

**PATIENT SATISFACTION TOWARDS OUTPATIENT  
DEPARTMENT (OPD) SERVICES OF MEDICINE IN  
BANPHEAO AUTONOMOUS HOSPITAL  
SAMUT SAKHON PROVINCE, THAILAND**



**A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF  
THE REQUIREMENTS FOR THE DEGREE OF  
MASTER OF PRIMARY HEALTH CARE MANAGEMENT  
FACULTY OF GRADUATE STUDIES  
MAHIDOL UNIVERSITY**

**2007**

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COMMUNITY HOSPITAL SAMUT SAKHON PROVINCE, THAILAND**



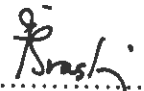
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was submitted to the Faculty of Graduate Studies, Mahidol University  
for the degree of Master of Primary Health Care Management


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March 13, 2007



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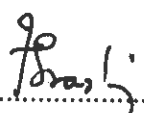
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Amin Khan Mandokhail

PATIENT SATISFACTION TOWARDS OUT PATIENT DEPARTMENT (OPD)  
SERVICES OF MEDICINE DEPARTMENT IN BANPHEAO COMMUNITY  
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ABSTRACT

This descriptive study was conducted to describe patient satisfaction towards out patient health care services provided by the medicine department in the Banphaeo Autonomous Hospital, Samut Sakorn province, Thailand. The study population was respondents aged 16 and above, 225 respondents were interviewed from 17<sup>th</sup> of January to 5<sup>th</sup> of February 2007 to collect data regarding socio-demographic factors, accessibility, experience regarding medicine OPD and patient satisfaction. Chi-square test was performed to analyze the association.

The results showed that the overall satisfaction was 86.67%. The patients were most satisfied with convenience (84%) while least satisfied with courtesy (75.11%). Item wise, the satisfaction was poor in the case of heating and cooling arrangements, permission from doctors before examination and doctors /nurses keeping the patients from worrying. The majority of patients (87.56%) had a good experience from medicine OPD. From medicine OPD, the respondents had a good experience regarding doctor service, while only 43.11 percent had a good experience with the pharmacy service. Approximately 65 percent of respondents had good accessibility. Regarding overall accessibility, most patients (84%) had good accessibility in terms of working hours while more than half (52.89%) had good accessibility in terms of waiting time. Statistical analysis showed a relationship between occupation, marital status, accessibility and experience of patients and satisfaction.

From this study, it is recommended that improvement is needed in few of the items of accessibility and courtesy; extensive analytical studies should be performed to substantiate these particular findings.

KEY WORDS: OUT PATIENT DEPARTMENT/SATISFACTION/  
ACCESSIBILITY/EXPERIENCE

129 P.

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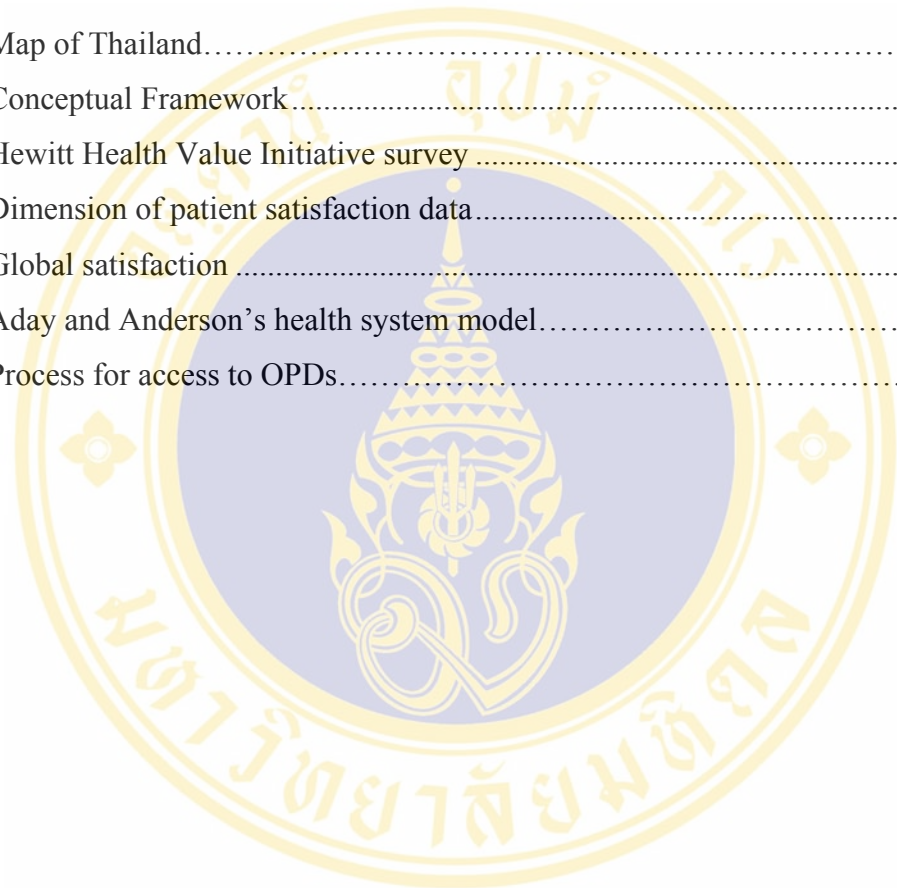
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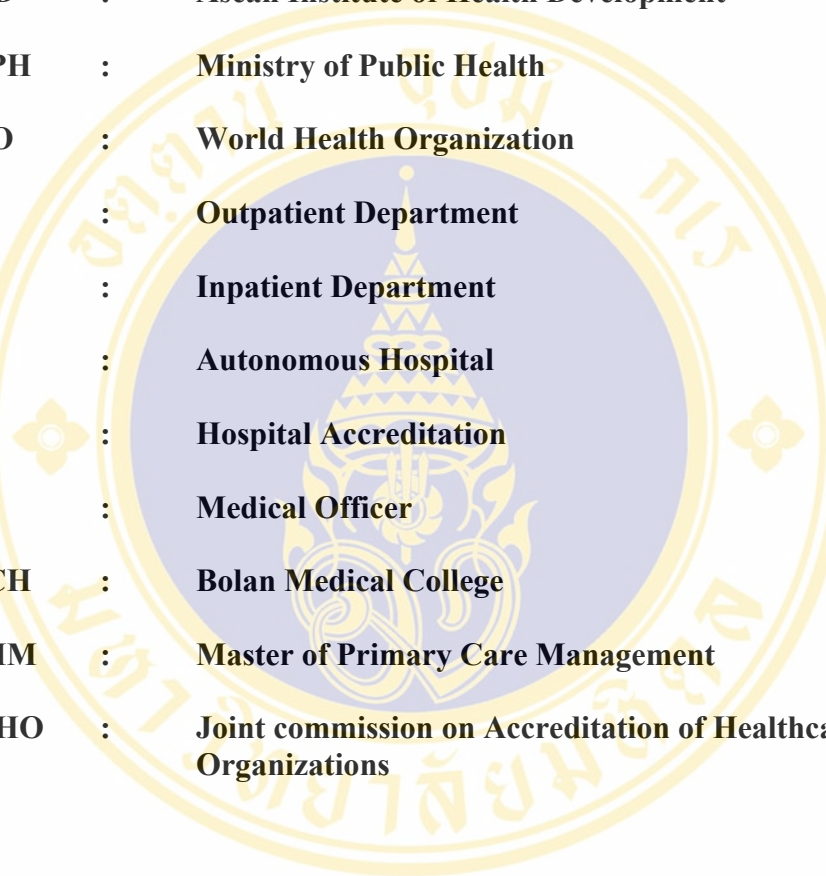
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## LIST OF ABBREVIATIONS



<b>PCU</b>	<b>:</b>	<b>Primary Care Units</b>
<b>AIHD</b>	<b>:</b>	<b>Asean Institute of Health Development</b>
<b>MOPH</b>	<b>:</b>	<b>Ministry of Public Health</b>
<b>WHO</b>	<b>:</b>	<b>World Health Organization</b>
<b>OPD</b>	<b>:</b>	<b>Outpatient Department</b>
<b>IPD</b>	<b>:</b>	<b>Inpatient Department</b>
<b>AH</b>	<b>:</b>	<b>Autonomous Hospital</b>
<b>HA</b>	<b>:</b>	<b>Hospital Accreditation</b>
<b>MO</b>	<b>:</b>	<b>Medical Officer</b>
<b>BMCH</b>	<b>:</b>	<b>Bolan Medical College</b>
<b>MPHM</b>	<b>:</b>	<b>Master of Primary Care Management</b>
<b>JACHO</b>	<b>:</b>	<b>Joint commission on Accreditation of Healthcare Organizations</b>

# CHAPTER 1

## INTRODUCTION

### 1.1 Rationale and Justification

During the past few decades, there has been reawakening that health is a fundamental human right and a world wide social goal; that it is essential to the satisfaction of basic human needs and to improve the productivity of nations. However it was recognized that in both developed and developing countries, the standard of the public health expected has not yet been achieved (1).

The concept of quality services in the health care system has been introduced first in developed nations. However, this is rapidly becoming a global issue. More and more countries are focusing their attention on health care quality because of the concern that health care is costly, and therefore, needs to be dispensed appropriately and equitably with minimum variation. The last 20 years have witnessed an accelerating increase in attention given to patient satisfaction within health services. (2). Thailand has been developing health care services in response to patient needs. Key performance indicators are used to monitor and evaluate the fruitfulness of organizations and their staff. Undeniably patient satisfaction is the essential indicator that indicates the service quality at any level of health care services. Additionally, understanding the different influences on variation in patient satisfaction is important. To improve health care provision, managers need to be able to differentiate between factors for which they have oversight and external influence on healthcare coming from wider social and political context.

