CLIENTS' SATISFACTION TOWARDS CURATIVE SERVICES PROVIDED BY THE PRIMARY CARE UNITS IN SAKAEO PROVINCE, THAILAND

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CLIENT SATISFACTION WITH CURATIVE SERVICES PROVIDED BY PRIMARY CARE UNITS IN SAKAEO PROVINCE, THAILAND

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ABSTRACT

The objective of this study was to determine the factors related to client satisfaction among patients attending primary care units in Sakaeo Province. The sample was composed of 240 patients who came to three primary care units in Sakaeo Province, Thailand during the period between 12th and 22nd January 2004. They were given structured questionnaires on socio-demographic factors, accessibility, availability of the curative service and client satisfaction. Chi-square analysis was applied to measure the relationship between client satisfaction and related factors.

Most (80.0%) of the respondents were married and had primary education (75.0%). More than half (59.2%) were farmers and most earned less than 3000 Baht per month. Around three-quarters found curative services were easily accessible and available.

The findings of overall satisfaction revealed that just over half of the respondents had high satisfaction. Approximately 60% were highly satisfied with accessibility and availability. The clients were dissatisfied with the number of days that the doctor worked and number of pharmacists. Most (80%) agreed that the days of doctor were not enough and only half said that pharmacists were available.

The factors of information, health care provider and referral vehicle were also significantly related to client satisfaction. No other factorial variables had a significant relation with satisfaction.

It is recommended that the number of days that the doctor comes to primary care unit and full time recruitment of pharmacists be increased. It is also recommended that the clients be given privacy especially during treatment examination process.

KEY WORD: CLIENT SATISFACTION CURATIVE SERVICES

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LIST OF ABBREVIATIONS

AAFP :	American Academy Health Development
AIHD :	Asean Institute of Health Development
CUP :	Contracting Unit for Primary Care Units
CUP :	Contracting Unit for Secondary Care Unit.
CUS :	Contracting Unit for Tertiary Care Unit .
DISH :	Quality of Reproductive Healthcare study
MOPH:	Ministry of Public Health
MPHM:	Master of Primary Care Management
OPD :	Outpatient Department.
PHC :	Primary Health Care
PCUs :	Primary Care Units
VHVs :	Village health Volunteers
WHO :	World Health Organization.

CHAPTER I
INTRODUCTION

1.1 Rationale and Justification

Being in the era of DNA of the 21 century, there are increased educated clients, they are financially improved, and they have easy accessibility to health services, which increased the expectation and demands of the clients. These can reduce level of satisfaction of the clients. Surely, this increases stress to both health care providers and government settings to cope with the expectations and demands of the clients. For this reason, information about patients' satisfaction should be very important for the success of health facilities and designing the better management of health care system (1)

Hjertqvist J. in 2002 said that the new health care clients today are fundamentally different from those in the past. They are educated, more integrated into the social network, and better financially than previous generations, but in general they are also more accustomed to making long range decisions by themselves in selecting health care service (2). Because of this, major health care service reforms are necessary to be performed in order to meet both the needs and demands of the clients and professionals of the future:

Similarly, Aharony reported in 1993 that clients are more likely to continue utilizing health care services, maintain a relationship with specific health providers, and comply with medical recommendation (3). However, in developing countries, un-satisfied clients often avoid contacting the basic health facilities and prefer going to a higher facilities for curative services of higher institution or sometimes traditional medicines services.

When sources of dissatisfaction are identified, the government or the organization can address the areas of weakness or after knowing where the position of weakness is, then the risk can be reduced. The satisfied patient is more likely to accept and follow prescribed and recommended medical intake and planned treatment. Finally, client's satisfaction measures the health system performance resulting to important information and giving contribution to the organizations' total quality of management effort (4).

Furthermore, satisfied patients are likely to continue enrolling in their health plans, more likely to return to a physician or hospital (5), and less likely to bring a malpractice suit. The kind of medical care that patients find satisfying also makes them more compliant with their treatment regimes, and thereby produce better clinical outcome (6). Satisfied patients also tend to improve the quality of the work experience for providers, reducing staff turnover and burnout.

If the cost of the health services is cheaper, many clients with low income are willing to utilize them, but if the cost is more expensive, only the clients with a higher income will go for utilization.

Additionally, one more important reason that distracts clients from the basic health services could be obtaining health information from non-professional, professional and pseudo-professional as well as from educational institutions and from the media. Unfortunately, much of this information is misleading, inaccurate or false. Even scientists at times can find it difficult to sort out the fact from fiction.

The intelligent health clients should follow these practices to avoid the above said problems (7):

- Maintain a degree of skepticism towards health information received through media, select the practitioner with great care
- Become well-informed before making decisions to purchase and use health products and services, pay little or no attention to health advertising.

Seek reliable sources of information

- Be familiar with the fundamental concepts used in the scientific methods, including statistical concepts.

Consequently, if the above given steps are not followed, the following problems could occur:

1 Unhealthy and unstable conditions
2 Many disease complications
3. Use of incorrect medicines
4 Wastage of government resources in the health facilities
5 Wastage of clients' money and consequence of big health problem

Going to the hospitals of the upper level of health services without passing the first contacts of the services, such as primary care unit, may also cause overcrowding, long queues, loss of time and difficulties for health providers. Finally this problem may affect the plan of the health system of the government and health status of the people (8)

Beside the above, another problem existing in the developing countriess was reported that there are many health personnel who are leaving their jobs because of working long hours and earning a small salary . Especially, the young doctors and nurses, many of them are going abroad for jobs and further education. In the developing countries, the only governments that can afford are naturally forced to import more health personnel from outside and build more universities to try to produce more health manpower. This also puts the government in a difficult situation with the economy and social development and causes loss of resources. The best way of measuring client satisfaction is to obtain information concerning the behavior of clients.

The most important predictor of the patients' satisfaction is quality of care from the doctor. Clients feedback can also be used systematically by the organization as an

alternative ways of improving the curative services. In this service, the weakness and strengths of the provided health services can be decided.

Similarly, nurses, midwives, and physician's assistants tend to score highly on interaction with patients, though they are perceived to be less skilled. Interestingly, almost all studies concerned the physician assistants for diagnosis and patient education in the place of physicians had showed that they perform just as well as, or better than physicians in diagnostic accuracy and patient satisfaction (9).

Of course, patients' perceptions of actual competence is only weakly related to actual competence. Patients are less satisfied if doctors display any uncertainty and presumably even the most competent doctors are occasionally uncertain. Patient satisfaction also can strongly predict the ability or inability of seeing specialists when clients feel that they need to see them.

To come to the Ministry of Public Health of Thai government, which runs most of the hospitals in the country, has to organize and plan health activities under universal coverage scheme by using primary care units located in the hospitals and in Tampoons. MOPH should have also to organize the governing body called Contracting Unit for the primary acre units (CUP). Therefore, it became very important that the hospitals and health centers should be restructured for the implementation of the universal coverage scheme of thirty Baht program and organizing of the primary care units became focal point of activity for delivery of health services. It was decided that hospitals and health centers should have health care providers of manpower that complimented to be assigned to primary care unit. The contracting unit can have more than one PCU.

This new health facility of PCU should have a doctor, professional nurse, technical nurse and other allied professionals in this facility. All patients registered at this facility must attend this before they are preferred to higher levels of care. PCU acts as filter for hospital care patients (10) (11). PCU is very important for every patient should have to attend first at the PCU before being referred to community

hospital or other special health or doctor when necessary except the accidents and emergencies. Health users especially those who use curative service in hospital and health centers in which many of them became primary care units increased after the implementation of universal coverage scheme.

The health services of Thailand passed through different reforms. It was declared that every district must have at least one community hospital with at least one doctor and at least one health center in the sub-district. This led to rapid change of health resources in primary and secondary care level. Then, there was another reform, which led the country into great change of health services. This was the formation of universal coverage scheme of 30 Baht. This in turn has promoted to the formation of primary care units under this project. The formation of primary care units caused the improvement of the equity, efficiency, quality and social accountability of the present health sector system. This project was planned to involve both urban and rural areas. In the rural areas, physicians and nurses from community hospitals enhanced the health centers' services through supervision. A system of reform and re-orientation of health center activities included providing efficient information and referral systems as well as home care. This system of reform was one of the reasons that motivated the researcher to choose the three primary care units under the Contracting Unit of Wang Num Yen community hospital.

Sakaeo province is estimated to be a distance of 236 kilometers from Bangkok when traveled by car. It has land area of 7,195 sq. kms. There is a total population of 521,984 with the male population of 263,295 and the female population is 258,689. The population of the province mainly engaged in agriculture, animal husbandry and fresh water fishery.

Coming to the health services in the province, there is one provincial hospital with 231 beds. There are six community hospitals at district level and there is also one military hospital with 90 beds. Sakaeo province is one of the seven Eastern Provinces in Thailand. In addition, it was reported that there are 109 health centers working while there are 25 primary care units functioning. Sakaeo was first province in the

eastern provinces where universal coverage scheme was started. It was reported that it successfully implemented the universal coverage scheme and progressed in processing the primary care unit program where many clients were benefited from it according to provincial health authority.

Wang Num Yen district where the data was collected is one of the six district of Sakaeo Province. It is 36 kms away from capital town of Sakaeo. In this district, there is one community hospital with 60 beds. It was purposively selected because of the good management of community hospital, better collaboration reported and good background of data and information collection.

Other reasons of selection could be the shortage of the physicians. There is only one doctor working for both contracting unit of the community hospital in the district and primary care units and this could affect the clients' satisfaction. In addition, this district is located in remote isolated and rural area compared to other districts in the province. The people of this district are mainly farmers and laborers.

This study concerns the client satisfaction on primary care services and tries to discover how the curative services of the primary care units are satisfying the clients' needs. It is important to conduct this kind of survey in developing countries to promote client-oriented health services. This type of assessment studies usually measures medical outcomes and client satisfaction.

In this client satisfaction study, the researcher wants to determine the effectiveness of the care services conducted by the PCU knowing that client satisfaction can be used as one of the most important dimension to measure the quality of medical health care services as an outcome. Client satisfaction is related with health behavior. As said in above, if clients are dissatisfied with curative services of primary care, they may seek alternative health curative services in the other health facility.

Hence, what increased more the interest of the researcher is also knowing how the situation of the clients in low income area are different from those clients who are better educated, financially developed and able to decide where to go for their curative service. There were few health care service studies that were conducted in this district previously. Moreover, this study has relation with the health services development in developing countries and will contribute a lot to strategy and progress of the health services going there. Therefore, the satisfaction was selected purposively because it is lock opener, which enables clients to continue or discontinue using the health service. Moreover, the satisfaction is important and measurement for the success of any service of health facilities. The following health care providers with the corresponding population ratio were collected from the above said province.

Table 1 Health manpower with population ratio in Sakaeo province

Health manpower	**population ratio in Sakaeo Province**
Doctor	1:10,000
Nurse	1:1250
Dentist	1: 20,000
Pharmacist	1: 15,000

Source: Provincial Health Office in Sakaeo (2004)

To keep clients content and satisfied is a challenge for all business. Therefore, clients' satisfaction towards primary care curative services is intended to understand clients' psychology (clients' interpretation). Understanding the clients' interpretation is an important determinant of health behavior and not so much still was decided on this aspect. In order to cope this problem, it is necessary to study on the clients' satisfaction towards curative services of primary care units. The information obtained from this study is an indicator for the reflection of the type of quality of curative services provided by the primary care units under universal coverage scheme.

Furthermore, this study would be useful for the health services planners to improve the primary care services, especially where the clients showed concern on the three PCUs services utilization during data collection. In addition, the results of this study would be used by the health providers of the primary care units surveyed and contracting units for improvement of the curative services and for strengthening the relationship between the clients and health care providers of the primary care units

1.2 Research Question

What are the factors related to the clients' satisfaction on curative services among the patients attending three primary care units in Wang Num Yen district in Sakaeo province?

1.3 Research Objectives

1.3.1 General Objective:

To determine the relationship between socio-demographic characteristics, accessibility, availability of the curative care services and client satisfaction on the curative services among the patients who utilize PCUs of Wang Num Yen district in Sakaeo province.

