilities have the highest average of 3.57 of service quality. Clients of assistive devices for blind persons have the average of 3.47 and clients of assistive devices for disabled persons with deaf and hard of hearing disability have the

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lowest average of 3.24. When comparing with the difference of the average among 3 group, it is found that there is significance (p-value=0.016). The different pair is the group of clients of assistive devices for the disabled persons with physical disabilities and the group of clients of assistive devices for disabled persons with deaf and hard of hearing disability. It can be interpreted that the disabled persons with physical or mobility disability who lose their ability of movement make them unable to follow their daily life as non-disabled persons. And thereby make them come to receive service more often. The disabled persons with deaf and hard of hearing disability have more experience in treatment. Kotler (1994) suggests that the attitude of clients towards service quality from their experience and the fromer service using. When compared, it causes better attitudes towards service. As a consequence, more service using of assistive devices for the disabled persons with physical and mobility disability makes them impressive and satisfied with better received service which is different from the disabled persons who receive service of other assistive devices for the disabled persons.

For the frequency of clients, it is found that clients who use service more than 3 times have the highest average of service quality, that is 3.96. The second rank of 3.57 is from clients who uses service more than 2 times. Finally, the lowest average of 3.45 is from clients who use the service merely 1 times. When comparing the difference of the average among 3 groups, it is found that there is significance (p-value = 0.021). The different pair is the group of clients of 1 time and the group of clients more than 3 times. It can be said that the experience of using service has an effect on the attitudes of clients. It means that if clients are impressive with the service, they will use that service again (Johnson & Lyth in Brown, (Eds)., 1991) and if they receive the expected service, the level of expectation will be continuously increasingly higher (Satit Wongsawan, 1983). Receiving service merely 1 time may make them have less perception of service quality and thereby have less opinions of service quality. When comparing with more frequent service using, more experience of using service cause clearer understandings of service process so the frequency of using service leads to difficulties in using service.

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From an interview of 140 clients of assistive devices for the disabled persons in the general hospitals in Kanchanaburi, 63 persons of the percentage of 45.0 show their opinions about the difficulties and 48 persons or the percentage of 34.3 give the suggestions as followings:

About the officials, the problems are that there is the long waiting time of calling for receiving service is 11.1%, no officials for being receptions is 6.3% and unaware of the process of using service of assistive devices for the disabled persons are 12.7% think that these problems may be because the general hospital are the public service which have to provide before and after service according to the received queuing. Some clients may not understand the service providing system and a small amount of officials in service section of assistive devices for disabled persons cause late providing service, not as efficient as clients want. Furthermore, some officials are still not know about the process of using service since the section is still not produce practical manual seriously.

For the appointments, making an appointment but not correct as schedule is 57.1% , making an appointment to receive assistive devices for disabled persons but failed is 23.8%. gain the mistaken appointment because of the requirement system of assistive devices for the disabled persons from Sirinthorn center. This requirement system has to be passed to the center before getting the allowance. After that there has to be the reception of assistive devices of the disabled persons and then provide them to the disabled persons. This is because hospitals do not have their own assistive devices for the disabled persons in their stock, and therefore cause the wrong appointment. In addition, it takes some time in producing and finding equipments and some equipments have to be invented by the experts. So some clients may not receive assistive devices for the disabled persons as their appointments.

For assistive devices for the disabled persons, there is less choice of assistive devices for the disabled persons are 15.9%. A long time step of repairing assistive devices for disabled persons are 12.7% and a difficult step for requesting assistive

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devices for disabled persons are 9.5%. Since assistive devices for disabled persons are received assistive devices from Sirinthorn center for restoring health care service which need some budgets for providing service to the disabled persons in accordance with the legislative low of restoring the capabilities. Therefore, there is less choice of assistive devices according to the received budgets. The suitable reparation of assistive devices for disabled persons has to take long time. In addition it is so complicated that need to have expert technicians to do it. If there is the inppropriate use of assistive devices for disabled persons, it will cause more obstacles in following their daily life.