Health care has seen many changes over the years. The objectives of health care changed with the requirements of society and the availability of resources and technology. The WHO Conference on supporting Health for all, held in 1990, defined future development in health to be human centered. A lot of stress has been made on

investment in health, patient care and patient's right to delivery of quality health care leading to patient satisfaction. (3)

Considering the above historical facts, the strategy that is required should lead to delivery of equitable, accessible and satisfactory medical care to all patients. Patient satisfaction is therefore of high value and it is useful to understand the need of patients. By understanding the importance of satisfaction and determining its existing level, health care services can be made relevant to the requirements of people and patients. A review of relevant literature supports that assessment of level of patient satisfaction is the tool to determine the level of health care delivery, analyze the existing situation and workout strategy to improve it. This is supported and emphasized by Fitz Patrick Ray (1991) who stated that patient satisfaction provides potentially a direct indicator of system performance and is a means of choosing alternative strategies in health care provision (4). Hence, assessing satisfaction is not a one time action; instead it needs continuous monitoring and evaluation. By adopting this procedure, service providers are able to learn about deficiencies in the health delivery system and will be able to take timely appropriate alternative steps. Kareem et al, (1996) stated that studies related to the patient satisfaction are important, but this topic has always been ignored by the service providers. Therefore, it is important that regular internal audit should be conducted to assess the patient behavior and satisfaction. Linder-Peltz (1992) mentioned that patient satisfaction with health care is getting attention from administrators, practitioners, patients and evaluators of health care (5). Consequently patients as service users and physicians and administrators as service providers are conscious about the satisfactory health care delivery.

From a management perspective, patient satisfaction with health care is important for several reasons. Satisfied patients are more likely to maintain a consistent relationship with a specific provider. By identifying sources of patient dissatisfaction, an organization can address system weaknesses, thus improving its risk management. Satisfied patients are more likely to follow specific medical regimens and treatment plans. Patient satisfaction measurement adds important information on system performance, thus contributing to the organization's total

quality management (6). Unsatisfied patient will not come back to the hospital, and it will lead to loss of income from the patient, as well as wastage of government resources. (7)

Patient satisfaction surveys are an instrument in monitoring hospital's quality of care in relation to cost and services. (8) Measures of patient satisfaction can assess communication in the consultation such as information transfer, patient involvement in decisions and reassurance. Patient satisfaction studies inform planning as part of range of assessment indicators used to compare different activities of organizing or providing health care. (9)

After reaching to the conclusion how patient satisfaction is vital for hospitals and other health organizations, it would be appropriate to uncover the issue and determine the factors influencing the satisfaction. Satisfaction may be influenced by socio-economic factors, accessibility to the health care services and experience of patients towards health services. (7) Experience of patients about health care services contributes in establishing expectations of patients so this fact makes experience a very important variable. (8)

Hospitals act as a bridge between people and health service providers. Hospital, is responsible for providing a curative as well as preventive care. Consequently the hospital has two departments-in patient and out patient department. (9)

A good understanding can only be developed when people are assured in quality, quantity and continuity of services appropriate to their needs with their active participation (10).

It is important to conduct this kind of survey in developing countries to promote patient oriented health services. The patient satisfaction studies however received comparatively little attention in public or Government sponsored setting in developing countries in particular (12).

Due to shortage of personnel health facilities, especially of physician in district hospitals, patient satisfaction toward quality of service is an important indicator of the quality of hospital services. The entire hospital quality management committee should be aware of these issues. Satisfied patients are the assets of a hospital, which will induce a sense of belonging and could improve autonomous participation on hospital development. In order to improve the quality of services as part of total quality management, the measurement of patients' satisfaction in autonomous hospital should be carried out regularly as basic indicator to define the strengths and weaknesses of the provided services. Data of patient satisfaction could alert health care providers to patients' concerns, needs and perception of treatment. In addition the data may also prove useful for program planning and evaluation as well as identification of potential areas of improvement.

OPD is the first point of contact with a patient and serves as the window to any health care services provided to the community. The care in OPD indicates the quality of services of a hospital and is reflected by patient's satisfaction and their perception about the time spent. This study can be an effective means of evaluating the performance of the medicine OPD of the only autonomous hospital of Thailand from the patient point of view.

Broadly speaking, this knowledge will serve two purposes: identifying areas of improvement in quality of services offered; and highlighting the need for corrective action when patient's perception exceed what the organization could afford to offer or what a particular program was meant to provide. (13)

The health plan at provincial level emphasizes patient focused service improvement and organization development. The rate of patient satisfaction at 80% is the minimum goal for every hospital to achieve.

In this patient satisfaction study the researcher wants to determine the patient satisfaction from medicine OPD services of Banphaeo hospital which is the first and only autonomous hospital (public organization) in Thailand located in Samut Sakhon

province. Samutsakhon is one of the coastal provinces of Thailand. Neighboring provinces are (from the southwest clockwise) Samut Songkhram, Ratchaburi, Nakhon Pathom and Bangkok. Total population of the province is 433, 588 with 213,290 males and 222,298 females.



**Figure 1** Map showing the Samutsakhon province

The province is subdivided into 3 districts. The districts are further subdivided into 40 communes (*tambon*) and 288 villages. Samutsakhon is located 30 kilometers from Bangkok. The province occupies a total area of 872 square kilometers and is administratively divided into 3 districts: *Muang Samutsakhon*, *Krathum Baen*, and *Banphaeo*. Altogether there are 7 municipal areas within the province, Krathum Baen and Om Noi are the two towns (*thesaban mueang*), and there are further 4 townships (*thesaban tambon*).

Banphaeo autonomous hospital (public organization) is covering the Banphaeo district of the Samut sakhon province. The total number of doctors in hospital is 49, including the specialist doctors in hospital are 2 in internal medicine, 1 in nephrology, 3 in general surgery, 2 in orthopedics, 2 in Obstetrics-gynecology, 3 in pediatrics, 5 in Ophthalmology, 2 in radiology and 15 GPs, other staff include 11 pharmacist, 6

medical technician, 134 Nurses, 6 medical technicians, 3 PTs and 104 others so the total hospital staff is 306. The hospital became autonomous on 1 Oct 2000. Banphaeo hospital is having 180 beds, is the only autonomous hospital in Thailand, the hospital is having their own management, equipments and they can recruit the doctors themselves as compared to public hospitals which can't recruit doctors and other paramedical staff. The referral system is that they have cooperation with hospitals at a higher level. This hospital's status as both public and private facility means that they can refer the patients to public or private hospital as required. This hospital is having hospital accreditation (HA) (14).

According to hospital authorities before autonomy there was a hierarchical style of administration, shortage of doctors and nurses, low salary incentives for hiring/retention of the staff, on hand equipment old or obsolete, cash basis, shortage of medical equipment, low budget allocation from the central government, poor customer services from the staff and 500 Baht voluntary family health insurance. The hospital was unable to refer patients to general hospitals because of inability of patients to pay, Community leaders had no voice in how the hospital was operated.

With the autonomy the hospital sources describe more corporate style of administration (board of directors), hiring and staffing protocols were changed, salary levels were set to market standards, budget was managed by board of a directors, donations/ support from community was managed by board of directors, accounting system was changed to accrual basis, community leaders got position on the board of directors and are controlling hospital operations. Staffs now are involved directly in improving customer services and overall hospital operation. The objectives set for this hospital were to increase efficiency, to be run independently, to be accountable and transparent and to improve the quality.

The main difference between government and private hospitals is that the patients are mostly dissatisfied from health care provider behavior in government hospitals. The patient dissatisfaction from health care provider in public hospitals of Thailand on average is 68.7 percent while in private it is 40.5 percent, from the speed

of services 44.8 percent were dissatisfied from public hospitals while from private 34 percent patients were dissatisfied. For convenience 10.4 percent are dissatisfied from government and 5.9 percent are dissatisfied from private hospital. About explanation of health personnel to patients about 4.6 percent dissatisfaction is from private hospitals and 6.9 percent from Government hospitals (15).

According to one study in Banphaeo Hospital by Kunludde Wongmanovisuit on assessing the quality of care of the out patient department of Banphaeo district Hospital in 1999 that is before the autonomy of the hospital the relationship between patient's expectations, perceptions of real care and evaluation of quality of care were examined. The result of study is based on the services of nurses and pharmacists. The sample size was 400 and the respondents had all used services of the emergency room, cashier and pharmacy. The average score was in the middle level according to that study. This study was about the evaluation of quality. The factors that may influence patient's evaluation such as socio-demographic factors and past experience in other hospitals were also examined. Almost all the patients have higher degree of expectations than perceptions of real care (16).

According to another study by Piyatida Nakagasien on the image of doctors at the Banphaeo hospital with purpose of the current image and the ideal image of doctors from the point of view of doctors and patients during 1997, the study revealed there were measures for doctors to follow: work efficiency, knowledge and ability in curing, diagnosis, detailed examination of patients, advice and medical information giving, talking to patients about their symptoms and punctuality. As for the current and ideal image of doctors from patient point of view, the study revealed that patients need doctors to improve the following: drug prescriptions, examinations, advice and medical information given, asking about symptoms, friendship expression and being more punctual (17).

The researcher will conduct the research in medicine OPD of Banphaeo hospital because medicine OPD is having more patients, quite crowded and some complains from this OPD (on the basis of information through complain box and through

telephone comments about services) as the information provided by one nurse working there.

Although this hospital is having the efficiency and effectiveness of management but the patient always complains about the OPD services especially in the morning when the number of patients is more than the rest of the day. Patient also complained that the new doctor lacks confidence, experience and medical knowledge. Patients feel that they have to wait for the medicine from the pharmacy for long time that adds misery to them. Patient also complain about inadequate information about services (14)

In the Alma Ata declaration the World Health Organization defined primary health care as 'essential health care based on practical, scientifically sound and socially acceptable methods and technology, made universally available to individuals and families in the community through their full participation and at a cost that the community and the country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination.

It addresses the most common problems in the community by providing preventive, curative, and rehabilitative services to maximize health and well-being. It integrates care when more than one health problem exists, and deals with the context in which illness exists and influences people's responses to their health problems. It is care that organizes and rationalizes the deployment of resources, basic as well as specialized, directed at promoting, maintaining, and improving health' (85).

The information obtained from this study is an indicator for reflection of the type of quality of curative services provided by hospital units under universal coverage scheme. Universal health coverage scheme have improved the chance of taking medical treatment. The implementation of decentralization and devolution in health sector are still going further by Thai government. Therefore, in these days, increasing of health care utilization and more equitable health status is expected. The 30 baht scheme policy of the current government has considerably taken part in

expediting quality assurance system development of hospitals and primary care centers. The researcher would like to know about the patient satisfaction as the patients are utilizing different health insurance schemes in this hospital.

Furthermore, this study would be useful for health service planners to improve the OPD services especially where the patients showed concerns on the service utilization during data collection. In addition, the result of this study would be used by the health providers of hospital for improvement of services and for strengthening the relationship between the patients and health care providers of the hospital.