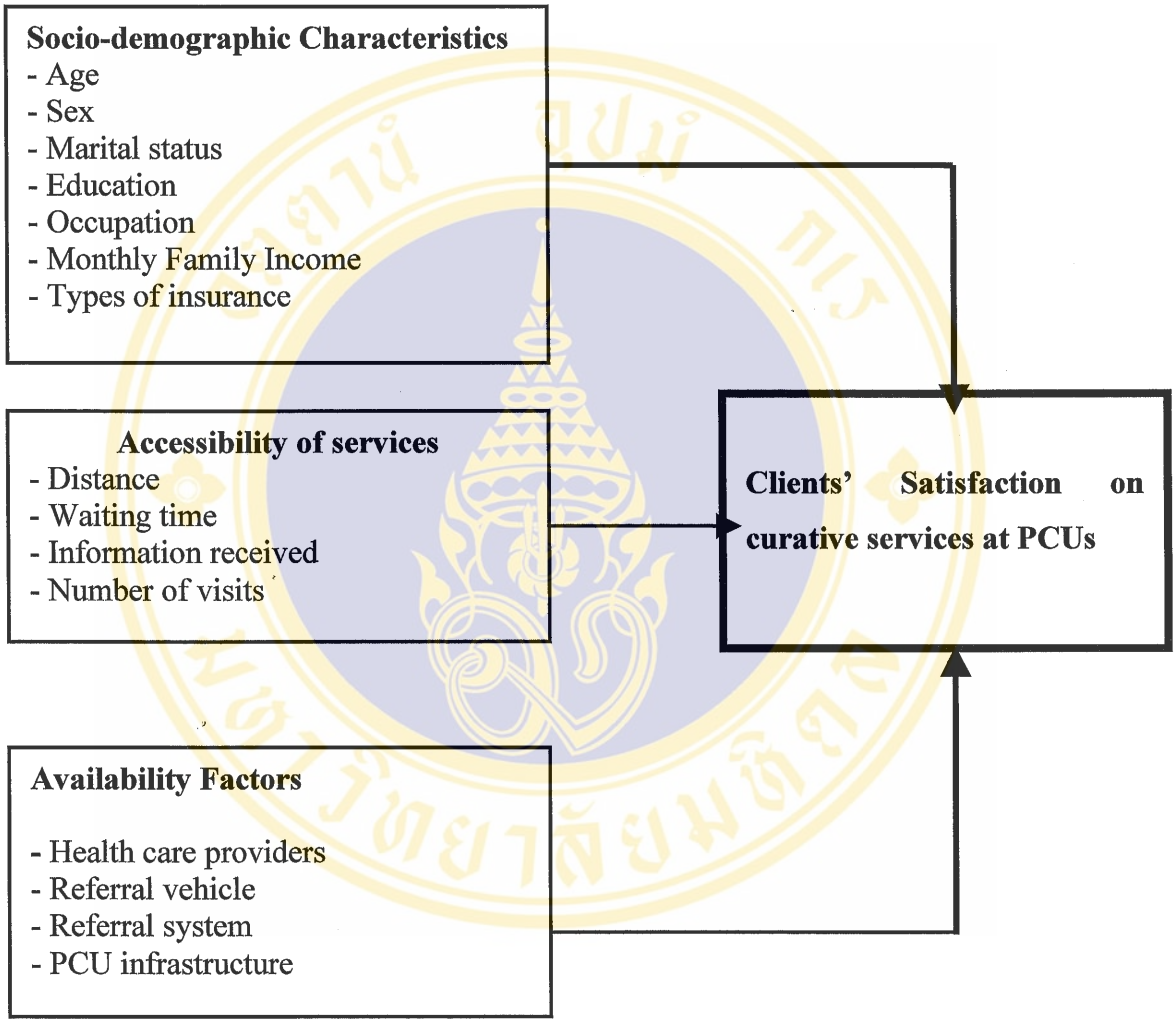
1.3.2 Specific Objectives:

1. To identify the level of client satisfaction on the curative services at three PCUs of Wang Num Yen district in Sakaeo province.

2. To describe socio-demographic characteristics (age, sex, occupation, income, and etc), the accessibility (distance, waiting tine, information received, type of insurance) and availability of services (health providers, referral vehicle, referral system and infrastructure of the primary care units) among the patients who attend the primary care curative services.

3. To explain client satisfaction by socio-demographic characteristics, accessibility, availability to curative services of PCU, and client satisfaction among patients who are attending the curative services provided at the PCUs.

1.4 Conceptual Framework:



1.5 Operational Definition

Clients' Satisfaction:

Refers to individual's perception towards curative services provided at the primary care units as perceived by the clients depending on their experiences of utilizing this service.

Monthly family income

It refers to total income of all family members of clients per month.

Types of insurance

It includes the types of health insurance that allows the client to attend the curative services of the three primary care units for treatment composed of gold card, social security cared and government reimbursement service.

Accessibility of the curative services

Refers to the possibility through which the clients are easily obtaining PCU services they need in terms of the distance between their household and PCU, waiting time, information received and number of visits.

Distance from PCU

In this study it refers to how far the patients' house is away from primary care unit where the patient receive the curative service.

Waiting time

It refers to how long the patients wait for the services of PCU or time used for accessing OPD card, physical examination, and treatment and taking prescribed drugs.

Information received during PCU visiting

It refers to the information about diagnosis, OPD card, utilization, consultation and suggestion given to the clients during their visit to the PCUs for prescribed drugs by health care providers.

Number of visits

It refers to how many times that the client has visited the PCU during the last three months at the time of data collection.

Availability of curative services at PCU

It refers to the sufficiency of curative services and of being convenient to individuals attending the PCUs in terms of the suitability of health providers, referral vehicle, referral system and PCU infrastructure.

PCU Infrastructure

It refers to general attitude of the client towards the condition of inside and outside PCUs infrastructure such as light, ventilation and general condition of infrastructure whether all these are good enough or not.

Health care providers

Health personnel who provide curative service at primary care unit for clients.

Referral system

It refers to the process of consigning the patient to special health institute or upper level of health institution.

Referral vehicle

It is the vehicle that is used for transporting the patient to the district/community hospital at upper level or other specialized health facilities

Curative service

It is process of affecting correction service concerning how the health providers treat patient including prescribing drugs, referring, giving consultation and taking physical examination and investigate patients' history of illness.

Primary care units:

It is first stage of medical care delivery that emphasizes first contact care and ongoing caring responsibility for patient in both health maintenance and therapy of illness.

1.6 Limitation of study

This study was carried out to identify the level of satisfaction on the curative services of the primary care units among the clients attending curative services of primary care units The measured satisfaction on these services would neither depended on the view of the researcher nor the health providers but would be depended on how the clients perceiving the curative services through their experiences at visiting the primary care units in a period of time. The clients who had visited the curative services of primary care units were not necessarily representing the general population.

The study was descriptive in which satisfaction was studied according to clients' point of view towards curative services of primary care units. This information was gathered from those patients who attended the primary care units while those who did

not attend to the PCUs their views were not available. This study population was purposively selected and the results could not explain all factors concerning satisfaction. Therefore, the scope is to explain the factor related to demographic characteristics of the patients, accessibility, availability and clients' satisfaction towards the curative services and not single component.

The health care providers and their service provision satisfaction play important role on clients' level of satisfaction. Nevertheless, this is beyond the scope of this study because the study did not discover more on the possibility of knowing the health care providers and patients' interaction. It will be better to study more on objective measurement of quality and availability through direct observation and performance.

CHAPTER II
LITERATURE REVIEW

2.1 Universal health coverage scheme

Before the universal coverage policy was started, there were several health welfare schemes in Thailand. These health welfare schemes were Voluntary Healthcare Card Scheme, Civil Servants Medical Benefits/ Welfare Scheme (CSMBS), Social Security Scheme (SSS; compulsory scheme for formal sector) and Health welfare for the low-income group, the elderly, children under 12 and other underprivileged groups. Although these schemes have covered various population groups, they have not yet covered 100% of Thai total population. Besides, there were some weakness in terms of efficiency and equity. If the previous schemes were expanded to become universal health coverage, it would be needed:

- Set the universal standard regulation for health for all.
- Changing their philosophy to offer health schemes of greater similarity.
- Readjust the legislation related to health insurance, especially private health insurance
- Adapt a registration information system
- Organize the payment mechanism and reimbursement standard to operate in the same direction.

Therefore, proceeding from above Thai government produced a policy for improving the quality of life for segments of society in which the MOPH plays great role to implement gold card policy of 30 Baht universal coverage of health care policy. Besides the above mentioned target to achieve the universal coverage, the government has set the national agenda and has merged with 9th National Economic and Social Development Plan and translated into health policies based including the

universal health care insurance. The 30 Baht universal health care policy is one of the major policies of the present government of Thailand has developed.

Proceeding from above, this policy focuses on creating universal health insurance coverage of the whole population. First phase of this scheme was commenced in April 2001 with six provinces and then all country has been fully covered in April 2002. The insured are all people who were not in any health scheme and those names are in the house registrations in all of the provinces. These people would receive the universal health card or gold card. This card must show consistency with the individual's identification card every time they access the health services, which are government health services or private sector health services registered with this project. The accessing health service has to follow the referral system from primary care units or nearby hospital, which are registered under the scheme.

For emergencies and accidents, the insured can access any government health services. To access needy health services, the insured must contribute a co-pay of 30 Baht per episode. Under this 30 Baht Universal Coverage Policy, the insured will receive the same quality health services as offered by other health schemes. Now, the services includes most health services except cosmetic care, obstetric delivery beyond two pregnancies, drug addiction treatment, hemodialysis, organ transplantation, infertility treatment, and other high cost intervention. However, with more resources and disease priorities, the inclusion can expand further over time. From government side, the funding of the system is paid by capitation. The total payment per capita paid from taxi revenue per year, parts of which are paid to the health care facilities, according to the number of local residents who are registered with them so to be served.

Primary care units are assumed to be under the contracting unit of the nearest community hospital. Primary care institution can register the clients only if they have integrated treatment, health promotion, disease control and rehabilitation both inside and outside the institution where at least one doctor and other health personnel can work. One of the places where the people choose for registration is at the community

or district hospitals. These hospitals can be primary care providers and registrars of the people however, it needs to develop integrated services. In addition, all public hospitals should undertake the required standards in order to be able to provide the universal coverage health insurance within the provided however, for private health institutions should have to pass the standard evaluation before taking part in the provision of universal coverage. It was said that private primary care institutions including clinics should have qualifications that they can only register people in the district where clinic is located and other nearby districts.

2.1.1 Primary Care Service

Definition

It is defined as primary care component, which includes medical and health services that comprise health personnel; e.g. doctors, nurses, midwives and etc. the services include health promotion, disease prevention, nurse care, curative and rehabilitation. Primary care is the stage of care whereby the providers must have some medical knowledge as well as the ability to create a good relation with the community. Good primary care comprises of three basic components –continuity, integrated and holistic care.

Moreover, according to the American Academy of Family Physician (AAFP), the primary care can be defined as follows:

A form of medical delivery which emphasizes first contact care and ongoing responsibility for patient in both health maintenance and therapy of illness. It is personnel care involving a unique interaction and communication between the patient and physician. It is comprehensive in scope, and includes the overall condition of the care of the patient's health problems, be they biological, behavioral or social. The appropriate use of consultants and community resources is an important part of effective primary care.

The primary care service in Thailand is a sub-system of health care. The Thai health care system consists of primary, secondary and tertiary care. Primary care is provided at public health centers and private clinics and more recently many of the health centers were transformed to primary care units. Although the function of public hospitals is to provide secondary and tertiary care, many patients go there for primary care because in the past there were very few health centers in the rural areas and no PCU at all.

Primary care providers include physicians, nurses, and public health officers including midwives and sanitarian working in both public and private facilities.

There are public health facilities in every level of care from PCU to community or district hospitals, regional hospitals or general hospitals, hospitals under the Ministry of Public Health or universities, state enterprises and urban health centers under municipalities.

Rural and urban health centers provide integrated services including curative care, health promotion, disease prevention and rehabilitation. Rural health centers and community or district hospitals are responsible for the population of their catchment area. The district hospital is located in its own catchment area to provide primary and secondary care for the people in the district and those patients referred from the primary care units.

In the past, the community did not participate in health services, except self-care or self-prescribed medication. However, under the decentralization Act, the local government and community are responsible for the policy making, the health service plans and monitoring of health facilities (12).

2.1.2 Linkage with higher level of care

Some primary care providers both in the public and private health fields are in the network for providing primary care for workers in the social security scheme. If

they cannot handle the patients, they will refer the patients to the contracted hospital. This is one example that the primary care unit is linked to higher levels of care.

The referral system has been established in public facilities, especially in the primary care units where the patient is referred to the contracting unit. Added to that, it was reported that there is no health center situating in the central sub-district where the Ministry of Public Health hospital is located. Therefore, it is the policy of Ministry of Public Health to use the district hospital as the First Line Health Services for the population near the district hospital and as the first referral center serving patients referred from the primary care unit.

2.1.3 The Health Facility under the Universal Coverage project can be divided into three groups, which are as follows:

- Contracting unit for primary care; it is known as CUP that means the organization providing curative, promotive, preventive and rehabilitative services as ambulatory care, home care, and community care excluding specialized services. CUP is needed to have district registered population and primary care unit who may provide health services as single health facility or primary care network. The main contractor provides completely standard services while sub-contractor does not provide completely services. There should be referral system including transport of patient to the district hospital. Therefore, a vehicle should be available at the primary care unit.