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CHAPTER VI
SUGGESTIONS

This research study is the survey research with objectives of studying the service quality level in accordance with the attitudes of clients of assistive devices for the disabled persons in the general public hospitals in Kanchanaburi. The studied sampling group are 3 types of clients who are the disabled persons as followings : the disabled persons with physical or mobility disablement, the disabled persons with blind disablement and the disabled persons with deaf and hard of hearing disablement with the age of 18 up serveyed from 140 persons who used to use service in the general public hospitals in Kanchanaburi. There was the collection of infromation from January 2001-april 2002 by conducting an interview. The applied equipments are interview froms which the researcher has designed and they have been contextually proved by the qualified persons. The mentioned interview froms have been tried out with 20 disabled persons in Kanchanaburi and been calculated for its reliability. Then questionnaires are used with the studied sampling group and analysed by statistical package program for calculating frequency, the percentage, the average and comparative analysis of the service quality average regarding to the opinions of clients by applying analysing statistics of variables and using LSD for the test of difference.

The research summary

The result of analysing the general data from the sampling groups. The general characters of the sampling groups are found out that 140 client who are in the sampling groups, most of them are male at the percentage of 64.3. The percentage of 44.3 have the age of 35-49 years old, the percentage of 47.1 are married and the percentage of 42.9 are graduated from the primary school. The percentage of 34.3 have the income of 1,000-

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2,999 bahts, the percentage of 34.3 have no occupation or are unemployed and the percentage of 40.0 have gained the infromation from their relatives - neighbors. Assistive devices for persons with physical disability used in service are the percentage of 67.1 and the most frequent of receiving service is one times in the percentage of 64.3.

The result of analysing service quality level in accordance with the opinions of clients.

Service quality level of assistive devices for disabled persons in the good level at the average of 3.51. when classified according to the income, it is found that service quality which is in the good level are in all 4 aspects of the morality of officials, the friendliness of officials, the providing knowledge, suggestions and consultancy, and the reliability. The moderate service quality level according to clients' opinions is in 3 aspects the concreteness of service, the facilities of using service and the readiness of providing service.

The result of the comparative analysis of service quality according to clients' opinions classified in accordance with clients' characteristics.

Male clients have the higher average of service quality than female clients. They have insignificance of opinions towards service quality. (p-value = 0.143).

Clients at the age of 15-19 years old have the highest average of service quality, that is 3.71. When comparing the difference of average, it is found that there is insignificance (p-value=0.268) so persons with different age have no different opinions towards service quality.

Clients with different marital status, married, widow, divorced or separated have the highest average of service quality, 3.58. When comparing the difference of the average, it is found that there is insignificance (p-value=0.644) so persons with different marital status have no different opinions towards service quality.

Clients who have the vocational study level have the highest of average, it is found that there is insignificance (p-value=0.870) so persons with different education level have no different opinions towards service quality.

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Clients who work in state enterprise official have the highest average of 4.03. When comparing the average, it is found that there is significance (p-value=0.031). The different pair is government official and persons who work in government enterprises official and unemployed persons, and employees and unemployed. There, clients who have different careers will also have different opinion towards service quality.

Clients who have no income have the highest average of service quality, that is 3.68. When comparing significance (p-value=0.052) so service with different income will have different opinions towards service quality.

Clients who gain information the doctors have the highest average of 3.76. When comparing average it is found there is the difference in significance (p-value=0.004) The different pair is clients who gain the doctors information and clients who gain the information from the relatives-neighbors, the pair persons who gain the doctors information and clients who gain the information from the association so the different received information sources cause different opinions towards service quality of clients.

Clients of assistive devices for the disabled persons with physical disability who have the highest average of service quality, that is 3.57. When comparing the average, it is found that there is significance (p-value = 0.01). The different pair is clients of assistive devices with deaf and hard of hearing disability and clients of assistive devices for the disabled persons with physical or mobility disabledment. As a consequence, the use of different assistive devices for the disabled persons cause the different opinions of clients towards service quality.

clients using service more than 3 times have the highest average of service quality, that is the average of 3.96. When comparing the average, it is found that there is the significance (p-value =0.021). The different pair is clients of 1 time and clients of more than 3 times so clients who use service with different frequency have the different opinions towards service quality.