## **1.2 Research Question**

Are the patients satisfied with OPD services of medicine department at Banphaeo autonomous Hospital and to what extent they are satisfied with services?

## **1.3 Research Objectives**

### **1.3.1 General Objective**

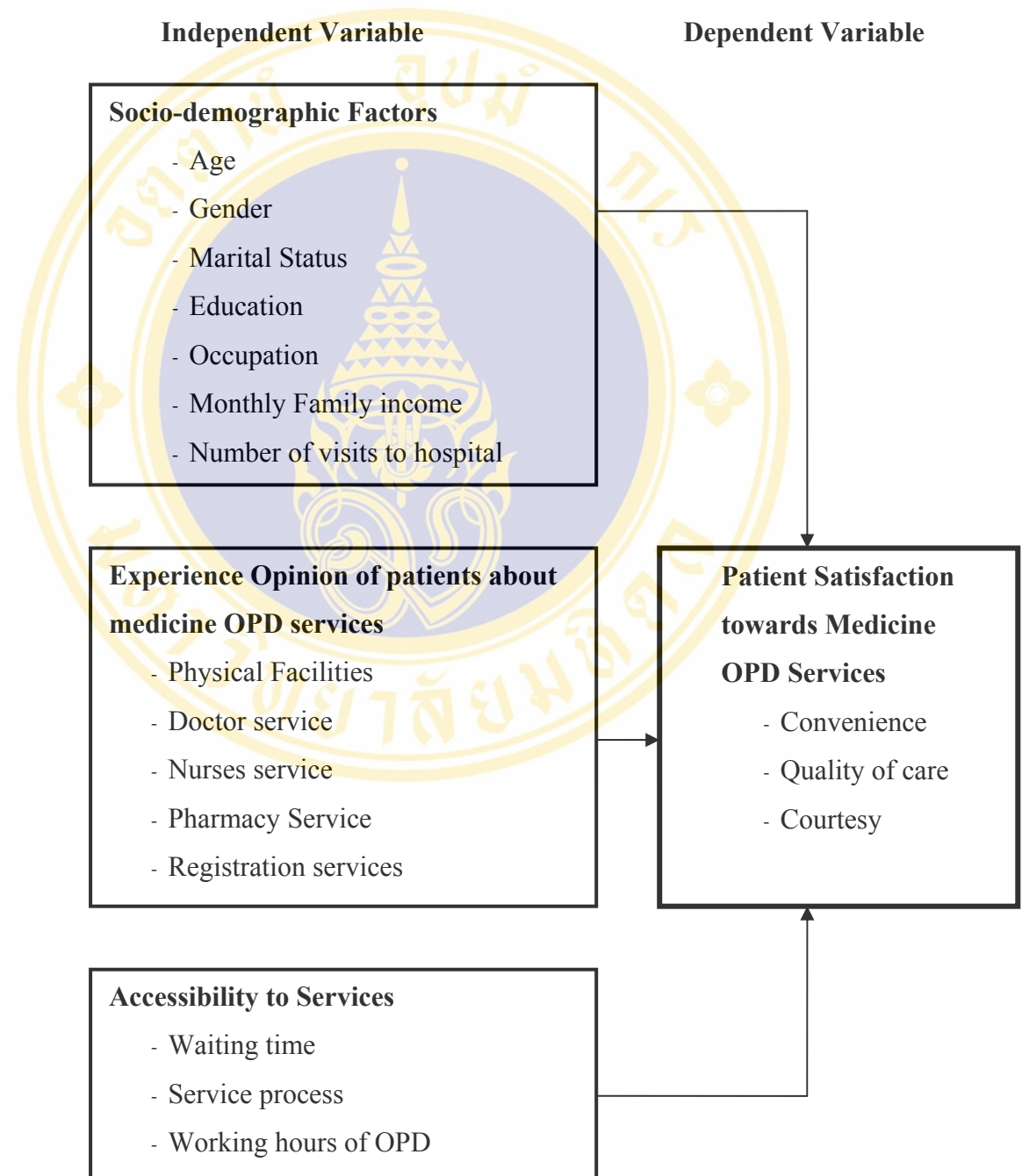
To assess the level of patient satisfaction with the medicine OPD services in Banphaeo Autonomous Hospital.

### **1.3.2 Specific Objectives**

- 1.3.2.1** To evaluate the level of patient satisfaction with OPD services in terms of convenience, courtesy and quality of care.
- 1.3.2.2** To describe the socio-demographic characteristics (gender, age, marital status, occupation, education level, income, number of hospital visit), experience of patients about medicine OPD services (physical facilities, medical equipment, doctor service, nurses service, pharmacy service, registration service, availability of medicines) and accessibility to services (waiting time, service process, working hours of OPD) among the patients who attended the medicine OPD of Banphaeo autonomous hospital.

**1.3.2.3** To find the association between socio demographic characteristics, accessibility, experience opinion and patient satisfaction concerning the medicine OPD services.

#### 1.4 Conceptual Framework



**Figure 2** The conceptual framework on Patient satisfaction using Aday and Anderson's health system model.

## 1.5 Operational Definitions:

### **Dependent variables**

**Patient satisfaction** referred to patient's feelings and contentment with utilizing hospital services at medicine OPD of Banphaeo Hospital Outpatient department (OPD). The indicators for patient satisfaction in this study consisted of convenience, quality of care and courtesy.

**Outpatient Department** referred to the hospital unit where a patient was attended for treatment or consultation and did not stay overnight in the hospital.

### **Independent variables**

**Socio-demographic characteristics** consisted of age, gender, marital status, education, occupation, income per month, family size of the respondent, total number of visits to hospital during last six months and the place for getting the treatment.

**Education level** referred to the academic or study qualification of respondent. In this study, education levels were categorized into 5 groups: illiterate, primary school, secondary school, vocational school, Bachelor's degree.

**Monthly Income** referred to the total income per month in Baht of respondent. The average amount of money received in exchange for labor or services of all family members within one month. It was categorized into below and equal to 3,000 Baht, 3,001-5,000 Baht, 5,001-10,000 Baht and above 10,000 baht. The maximum family income set for this study was 50,000 Baht.

**Age** referred to the age of respondent counted in years on last birthday. The age of the respondent was 18 and above in this study.

**Number of Visits to Hospital during last year** referred to the total number of visits to the hospital by the patient during the last year.

**Gender** referred to the sex characteristics of the patient as male and female.

**Marital Status** referred to whether the respondent is single, married, separated, widowed.

**Occupation** was defined as the main job of respondents for income. It was categorized into: Agriculture, government employed, non-government employed, labor and student.

**Family Size** referred to total number of family members in household.

**Experience of patient about medicine OPD services** was the experience of patient on service system as regards to physical facilities, doctor's service, nurse service, pharmacy service, registration staff service.

**Physical Facilities** included service facilities such as general cleanliness, ventilation, noise, and light, sitting facilities, clean toilets and sufficient examination room availability.

**Doctor's service** referred to the courtesy and respect of a doctor for patient and time spent by doctor in physical examination, history taking.

**Nurse Service** referred to the courtesy and respect of nurse for patient, listens to patient and gave complete explanation as required.

**Pharmacy Service** referred to the courtesy given and use of medicine clearly explained by pharmacist etc.

**Registration staff Services** referred to the courtesy paid by the registration staff, their good communication skills etc.

**Accessibility to services** meant how comfortable it is to access the services in terms of waiting time, service process and working hours of OPD.

**Working hours of OPD** referred to the time for getting health services from medicine OPD.

### 1.6 Limitations of study

1. The main constrain was time as there was limited time to complete required sample size, otherwise, researcher would like to involve providers also to narrate about the level of satisfaction of patient as well as because of limited man, money and material many important variables could not be included.

2. During data collection, possible bias occurred since we cannot separate the patient from the group of people who came with patient, so interviewer could not interview the patient as some one else could answer the questionnaire instead of the patient that could not be cooped.

## CHAPTER 2

### LITERATURE REVIEW

The topics of the literature review included

- Patient satisfaction
- Evolution of satisfaction
- Socio-demographic characteristics/General Factors
- Experience of patients
- Accessibility to Services
- Components of Satisfaction
- Measuring patient satisfaction with health care services
- OPD of Banphaeo Hospital
- Theoretical Model
- Health services in Thailand
- Hospital Autonomy in Thailand
- Satisfaction studies in Thailand
- Some Prejudices about satisfaction surveys
- Characteristics of medical care services
- Importance of patient satisfaction
- Health care providers
- Attitude scaling Methods

#### 2.1 The Patient Satisfaction

Patient's satisfaction is a person's feeling of pleasure or disappointment resulting from a service's perceived performance or outcome in relation to his or her expectations. As this definition makes it clear, satisfaction is a function of perceived performance and expectations. (17). If the performance falls short of expectations, the patient is dissatisfied. If the performance matches the expectations, the patient is

satisfied. If the performance exceeds expectations, the patient is highly satisfied or delighted. (18)

Patient satisfaction has remained most important and an essential focus point for all health providers. Risser (1975) pointed out that patient satisfaction has been defined as “the degree of congruency between a patient’s expectations of ideal nursing care and his perception of real nursing care he receives” (19). Oliver, (1993) pointed out that word satisfaction is from Satis=enough and faction= to do or make. Hence satisfaction is a fulfillment response (20). Swan, (1985) suggested that patient satisfaction is a positive emotional response that is desired from cognitive process in which patient compare their individual experience to the set of subjective standards(21).

Linder-Pelz (1982) defined patient’s satisfaction as the individual’s positive evaluations of distinct dimensions of healthcare. Satisfaction is an expression of an attitude, an affective response, which is related to both the belief that the care possesses certain attributes. (20)

The literature review revealed the following three important relationships.

- Satisfaction was a function of expectations, perceived performance, and disconfirmation;
- Intention to repurchase was a function of patient satisfaction and
- Choice was a function of expectations and intentions to repurchase.

The higher the expectations that were met, the higher will be the patient satisfaction (21). In another study by Giese et al, (2000), it was determined that when examining satisfaction as a whole, three general components can be identified: 1) patient satisfaction as a response (emotional or cognitive); 2) the response pertains to a particular focus (expectations, product, consumption experience etc); and 3) the response occurs at a particular time (after consumption, after choice, based on accumulated experience etc) (22).

Previous studies on patients' satisfaction indicate that most people want to know as much as possible about their illness and treatment. Even in cases where the concerned information is bad news, such as diagnosis of cancer or information about the danger and risks of investigation or treatment procedures, this is true (23).