- Contracting unit for secondary unit, which is known CUS, which is the organization providing general care in inpatient services, which are provincial, regional hospital, general hospitals and university hospitals including those public hospitals outside the MOPH and private hospitals. The CUS is responsible for those patients referred from primary care unit as in-patients.

- Contracting unit for tertiary care, which is known as CUT. The CUT is the organization that provides specialized care with high technology and

expensive care. It can be regional hospital, university hospitals or specialized health institutes.

2.1.4 The significant characteristics of the health services mentioned in each level above are:

1. The characteristics of primary care services:
   - Frontline care
   - Ongoing or longitudinal care from birth to death
   - Comprehensive care
   - Coordinated care
2. Characteristics of secondary and tertiary services
   - Provide complicated medical care
   - Provide emergency and accidental care
   - Provide efficient referral system
   - Monitor and develop quality of care continuously
   - Provide qualified service by standardized health personnel and medical equipment

A fundamental principle of primary health care is the close relationship between all levels of the health care system, starting at the community extending upward and to clinic, health center, primary care unit, district hospital and beyond. Each patient is therefore connected through seamless continuum of services and should arrive at the appropriate level of giving optimal health care for any given problem. This assures that the most common and often important measures are available nearest to home and convenient to each citizen. Through a smoothly functioning referral system, the patient can arrive at higher levels where more specialized medical professionals as well as diagnostic and therapeutic tools are available.

Thus the referral system is an integral part of PHC. Effective referral requires clear communication to assure that the patient receives optimal care at each level of the system.

2.1.5 Health Care Services provided by the Government

In Thailand, there are three types of health facility systems of provincial hospitals 67, general hospitals, 712 community hospitals and 9,689 health centers. The community hospitals have PCUs services to the people in the catchment are of the districts and rural areas since 80% of Thai population still lives in the rural areas of the country. Most of the health centers have been promoted to primary care units and the district hospitals as to be contracting units.

Hospitals are the facility cores of the health care system, the source of knowledge for sickness and the reliable location for health care. Hospitals therefore are the main institute for the health care system (13).

The Ministry of Public Health is the largest organization in government of Thailand that possesses the largest number of hospitals and two beds out of every three beds of the country. In 1997, the MOPH possessed 64.9 percent of the hospitals and 60.4 percent of hospital beds according to Suwat Wibulpolpraserd and group in 1999. MOPH has categorized this control into three types:

Table 2 Public and Private Health Care Facilities (1998)

Administrative level	Health facility	Number
75 provinces	General hospitals (MOPH)	67
	Hospitals in military bases (MOD)	56
	Private hospitals	342
	Clinics	9,063
	Drugstores	9,049
729 Districts	Community hospitals	712
81 Sub-districts	Extended OPD	1
	Municipal health centers	212
7, 195 Tampoons	Health centers	9,689
	Primary health care centers (Rural)	67,376
	Primary health care centers	1,732

Source: Bureau of Health Policy and Planning of MOPH

2.1.6 Regional hospitals and medical centers:

The largest hospital can hold more than 500 beds and it is the center health services in each section area. It has the capability to accept patients with specialists in all areas. It is classified as tertiary care.

1. General hospital

It is the hospital that can hold 500 beds and has lower capability to accept patients compared to a regional hospital. It has the responsibility to provide service for the people in the urban areas and environs. It is classified as secondary care up to early tertiary care.

2. Community hospitals

This hospital can hold between 10 to 120 beds. It is located in every Amphur as the smallest sector that has working doctors. It aims to provide mixed services to the community. It is categorized as late primary care till early secondary care. All hospitals in every level have the same goal: to provide good service to satisfy each client's demands.

The main factors considered for providing service are:

1. Clients or services receivers
2. Hospitals or health care facilities and
3. Service providers in various practices such as doctors, dentists, pharmacists, nurses and other health related personnel. Every factor is related to service and its' role complements each other. Every factor has a target, expectation, structure, and norm advance technology associated to service provision.

2.1.7 The Characteristics of medical care services

Yongyut Pongsuphab (1980; 53) stated that a good service did not require only knowledge and ability of the person who offered the service, but also the management system that influenced this factor as well. Good service characteristics can be explained as follows:

1. **Acknowledging client's care** :

A client should not only be considered as a patient, but also as a person who needs to express his beliefs, fears, worries and wonders he possesses. This person should be recognized in terms of society that he belongs to, culture and his economic status. This acknowledgement can be assisted in establishing good relationship between health providers and client, in terms of common agreement, common decision, decision implementing and self-reliance of the clients.

2. **Continuous care:**

A service should be offered, starting from the onset of health problems till the complete disappearance of these problems. In the ideal situation, services are offered from birth until death. The system is compulsory to complete continuous surveillance both individually and on a family level. Continuity will result from overall surveillance. Starting from recognizing the mind's condition, clients who receive services will agree to be followed up, but some services can not completely fulfill the demand of the clients or those people who are using the services of the health care facilities. Continuous interaction should be established a relationship and would allow the providers to be able to offer overall services. Overall look-and continuous look-after would both complement each other.

3. Mixed care:

This consists of curative, prevention, promotion and rehabilitation. If a health service facility can effectively provide health care, it can significantly upgrade the trust and belief, resulting in health promotion, prevention and education activities. However, mixed look-after is still significantly related to overall care and continuous care. Overall care and continuous care will determine what current appropriate care is needed in term of curative, promotive, preventive and rehabilitation of individual or society. All above said three characteristics complement each other and if one of them is missing, the other two will lose their value. However this research concerns only the curative services but the PCU activities should be mentioned in the review literature (14).

This study was carried out in Wang Num Yen district of Sakaeo hospital province. This province is located in the upper part of eastern Thailand. It is approximately 236 kilometers from Bangkok by car and 200 kms by train. It has area of 7,195 sq. km. There is a total population of 521,984. The male population is 263,295 and the female population is 258,689. In this province, there is one provincial hospital with 231 beds, 1 Military hospital with 90 beds and 6 community hospitals.

In addition, there are 109 health centers. Beside of these, there are 25 primary care units functioning in the province. Wang Num Yen district is one of the six districts in which the Sakaeo province is composed of.

The curativee service improvement of primary care unit is very essential so as to meet better clients' satisfaction.It may happen that the PCU facility could be opened in short time, therefore the study could find ways of improving it so as to satisfy the needs of clients by providing quality services. Moreover, because of the findings of the study, ways would be found for establishing a high quality standard of health services from the point of view of clients.

2.1.8 Measuring client satisfaction with health services

Measuring consumer satisfaction with health services is part of the process of monitoring the success of community participation and quality improvement strategies. However, measuring consumer is not straightforward. "Satisfaction" is a complex concept that is influenced by factors including socio-demographic characteristics, physical and psychological status, attitude and expectation about medical care, and the structure, process and outcome of care (Avis et al., 1995) (15). Despite these difficulties, methods for measuring consumer satisfaction have developed rapidly in recent years by:

1. The emergence of an explicit client voice in health, and the resulting need to incorporate client voice perspectives into development and evaluation of health services.
2. The influence of market ideas on health, which has been patient satisfaction included in evaluations for the purposes of quality assurance and allocating resources.
3. The desire to improve compliance with treatment, since patient satisfaction is a strong a predictor of subsequent health behavior.

For the purpose of quality assurance, measurement of consumer satisfaction has the potential to be an educational process, to identify improvements that are cheap to make, to identify good practice, and to set standards that incorporate that patient's perspective (16). At the local level, the results should feed back into the local organizational process to improve the quality of services. At the state level, the results can help to identify areas of need through monitoring variations based on different population characteristics, e.g. by age, group, geographic area or ethnicity.

2.1.9 The Importance of Clients satisfaction

It was found in 1990 that satisfied patients are likely to continue enrolling in health plans and more likely to return to their physician or hospital (17) and less likely to bring a malpractice suit. Clients who find the medical care satisfying more complaint with their treatment regimes, and thereby produce more clinical outcomes and better results. Satisfied clients improve the quality of the work experience for providers, reducing staff turnover and burnout. Client's behavior can be defined as those acts of individuals that involve buying and using products and services, including the decision process, and to determine those acts (James et, al. in 1978). Surveying clients about their level of satisfaction and plotting the results can help managers to understand how the clients are satisfied or dissatisfied dealing with both their company in general and with various elements of the company products or service in particular. Measuring the clients' satisfaction is one of the safest ways to obtain the information. A completely satisfied client believes that the company understands and addresses his or her personal preferences, needs or problems (18).

Organizations in the health industry need to change their tactics of strategies and activities as they face increasingly conflicting demand from internal, external and interface stakeholders (flood and scoot, in 1978). To manage stakeholders, health care managers must be involved in continuous internal and external scanning when making strategic decisions. They must go to traditional issues in strategic management and look for those internal, external and interface stakeholders who are likely to influence the hospital's decisions.

Managers must then make two critical assessments about stakeholders: Their potential to threaten the organization and their potential to cooperate with it (freeman, 1984). For this reason, effective managers must be able to help their subordinates accomplish the mission or organizational goals. They certainly need knowledge of management based on the nature of organization of those services.

2.1.10 Client Satisfaction

Most clients are satisfied with their personal physician and hospital care, even though clients satisfaction with their doctors and health care generally in the industrialized world is the lowest (19). Generally, high satisfaction with personal experience of care, however, has introduced some difficulty in interpreting surveys. For instance, if satisfaction with physician care is above 95 percent in a hospital and recedes into the background as a constant, physician care may not appear to predict any of the overall satisfaction, while it would be the most important variable in a setting that had more variance in physician quality. The gradual accumulation of studies over the last two decades, however, has begun to provide adequate variance in the predictors of satisfaction. There are life satisfaction people who are always happier with their life and who tend to be more satisfied with their health care service though, the reverse is also true (20).

2.2 Theory of the study

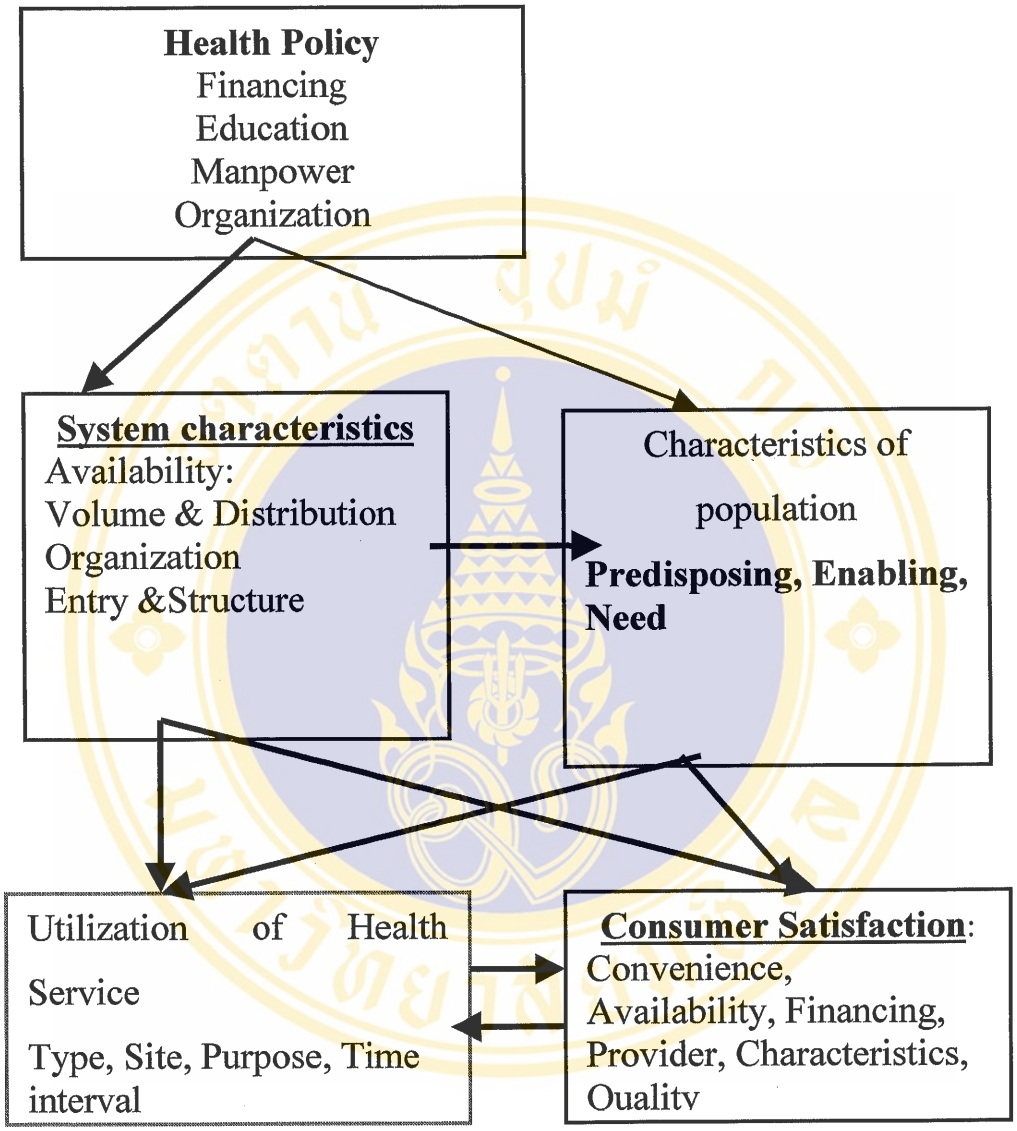
Aday and Anderson in 1974 documented that client satisfaction is the attitude towards the medical care system of those who have experienced a contact with it, which is different from medical belief component of predisposing variables in that it measure user's satisfaction with the quantity or quality of care actually received. They proposed that client satisfaction is probably best evaluated in the context of specific, recent and identifiable episode of medical care seeking relevant to consider in eliciting subjective perception of access that are satisfied with the convenience of care, its' coordination and cost, the courtesy shown by the providers, information given to the patient about dealing with his illness, and his judgement as to the quality

of care the clients received. Client satisfaction is an outcome indicator in the theoretical model of access, which indicated.
"use of service" cares (21).