The conclusion of difficulties, problems and suggestion of clients is that there are 63 clients at the percentage of 45.0 who show the opinions about problems and difficulties and 48 clients at the percentage of 34.3 provide the suggestions as followings:

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The problems in using service is that about the officials, the problems are that there is the long waiting time of calling for receiving service is 11.1%, no officials for being receptions is 6.3% and unaware of the process of using service of assistive devices for the disabled persons are 12.7%. For the appointments, making an appointment but not correct as schedule is 57.1% , making an appointment to receive assistive devices for disabled persons but failed is 23.8%. For assistive devices for the disabled persons, there is less choice of assistive devices for the disabled persons are 15.9%. A long time step of repairing assistive devices for disabled persons are 12.7% and a difficult step for requesting assistive devices for disabled persons are 9.5%.

In their opinions, the clients suggest that the service steps should be:

reducing delay of steps of service is 16.7%, making an appointment on time is 20.8%, a few assistive devices for disabled persons are 8.3%. Evaluation after receiving service of assistive devices for disabled persons is 12.5%. Readiness of assistive devices for disabled persons to receive service every time is 14.6% and repairing assistive devices for disabled persons when they are damaged is 6.3%. For suggestions of the durable quality of assistive devices for disabled persons, the clients suggest that they should be improved to be strong and durable which the percentage is 18.8 and assistive devices for disabled persons should be lightweight, beautiful, and convenient which the percentage is 25.0. The suggestions of convenience, coordinating, and support are divided into the following subtopics: reducing difficult steps of receiving the support is 12.5%, providing officers to give infromation is 6.3%, needing officers to take care them as same as normal persons is 4.2%, and needing sympathy more than anything else is 4.2%.

Research Suggestions

The research result is that there is the positive opinions of the disabled persons towards service using but there is some moderate opinions of clients in 3 aspects: concreteness of service, facilities in using service, and the readiness in providing service in the general hospital in Kanchanaburi. There should be the development in services as followings :

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1. Conducting boards, including the direction symbols which are clear and appropriate for all types of disabled persons for comfortabilities and adroitness in using service without confusion.

2. For hospitals, especially in service of assistive devices for the disabled persons, there should be facilities adequate comfortable seats, drinking water and books provided for clients.

3. Improving service providing process to be adroit in using service and comfortable for clients concerning on clients, including appointment system with high quality for less waiting time clients.

4. Training officials for the readiness of providing service to clients all the time they want. This training should cover in providing equipment, knowledge, suggestions and consultancy when clients want, including the reception or information service in order to enable the disabled persons access to service using as much as possible for better life style quality.

From the research result, the factors of vocation, information sources, the type of assistive devices for the disabled persons and the frequency of using service have the effect on the opinions of service quality so service management should be considered according to :

1. The vocational difference, especially government officers have the lowest opinions towards service quality so there should be a focus on service process necessary for government. For example, there should be correct and facial requirement of document for expenses, there should be overtime service of assistive devices for the disabled persons for the facilities in using service for the disabled persons who work in official time and who do not have the time in using service in official time.

2. The difference of information sources provided for clients in different places the association, the donation institution has the lowest effect on the opinions towards service quality. As a result the public hospitals should have more reception and coordination of the right service using of assistive devices for the disabled persons with the association and the institution for donation.

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3. For the difference of received assistive devices for the disabled persons, the disabled persons with deaf and hard of hearing disability have the lowest opinions towards service quality. This may be because hospitals lack sign language translators to explain and providing information about service using may be unclear, uncovering, misunderstanding. Therefor, hospitals should provide translators as the facilities of providing service for the disabled persons with deaf and hard of hearing disability.