## 2.2 Evolution/History of patient satisfaction

Patient perception of satisfaction- their positive evaluation or assessment has been a major focus of health behavior research. Satisfaction is complexly determined. It involves trust, patient characteristics, need as well as their perception of physicians and interpersonal skills, together with their perception of whether or not they are responding appropriately to treatment.

Among the pioneers of methodological assessment was Florence Nightingale, who drew attention to the low standard of medical care in the army. Her devastating exposure of Crimean hospital as death trap was based on showing that a key determinant of regimental survival was distance from hospital. The least fortunate regiments were those with good access to hospital beds, because death depends less on casualties in battle than on acquiring an infection within the hospital. She later developed her uniform system of hospital statistics, designed among other things to compare death rates with diagnostic category (24).

Satisfaction studies historically begin to appear in health care literature in the late 1950's. At that time there was growing awareness of the patients as an evaluator of health care. Throughout the 1960's and 1970's a number of important studies had been done that assessed the quality of health care as revealed by the client satisfaction. (27)

Mechanic's (1954) study in Madison (USA) revealed that one third of those who changed doctor or clinic did so because of dissatisfaction. The most frequent cited for a change is that physician is failed to do what seemed indicated. It is implied that doctor did not adequately meet patient's satisfaction and failed to explain the

procedure and assumption in treatment process. The other reason for dissatisfaction which led to change of doctor according to Mechanic's study was the doctor lack of interest, motivation and skill in competency.

In the 1960 and 1970's many studies assessed the association of health care and patient satisfaction. In fact satisfaction is influenced by numerous factors and only continuous evaluation can identify the factors which can effect the satisfaction. (25)

The health sector patients are the clients of the health services. Thus patient's perception of satisfaction, their positive evaluation or assessment have been major focus of health behavior research. Satisfaction is complexly determined; it involves trust, patient characteristics, need as well as their perception of physician and their personal skill, together with their perception of whether or not they are responding appropriately to treatment (26).

Mechanic (1954) studied patient satisfaction and found that one third of those who changed their physical or hospitals did so because they were dissatisfied. Doctors did not adequately meet patient expectations and failed to explain the procedure and assumption in treatment during the treatment process. The other reason for dissatisfaction that led to change of doctor was doctor lack of interest, motivation, skill and competency (28).

Donabedian (1980) proposed a conceptual structure and explained satisfaction study as a provider's success to meet patient values and expectations. (29) Lebow, (1983) reported that satisfaction level has never been fixed or had a consistent score. It changes with circumstances and quality and quantity of service provided. It has been reported by examining several studies that satisfaction rate was as high as 91-100 percent and as low as 51-60 percent. (30). Chetwynd, (1988) reported that most common complaints of his subject were that the hospital was under staffed and waiting list was long, lowering the level of patient satisfaction (31). It has also been indicated by Rodney 1986) that patient satisfaction is measured in terms of continuity, humanness, effectiveness of care and dissatisfaction in areas of cost and accessibility

(32). In a study about satisfaction in 30 hospitals, it was determined that areas of dissatisfaction were long waiting time, poor cleaning and hospital settings, and weak doctor patient relationship.(33) Mahon, (1996) said that satisfaction implies complete fulfillment of patient's desires, wishes and needs and patient satisfaction is influenced by the degree to which care fulfils expectations(34).

The very first taxonomy of patient satisfaction with medical care was developed by Ware and associates that included satisfaction questionnaire and patient response to open ended questions posed to identify satisfaction and dissatisfaction. Since then a great number of studies have been done on patient satisfaction evaluating service and service providers. (35)

Patient satisfaction studies began in Sweden in 1990s with an aim to improve quality of services and increase efficiency and effectiveness of the process. The Government of Canada has declared the present era as an era of efficiency, and market and patient choice, by reducing professional power and increasing the power of public.

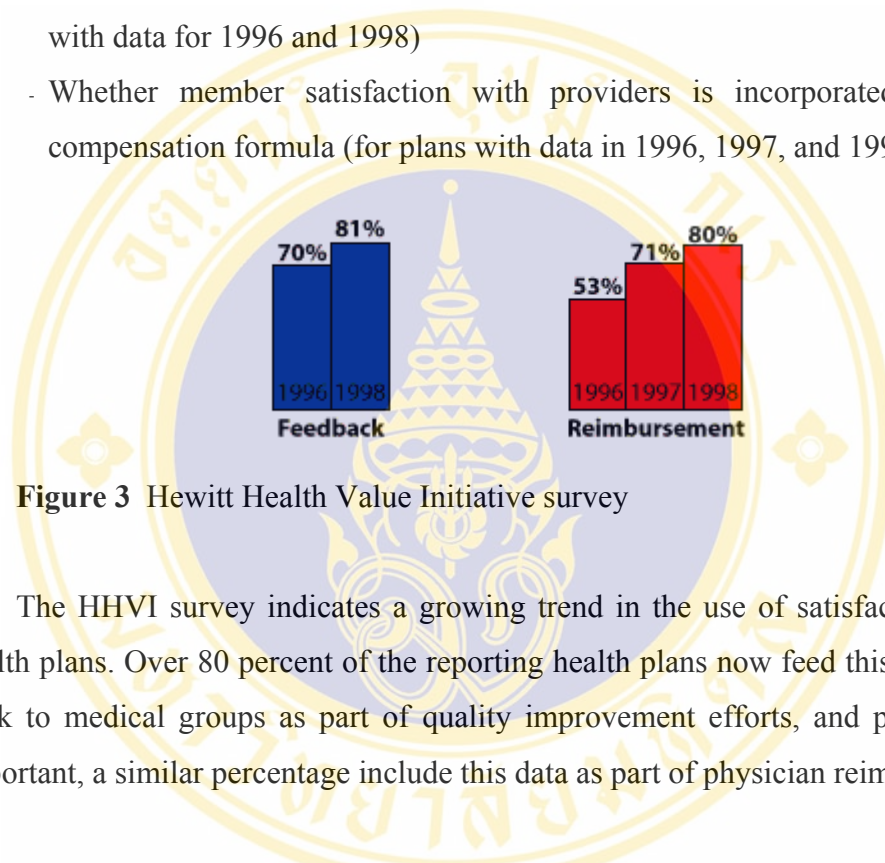
Studies regarding patient satisfaction are important for smooth running of the health organization such that they should have built-in mechanisms that should bring changes according to needs of the consumers. Kareem et al in 1996, found that where on one hand, studies related to patient's satisfaction are important, on the contrary this important topic has always been ignored by service providers. It is therefore important that regular internal audits on quarterly basis may be undertaken to understand the behavior of consumers.

One needs only to look at the available data to realize the growing importance of monitoring patient satisfaction. Beginning in 1996, Hewitt Associates, the international management consulting firm, began to develop an extensive health plan database: the Hewitt Health Value Initiative. The database included health plans' responses to an extensive questionnaire about operations, quality-improvement

programs, provider contracting, and other activities. The survey has been conducted annually since 1996 and contains responses from over 500 plans.

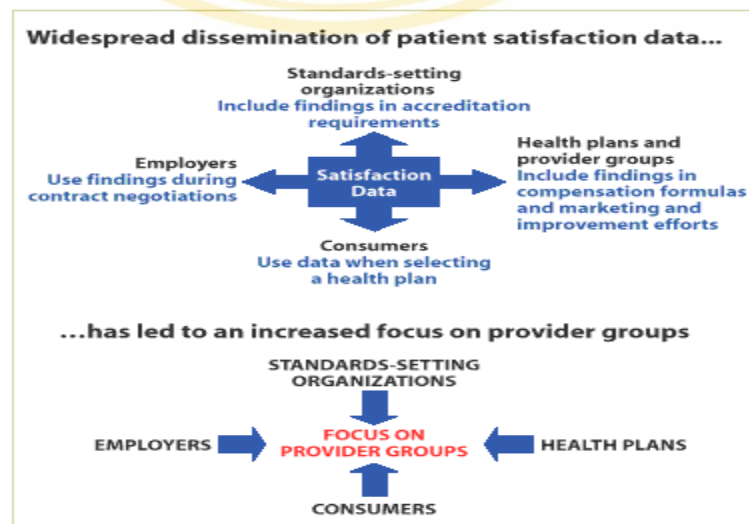
Among the questions that have been asked:

- Whether plans feed satisfaction-survey results to medical groups (for plans with data for 1996 and 1998)
- Whether member satisfaction with providers is incorporated into the compensation formula (for plans with data in 1996, 1997, and 1998)



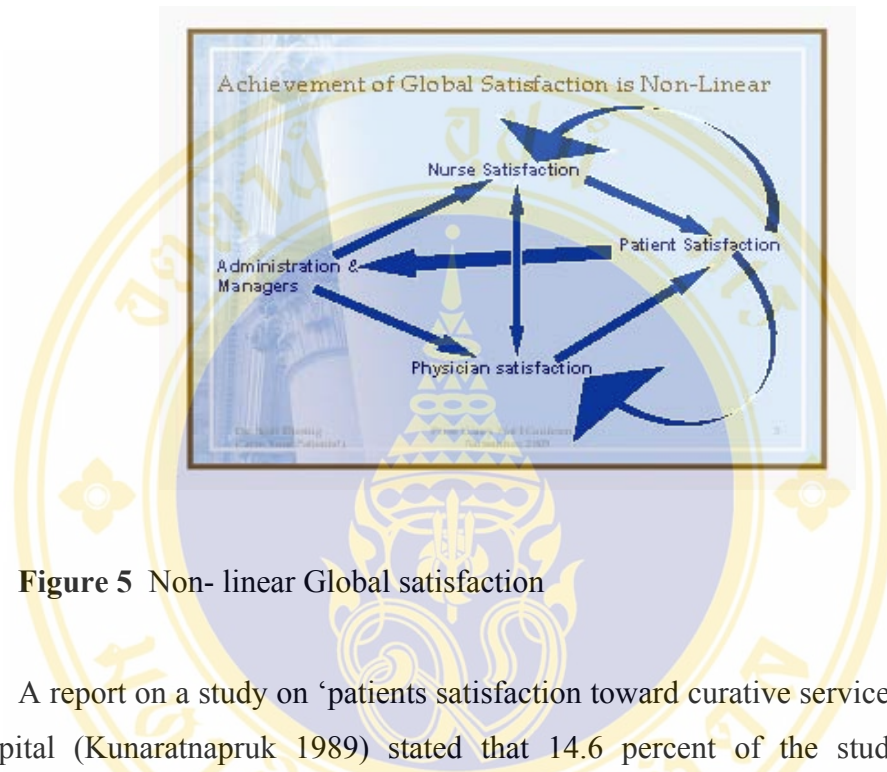
**Figure 3** Hewitt Health Value Initiative survey

The HHVI survey indicates a growing trend in the use of satisfaction data by health plans. Over 80 percent of the reporting health plans now feed this information back to medical groups as part of quality improvement efforts, and perhaps more important, a similar percentage include this data as part of physician reimbursement.