Ware et al. in 1975 reported that client satisfaction survey data has been used as a dependent variable to evaluate provider service and facilities, on the assumption that client satisfaction is an indicator of the structure, an outcome of the variable process and of the care. (22)

Lucker and Dunt in 1978 stated client satisfaction was considered for improving services that are beneficial to the patient if not to the health care system as a whole. The distinct purpose of client satisfaction includes evaluation of quality of care as an outcome variable, which is an indicator of client response towards quality of health care service (23)

Aday and Anderson's Health System Model



Source: LuAnn Adday and Ronald Anderson. The development of Indices of access to medical care, p.7 copyright c1975 by the University of Michigan, Reprinted by the permission of Health Administration Press.

2.3 Related studies

Hsieh & Kagle have reported in 1991 that many health care providers would argue that there is a direct relationship between a client's experiences with a health care service and their evaluation of that health care service. In this respect, it is assumed that clients are satisfied with good services and dissatisfied with poor service (24). However, actual experience of service quality is only one of several factors that can determine whether the clients are satisfied or dissatisfied with the health care services that they receive. Research examining the determinants of client satisfaction has primarily focused on the characteristics of clients, including a variety of socio-demographic factors. Several reviews of this literature have revealed weak and inconsistent relationships between a variety of different client characteristics and satisfaction with health care services received.

Clearly in 1988 mentioned that study of patient service satisfaction is an important consideration determining the quality of care and, therefore, of interest to the health service researchers. For the policy makers, it is necessary to identify the specific ways in which information about the patient satisfaction can be used. Two main criteria were presented for evaluating the relevance of satisfaction data to the organization and delivery of health services. First, it should be demonstrated that policy changes. Second, satisfaction should be related to subsequent patient behavior. Good communication and attentiveness to patient concern appear to be the strongest predictors of how patient will evaluate the health care received ((25).

Client satisfaction with health care services represents an important intervening variable between the provision of health care and the ultimate outcome for clients. Furthermore, in health care settings, client satisfaction represents the consumer's positive and negative reactions to the context, process and result of health care service experiences. Research examining the quality of health care services has increased in response to growing demand from governments and other agencies for evaluative information upon which to formulate health and social policies. However, a number

of conceptual and methodological factors have inhibited the extent to which client satisfaction data can be used as an effective indicator of health care service quality.

In the context of health care delivery, this acquiescent response bias has been attributed to the low status of clients, the lack of client control over health care services, and an unwillingness to jeopardize one's relationship with specific health care providers.

Furthermore, client satisfaction surveys typically measure overall reactions to health care services and overlook discrete service components provided by the organization. Clients may evaluate health care services as satisfactory overall, although they may be dissatisfied with specific components of the health care services received.

Many researchers documented that the socio-demographic variables are directly related to patient satisfaction. Similarly, patient satisfaction correlates to the health personnel behavior, especially those who are with low income. These variables are well documented by many different researchers and writers.

Although some trends have been identified in the literature, socio-demographic variables do not appear to be consistent predictors of client satisfaction. For instance, several studies indicate that higher levels of client satisfaction with health care services tend to be reported among female clients (26). Other studies, however, have failed to detect a relationship between gender and client satisfaction with health care service (27).

Linn, LS and his friends reported in 1983 that there is some evidence indicating that older individuals report greater levels of client satisfaction with health care services than younger individuals (28) but this is not a definite conclusion. Some studies concerning the socio-economic status of the health services clients have found that education and income (29) levels do not influence client satisfaction with health care services. Other studies, however, report that lower levels of client satisfaction

with health care services exist among individuals with lower levels of education and income (30).

The literature suggests that clients are particularly concerned about the qualifications and training of service providers. The quality of Reproductive Heath Care Study conducted (DISH, 1999) in Uganda discovered that clients often expected facilities to have well qualified medical doctors and laboratory technicians. Specifically, clients wanted providers to conduct a proper examination, identify the problems and prescribe treatment. Many clients felt that the health facilities lacked qualified staff and resented being treated by midwives, or nurses who were often overburdened. Therefore, clients recommended that the facilities maintain an adequate number of qualified staff to satisfy demand and to eliminate the policy of delegating responsibility to less qualified colleagues.

Moreover, the client may sometimes have a higher expectation in the utilization of his/her health facility. Therefore, some literature has also documented the role of a variety of different demographic factors in determining client satisfaction with health care services. The nature of these demographic variables differs widely and includes the client's expectations concerning the health care process and the client's perceptions of the quality of the health care services received .

More recently, Gotlieb et al used expectancy of value theories in order to understand more fully the cognitive processes by which expectations influence client satisfaction. In a sample of hospital patients, they found that confirmation of health care expectations indirectly influenced client satisfaction only via patients' ratings of health care quality (31).

2.3.1 Socio-demographic characteristics

Socio-demographic variables are related to the kinds of health care experiences that patients have, and to the way that they interpret them. For instance, better educated patients may participate in diagnosis and treatment decisions more than less

educated patients, but remain less satisfied with their degree of participation because physicians are not meeting their higher expectations. Consequently, it is often difficult to interpret findings of relationships between sociodemographics and satisfaction.

Secondly, most researchers are now finding that the sociodemographics contribute little to predicting satisfaction, if one controls the aspects of care, such as access to a regular source of care, or the attitudes, such as desire for participation, which the sociodemographics are correlated with.

DiMatteo and Hays in 1980 said that generally according to the age, it was reported that older people are more satisfied with medical care. (32). This is probably due to their greater continuity of doctor-patient relationships, and their lower expectations about patient involvement in care.

Low Income people have low health, get lower health care, have less continuous relations with doctors, and have difficulties getting appointments. They are also treated differently from privately insured patients to some degree. Consequently, they tend to be less satisfied (33).

2.3.2 Health care providers

Hall and Dornan reported in 1988 that satisfaction with health care services is determined by satisfaction with one's physician, while satisfaction with the outpatient experience is determined by the quality of the health care workers (34). The satisfaction divides into two: satisfaction with technical competence and satisfaction with interpersonal skills. When evaluating nurses, the patients place much more emphasis on the interpersonal aspects than on the perceptions of technical competence. Clients stick with their health personnel (doctors, nurse and other) once suitable personnel is found. Having continuous relations with their doctors is a strong predictor of overall satisfaction. Prior relations between doctor and client are the major predictors of enrollment in managed care, and the disruption of provider relationships is a major cause of disenrollment (35).

Interpersonal relationship between a client and the provider is reported by many Authors to be one of the most important issues for clients' perception of quality. Specifically, clients prefer a service provider whom:

- Gives them a warm welcome, acts friendly and polite
- Shows respects and treats clients as "human beings" and is sympathetic
- Acts fair and does not discriminate (practice 'first come- first serve' principle)
- Communicates well in a language that the client understands
- Expresses or demonstrates a commitment to their work
- Assures clients of confidentiality

Margret reported in Client perspective that client-centered care requires health providers to respect a client's point of view, encourage clients to discuss their needs, provide the appropriate medical information to the client and assist them in making decisions rather than telling them what to do (36). The relationship between health worker and client is a tenuous one. The health worker has an opportunity to be extremely influential on a client simply by the way he or she interacts with that

person. Many people view health workers in the same light as a parent. Consequently, clients expect health providers to behave and act in a manner deserving such respect.

Numerous studies cited low client satisfaction of quality of care because of poor attitude from health workers. For example, in Tanzania it was discovered that some dispensaries were perceived as offering bad delivery care because of bad the attitude of the staff.

Added to that, there are some reasons why the clients are bypassing the health services. Many clients do not utilize the existing health care services and bypass them because of (37):

1. Low inome
2. People's tradition, belief, culture, and habits
3. Distance of health facility from the house of clients

In addition of this, there are some inconveniences caused not utilize the health care services because of:

a. Health services equipment and providers
b. Health services management

2.3.3 Waiting Time: Usually clients do not like to wait for an appointment, and they do not like to wait in the waiting room when they show up for a appointment.

2.3.4 More related studies

Lochman reported in 1983 that clients desire to be able to park close to the facility, walk in through a safe neighborhood, and find the appropriate room easily (38) for waiting their turn calling where clients go for medical care depends on whether there is differential 'treatment' of the individual, additionally, a client's waiting time in obtaining service could be used as a proxy indicator of convenience of any service.

Sriratanabul and Pimpkovit interviewed patients in the outpatient department service at chulalonkorn hospital and found that 83 percent of the clients said that the services were good. However, one-third encountered problems while receiving health services. Those problems included the inconveniences of the services; clients had to wait for long hours (39).

Durongpisitkun had also completed a study on outpatient satisfaction with the health services at Ramathibodi Hospital. Interviewing clients collected outpatient satisfaction with the medical diagnosis and physical examination unit and the pharmacy unit. Predisposing factors, waiting time and traveling of patient were also gathered. At the medical register unit, clients who had a high degree of education or had experience of getting services from other hospitals had low on satisfaction scores than those who had low education, short waiting time or had no prior experience of obtaining services. At the physical examination unit, client who was male or younger had a lower degree of satisfaction than females or the elderly. At the pharmacy unit, clients who had higher degree of education or long waiting time were lower satisfied than those who had low education or short waiting time were. This research concludes that education, waiting time, sex, and age affected patient satisfaction (40).

Likun studied strategic issue for reducing client waiting time and improving satisfaction with services at the outpatient department of the first affiliated hospital, Kunming Medical College. The findings were firstly long time waiting and client dissatisfaction. The association among waiting time, health providers with satisfaction

was computed and all correlation coefficients were positive and significant ($p<0.01$). A strong correlation was found between waiting time and nursing services with satisfaction. Sixty seven percent of clients were satisfied and 61 % considered that waiting time in the outpatient department, was unreasonable (41).

2.3.5 Accessibility

Most of the literatures suggest that clients would like to have increased access to health providers. In particular, clients are looking for:

- A willingness to serve clients at any time of the day and night, even if the provider is not on duty
- Availability of enough number of providers
- Punctuality
- Shorter waiting time for health services

In many cases, clients reported the need for emergency services in middle of the night and described an acute sense of frustration and helplessness when providers did not arrive to assist. The importance of health staff living close to a health facility to provide service whenever need was cited as one main reason that clients prefer private clinics (42).

Maxell, in 1994, pointed out that Florence Nightingale (1863), considered a health care pioneer felt a need to assess the quality of services by using a qualitative technique. This pointed out reasons for infection in the hospital and shed new light on ease of accessibility of services. A uniform system of health statistics was designed among other things, a comparison of death rates used by diagnostic category (43)

Ross, et Al. in 1993 measured patient satisfaction with respect to accessibility of services, availability of services, technical quality of services, interpersonal care and financing of care. The relationship conducted with the subgroup, between patient satisfaction and preferences were found highest on technical quality of care (R square

=0.770) which considered completeness and quality of medical clinics and facilities, thoroughness of examination, skill and thoroughness of treatment, followed by inter-personnel care (R square=0.63), which considered friendliness; personal interest, respect and reassurance shown by the physicians and nurses; and access to care (R square = 0.560), considered convenience and waiting time. The patients, who gave priority to access of quality, belonged to elderly groups or lower income and education groups (44)

A study conducted by Chanawangse in 1996 suggested that distance of the health facility and price of transportation also determine level of satisfaction of the client. After surgery most of the patients in the hospital do not prefer to come for daily dressing (free of cost) of the traveling distance and additional cost (45). Many clients wish that the health care services were unrestricted by barriers such as geography, economic status, language and waiting time. Finally, amenities refer to a client's perception of the physical health care facility, as well as supplies and equipment within the facility.

CHAPTER III
RESEARCH METHODOLOGY

3.1 Study Design

This study was a cross-sectional descriptive study in which the researcher had collected information base at a point in time by using constructed questionnaires to describe the factors related to level of clients' satisfaction on curative services provided by primary care units in Wang Num Yen district of Sakaeo province in Thailand.