4. The clients who use service 1 time have the lowest opinions towards service quality. There should be an improvement on service providing process to be more facile and adroit. In addition, there should be the reception desk to provide service before and after intermittently for the equalization of clients and the highest satisfaction of clients. There should be best and efficient solution by finding other choices for clients when service using is not as they expect.

5. Performing activities and program for supporting knowledge, understandings between service providers and clients of assistive devices for the disabled persons.

The suggestions for the next research

1. There should be the study of service quality regarding to the opinions of the disabled persons who use service in the public and private hospitals in order to make the next comparison of service quality and to be the approach for improving service of assistive for the disabled persons and to satisfy the disabled persons as much as possible.

2. There should be the study of factors which have an effect on the opinions of service quality in all service of assistive devices for the disabled persons.

3. The opinions about research on service quality should be brought to study in other areas of service related to the disabled persons and other section for the overall perspectives of a country after all.

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APPENDIX A

แบบสอบถาม

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แบบสอบถาม

ความคิดเห็นของผู้ใช้บริการต่อคุณภาพบริการเครื่องช่วยคน

พิการในโรงพยาบาลทั่วไปของรัฐ จังหวัดกาญจนบุรี

ตอนที่ 1 สถานภาพส่วนบุคคล

คำชี้แจง โปรดทำเครื่องหมาย √ ลงใน [ ] หน้าข้อความที่เป็นจริงเกี่ยวกับตัวท่านมากที่สุด

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1. เพศ
   1. [ ] ชาย 2. [ ] หญิง
2. อายุของท่าน.....ปีเต็ม
3. สถานภาพสมรส
   1. [ ] โสด 2. [ ] คู่
   3. [ ] ม่าย หย่าร้างหรือแยกกันอยู่
4. ระดับการศึกษา
   1. [ ] ไม่ได้ศึกษา 2. [ ] ประถมศึกษา
   3. [ ]มัธยมศึกษา 4. [ ]อาชีวศึกษา
   5. [ ]อนุปริญญา 6. [ ]ปริญญาตรี
   7. [ ]สูงกว่าปริญญาตรี
5. ปัจจุบันท่านมีรายได้ต่อเดือน.....
6. อาชีพ
   1. [ ] รับราชการ 2. [ ]รัฐวิสาหกิจ
   3. [ ]รับจ้าง 4. [ ] ธุรกิจส่วนตัว
   5. [ ] เกษตรกร 6. [ ]ไม่ได้ทำงาน
   7. [ ] อื่นๆ โปรดระบุ.....
7. ได้รับทราบข้อมูล ข่าวสาร การให้บริการเครื่องช่วยคนพิการจากทาง
   1. [ ] แพทย์ 2. [ ]สื่อมวลชน

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3. [ ]ญาติพี่น้อง, เพื่อนบ้าน 4. [ ]สมาคม องค์การกุศล

5. [ ]อื่นๆ โปรดระบุ.....

8. อุปกรณ์เครื่องช่วยคนพิการที่ขอใช้บริการจากโรงพยาบาล

1. [ ]อุปกรณ์เครื่องช่วยคนพิการทางการมองเห็น
ประเภท.....

2. [ ] อุปกรณ์เครื่องช่วยคนพิการทางการได้ยิน สื่อความหมาย
ประเภท.....

3. [ ] อุปกรณ์เครื่องช่วยคนพิการทางกายหรือการเคลื่อนไหว
ประเภท.....