**Figure 4** Dimension of patient satisfaction data

Health services have always been an essential human requirement because all human beings need them for curative, preventive and rehabilitative purpose. The good quality health service can confer healing and only attainment of quality service or health can physically and psychologically satisfy the patient. (7).



**Figure 5** Non- linear Global satisfaction

A report on a study on 'patients satisfaction toward curative services in a general hospital (Kunaratnapruk 1989) stated that 14.6 percent of the study population expressed a low level of satisfaction.84.6 percent were indeterminate and only 0.9 percent reported a high level of satisfaction. The main area of dissatisfaction were: long waiting time, poor organization of services and readiness of care, poor doctor patient relationship and doctor's concern about patients problem, poor courtesy of health personnel, readiness of medical equipment and their effective utilization to improve patient out come, poor internal co-ordination to guarantee comprehensive care to patients, poor communication about illness, treatment and proper care. The group with the lowest level of satisfaction had the same characteristics as the main hospital patients group namely: monthly income below 2000 baht, back ground education of secondary level or less, involved in private or agricultural sector and living outside municipal area.

It can be concluded that different scholars have defined the satisfaction with reference to the different parameters and aspects but none of them has denied its

importance. Hence it is determined that patient's are happy when all his needs are met according to his expectations.

Linder-Peltz (1992) has mentioned that client satisfaction with health care is getting increasing attention from administrators, practioners, consumers and evaluators of health care. Client satisfaction has become one goal of health care delivery as a consequence of consumer movement. Satisfaction of consumer is seen as a necessary outcome of any transaction irrespective of the efficacy of that transaction. (27)

Donabedian (1990) determined that when patient gets medical assistance needed in sufficient amount and at appropriate cost, he becomes satisfied and consider the services to be accessible. (25)

Patient-centered outcomes have taken center stage as the primary means of measuring the effectiveness of health care delivery. It is commonly acknowledged that patients' reports of their health and quality of life, and their satisfaction with the quality of care and services, are as important as many clinical health measures.

### **2.3 Socio-demographic Characteristics/General factors**

It is commonly believed that satisfaction with health care may be dependent upon variable such as social class, marital status, gender and in particular age. However socio-demographic characteristics were concluded by some studies to be at best a minor predictor of satisfaction. (36).

Socio-demographic variables are related to all kinds of health care experiences that patients have, and 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 socio-demographic and satisfaction. (37)

Cultural similarity was found between the prospective patients and health care professionals as an important determinant of the extent to which help will be obtained from the doctors whenever needed. (38) It has also been determined that enabling factors like insurance coverage, family income, sex, education and occupation influence the use of health services. (39)

Many researchers documented that socio-demographic variables are directly related to patient satisfaction. Similarly, patient satisfaction correlates to health personal behavior, especially those who have low income. These variables are well documented by many different researchers and writers. Perhaps the most consistent determinant characteristic is **age**, with a body of evidence from various countries to suggest that older people tend to be more satisfied with health care are younger people.

It has been proposed that utilization of medical services is not only personal matter but the decision is taken within family or with the assistance of friends. The use of medical services by people is the end result of the social group they live in (28)

Although some trends have been identified in the literature, socio-demographic variables do not appear to be consistent predictor of patient satisfaction. For instance, several studies indicate that higher level of patient satisfaction with health care services tend to respond among female patients.

Moreover, the patient may sometimes have higher expectations 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 health care services received.

Most researcher find that the socio-demographics 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 socio-demographics are correlated with. (40)

Low income people have low health, get lower health care, have less continuous relation 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. (41)

Patient socio-demographic factors like age, education and income influence patient satisfaction. Kareem et al in 1996 considered socio-demographic factors related to patient satisfaction and pointed out that females and elderly are usually less satisfied as compare to males, although the differences were not statistically significant. Kareem also found that there is highly significant relationship between satisfaction of non citizens and citizen patients. Non citizens were consistently more satisfied than citizens, except for perceptions on community, for which there was no difference. According to study of Kareem the younger patients were more satisfied with physical environment (or facilities). Income level was significantly related only to satisfaction with quality of care. Those with lower income reported higher level of satisfaction with quality of care. Similarly less educated and low income class patients are more satisfied as compare to their counter parts. (29)

**Educational attainment** has been identified as having a significant bearing on satisfaction, the trend being that greater satisfaction is associated with lower levels of education (30)

**Ethnic Origin** is perhaps one of the most complex determinant characteristics. From the US there is the evidence that whites on the whole are more satisfied than non-whites, however, the interaction of ethnicity and socio-economic status has been shown to confuse results. (31)

A number of social-psychological response patterns may affect expression of patient satisfaction. “Social desirability response bias” argues that patients may report

greater satisfaction than they actually feel because they believe positive comments are more acceptable to survey administrators. Similarly, “ingratiating response bias” occurs when patients use the satisfaction survey to ingratiate themselves over the anonymity of respondents. A number of observers have suggested that patients may be reluctant to complain for fear of unfavorable treatment in the future (32)

Various studies indicate that psychological distress affects both the frequency of symptoms initiated visits and the total number of visits. They are also correlated with sex. Females make more visits as compared to males

Sixty two studies were reviewed to examine the relationship between socio-economic factors and reported satisfaction with healthcare. Some of their conclusions are summarized below:

**Gender:** Men were more satisfied than women. (42) However, in many other studies women were more satisfied than men.

Studies about **age** confirmed the old wisdom and concluded that older respondents were more satisfied, probably they were more social and accepting than younger or they had more respect and care for providers. It was also assessed that they had lower expectations. (43)

In another study by William et al. (1991), it was concluded that older respondents generally record higher satisfaction; possible explanations included lower expectations of health care and reluctance to articulate their dissatisfaction (44).

The most consistent determinant of patient satisfaction from health care is patient age, with a body of evidence from different countries to suggest that older people tend to be more satisfied with health care than do younger people. (45). The literature appears to support this, it was found that older respondents expected less information from their doctor and younger patients were less satisfied with issues surrounding the consultation and less likely to comply with prescriptions or medical advice. Older

people have also been found to be far more satisfied with most aspects of their hospital care than younger or middle aged people.

**Education** was not found having any significant effect. However, higher level of education was less satisfied with health care (59). In another study by Sumtrapapoot P. (1997) it was determined that lower education group (primary and less) is more satisfied than the high education group.

Tran Thi Nga (2002) concluded that there was no association between marital status and satisfaction (46).

**Monthly family income** according to the secret marketing concept is an indicator of having or not having the ability to pay for goods or services. Income of an individual is one indicator of his life security and economic status. Higher income has been associated with greater satisfaction with doctor's interpersonal communication skill and people with lower income report more problems in hospital. (47). On the other side, study by Sumtrapapoot has concluded that low income group was more satisfied than higher income groups.

Tran Thi Luu (2002) in her study found that family size had no association with satisfaction. (62)

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.

Research by Schauflier H.L. et al( 1996) on their study on health education on OPD and patient satisfaction found that **age and education** were not statistically significantly associated with level of patient satisfaction with physician, but many other variables were. Sex was significantly associated ; women were more satisfied with their physician than men (48).

## 2.4 Experience of patients

Experience of patient to health services is an important variable because it made the expectations of patient which in turn are dependent on perceptive image. A common definition of perceived image is to become aware of something through one senses-touch, taste, smell, hearing or sight. It is understood to be the common general knowledge or knowledge acquired by self experience or other's experience of utilization of services. Experience to health care services assessed with reference to physical facilities, doctor's service, nurse service, pharmacy service, registration staff services.

Patient satisfaction is measured as an attitude the attitude of those who have experienced medical care both in the quantity and quality of care actually received. Patient satisfaction is probably best evaluated in the context of specific, recent, and identifiable episodes of medical care seeking, relevant to consider in eliciting subjective perceptions of experience to medical care service.

Several components have been proposed, some appropriate only for specific health care contexts, others aiming at broad applicability. An early identification of key components, proposed the following: adequacy of facilities; effectiveness of the organizational structure; professional qualifications and competency of personnel; and the effect of care on the patients. After reviewing US patient satisfaction research, the following components emerged: cost, convenience, the provider's personal qualities and the nature of the interpersonal relationship; and the provider's competence and the perceived quality of care received.

C. A. Berry et al in 2001 from Ireland made a critical analysis of the study by Elliot Mishler in 1984 who stated that for patient satisfaction, inter-personal communication between patient and physician is important that confirmed the results of Mishler in a different way. The paper found four communication patterns across 35 patients attending a general practitioner clinic. The study revealed that when there is psychological bond between doctor and patient, better outcome is seen and patient is

more satisfied. Recommendations of the study were that doctors should build up psychological bond with their patients, especially pressure cases. For implementation of such a system, a change in health service delivery system shall be needed where doctor become totally patient centered (49).

#### **2.4.1 Physical Facilities**

In a study in 1994 by Upreti, it was determined that 71 percent patients were satisfied and 29.8 percent were poorly satisfied and the areas of poor satisfaction were waiting time, inadequate cleaning, and setting of health center surroundings. In another study by Pasaribu (1996), it was found out that patient were not satisfied due to low quality of care and inadequate supply of medicine. (50).

#### **2.4.2 Doctor Services/ Nursing Services**

A study at Switzerland revealed that in measuring patient satisfaction patient-doctor communication is most important factor. (51) Another study at Australia showed that tone of physician, his touch, interaction and manner of speaking contributes to patient satisfaction. (52) In the year 2001, a study at Ireland by Barry et al, showed that interpersonal communication between physician and patient is the corner stone for consumer satisfaction and improving quality of life. (53).

#### **2.4.3 Pharmacy service/Registration Service/Service Procedure**

Pyunyathikum(1994), in a study on pharmacy requirements in OPD, examined the number of prescriptions, number of pharmacists in charge and waiting time in getting drug. Patient satisfaction was analyzed and it was determined that most patients were satisfied with the service (54).