3.2 Study Population

Target population of study included all people 16 years old and above composed of male and female that were attending and utilizing curative service of the primary care units by themselves or for their children or family members. This age group of 16 years and above was selected because of their maturity in responding with the research questions that had been developed.

3.3 Sampling techniques

Sakaeo province was purposively selected to be study area. After that, Wang Num Yen district was selected from the six districts of the province where then three primary care units of Wang Num Yen district in Sakaeo Province were selected to be the study area in order to see the situation of clients' satisfaction in rural area. They were selected to be representatives of the district. The interviewers collected data from the exit of the PCUs after the clients received their prescribed drugs interviewing all persons attending to each PCU per day. There were 24 persons to be interviewed per day.

The primary care units that were selected were Ta Lang Mai, Thung Maha Charoen and Klong Hin Poon were selected for data collection from the working days of 12 to 22 January 2004. The respondents of the study population were the patients who used to visit the primary care units for seeking curative services before the time of data collection started.

A continuous sampling technique was utilized to interview the patients from the all three primary care units at the exit point until the required number of 240 respondents was completed. Equal number of 80 respondents was selected from each primary care unit. These three PCUs were selected to represent the study as population sample for the whole district. The following table contains the population that each PCUs provides with curative service.

Table 3 The population cared by the PCUs

Sub-district	Name of PCU	Population of each PCU	Nu taken
Ta Lang Mai	Ta Lang Mai	13,152	80 clients
Thung Maha Charoen	Thung Maha Cha.	16,239	80
Klong Hin Poon	Klong Hin Poon	8,830	80

Source: From public health office in Wang Num Yen district

3.4 The sample estimation

The formula for sample size calculation:

$$n = \frac{z_{\frac{\partial}{2}}^{2} p(1-p)}{d^2} = 240$$

Where; n = Sample estimation

$Z_{a/2}$= parameter Level of statistical significance for which this study was set at the level of confidence alpha at 0.05 relating to the level of 1.96 or 2 at the confident level of 95%

P= expected proportion of satisfaction in the population, expressed as fraction of 1, equals 0.635 (cited in research conducted in BMA health center 24, conducted in Bangkok, 1997)

q= 1-p, expected proportion of population that are not satisfied, expressed as fraction of , equals 0.365

d = absolute precision, expressed as fraction of 1, equals to 0.07

Putting the value in the formula, n=181

In this study, the sample size was increased to 240

Total sample population = 240

3.5 Study instrument

An interview questionnaire was used to collect information from respondents after they were pre-tested. There were twenty questions measuring the level of the clients' satisfaction at the primary care units in Wang Num Yen of Sakaeo province. Out of these, there 20 items altogether to measure the level of clients' satisfaction The instruments were developed in English Language and then translated into Thai Language in order to make easier for the interviewers and interviewees in the fieldwork during the data collection. The questionnaire is divided into 4 parts as follows:

Part 1: socio-demographic factors items about information consisted of the clients were, such as sex, age, marital status, educational level, occupation, Monthly family income and types of the insurance. This part was composed of seven questions. These questions were from Q1 to Q7 of part 1.

Part 2: Accessibility factors consisted of distance, waiting time, information received and number of visits made by the clients in the last three months. This part was composed of 10 questions of negative and positive responses

The scores were 1 for positive responses of "Yes" and 0 for negative response of "No". The questions were numbered from Q8 to Q17.

Part 3: Availability factors consisted of PCU infrastructure, health providers, referral vehicle and referral system. This part was composed of nine questions. The scores were 1for positive responses of "Yes" and 0 for negative responses of "No". These questions were numbered from Q18 to Q26.

Part 4: Clients' satisfaction consisted of 20 questions using three Likert scales of: Agree 3=, Not sure=2, Disagree=1. The questions of this part were from Q27 to Q46. Therefore, the all questions of this study were 46 questions altogether. The median was used as a cut-off-point, where > median was high satisfaction while ≤ median used for low satisfaction.

3.6 Pre-test of the questionnaires

Before processing the data collection, the candidate submitted questionnaire thesis to advisors in order to check the content validity. Then, the questionnaires were adapted according to the suggestions and comments of the thesis advisors and proceeded to pre-test them using the devised questionnaires for thirty respondents. Then, the results of the thirty respondents were put into the Minitab of computer software to find out the reliability coefficients. When the questionnaires were pre-tested for its' reliability by using cronbach's coefficient of alpha method for part of clients' satisfaction. After testing, it was found that the value of the reliability was 0.7785 at the beginning of the computing the analysis and when questions 14 and 18 were removed, it was found to be 0.8314. After then the questions were revised in order to modify where it was necessary.

3.7 Data Collection

After permission was received from the provincial and district health offices, data collection process was commenced. A training orientation was conducted for three nurses from Wang Num Yen district health office. They were given training orientation on the contents of the research questionnaires, the procedures, methodology of the data collection, practice session on filling the questionnaires. The training methods used were lecture, role-play and practice. This training was conducted in the community hospital which was contracting unit of PCUs in Wang Num Yen. They were taken to data collection site for acquainting them with the exit of the primary care units and with area. The objective of training was to gather reliable and valid data during the period of data collection, which was in between 12-22 January 2004.

3.8 Data processing: and analysis

The data collected by the interviewers were checked and edited to correct the small mistakes and misplacement with them. Then, the raw data was entered into Minitab program by the researcher. This program was used to analyze the data. The normality test and histogram graph had been used to know the level of 0.05 in order to decide if the basic descriptive analysis was normally distributed or not. After it was known that it was not normally distributed, it was decided to use median as a cut point. Both descriptive and inferential statistical tests were used. The descriptive statistics was used for deciding the mean, median, mode and standard deviation as well as minimum and maximum. To find frequency and percentage tally test was used. In addition, Chi-square test was performed to determine if there had been relationship between the satisfaction, demographic characteristics, accessibility and availability factors variables used for the development of the client satisfaction research.

CHAPTER IV
RESULTS

This study was a descriptive cross-sectional study of clients' satisfaction on curative services of primary care units in Wang Num Yen district of Sakaeo Province in Thailand. After having had permission from the local health authority, the three primary care units which were located in the out skirts of rural area of Wang Num Yen district were purposively selected. The names of primary care units where the data was collected were as follows; Ta Lang Mai, Thung Maha Charoen, Klong Hin Poon

The total respondents of this study were 240 clients attending the above-mentioned three primary care units during 12-22 January 2004. The interview was conducted at the exits of the PCUs. The respondents were composed of only 16 years and older clients.

These eligible respondents were asked about the basic information of socio-demographic characteristics, accessibility, availability and satisfaction of clients with the dimensions of related curative services of the primary care units in the above mentioned district of Sakaeo Province, Thailand. There were 80 respondents selected from each primary care unit. The respondents who came to the three primary care units for utilization of curative services during the period of the data collection were both males and females.

This study was conducted in order to measure the level of the clients' satisfaction on the curative services using median score as a cut-point. Moreover, this study was intended to find out the relationship between the clients' satisfaction, demographic characteristics, accessibility, and availability factors in the regard of client satisfaction on the curative services of the three primary care units

The results of this study are presented into 4 parts:

Part 1: The socio-demographic characteristics of clients
Part 2: The accessibility on curative care services of the primary care units
Part 3: The availability on the curative care services of the primary care
Part 4: The clients' satisfaction

4.1 Socio-demographic characteristics

As shown in the conceptual framework of the study, the demographic characteristics of the respondents were composed of sex, age, marital status, education, occupation, monthly family income and types of the insurance.

Out of 240 patients surveyed, more than half (67.9%) of them were females while in marital status, majority (80%) of them was married group. The remaining were singles, divorced, widowed and separated.

The age of the patients was ranged from 16 to 80 years with mean age of 46.4 years old. The age of the respondents were divided into six categories. Highest proportion (22.5%) of the patients was the age group of 41-50 years. In the age group of 51-60, there were 18.3% and those who were older than 60 years of age were 21.3%. It seemed that the number of overall age groups of the respondents who were 30 years and older were 84.4% out of the total population surveyed. The proportion of age group of 31 to 40 years old was only 21.3%.

In terms of education, there were three categories that educational level was divided into. These were illiterate, primary education, secondary and above education. Majority of the respondents had primary education (75%) while remaining groups included the illiterate (11.7%), and secondary and above (13.3%), which was too small compared to primary school group.

The occupation component was divided into four categories. These were un-employed, farmers, laborers and private business/government employees. Majority (59.2%) of the respondents was farmers but the groups of laborers were 18.8% while small percentage (16.7%) of them were un-employed. The remaining groups were composed of those who worked for government and private business.

In addition, the family income per month was classified into four categories. More than half of the respondents (59.2%) was earning less than or equal 3000 Baht as monthly income. The remaining portion of the respondents was having an income between 3,001 to 5,000 Baht monthly while there were small groups that used to earn an income between 5,001-10,000 and more than 10,000 Baht.. Therefore, 84.2% of them were either earning less than or equal 5,000 Baht monthly. The minimum earning was 500 Baht and maximum one was 40,000 Baht. The average income of respondents was 4625 Baht while the standard deviation was 5401.

The respondents were asked about the types of the insurance that allowed them to come to receive curative services of the primary care units during the data collection. Almost all the patients (94.6%) were using gold card under the universal coverage scheme of 30 Baht insurance. The remaining group was using the social service card and government reimbursement.

Table 4 Frequency and percentage distribution of socio-demographic characteristics of the respondents

Characteristics	Frequency (n= 240)	Percent
Sex:		
Male	77	32.1
Female	163	67.9
Age (years)		
≤ 20	12	5.0
21-30	28	11.7
31-40	51	21.3
41-50	54	22.5
51-60	44	18.3
> 60	51	21.3
Minimum: 16,	**Maximum: 80**	**Median=44,**
Marital Status:		
Single	14	5.8
Married	192	80.0
Widowed/Divorced/Separated	34	14.2
Educational Level:		
Illiterate	28	11.7
Primary	180	75.0
Secondary or above	32	13.3

Table 4 Frequency and percentage distribution of socio-demographic characteristics of the respondents (cont.)

Characteristics	Frequency (n= 240)	Percent
Occupation:		
Un-employee	40	16.7
Farmers	142	59.2
Labor	45	18.7
Others	13	5.4
Family Income (Baht/month):		
≤3,000	142	59.2
3,001- 5,000	60	25.0
5,001-10,000	21	8.7
>10,000	17	7.1
Min=500 Baht,	**Max=40,000 Baht,**	
Median =3,000 Baht,	**S.D.=5,401**	
Type of Insurance:		
Golden card (UC)	227	94.6
Others	13	5.4

4.2 Accessibility of the curative services at PCUs

The two hundred forty respondents were interviewed at the exit of PCUs for evaluating their opinions towards accessibility of curative services of primary care units. In the accessibility part of the study contained the components of distance from the residence of the clients to the primary care units, waiting time for the curative care services, information received and the number of visits accomplished by the patients in the last three months.

During computation of data analysis, it was found that the overall accessibility to the curative services, majority 173 (72.1%) of the respondents said that they were having the easy accessibility while remaining part 67 (27.9%) of them cited that they had difficult accessibility.

Table 5 Frequency and percentage distribution on overall accessibility of curative service

Accessibility	Number n=(240)	Percentage
Overall accessibility:		
Easy access	173	72.1
Difficult access	67	27.9
Median=8,	**Min=4**	**Max=10**

However, in the items analysis-wise, there were 10 items in this part of accessibility study. During data analysis, it was found that the waiting time of the OPD card, majority (77.5%) of the respondents cited the time was not too long to wait receiving the card.

For waiting time in processing the curative services, majority (87.5%) of respondents cited that it was not too long. When the patients were asked about the waiting time concerning the taking medicines from the pharmacy, most (82.5%) of

them, cited that the waiting time of this section was not too long to wait. It was continued to ask the respondents about the information given by the health providers at the PCUs There was only less than half (37.9%) of respondents reported that they received information about family folder file. Others reported that they did not receive any information concerning the same item. In the question of treatment, majority (88.7%) of them cited that they received information. In curative services, most (87.1%) of them cited that they received enough information while in self-care item, 92.5% of them had cited that they received information.

Table 6 Frequency and percentage distribution of item analysis on accessibility of curative services

Accessibility Items	Frequency (n=240)	Percentage
Waiting time for OPD Card	186	77.5
Waiting time for curative services	210	87.5
Waiting time for medicines taking	198	82.5
Distance from house to PCU	209	87.1
Treatment information received	213	88.8
Curative service Information	209	87.1
Family folder file information	91	37.9
Prescribed medicine information	240	100
Self-care information received	222	92.5
More than one time visit	196	81.7

4.3 Availability of the curative services at PCUs

The availability of the curative care services of primary care units was composed of health providers, referral vehicle, referral system and the cleanliness of infrastructure as variables. In this study, the overall availability showed that most (75.4%) of the patients that the curative service of the PCUs was convenient while remaining group (24.6%) were less availability.