9. ท่านเคยใช้บริการเครื่องช่วยคนพิการในโรงพยาบาลของรัฐ จังหวัดกาญจนบุรี เป็นจำนวน.....ครั้ง

ตอนที่ 2 ความคิดเห็นของผู้ใช้บริการต่อคุณภาพบริการเครื่องช่วยคนพิการ ในโรงพยาบาลทั่วไป จังหวัดกาญจนบุรี

<u>คำชี้แจง</u> โปรดทำเครื่องหมาย √ ลงในตาราง ระดับความคิดเห็นเพียงข้อเดียว ในบริการต่าง ๆ ที่ท่านเห็นว่า ใกล้เคียงหรือตรงกับความรู้สึกของท่านมากที่สุด

โดยแต่ละหมายเลขมีความหมายดังต่อไปนี้

หมายเลข 1	หมายถึง	เห็นด้วยน้อยที่สุด
หมายเลข 2	หมายถึง	เห็นด้วยน้อย
หมายเลข 3	หมายถึง	เห็นด้วยปานกลาง
หมายเลข 4	หมายถึง	เห็นด้วยมาก
หมายเลข 5	หมายถึง	เห็นด้วยมากที่สุด

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ข้อที่	คุณภาพบริการ	ระดับความคิดเห็น				
		น้อยที่สุด	น้อย	ปานกลาง	มาก	มากที่สุด
	ด้านความเป็นรูปธรรมของบริการ					
1	อาคารสถานที่ของงานบริการเครื่องช่วยคนพิการ สะอาด กว้างขวาง อากาศถ่ายเทได้สะดวก					
2	มีการจัดสิ่งอำนวยความสะดวกสำหรับคนพิการ เช่น ทางลาด เพื่อสะดวกในการใช้บริการ					
3	ในหน่วยบริการเครื่องช่วยคนพิการมีเครื่องหมาย ป้าย ลูกศร เหมาะสมสำหรับคนพิการ					
4	มีห้องน้ำที่สะอาด เฉพาะสำหรับคนพิการ					
5	มีบริการน้ำดื่ม มีโทรทัศน์ชมขณะรอ มีร้านอาหาร					
	ด้านความสะดวกในการใช้บริการ					
6	การเดินทางจากบ้าน มาใช้บริการเครื่องช่วยคนพิการมีความสะดวก					
7	มีการจัดสิ่งอำนวยความสะดวกสำหรับคนพิการ เพื่อสะดวกในการมาใช้บริการ					
8	การบริการงานเครื่องช่วยคนพิการ ให้บริการที่สะดวก รวดเร็ว ไม่รอนาน					
9	เจ้าหน้าที่แจ้งรายละเอียด ขั้นตอนในการใช้บริการกับท่านอย่างชัดเจน					
10	ขั้นตอนการใช้บริการของงานเครื่องช่วยคนพิการโรงพยาบาลนี้ ซับซ้อน ยุ่งยาก					

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ข้อที่	คุณภาพบริการ	ระดับความคิดเห็น				
		น้อยที่สุด	น้อย	ปานกลาง	มาก	มากที่สุด
	ด้านความเชื่อมั่นไว้วางใจ					
11	แพทย์และเจ้าหน้าที่ ที่ให้บริการมีความรู้ความเชี่ยวชาญ ในเครื่องช่วยคนพิการ					
12	ท่านได้รับคำปรึกษาที่ดี ทำให้รู้สึกสบายใจ					
13	ท่านมีความมั่นใจว่าเครื่องช่วยคนพิการที่ได้รับจะช่วยให้ท่านดำรงชีวิตที่ดีขึ้น					
14	ท่านพอใจในหน่วยงานเครื่องช่วยคนพิการของโรงพยาบาลของรัฐ					
15	ถ้าท่านมีโอกาสเลือก ท่านจะไปใช้บริการเครื่องช่วยคนพิการที่หน่วยอื่น					
	ด้านความพร้อมในการให้บริการ					
16	ที่หน่วยงานเครื่องช่วยคนพิการมีแพทย์ และเจ้าหน้าที่เพียงพอในการให้บริการ					
17	แพทย์และเจ้าหน้าที่ มีความพร้อมที่จะให้บริการช่วยเหลือและแก้ไขทันที					
18	ท่านต้องเสียเวลาคอยนานเมื่อมาใช้บริการที่หน่วยบริการเครื่องช่วยคนพิการของโรงพยาบาลนี้					
19	หน่วยบริการเครื่องช่วยคนพิการให้เครื่องช่วยคนพิการที่เหมาะสมกับความพิการของท่าน					
20	มีอุปกรณ์เครื่องช่วยคนพิการที่ ทันสมัย อยู่ในสภาพที่ใช้งานได้ดี พร้อมที่จะให้บริการอย่างเพียงพอ					