Muller et al. in 1998 studied on patient satisfaction with ambulatory care pharmaceutical service. Patient's opinion was collected by questionnaire and it was determined that most patients were satisfied with service

## 2.5 Accessibility to Services

Definition of accessibility includes issues such as physical access to hospitals, appointment systems, receptionists, changing doctors, home visits, and appointment waiting lists.

Most of the literature suggests 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 health facility to provide service whenever needed was cited as one main reason that clients prefer private clinics. The interpersonal aspects of care are regarded as the principal component of satisfaction. Two aspects are regarded as particularly important: communication and empathy (55).

Reassurance, empathy, and familiarity are recognized as important aspects of the doctor/patient relationship but a direct association with satisfaction is unproved. It was also found that almost all encountered described by patients as “exceptionally good” focused on aspects such as kindness, friendliness and emotional support rather than technical care. The importance of empathy and reassurance in the patient/health professional relationship in coping strategies of patients with cancer is well recognized. This evidence seems to suggest that the health professional is perceived as communicating well when the patient feels he/she shows individualized interest, understanding and reassurance.

Patient always remain in need of health care facilities because demand to seek services of medical facilities may generate any time. Therefore, it is a natural desire of clients that health care services should remain available at any time of day or night. There should be sufficient number of health providers who could meet the demand without delay and with minimum waiting time. However, convenience has a price to pay. It may not be fully true for public hospitals, but it is a fact in case of private hospital. This fact can be elaborated by following example: Considering the cost incurred from treatment in terms of transportation expenditures and inconvenience caused by traveling long distance, it was demonstrated by Chenawangse et al. in 1996 that patient satisfaction is influenced by distance to the health facility and price of transportation. Most of the patients do not like to come back to the hospital for even free daily dressing due to transportation and other expenditures. (56)

Improved access to medical care has been a major goal of much health legislation and planning. However, efforts to conceptualize and measure access have varied. Operational measures of access have included the availability of health personnel, patient linkages with a regular source of care, the convenience of services, actual use rates, the use of services relative to some standard of need, and consumer satisfaction with services. Using data from a national survey of access to medical care, we explore both the extent to which access is indeed a multidimensional concept and the feasibility of representing those dimensions through a relatively parsimonious set of empirical indicators. (57)

Rose et. al. (1993) determined in a study that the majority of patient's selected technical quality of care as first preference, interpersonal care as second preference and accessibility of care as their third preference. Access to the medical care included 'convenience' and 'waiting time'. Moreover, the patients who considered access as first priority belonged to the elderly group. They were from a low education and low income group. (65). In conclusion patient desire to have a free access to medical services that should be free of location and language barriers. They expect to incur only minimal cost and waiting time.

## 2.6 Components of Satisfaction

Three components of satisfaction considered by the current study of Banphaeo community hospital are convenience, courtesy and quality of care.

### 2.6.1 Convenience

Convenience meant the ease to travel to the service, an opportunity of meeting the health provider, waiting time, receiving the services as wanted and willingness of the health providers to treat patients.

The convenience and characteristic of place people go for medical care provide data on whether there is differential treatment of individuals depending on where they chance to go for services. In addition waiting time in getting services should be as proxy indicator of convenience in any service (31).

Sriratanabul and pimpakovit studied on outpatient department service at Chulalongkorn hospital. The patient feelings were interviewed. It was found that 83 percent of the patient said services were good but one third met some problems during they were receiving services. These problems were the inconvenience of services; patient had to wait for many hours. (37)

Likun, (1996) studied ways and means to reduce the waiting time and improve patient satisfaction. The association between waiting time, doctor, nurse and pharmacist services was computed with satisfaction and strong correlation was found between waiting time and nursing service with patient satisfaction. About 61 percent patients reported that the waiting time was not reasonable (38). In a study at Ramathibodi hospital, it was shown that the waiting time was the most important factor influencing the satisfaction. At registration counter it was noticed that patients with higher education and longer waiting time had lower satisfaction. At pharmacy unit same pattern was observed. (58)

### 2.6.2 Quality of care

Today, the terms 'Quality in Health Service' and 'Patient Satisfaction' are often brought on the agenda. Increasing rivalry generally in the institutions, especially in the health institutions, technology, humanistic approaches, the level of patient education, communication and transportation facilities make quality and patient satisfaction important. The determiner of quality and patient satisfaction is patient expectations. (59)

Donabedian explained the quality of health service in seven factors. These are efficacy, effectiveness, efficiency, optimality, acceptability, legitimacy, and equity.

The approaching millennium is witnessing a fundamental transformation of health care quality evaluation and improvement. Formalized standards and mechanisms to assess and improve patient care date to the American College of Surgeon's 1917 Hospital Standardization Program (60), since evolved into the Joint Commission on Accreditation of Healthcare Organization Accreditation Process. Until the late 1980s, quality evaluation and risk management approaches fostered by accreditation and regulatory processes had relied upon a combination of peer case review and statistical monitoring techniques to define and assess quality.

With the improvement in technology, hospitals are emphasizing enhanced quality of care. If some patients suffer a post operative hospital infection and become cured by subsequent follow up, it might be concluded that no quality problem has occurred. Hence, use of technology is introducing new dimensions in quality of care. Adaptation of modern quality science from manufacturing and other servicing industry has changed the scenario of quality care. Combinations of conventional and modern care techniques have lead to the modern era of quality health care management (61).

Adaptation of modern quality service from manufacturing and other servicing industry has changed the scenario of quality care. The Combination of conventional

and modern health care techniques had lead to the modern era of quality health care management. (62)

The American College of Surgeons in 1913 established quality of hospital care as a basic principle and subsequently introduced it in 1917 as its hospital standardization program. In 1951 American Medical Association, American college of Physicians, The American Hospital Association and The Canadian Hospital Association formed a joint Commission on Accreditation of Hospitals (JACHO) which developed criteria-based audit method.

Factors influencing the quality of services are:

1. The availability of resources such as
  - Quality and quantity of manpower
  - Availability of standard equipment required for service delivery
  - Availability of funds required for service delivery
  - Adequate referral back up service
2. Standard operational procedure (SOP)

The measurement of service quality is also based on the standard operational procedure. However the standard could be changed based on the development of technology and the demand of the consumer.

3. Standard managerial process

The quality of service depends again on the well organized and standard service management process.

4. Output of service

The quality of service will not be effective for the community-at-large if the output of the service is small (63).

P. Garpenby from Sweden in 1999 wrote a research paper on resource dependency. The paper focused on the interaction between the state and medical

professional at the national level with respect to patient satisfaction in health care. The paper came with suggestions that in order to prevent erosion of public confidence on health care services, quality improvement needs to be intensified. The author stated that from having a system characterized by trust in profession, the health care system is needs to be treated as other professional industries. Appropriate standard of care as accessibility, availability, provider's competency and responsiveness are issues not only related to the health managers or policy makers, but also for patients, who are increasingly referred to as consumers (64).

### **2.6.3 Courtesy**

A third component of health consumer satisfaction was courtesy. It was reflected by tender care, interest and concern from the service provider.

## **2.7 Measuring patient satisfaction with health services**

Measuring the patient satisfaction with health services is a part of process of monitoring the success of community participation and quality improvement strategies. However, measuring patient satisfaction is not straightforward. "Satisfaction is a complex concept that is influenced by factors including socio-demographic characteristics, physical and psychological status, attitude and expectations about medical care structure, process and out come of care (65)

Despite these difficulties, methods for measuring patient satisfaction have developed rapidly in recent years by:

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

For the purpose of quality assurance, measurement of patient 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 patient's perspective. At the local level, the results should feed back into the local organization 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, geographic area or ethnicity.

## **2.8 OPDs of Banphaeo Hospital**

The outpatients department was a hospital department where patients received diagnoses and/or treatment but they did not stay overnight. There were nine outpatient department services provided by Banphaeo autonomous hospital. These outpatient department (OPD) provided services in general medicine, general surgery, orthopedic surgery, gynecology, pediatrics, ophthalmology, ENT, dental department, health promotion and prevention department.

1. For OPD at the Banphaeo autonomous hospital has three specialist doctors and this department is the most crowded department. Some people come to OPD with major diseases like diabetes, hypertension, cardiovascular disease and gastrointestinal diseases.
2. General surgery at OPD has three specialist doctors. For morning OPD the hospital have two specialist doctors. The patients come to general surgery OPD mostly with hernias, intestinal obstruction, appendicitis, gallstones etc.
3. Orthopedic surgery department has two specialist doctors. The patients come to orthopedic OPD mostly with fractures from accidents, osteoporosis etc. The orthopedic unit of hospital is doing knee and hip replacement surgery and also surgery of spinal cord.
4. Gynecology unit of hospital have two specialist doctors. The OPD has antenatal care all the week including Saturday and Sunday. The pregnant women are giving birth under supervision of specialist doctor. There is no charge for any thing in this department.

5. Pediatrics department has two specialist doctors. The most common the patient are coming with are respiratory especially the upper respiratory tract infections (ARI) and gastrointestinal (GIT) infections.
6. Ophthalmology department is having services about general diseases of eyes and surgeries of eye. The hospital has special project about the cataract which is working with health insurance organization of Thailand. They have mobile unit for surgery of cataract.
7. ENT unit is having one specialist doctor. The hospital is having allergy clinic as well as the unit is performing all the major surgeries of ear, nose and throat.
8. Dental unit is having five dentists. This unit is also having mobile unit.
9. Health prevention and promotion unit is having services both inside and out the hospital. There are also arrangements of visits for elderly and patients with chronic diseases. The working hours of OPDs are from 7 am to 9 pm in this hospital