Table 7 Frequency and percentage distribution of availability of curative service

Availability	Number (n=240)	Percentage
Overall Availability:		
Available	181	75.4
Not available	59	24.6
Median =7,	**Minimum =3,**	**Maximum=9**

Coming to the analysis of the items there were nine items of this part of the study. Therefore, out of 240 respondents, majority (82.9%) of the respondents said that there was availability of enough seats at the infrastructure of the primary care. Majority (87.5%) of them showed that the infrastructure of the primary care units had good cleanliness while ventilation condition, 100% of the respondents showed that there was enough ventilation inside the infrastructure and 82.9% of them said that there was light condition in the infrastructure was good.

When patients were asked whether there were enough doctors, majority (76.2%) of them said that there were enough doctors though when they were asked about the nurses, most (82.9%) of them answered that there were enough nurses. However, when they were asked about the pharmacists, it found that there were only half (51.7%) who answered that there was availability of pharmacists.

Table 8 Frequency and percentage distribution by item analysis on availability of curative service

Availability	Frequency (n=240)	Percentage
Availability of doctors	183	76.2
Availability of nurses	199	82.9
Availability of pharmacists	124	51.7
Availability of seats	210	87.5
Cleanliness of PCUs	225	93.7
Ventilation condition inside PCUs	240	100
Light inside PCUs	199	82.9
Referral vehicle at PCUs	113	47.1
Referral system of PCUs	217	90.4

4.4 Clients' satisfaction on curative service

Among the patients with satisfaction, half (51.7%) of them were having higher satisfaction while the nearly half (48.3%) of them were having also lower satisfaction when used median as a cut-off- point. In this part of study, there were twenty items for client satisfaction. These items were concerning the health providers and clients relationship, their competency, curative service information and supplies and cleanliness of the infrastructure.

The score of the satisfaction was measured by likert scales method, which was recorded in three levels of satisfaction, which were used for agree (3), not sure (2) and disagree (1). Therefore, the total score of satisfaction by item part of the study was 60 points at the highest while the lowest point was 20.

Health care providers capability

There were three questions about the competency of the health providers that patients were asked. These questions were as follows; ability of the health providers to diagnose the patients' complaints. There were more than half (64.2%) of respondents agreed that the health care providers had ability of diagnosing their health. Out of 240 patients interviewed, most (88.8%) of them had agreed by saying that health providers took always the physical examination. In the case of taking the patients' history during their visits to the primary care units, majority (92.9%) of them said that the health providers had performed taking the history of them patients.

Health providers and clients relationship

There were several questions, which were concerning the relationship between the health providers and clients. These questions were for example how the health providers had respected the patients as clients. Almost all of the patients (96.3%) agreed that the health providers showed respect to the patients during their visit to the

primary while majority (96.7%) of them said that the health providers had willingness for helping them.

When the patients were asked, if the health providers gave attention to listen the patients, most (95%0 of them agreed that they were listened while most (95.8%) of them also cited that health care providers had answered their questions. Though when asked if measures taken to assure their privacy, only 56.3% of them had agreed that measures were taken for assuring their privacy during the treatment process while almost half (42.5%) cited that they were not sure if their privacy was assured or not. This result showed that the respondents were having doubts on their privacy protection.

Curative services information and supplies

The most items of the part four of the research were regarding the information on the curative care services. Some of the questions were concerning the diseases, usage, side effects, quality and sufficiency of the drugs prescribed for the patients. When they were asked if the health providers gave them information about their diseases, majority (83.3%) agreed that they received explanation on this aspect. Information on usage of the prescribed medicines, all (100 percent) of them agreed they had received information of this item where majority (80.7%) of them agreed on the quality of the treatment given by the health providers.

Concerning the doctor going to the primary care units for two days every month, 80.4% of them agreed that these two days of a month are not enough for doctor to treat the patients. In addition, the patients were asked about the clinic hours and more than half (66.2%) of them disagreed that clinic hours were inconvenient though 31.7% of them agreed that the clinic hours were not convenient. For referring to district hospital, majority (69%) of them agreed that they preferred to be referred to referral hospital and remaining groups either were not sure or disagreed about the ability of diagnosing health problem..

Concerning cleanliness of treatment room and the condition of infrastructure as a whole, most (98.7% and 93.3% respectively) of them cited that they were clean. However, when asked about the ability of making diagnosis, nearly half (64.2%) of them said health providers had ability to diagnose though all (100%) cited that drug usage was explained clearly.

Table 9 Clients' satisfaction on curative services

Level of satisfaction	Number (n=240)	Percentage
High	124	51.7
Low	116	48.3
Min=44	**Median=56**	**Max=89**

Table 10 Frequency and percentage distribution on level of clients' satisfaction by item analysis

Relating items	Level of satisfaction (n=240)		
	Agree %	Not sure %	Disagree %
Health providers:			
Take Physical examination	88.7	9.2	2.1
Take Patient History	92.9	6.3	0.8
Pay respect to patient	96.3	3.3	0.4
Have willingness to help patients	96.7	3.3	0
Listen to patients	95.0	5.0	0
Always pay attention to answer the questions:	95.8	4.2	0
Assure your privacy	56.2	42.5	1.3
Have ability to diagnose	64.2	27.9	7.9
Explain about diseases	83.3	9.2	7.5
Explain clearly using drugs:	100	0	0

Table 10 Frequency and percentage distribution on level of clients' satisfaction by item analysis- (cont.)

Relating items	Level of satisfaction (n=240)		
	Agree %	**Not sure %**	**Disagree %**
Side effect of drug	80.8	17.5	1.7
Drug has enough quality	80.7	18	1.3
PCU has sufficient drugs	72.5	14.6	.12.9
2 days a month are not enough for the doctor to come PCU:	80.4	5.0	14.6
Treatment received from PCU	96.2	2.5	1.3
Time for services is enough	94.2	2.5	3.3
Clinic hours are not Convenient	31.7	2.1	66.2
Refer to hospital is preferred	69.2	12.5	18.3
Treatment room is clean	98.8	0.4	0.8
Infrastructure is clean	93.3	0.4	6.3

4.5 Clients' satisfaction by general characteristics

The socio-demographic characteristics of the patient have not related with the clients' satisfaction. The computed analysis of satisfaction of clients' different characteristics was conducted during process of data analysis.

In this study, socio-demographic characteristics of the respondents were composed of age, sex, marital status, education, occupation, monthly family income and types of insurance. For this reason, the relationship between patients' satisfaction and general characteristics of the patients of this study significant relationship was not shown in any variables of the demographic factors. When computed the age of the respondents, it was found that the patients with older age seemed to be having high satisfaction comparing to those who were younger. Those groups of respondents with the age of 41-50 years showed only the proportion of 57.4 percent had high satisfaction on the curative services. However, those groups from 51 to 60 years and more than 60 years of age were having satisfaction proportion at the level satisfaction of 61.4 percent and 56.9 percent respectively. Statistical analysis showed that the relationship between clients' satisfaction about the curative services and age of the clients studied was not significant ($p>0.171$).

Talking about the sex group, it was found that the female group slightly showed that they had igher satisfaction, which was more than male group though there was not relationship between clients' satisfaction and sex of the clients (p-value=828). In the female group, there were half (52.2%) showed to be satisfied but anyhow, these groups were dependent on each other. In the marital status, there were three groups of marital status such as single, married and others including divorced, widowed and separated. The married group was 53.1% of them had shown higher satisfaction comparing to the other groups of the marital status. The single group was having lowest satisfaction (42.95) at the curative services of the primary care units while others with satisfaction of (47.1%) composed group of divorced, widowed and separated. However, statistical analysis showed that relationship between marital status was not related to clients' satisfaction (p-value=0.642).

In the case of education of the patients, it was divided into three categories of illiterate, primary education, secondary and above. It seemed that the illiterate and primary education groups were equally satisfied at the median score (53.6% and 53.3% respectively).

Looking at the various groups of different occupations, which were un-employed, farmers and laborers were nearly equally satisfied with the curative care services at the primary care units (52.5%, 52.8% and 51.1% respectively). The groups have nearly same proportion. They are not significant and this is the reason why there was not relation between the occupation and satisfaction. Statistical analysis showed that the relationship between occupation and satisfaction were not related each other (p-value=0.801).

In this study, the family income per month of the patients was collected. When it was computed to discover the relationship between monthly family income and satisfaction, it was found that those who earned more than 5000 Baht and above (55.3%) had higher satisfaction than those who earn less income. Statistical analysis showed that there was not relationship between the family income per month and the satisfaction at the level of ($p>0.05$).

In addition, the types of the insurance that allowed the patients to attend the curative services of primary care units were surveyed. It was found that 52% of those who used the gold card had shown that they satisfied with the utilization of curative services though. The groups have nearly to same proportion and they are not different significantly types of insurance was related to clients satisfaction (p-value 0.683).

Table 11 Clients' satisfaction by socio-demographic characteristics

Socio-demographic factors	Satisfaction groups High No	%	low No	%	x^2 (df)	p-value
Sex:						
Male	39	50.7	38	49.3	0.047	0.828
Female	85	52.2	78	47.8	(1)	
Age in Years:						
≤20 yrs	4	33.3	8	66.7	7.740	0.171
21-30	11	39.3	17	60.7	(5)	
31-40	22	43.1	29	56.9		
41-50	31	57.4	23	42.6		
51-60	27	61.4	17	38.6		
> 60	29	56.9	22	43.1		
Marital Status:						
Single	6	42.9	8	57.1	0.888	0.642
Married	102	53.1	90	46.9	(2)	
Others	16	47.1	18	52.9		
Educational level:						
Illiterate	15	53.6	13	46.4	1.803	0.406
Primary	96	53.3	84	46.7	(2)	
Secondary and above	13	40.6	19	59.4		

Table 11 Clients' satisfaction by the socio-demographic characteristics –(cont.)

Socio-demographic Factors	Satisfaction groups: High No	High %	Low No	Low %	x^2 (df)	p-value
Occupation:						
Unemployed	21	52.5	19	47.5	1.000	0.801
Farmers	75	52.8	67	47.2	(3)	
Labor	23	51.1	22	48.9		
Others	5	38.5	8	61.5		
Family Income (Baht/month):						
≤ 2,000 Baht	37	48.1	40	51.9	0.664	0.717
2,001-5,000	66	52.8	59	47.2	(1)	
>5,000	21	55.3	17	44.7		
Types of Insurance:						
Golden card	118	52.0	109	48.0	0.116	0.683
Others	6	46.2	7	53.8	(1)	

4.6 Clients' satisfaction by accessibility factors

The relationship between the accessibility with the factors of distance, waiting time, number of visits and information given to clients and level of satisfaction to the curative service was also conducted. In overall accessibility, among those who showed high accessibility, there were more than half (58.4%) of them who had high satisfaction to the curative services in the overall accessibility comparing to those who were having difficult accessibility. Statistical test of chi-square used had shown that there was relationship between the accessibility and clients' satisfaction (p=0.001).

Moreover, the distance between the client's house and primary care units was not related to the satisfaction of the clients at the level of confidence interval of 95% (p=0.999). The distance had no relation with satisfaction. This means the groups had same proportion in terms of satisfaction.

In the result of the waiting time, 53.1% had high satisfaction where the statistical test verified that the waiting time was not related with the satisfaction of the clients at the curative services of the PCUs in the level of confidence interval of 95% (p=0.523).

Information was another component that the patients were also asked where 57.3% of those who received enough information on curative services from the sources of the health providers during their visit said that they had high satisfaction. Information from any sources of the PCUs was highly related to the clients' satisfaction (p=0.000).

According to the number of visits that was made by the patients, there were 52.6% of those who visited the primary care units more than one time were to have high satisfaction. The statistical test has shown no significant relationship between the number of visits and satisfaction (p=0.563).

Table 12 Clients' Satisfaction by Accessibility

Accessibility factors	Satisfaction group				x^2	
	High		Low			
	No	%	No	%	(df)	p-value
Overall Accessibility						
Difficult access	23	34.3	44	65.7	11.189	0.001
Easy access	101	58.4	72	41.6	(1)	
Distance						
Not Far	108	51.7	101	48.3	0.000	0.999
Far	16	51.6	15	48.4	(1)	
Waiting time						
Not Too long	85	53.1	75	46.9	0.409	0.523
Too long	39	48.7	41	51.3	(1)	
Information received						
Received	114	57.3	85	42.7	14.732	0.000
Not received	10	24.4	31	75.6	(1)	
Frequency to visits						
1st visit	21	47.7	23	52.3	0.335	0.563
≥ 2 visits	103	52.6	93	47.4	(1)	

4.7 Client Satisfaction by Availability factors

The components of availability of this study were composed of health providers, infrastructure, referral system and referral vehicles. The relationship between the availability and satisfaction was also computed using the statistical test of chi-square. It was detected that there were 58 % of those patients who were having easy availability had satisfaction compared to those had difficulties to access. The availability was highly related to the satisfaction of the clients at the level of confidence interval 95% (p=0.001.).