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ข้อที่	คุณภาพบริการ	ระดับความคิดเห็น				
		น้อยที่สุด	น้อย	ปานกลาง	มาก	มากที่สุด
	ด้านอัธยาศัยไมตรีของเจ้าหน้าที่					
21	เจ้าหน้าที่มีความเป็นมิตร หน้าตายิ้มแย้มแจ่มใส กับผู้ใช้บริการเสมอ					
22	เจ้าหน้าที่พูดจาด้วยถ้อยคำสุภาพ ไพเราะ					
23	เจ้าหน้าที่มักแสดงอาการหงุดหงิด รำคาญ เมื่อคนพิการซักถามข้อสงสัยในการใช้บริการ					
24	เจ้าหน้าที่ไต่ถามความต้องการของผู้ใช้บริการอย่างสม่ำเสมอเมื่อต้องรอนาน					
25	เจ้าหน้าที่เปิดโอกาสให้ซักถามข้อข้องใจ ได้ตลอดเวลา					
	ด้านการให้ความรู้ คำแนะนำ และคำปรึกษา					
26	มีเจ้าหน้าที่แนะนำเครื่องช่วยคนพิการต่างๆ ที่เหมาะสม กับความพิการของท่านให้ท่านทราบ					
27	มีเอกสารสิ่งพิมพ์แจก เกี่ยวกับเครื่องช่วยคนพิการ วิธีการใช้ การปฏิบัติตัวของคนพิการ					
28	มีการให้คำปรึกษาหลังจากรับเครื่องช่วยคนพิการแล้ว					
29	ท่านได้รับความรู้ คำแนะนำ คำปรึกษาที่ถูกต้องชัดเจน					
30	เจ้าหน้าที่หน่วยบริการเครื่องช่วยคนพิการมักแสดงอาการเฉยเมย ไม่สนใจตอบข้อซักถามของท่าน					

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ข้อที่	คุณภาพบริการ	ระดับความคิดเห็น				
		น้อยที่สุด	น้อย	ปานกลาง	มาก	มากที่สุด
	ด้านจริยธรรมของเจ้าหน้าที่					
31	เจ้าหน้าที่หน่วยงานเครื่องช่วยคนพิการให้เกียรติท่าน ให้ความสำคัญ ในฐานะที่คนพิการเป็นบุคคลคนหนึ่ง					
32	การให้บริการไม่มีความเสมอภาค แบ่งชั้นวรรณะ					
33	เจ้าหน้าที่เครื่องช่วยคนพิการรักษาความลับของท่านเสมอ					
34	เจ้าหน้าที่หน่วยงานเครื่องช่วยคนพิการ มีความเห็นอกเห็นใจ และเข้าใจจิตใจของคนพิการ					
35	มีการลดหย่อนค่ารักษาพยาบาลตามสิทธิที่คนพิการได้รับ					

ตอนที่ 3 ปัญหาอุปสรรค และข้อเสนอแนะ ในการใช้บริการเครื่องช่วยคนพิการ ในโรงพยาบาลทั่วไป จังหวัดกาญจนบุรี

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APPENDIX B

ตารางวิเคราะห์ LSD

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ตารางวิเคราะห์ LSD

ตารางภาคผนวก A 1 ผลการเปรียบเทียบคู่ที่แตกต่างของลักษณะประชากรด้านอาชีพ

อาชีพ	ค่าเฉลี่ยคุณภาพบริการ $\bar{x}_i$	คะแนนความแตกต่าง				
		$\bar{x}_1 - \bar{x}_i$	$\bar{x}_2 - \bar{x}_i$	$\bar{x}_3 - \bar{x}_i$	$\bar{x}_4 - \bar{x}_i$	$\bar{x}_5 - \bar{x}_i$
รัฐวิสาหกิจ	4.03	-				
ไม่ได้ประกอบอาชีพ	3.62	0.41	-			
ธุรกิจส่วนตัว	3.52	0.51	0.10	-		
รับจ้าง	3.38	0.65	0.24*	0.14	-	
รับราชการ	3.21	0.82*	0.41*	0.31	0.17	-