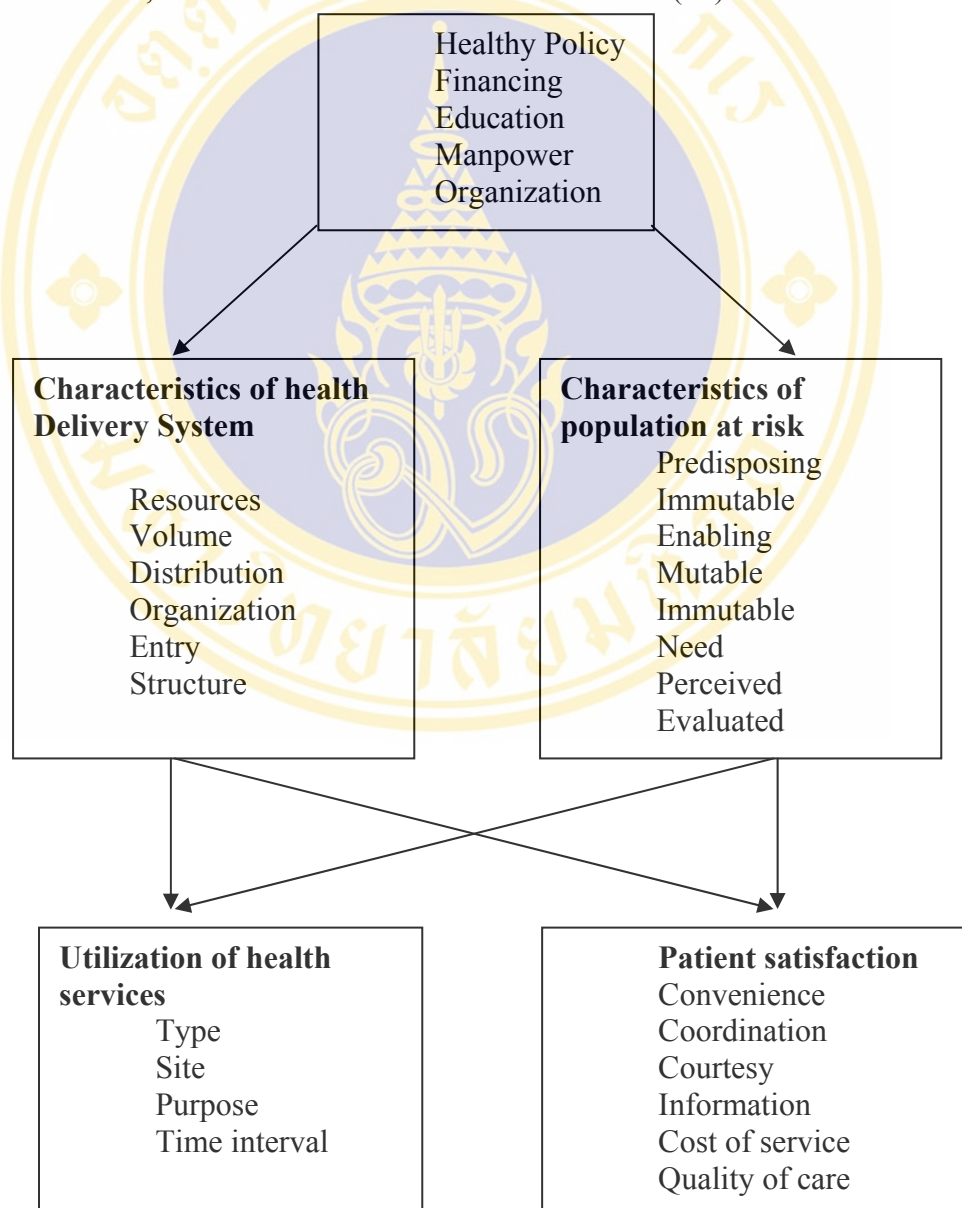
## **2.9 Theoretical model used for construction of conceptual framework**

Aday and Anderson (84) studied satisfaction of people toward health care delivery in United States during 1970-1975 and pointed out 6 fundamentals related to patient satisfaction, three of the fundamentals of those six are as follow:

1. Satisfaction to convenience can be divided as follow:
  - 1.1 Office waiting time
  - 1.2 Availability of care when needed
  - 1.3 Base of getting care
2. Satisfaction to courtesy, which are friendliness of provider and care toward patients.
3. Satisfaction to quality of care, which is quality of care in patient's opinion.

Aday & Anderson in 1974 mentioned that patient satisfaction is the attitude towards the medical care system of those who have experienced a contact with it, which is different from the medical belief component of the predisposing variables in

that it measure use's satisfaction with the quantity or quality of care actually received. They proposed that patient satisfaction is probably best evaluated in the context of specific, recent and identifiable episodes of medical care seeking relevant to consider in eliciting subjective perception of access that indicate satisfaction with the convenience of care, its coordination and cost, courtesy of the providers, information given to the patient about dealing with their illness, and their judgment as to the quality of care received. Patient satisfaction is an outcome indicator in a theoretical model of access, which indicated the use of the services. (55)



**Figure 6** Aday and Anderson's Health System Model (66), the development of indices of access to medical care.

## 2.10 Health services in Thailand

Observing changing disease pattern has carried out health development with in the National Economic Development Plan. The following strategies to ensure implementation of the 8<sup>th</sup> five year National Economic and Social Development Plan towards achieving the desired image of health for Thai people have been developed:

- Increased efficiency and coverage of National health care service
- Promote positive health behavior and community participation in health development
- Reform of patient protection for health services and development system.
- Promote self re-reliance at all levels
- Increase the potential and competitiveness of domestic health related industries
- Recognize the system of public health administration

In the health sector, health care delivery all over the country has been tied up with concepts of availability, accessibility and acceptability of quality. In order to achieve these goals, the government developed and improved the quality of health services in each level all over the country.

At district level the government community hospitals are staffed with general practitioners. Community hospitals provide out patient as well as in patient services, involving curative, rehabilitative, promotive and preventive health care. General hospitals established in major cities play a role as referral centers for community hospitals. They are staffed with specialists and serve the population in urban and sub-urban areas. Some general hospitals developed service qualities through sub specialist services and function as regional hospital (67).

The three principal parties of government agencies delivering health institutional services are

- The Ministry of Public Health (MoPH)
- Other ministries and public agencies

- The private sector

The characteristics of facilities are explicit to their respective interest. MOPH hospitals are typically hierarchical. They are well distributed across the country.

Hospitals under the MOPH were classified into 3 categories:

- Regional hospitals, capable of medical treatment in all branches and sub-branches.
- Regional hospitals are assigned as center for expensive technological equipment such as the computerized X-ray machines that are not available at general hospitals.
- Large general hospitals, capable of medical treatment in not fewer than 12 specialist branches and sub-branches, located at major provincial cities.
- Small general hospitals located at district level and commonly referred to as community hospitals with capabilities in medical treatment. They provide curative, rehabilitative, preventive and promotive services for specific communities. (68)

Under the Seventh National Health Development Plan, the government has improved the quality and efficiency of health facilities at all levels through standardization of services for hospitals' auto-development and evaluation as well as implementation of total quality management and continuous quality improvement.

In Thailand, there are three types of health facility systems of provincial hospital which are 67 general hospitals, 712 community hospitals and 9,689 health centers in 75 provinces. General hospital is the hospital that can hold more than 500 beds and has the lower capability to accept the patients as compared to regional hospital. It has the responsibility to provide service for people in urban areas. It is classified as secondary care up to early tertiary care. Community hospitals can hold between 10-120 beds. It is located in every Amphur as the smallest sector that has working doctor. It aims to provide mixed services to the community. All hospitals in every level have the same goal: to provide good service to satisfy each patient demands.

## 2.11 Hospital Autonomy in Thailand

The public sector in Thailand has been the major player in Thailand's health service system from the introduction of modern health services. It is undeniable that the public sector is crucial in meeting the health needs of the population, especially the underprivileged and the poor. Given Thailand's economic crisis and experience with rapid growth and then decline of the private sector over the last fifteen years, the Government health service delivery system has been a force for stability in the country. However, health services operating under the conventional civil service system and are not without problems. There are examples illustrating the weaknesses of a health services delivery system being managed under a highly centralized bureaucracy. For example, staff working in the public sector lacks motivation to deal with the large volume of work due to the fixed salary system and rigid manpower management rules and regulation. In addition, efficiency in the use of resources has not been ensured. Finally, systems to ensure transparency and accountability of the public sector resources still need to be improved. (69)

Given the above background, the public sector needs to change its methods of delivering services and dealing with its hospitals in ways that improve efficiency and accountability but also allow for better governance. In many countries, such changes in public hospitals have been called either "privatization" or "cooperatization". In the Thai context, it is best to refer to these changes as a process of creating autonomous public hospitals. This nomenclature is in line with the current effort of civil service reform which is trying to make certain public services delivery more autonomous and free from conventional bureaucratic red tape, rules and regulations and Thailand's historical organizational culture. (69)

In this respect, creating autonomous hospitals should be taken as a form of decentralization. Hospital autonomy is essentially a form of decentralization addressing the division of economic and administrative power/responsibility between the central (in this case, the Ministry of Public Health [MOPH]) and sub-national units of government.

Like decentralization, hospital autonomy is an attempt to achieve the following objectives:

- Improving communication and reducing administrative complexity, thereby improving government's responsiveness to local needs.
- Enhance effectiveness and efficiency of management by allowing greater discretion.
- Increase accountability to the public consumer
- Improve resource mobilization for national and local development policies, and improve local knowledge of development priorities.
- Achieve political objectives such as self-reliance, self-determination, and democratization.
- Increase the role of the local community in ensuring good governance.

Establishment of hospital autonomy in Thailand is based on the belief that a well functioning public health sector can play a crucial role and make a substantial contribution to improving the health of Thai people. Hospital autonomy addresses the division of economic and administrative power/responsibility between the Ministry of Public Health (MOPH) and autonomous government hospitals. Hospital autonomy aims to achieve the following objectives: 1) improve communication and reduce administrative complexity; 2) enhance effectiveness and efficiency of hospital management; 3) increase accountability to the public; 4) improve resource mobilization and improve local knowledge of development priorities; and 5) achieve political objectives.

Autonomous public hospitals are not "public entities" capable of making a profit, but "public organizations" whose role it is to serve the community.

Decentralized decision making in autonomous hospitals occurs in six main areas: strategic management, procurement, financial management, human resources management, administration and clinical governance.

Hospital autonomy continues to value social equity where fees are set based on ability to pay, and service use is based on need. Since the differences between historical organizational function and that which is expected under autonomy are significant, a transition period will be required before full autonomy can be achieved.

Experience from Singapore and Hong Kong provides insight into the process of hospital autonomization. According to the reports of a study tour to Singapore and Hong Kong, the crucial characteristics for hospital autonomy are:

- Separation of financing from provision of care
- Well-defined sources of financing and payment methods
- Identification of revenue and cost sources
- Development of an appropriate accounting and management information system, including performance indicators
- Introduction of fair staff rewards and incentives
- Appropriate human resources development with emphasis on management training and corporate-style team building
- Reorientation of services towards customer demand
- Restructuring of hospital management and governance towards greater autonomy, flexibility, and accountability

The experience from Singapore and Hong Kong stresses that there is no best way to prepare for autonomy except to begin and adopt a research and development mentality. In Thailand, the process should begin and adjustments made along the way using the results of monitoring and evaluation. Taking the Singapore and Hong Kong experience to heart, the MOPH proposes to begin the transition to hospital autonomy with a number of hospitals using this manual as a guide.