In addition, when the relationship between availability factors and satisfaction were computed, the statistical test of chi-square had shown that there was relationship between the factor of health providers and satisfaction of the clients. It was discovered that there were 57.5.4% of the patients who were having availability towards the health providers had high satisfaction. The statistical test verified that there was significant (p-value = 0.002). It was continued that the patients were to be asked about the availability of the referral vehicles. There was mixed idea of the patients that some of them cited that there were referral vehicles and others cited there were not referral vehicles though 58.4% of those who said that there were referral vehicles available at the primary care units had high satisfaction. The availability of the referral vehicles showed that there was relationship with the level of satisfaction (p=0.049).

In the component of referral system, there were 53.5% of those who mentioned that the PCUs had referral system had showed high satisfaction. The referral system was not related to the satisfaction of the clients (p-value=0.088).

In the case of the infrastructure, there were 53.8% of those who cited that there was good infrastructure had high satisfaction. The statistical test used had shown that there was not any relationship between the infrastructure and clients' satisfaction (p=0.151).

Table 13 Clients' Satisfaction by Availability

Availability	Satisfaction group: High No	High %	Low No	Low %	x^2 (df)	p-value
Overall availability:						
Difficult	19	32.2	40	67.8	11.868	0.001
Easy	105	58.0	76	42.0	(1)	
Health providers						
Have	105	57.4	78	42.6	10.061	0.002
Have not	19	33.3	38	66.7	(1)	
Referral vehicles						
Have	66	58.4	47	41.6	3.885	0.049
Have not	58	45.7	69	54.3	(1)	
Referral system of PCUs:						
Have	116	53.5	101	46.5	2.904(1)	0.088
Have not	8	34.8	15	65.2	(1)	
Infrastructure of PCUs						
Good	107	53.8	92	46.2	2.061	0.151
Poor	17	41.5	24	58.5	(1)	

CHAPTER V
DISCUSSION

The primary care unit is the crucial gatekeeper to specialized institution services or open access to specialist clinics. The main objectives of this study were to assess the level of satisfaction on the curative services provided by this gatekeeper of primary care units of the Wang Num Yen district. In addition, it was to determine the relationship between socio-demographic characteristics of patients, accessibility and availability of curative services and clients' satisfaction on curative services.

For this study of clients' satisfaction (using median score as a cut-off-point) on curative service, the total patients surveyed were 240 persons attending the three primary care units in the above-said district in the period between 12 to 22 January 2004. The 240 respondents were divided among the three primary care units equally. 80 respondents with the age of 16 years and above were to come from each PCU. These respondents were those who visited at the primary care units for seeking curative services and those who came for taking care their children or clients under 16 years of age. These primary care units were purposively selected for this study. After having had received permission from the provincial and district health authority. Orientation training was given to the interviewers on the how to collect data, how to clean and how convince the respondents. They were shown how to lead the data collection at the exit point of the primary care units. Then, the target patients were interviewed using the structured questionnaires at the exit point till all 240 patients were completed. Descriptive statistics and Chi-square test were applied for the analysis of the raw data.

Fitzpatrick carried out a similar study in 1991. His study was concerned on measurement of patient satisfaction wrote that patients evaluated their health care on a number of different and separate aspects. How many dimensions that patients distinguish in their evaluation of care is not universally agreed, but several studies

assess patients' point of view separately utilizing each of the followings; personal aspect of care, technical quality of care, accessibility and availability of care, effectiveness of treatment and convenience of physical setting. Saurma Ida Pasaribu conducted another similar study at a health center in Bangkok in 1996. In his study, he found that 53.3% of the respondents who came to the health center were having high satisfaction and 46.7% had low satisfaction (46). These findings that. Saurma found were similar with results of this study.

Satisfaction

Gregory said in 1988 about this part of his study that the most difficult investigation was to detect the association between patients' socioeconomic demographic characteristics and the level of satisfaction. Though socio-economic demographic variables had been studied on numerous occasions, a consistent picture of their effects on patients' satisfaction was emerged. This was maybe due to the fact that many studies had varied widely in the nature of the studied sample and their specific background characteristics.

The level of clients' satisfaction is influenced by factors of demographic characteristics, accessibility and availability at health service facilities. Accordingly, it was found that there were 51.7% of those patients who had attended at the three care units of the Wang Num Yen district during the period of the data collection were having high satisfaction though the rest of the patients had low satisfaction.

However, the results of satisfaction of this study were less than the satisfaction findings of the study of Sita Ram Devkota, conducted in 1997 (47). According to his study which was conducted in five randomly selected health centers of Muang district, Loei Province, Thailand where 71.3% respondents showed high satisfaction towards health care services provided by the health centers. To compare different findings of satisfaction study could be found that there was different level of percentage based on their measurement. All these studies were performed in different places of Thialnd in different times but they might be used in different cut-points.

Table 14 Comparison to some findings from previous studies of satisfaction in Thailand (with different measurement)

Study	When	Where	% Satisfaction
Sita Ram	1997	Muang district	71.3% (moderate)
Saurma	1996	Bangkok	53.3% (low)
Iqbal	2002	Salaya	80% (high)
This study	2004	Wang Num Yen	51.7%(low)

The reason why this study showed less satisfaction was because of the primary care units were located in the deep remote area of the rural parts of the province with low income people comparing to areas that above researchers were conducted. In this study, the most respondents were farmers and laborers maybe they had limited time for attending and waiting for curative services of the PCUs. The people from rural areas could not get appointment with the doctor who stayed at PCUs for only two days per months. Furthermore, many of the respondents had cited that the clinic hours were not convenient for them. One of the reasons could be that the people living in different geographical locations might have different attitudes depending on their respective socio-cultural aspects.

Beside the above components, when the education was analyzed it was found that most of these patients were having primary education with low income and high un-employment comparing to the patients of the health centers of Bangkok and Muang district where clients were having higher education with high income . Another reason for their lower satisfaction was though they preferred to be referred to community hospital or higher specialized institutions, during the interview, most of the clients showed that there were not vehicles for referral at the PCUs.

Socio-demographic factors are related to both the types of health care experiences that patients have and to the way that they interpret them. Therefore, concerning the age, it was fond that the younger age group showed that there was less satisfaction comparing to other groups of older age groups. Therefore, satisfaction of the clients was higher as the age of the clients went older. Hall and Dornan in 1988 said that generally in age it was reported that older people are more satisfied with medical care. Hence, the age was not related to the level of satisfaction of the clients (p-value=0.171). The age of the clients and satisfaction were not independent each other. They were dependent. Therefore, higher the age of the clients more likely that the satisfaction of clients was higher at curative services of the PCUs and vice versa

In the sex groups, the female group showed that they had higher satisfaction comparing to the one of male group. In marital status, the married group was more satisfied than the groups of singles and divorced, widowed, and separated together. In education the illiterate and primary educated groups had high satisfaction comparing to those patients with secondary and above education only (1.6%) of them were reported to be having higher education) while the occupation of the most patients were farmers and laborers. These groups were having high satisfaction with the curative services though the unemployed groups were having slight satisfaction compared to other groups. The reason why there was not relationship between the two variables is because the groups are equally satisfied. Similarly, statistical test showed that there was no significant relationship between education and clients satisfaction (p-value = 0.406).

For the monthly family income, it showed that the more the income increased the higher the satisfaction with curative services but those patients who had less or equal two thousand Baht as income had less satisfaction. So the less income was, the less the patients had satisfaction comparing to those who were having higher income. It was reported by Hall et al in 1988 that low income have low health and get lower health having less continuous relations with doctors, and have difficulties getting appointments. They are also treated differently from privately insured patients to some degree and consequently tended to be less satisfied. The chi-square test used has

shown that there was relation between the monthly family income and clients satisfaction (p-value =0.717)

Moreover, most of the patients surveyed were using the gold card for attending the primary care units. In this regard, there were 52.0 % of those who were using the golden card had high satisfaction though the chi-square test showed no relation between the golden card usage and clients' satisfaction (p-value = 0.683)

Coming to the studying satisfaction items wise, it was found that satisfaction was relatively high in the case of patients and health provider relationship, information related to curative services and supplies and infrastructure's cleanliness. Most of the respondents were highly agreed about receiving the information on the prescribed drugs, information on usage drugs, information related to drug quality and drug availability in the PCUs.

In addition, there were many respondents who hesitated to agree the items relating to clinic hours, assuring patients privacy, the ability of diagnosing patients' problems and many of them preferred to be referred to district hospital. In the case of clinic hours many patients showed that they did not agree maybe because of being farmers and laborers because of their limited time for work schedule.

Coming to overall accessibility, 58.4% of the patients who had easy accessibility to the curative service had satisfaction declaring that the curative services were highly accessible. The accessibility of curative services was highly related to the satisfaction of the clients and when the statistical test was used, it was found that the confidence of interval of 95% (p-value 0.001). The four components of the accessibility such as distance, waiting time, information received and visits of more than one time in the last three months were studied. This means that the higher accessibility to the curative service is the higher the clients would be.

Though it was found that the respondents had high satisfaction with the overall accessibility still in the case of distance, both the patients who cited that the distance

was far and not far showed equal satisfaction (51.6% and 51.7% respectively). The distance did not show any difference among the groups of clients. This might be because of all patients were from the near catchment area of the primary care units though the distance was not related to the satisfaction of the clients at the confidence of interval 95% (p-value = 0.999).

In the case of waiting time, visits more than one time and information received, the patients who were having high satisfaction with curative services were as 53.1%, 52.6% and 57.3% respectively. Most of respondents were reported that they visited the primary care units two times or more than two times in the last three months. The number of visits of the clients to the curative services of the primary care units was not related to the satisfaction of the clients at the level of the confidence of interval 95% (p-value = 0.563). Waiting time was not related to the satisfaction of the clients at curative services of PCUs at confidence of interval (p-value = 0.523).

Furthermore, in the information-received factor many respondents showed that they were not receiving the family folder file information. (62.1%). Though the overall respondents showed satisfaction in those components still many of them had low satisfaction. In the case of information, the statistical test verified that the information was related to the satisfaction of the clients so more information given o the clients better the satisfaction of the clients would be (p-value =0.000).

Upreti conducted a similar study in 1994. This study was concerning the services of health centers. In his study, he found that 71% of the respondents were satisfied while 29% of them were not satisfied (48). The dimensions that he studied were relating to accessibility components as distance, waiting time, working hours. The satisfaction percentage of accessibility components was 64.1%. Similarly, he also found 59.0% in respect of information received. This study also showed that clients are concerned on the waiting time and also parts of information received, e.g. family folder files information.

But this study of curative services was to show that there were 58.4% of the patients had high satisfaction on accessibility and for information, there were 57.3% of them having high satisfaction.

Coming to the availability on curative services, it was found that 58 % of the patients surveyed among those who had high availability had shown high level of satisfaction of the services of curative care. The components of availability were composed of health providers, referral system, referral vehicles and infrastructure.

In this case, the statistical test showed that there health care providers component was related to clients' satisfaction at the confidence of interval 95% (p-value =0.002). In the health care provider factor, majority (57.4%) showed that they had high satisfaction and availability of health care providers had effect on the satisfaction of the clients so in this study more the health care providers are available, more likely the satisfaction of the clients would be better. This was explained by the Project of Quality of Reproductive Health Care Study (DISH, 1999) in Uganda by discovering that clients often expected facilities to have well qualified medical doctors and laboratory technicians. Specifically, clients wanted providers to conduct a proper examination, identify problem and prescribe treatment. Many clients felt that the health facilities lacked qualified staff and resented being treated by midwives or nurses who were "training-on-the-job".

In the case of the referral vehicle, it was slightly related to the satisfaction of the clients so more the referral vehicles was available at the curative services of PCUs more likely the situation of satisfaction of the clients would be higher (p-value =0.049).

There were many respondents showed that there were not pharmacists in the primary care units while others showed that the arrival days of the doctor to the curative services of the primary care units were not enough. Anyhow, 54.3% of respondents of those who announced that the primary care units had not referral vehicles showed less satisfied. These patients maybe were those who preferred to be

referred to the district hospital. So more the clients became trusted on the presence of the referral vehicles at the primary care units better that their satisfaction would be increased.

In this study, many patients knew that the primary care units had referral system though many of them said that there were not enough referral vehicles and this could give them reason of feeling doubts towards lack of possibility that the PCUs would not transfer them to the referral hospital. About the infrastructure of the primary care units, 53.8% patients of those who agreed that there was good infrastructure had satisfaction though there was no significant difference among the groups (p-value=0.151).