*มีนัยสำคัญทางสถิติที่ระดับ 0.05

ตารางภาคผนวก A 2 ผลการเปรียบเทียบคู่ที่แตกต่างของลักษณะประชากรด้านรายได้

รายได้ (บาท) /เดือน	ค่าเฉลี่ยคุณภาพบริการ $\bar{x}_i$	คะแนนความแตกต่าง				
		$\bar{x}_1 - \bar{x}_i$	$\bar{x}_2 - \bar{x}_i$	$\bar{x}_3 - \bar{x}_i$	$\bar{x}_4 - \bar{x}_i$	$\bar{x}_5 - \bar{x}_i$
ไม่มีรายได้	3.68	-				
6,000+	3.56	0.12	-			
3,000-5,999	3.54	0.14	0.02	-		
< 1,000	3.50	0.18	0.06	0.04	-	
1,000-2,999	3.36	0.32*	0.20	0.18	0.14	-

*มีนัยสำคัญทางสถิติที่ระดับ 0.05

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ตารางภาคผนวก A 3 ผลการเปรียบเทียบคู่ที่แตกต่างของลักษณะประชากรด้านแหล่งข้อมูลข่าวสาร

แหล่งข้อมูลข่าวสาร	ค่าเฉลี่ยคุณภาพบริการ $\bar{x}_i$	คะแนนความแตกต่าง $\bar{x}_1 - \bar{x}_i$	$\bar{x}_2 - \bar{x}_i$	$\bar{x}_3 - \bar{x}_i$	$\bar{x}_4 - \bar{x}_i$
แพทย์	3.76	-			
สื่อมวลชน	3.49	0.27	-		
ญาติ-เพื่อนบ้าน	3.46	0.30*	0.03	-	
สมาคม	3.33	0.43*	0.16	0.13	-

*มีนัยสำคัญทางสถิติที่ระดับ 0.05

ตารางภาคผนวก A 4 ผลการเปรียบเทียบคู่ที่แตกต่างของลักษณะประชากรด้านเครื่องช่วยคนพิการที่ได้รับ

ชนิดเครื่องช่วยคนพิการ	ค่าเฉลี่ยคุณภาพบริการ $\bar{x}_i$	คะแนนความแตกต่าง $\bar{x}_1 - \bar{x}_i$	$\bar{x}_2 - \bar{x}_i$	$\bar{x}_3 - \bar{x}_i$
เครื่องช่วยคนพิการทางกายหรือการเคลื่อนไหว	3.57	-		
เครื่องช่วยคนพิการทางการมองเห็น	3.47	0.10	-	
เครื่องช่วยคนพิการทางการได้ยินและสื่อสาร	3.24	0.33*	0.23	-

*มีนัยสำคัญทางสถิติที่ระดับ 0.05

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<u>ตารางภาคผนวก A 5</u> ผลการเปรียบเทียบคู่ที่แตกต่างของลักษณะประชากรด้านจำนวนครั้งที่ใช้บริการ

จำนวนครั้งที่ใช้บริการ (ครั้ง)	ค่าเฉลี่ยคุณภาพบริการ $\bar{x}_i$	คะแนนความแตกต่าง		
		$\bar{x}_1 - \bar{x}_i$	$\bar{x}_2 - \bar{x}_i$	$\bar{x}_3 - \bar{x}_i$
3+	3.96	-		
2	3.57	0.39	-	
1	3.44	0.52*	0.13	-

*มีนัยสำคัญทางสถิติที่ระดับ 0.05

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BIOGRAPHY

NAME	Miss Sornsiree Pummarin
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