The patients could be more satisfied if they were referred to the district hospital according to their responses. This maybe related to the shortage of the doctors or the short time that the doctor stayed at the curative service of the primary care units. Dolinsky and Caputo in 1990 studied that patient satisfaction is strongly predicted by ability or inability to see a specialist when consumers feel they need to specialists.

CHAPTER VI
CONCLUSON AND RECOMMEDATION

6.1 Conclusion

The main objectives of this study were evaluating the level of satisfaction of clients on the curative services provided by the gatekeepers of curative services. The other objectives of this study were to determine the relationship between socio-demographic characteristics of patients, accessibility and availability to curative services and satisfaction of clients on curative services.

This study of clients' satisfaction on curative services was conducted at the exits of primary care units in Wang Num Yen district of Sakaeo province, Thailand. The data collection of study was gathered in the period between 12-21 January 2004. The data was collected from 240 patients who attended these primary care units for seeking curative services during the above-said period of time. These PCUs are working under the contracting unit (CUP) of the community hospital locating in the district town while the PCUs were located in the outskirts of rural area of the Wang Num Yen district.

This study of the clients' satisfaction on the curative service of the primary care units was to evaluate clients' satisfaction from the point of view of the clients interviewed. The information received from the data analyzed would also help to overcome the existing problems hindering the improvement of curative services of the gatekeepers to specialized health institutions.

In this study, it was found that the clients who were utilizing the primary care units were mainly female (67.9%) and had aged between 16 to 80 years old. The average age was 46.37 years old and standard deviation was 15.39. The age of these respondents had not significant relationship with satisfaction of the clients (p=0.171).

80% of the clients surveyed were married. Most of patients surveyed (75%) were having primary school education. Majority of the respondents worked as farmers (59.2%) and laborers (18.7%) though there were considerable number of un-employed clients.

The family income per month was in between 500 Baht to 40,000 Baht while the average household income was at 4625 Baht with standard deviation of 5401. In the study, it was found that almost all of the patients 94.6%) were utilizing golden card of 30 Baht as a type of insurance. Of this, there were 52 % of them who were having high satisfaction by using at this cut point of median. There were also only 5.4% of the patients using other insurance cards; such as social security card, private insurance card and government service reimbursement.

In the overall accessibility, most of them 72.1% showed that they had easy access and of this, there were 58% of them who had high satisfaction showing significant relationship with the satisfaction of the clients ($p=0.001$). 87.1% of the patients said that distance from their home to the primary care units was not far away from the catchment area of the PCUs. In the case of the information-received, the statistical test showed that there was relation between the information given by the health providers during the curative service session and clients satisfaction. This was very encouraging activity for health providers to continue information-received accordingly or to upgrade the methods used for disseminating the information sources.

According to the results of this study, 51.7 percent of the respondents had high level of satisfaction on the curative services using the median score though in the study that many patients showed having low satisfaction. Majority of the population in this area is using the PCUs for receiving their curative services and referral system as crucial gatekeeper to community hospital at district level that had contracted with PCUs. It is therefore reasonable to improve the curative services and the relating activities for better utilization.

The overall availability of the curative services of the PCUs was having relationship with the level of satisfaction of the clients. There were 75.4% of them showed that the PCUs had availability while 58% of those who had showed easy availability had high satisfaction. The availability of the PCUs was related to the satisfaction of the clients. Therefore, the more availability of the curative services was the more likely that the satisfaction of the clients towards the curative services at confidence interval of 95% (p=0.001). Furthermore, the components of availability of the curative service were health providers, referral system, referral vehicle and infrastructure. Out of these components, there were health providers and referral vehicle statistically having relation with the satisfaction of clients

All in all components of the study, there were overall accessibility, availability, information-received, health providers and referral vehicles were statistically related to the level of satisfaction where the other variables did not show any relationship with the satisfaction of the clients. Also overall accessibility and availability had relationship with satisfaction of clients significantly.

Even though the level of satisfaction seemed to be good still many of the respondents had less satisfaction with curative services, which might be due to lack of referral vehicles, lack of enough doctors. This because many of the respondents also had mentioned that they were not receiving the information on family folder file. Other patients had cited that there were not pharmacists, who could help the patients so as to receive their prescribed drugs though altogether showed that the information on the prescribed drugs was good.

6.2 Recommendations

6.2.1 Recommendations for primary care units

Clients are more likely to continue utilizing curative care services of the primary care units, when they have a good relationship with health providers. However, the un-satisfied clients often avoid contacting the health providers of the health facility and prefer going to other heath facilities for better curative services in the developing countries when their relation with the health providers is not good.

In addition, when patient has high satisfaction with the PCUs is more likely to accept and follow prescribed and recommended medical intake and planned treatment. It is therefore recommended that the health providers of primary care units should professionally serve their clients with utmost skills and competencies so as to make maximum utilization of their services and in turn the patients could benefit from the services. Based on the study findings, the followings would be recommended for health care providers of PCUs, contracting units and researchers for future study in order to improve the curative services:

1. The study showed that the percentage of the clients' satisfaction towards the primary care units was partly low comparing other studies shown in discussion part. In the results of the study, there were many patients who were from the working class, especially farmers and laborers, therefore they might not have time to wait for the curative services longer for they showed hesitation on waiting time for OPD card and taking medicines from the pharmacy. Moreover, many of the patients surveyed showed that they agreed that the clinic hours were not convenient for attending the PCUs. It is therefore kindly recommended to quicken the curative service process so the clients should not have feelings of delay or losing their golden time on waiting for curative services. In other words, it is advisable to find ways to make the clinic hours agree on their time of work

such as by opening the weekend period and could be found possibility of co-payment by the clients so this fee can be given to the staff on duty.

2. In the result of the study, the patients showed that they had not received the information of family folder files. It is therefore recommended that the health care providers should have to give enough information on this matter so the patients could know more about their family health problem using VHVs. Since the curative service information related satisfaction, it is therefore recommended to be strengthened.

3. Many of the patients surveyed cited that they were not sure if their privacy assured during treatment provision and it is usually known that the sickness may cause the patient to have mental confusion. It is therefore recommended that the patients should have their personal privacy protected especially during the treatment provision process.

6.2.2 Recommendation for Contracting Unit

Based on the study findings, the followings would be recommended for contracting unit in order to improve the curative services of PCUs.

1. In the results of study, it seemed that the respondents were not content with only two days of the doctor arriving to visit the primary care units per month. They also showed that there was not availability of pharmacists in the PCUs. It is therefore recommended to increase the number of days that doctor is arriving and number of pharmacists or to find ways of making staff shift of the doctors, nurses or paramedical health personnel can be increased to provide curative services at primary care units.

2. The primary care units are the gatekeepers of the specialized institutions where the clients attend when they are not feeling healthily. In this study, many patients said

that they preferred to be referred to the community hospital. In addition, it was found that there had not been referral vehicle available in the primary care units during the period of data collection according to the responses of the patients surveyed knowing that these PCUs are away from the referral hospital. For this reason, it is recommended for the contracting unit should have to ensure and make follow up on the availability of the referral vehicles at the PCUs.

3. Rapid increase of health development had greatly affected the role of the health care providers. Therefore, the competency and skill of the health providers should be improved by conducting proper training for the nurses and other paramedical staff, including the staff of the pharmacy in order to lead better curative services, which could be scientifically reachable at the level of the primary care units.

4. Clients or users of the curative services are very important in the participation of the planning and decision-making of PCUs' activities. For this reason, it is kindly recommended to formulate ways of forming a client committee or community committee for either advocating the promotion of the PCU curative services or contribution for PCUs' development.

6.2.3 Recommendations for further study:

The basic reasoned doctrine behind each study is to find out a problem and then to get ways for solving this problem. This study could be very interesting for the researchers who are having stake in the regards of health care industry and hoping to improve the curative services of the primary care units. This study showed low satisfaction of the clients compared to the previous studies. It is therefore more studies recommended on this field finding other appropriate approaches including in-depth interview, open end questions, participatory observation or any other approaches can be used in order to get a clearer picture of the whole situation of the curative services relating to PCUs:

1. It is known that using median in this study as statistical point of view gave low results of satisfaction. So in order to find ways different from the methodology used in this study, maybe the qualitative data collection could be used. It is therefore recommended to promote techniques of observation, group discussion between the clients themselves or between the clients and health providers are recommended in order to conduct a new study for discovery of concrete picture of clients' satisfaction.

2. In this case, a study concerning the curative service utilization is advised which could be at home level interview of the clients so as to know more about their opinion. This can give a true picture of the situation because clients can respond freely when they are at their homes and not at the health facilities

3. Many patients said that they preferred to be referred to the community hospital. This has explained that there could be by-passers of the gatekeepers or there could be some of clients who were willing to be referred to the district hospital. Hence, it is recommended to evaluate this situation of the patients by-passing the PCUs.

4. Another study could be conducted for an assessment of the situation of the users of the primary care units and non-users in order to determine the different perceptions of the two populations towards curative services of the PCUs.

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APPENDIX

APPENDIX A

Questionnaires

Client satisfaction on curative services provided by primary care units of Wang Num Yan District in Sakaeo Province, Thailand

Introduction

Dear Curative Service Client,

We are kindly evaluating your satisfaction with the primary care unit curative services and the quality of care you are receiving from the primary care unit. Therefore, you are kindly requested to respond the following questions freely. All your honest responses in this regard will be highly appreciated and your answers will remain confidentially.

Thank you for your help

Serial number_____

Date of interview_____

(date/month/year)

Name of the PCU:_____

Name of the interviewer_____

Part 1: Socio-demographic characteristics regarding the respondents

Please mark √ the box or fill in the blank position of data questionnaires for responses. :

1. Age_____ (In Years)
2. Sex: [ ] Male [ ] Female
3. Marital status: [ ] Single [ ] Married [ ] Widowed/Divorced/ separated
4. Educational Level: [ ] 1 No schooling [ ] Primary school [ ] Secondary school [] College/higher education
5. Occupation: [ ] Un-employee [ ] Farmer [] 3 labor [ ] private business [ ] Government employee [] Other (Specify)_____
6. Income per Month _____Baht (all family members income)
7. Type of insurance [ ] 30 Baht Gold card [ ] Social Security card [ ] Private insurance card [] Government reimbursement card

Part 2: Accessibility to PCU curative service

Please check (√) the appropriate answer according to your opinion regarding the accessibility of service:

Statement	**Yes**	**No**
8. Waiting time for receiving the OPD card is quickly.		
9. Waiting time for getting curative services from health providers is not too long.		
10. Waiting time for getting the medicines from the primary care unit Pharmacy is not long.		
11. Traveling time from my house to primary care to get curative service is not too long.		
12. You get understandable treatment information from the health providers.		
13. The health providers give you clear information on the curative service utilization.		

14. You get clear explanation on the information of the family folder file from health providers.		
15. You get information on how to use prescribed medicines.		
16. You received consultation on how to self care your disease.		
17. You visited this primary care unit more than one time in the last 3 months including this visit now.		

Part 3: Availability of PCU curative service

Please check (√) the appropriate answer according to your opinion regarding the availability of service:

Statement	**Yes**	**No**
18. This primary care unit has enough seats for the clients.		
19. This primary care unit has enough doctors for curing the clients,		
20. This primary care unit has enough nurses for caring clients.		
21. This primary care unit has enough pharmacists serving the clients.		
22. This primary care unit has referral vehicle.		
23. This primary care unit provide referral system for the patient to district hospital		
24. Waiting area of the primary care unit infrastructure has enough cleanliness.		
25. The inside of the primary care unit infrastructure has enough ventilation.		
26. The inside of the primary care unit building has enough light.		

Part 4. Satisfaction to curative services

Please respond the following questions by ticking √ the blank position according to your opinion: Each question has **only one**_response; The satisfaction will be measured as Agree =3, not sure = 2 and Disagree = 1.

No	Satisfaction to Curative Services statement	3	2	1
27.	Health providers take always the physical examination			
28.	Health providers pay attention to taking patients' history.			
29.	Health providers always pay respect to the patient.			
30.	Health providers have willingness to help the patient.			
31.	Health providers pay attention to listen to the patient.			
32.	Health providers always pay attention to answer questions of the patients.			
33.	Health providers take measures to assure your privacy during your treatment provision.			
34.	Health providers have ability to diagnose your problem.			
35.	Health providers explain you about your disease			
36.	Health providers explain how to use the drug clearly to the patient.			
37.	Health providers explain the side effect of the prescribed drug to the patient.			
38.	The prescribed drugs have enough quality.			
39.	The drugs for treatment is sufficient in the primary care unit..			

40..	Two days are not enough for the doctor coming to the primary care unit.			
41.	You are satisfied with the treatment you receive from the primary care unit.			
42.	The time taken for the services provision is enough.			
43.	Clinic hours are not convenient.			
44.	You prefer to referring you to the district hospital.			
45.	The treatment room is clean .			
46.	The infrastructure of the primary care unit is clean.			

Time to start_____ in Minutes

Time to end_____ in Minutes

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