An autonomous hospital (AH) is an institution:

- Constituted under the Public Organization Act (POA) and accountable to the community, a juridical entity, capable of suing and being sued, and with authority to enter into contractual relationships and operating under State supervision;

- Primarily responsible for curative care provision, but providing preventive and promotive health services financed by State subsidies; With physical assets that are owned by the Ministry of Public Health (MOPH), Government of Thailand, but whose operation is not under the direct day-to-day control of the MOPH as defined in the Public Organization Act;
- Whose full-time, part-time, and casual staff are either: a) autonomous hospital employees; b) civil servants on secondment; or c) full civil servants during the transitional phase; Responsible to the MOPH for adhering to the appropriate functions defined for autonomous public hospitals as part of a coherent Thai health services system and meeting basic minimum standards for its technical and administrative functions.
- Operating under a general memorandum of administrative agreement defining the operational relationship between the MOPH and the autonomous hospital.
- Financed through a system of vertical block grants and/or transfers from the MOPH and locally generated revenue (in that order of importance), with clear and transparent lines of authority both within the hospital and between the hospital and the MOPH and provincial health administration.
- Able to retain surpluses within limits set by the MOPH, fully responsible for all hospital resources and openly and transparently accounting for all resources regardless of source.
- Governed by a Governing Committee (GC) and run by a Chief Executive Officer (CEO).

Autonomous hospitals, having been set up basically for charitable purposes, have no stock ownership and may accumulate surpluses but not profits. Governing Committees (GCs) will be bound by certain legal requirements and will have taxing authority in that they can set fees for service. To offset any deficits or to maintain financial solvency, the Government will subsidize these hospitals through block grants. The GC is the “boss” of the CEO but, since it is not involved in day-to-day operations, should develop a policy of “*executive limitations*” which limit the power of the CEO.

Autonomous hospitals are required to prepare annual recurrent budget plans and biennial capital budget plans based on MOPH guidelines. Accounting guidelines, a chart of accounts, and a list of cost centers for autonomous hospitals are developed as part of the transition process.

The Public Organization Act does not allow autonomous hospitals to be profit making institutions; rather, each AH must register as a non-profit entity under the POA and apply for and receive Certificates of Need for capital items.

The Board of Directors of each individual autonomous hospital may develop its own mission statement. In general terms, though the mission of an autonomous hospital is to provide comprehensive care services, of high quality and relevant to community needs, in the most efficient manner possible within available resources.

According to the provisions of the Public Organization Act, members of the Governing Committee shall not directly or indirectly have any business interests with the hospital. They also may not be a party to any contract with the autonomous hospital, nor undertake any transactions competing with those of the autonomous hospital (70).

## **2.12 Patient satisfaction studies in Thailand**

In terms of coverage of health delivery system a number of studies on performance of health personnel and government health delivery exist. For example Boesch's study (1972) in Thailand about dissatisfaction with outpatient services discovered that many patients often complained that the doctors did not give enough care and attention. They did not think the doctors forget about it because social interaction of Thai people emphasizes that socio-emotional aspect. Care and consideration are what the patients desired and lack there of could bring about dissatisfaction. The Boesch's study was about the "communication between doctors and patients" that communication as social interaction is much related towards the patient satisfaction. Care and consideration are what the patient desired and if the

doctors have no time to explain due to his working load is too heavy it could bring dissatisfaction. This condition will make patient feel to be separated from doctor by barriers of status and communication. (71)

Day, FA. And Boonlert Leoprapai (1977) in their study of patterns of health utilization in up-country Thailand has shown that distance is of only minor importance. They stressed that it seemed to be lack of attractive services which combined to the under use of health facilities.

Rauyajin, Oratai and Plianbangchang, Samlee (1983) in their study on psychological aspects of rural health services in the northeast region of Thailand studied consumer satisfaction in five dimensions of convenience comfort, out of pocket cost, amount and quality of information received and perceived quality of services. According to the findings the health services user of high utilized Tambon are more satisfied with health services than those of low utilized Tambon in almost every aspect. They discuss further and say, it is possible that even though physical distance and comfort in accessibility to health care is still a barrier, the rural people willingly use health services (regardless of accessibility), if the health provider is courteous, good in providing health information to the patient, friendly and provides high quality care as perceived by patients. They in addition emphasized that more important factor behind underutilization of health services is the patient satisfaction of health care provider's courtesy, friendliness and show of interest in and concern for patient relatives as opposed to the physical distance factor.

Phakunkongchai, Piyawan (1990) in her study of outpatient satisfaction with government health services found that public satisfaction for hospital services is at a low level, poorest satisfaction is given to the service inconvenience. Here age, sex, occupation, including the nature of sickness, means of traveling and distance to hospital is found to be associated with level of satisfaction as well as comprehension of messages concerning instruction, regulation and communication. The patients viewed medical service personnel as not exerting themselves to provide

understandable information, not providing effective services and not having good manners.

A study on patient satisfaction by Kanaratnapreuk, Supachai and Boonpandong, Duangsamorn (1989) which covered a sample in 30 hospitals out of 69 general hospitals measured satisfaction by examining areas like convenience, courtesy of care, medical equipment, coordination and medical information. Of outpatients and inpatients, 14.6 percent expressed low level of satisfaction, 84.6 percent expressed intermediate and only 0.2 percent was highly satisfied with hospital performance. The areas of dissatisfaction were long waiting time, inadequate cleaning and setting of hospital surrounding, poor patient-doctor relationship, and lack of doctor concern for the patient's problem and poor communication. The areas of dissatisfaction were more or less similar in both groups.

A study by Pannarunothai (1992) on equity in health: The need and use of public and private services in Phitsanulok municipality suggested that overall satisfaction towards the public hospital was lower than private hospital. Strong critiques were against the inefficient system of public services. On the other hand strong critiques on private hospitals were high cost. Doctor patient relationship in private hospital is better than the public hospital.

A study by Partha pratim roy on client satisfaction at the out patient department (OPD) of community hospital, half of patient were satisfied (53 %) towards the overall outpatient care. Most clients were satisfied from service procedure (56.5%), medical equipment (53.5%), and pharmacy sector (52.5%) but relatively less satisfied with doctor service (51.5%), physical facilities (50%), registration service (51%) and nursing service (50%). The highest level of satisfaction was recorded among 60 and above years. Patients in younger age group were less satisfied than those in other groups.

Sriratanabul and Pimpkovit interviewed patients in the outpatient department (OPD) services at chulalongkorn hospital found that 83 percent of patients said that the

services were good. However, one third encountered problems with receiving health services. Those problems included the inconvenience of services; patients had to wait for long hours (72)

Durongpisitkhun had also completed a study on outpatient satisfaction with health services at Ramathibodi Hospital. Interviewing clients collected outpatient satisfaction with 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 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 prior experience of obtaining services. At the physical examination unit, client who was male or younger had 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 less satisfied than those who had low education or short waiting time. This research concluded that education, waiting time, sex and age affected patient satisfaction (47).

### **2.13 Some Prejudices about satisfaction surveys**

It is worthwhile confronting several negative assumptions that may exist about the value of surveys of patient satisfaction. One unspoken anxiety may be that they will uncover widespread and general dissatisfaction, which will prove undermining to all concerned. However, health professionals seem to estimate greater levels of dissatisfaction in their patients than a survey discloses. Virtually all surveys indicate only a few patients who express negative views about particular issues. Indeed one of the greatest single obstacles in this type of survey is lack of variability in results; typically, atleast 80percent of respondents express satisfaction for any question. One reason is the reluctance of many patients to express critical comments about their health services. (73)

A more commonly expressed reservation is that answers given to surveys of satisfaction will reflect essentially ill considered, whimsical or unstable thoughts and

feelings, especially given the emotional and fluctuating nature of many episodes of illness. A variant of this concern is the argument that because of the technical complexity of so many aspects of health care patients are not competent to make sensible judgments about much of the care that they receive. In particular, patients might depend for their judgments on factors that from a health professional viewpoint are potentially misleading. One study suggested that patient technical skills and medical competence as expressed in survey were largely determined by their perceptions of quite different qualities of the doctor- the extent of friendly and reassuring interpersonal manners.

Despite specific and well designed the questionnaire, the clearer it is that the patient does not respond in terms of global reactions. Moreover as with other fields of survey research and measurement of attitude, reservations such as those expressed above have to be taken account of by examining the reliability and validity of questionnaires.

## **2.14 The Characteristics of medical care Services**

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

### **2.14.1 Acknowledging patients care**

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

### **2.14.2 Continuous care**

A service should be offered, starting from the onset of the 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 family level. Continuity will result from overall surveillance. Starting from recognizing the mind's condition, clients who receive the services will agree to be followed up, but some services cannot completely fulfill the demand of the clients or those who are using the services of health care facilities. Continuous interaction should establish with patients and the relationship with providers would allow the providers to be able to offer overall services. Overall look and continuous look after would both complement each other.

### **2.14.3 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 (74).

## **2.15 The importance of Patient 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 (75) and less likely to bring a malpractice suit. Patients who find the medical care satisfying more complaint with their treatment regimes and thereby produce more clinical outcomes and better results. Satisfied patients improve the quality of the work experience for providers, reducing staff turnover and burnout. Patient 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. Surveying patients about

their level of satisfaction and plotting the results can help managers to understand how the patients are satisfied or dissatisfied dealing with both their company in general and with various elements of company products or services in particular. Measuring patient satisfaction is one of the safest ways to obtain the information. A completely satisfied patient believes that the organization understand and address his or her personnel preference, needs or problems.

Organizations in health industry need to change their tactics of strategies and activities as they face increasingly conflicting demands from internal, external and interface stakeholders. 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.

### **2.16 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 health care workers. The satisfaction is divided into two parts: the satisfaction with technical competence and satisfaction with interpersonal skills. When evaluating nurses, the patients place much more emphasis on interpersonal aspect than on perceptions of technical competence. Patient stick with their health personnel once suitable personnel is found. Having continuous relations with their doctors is strong predictor of overall satisfaction. Prior relations between doctor and patients are major predictors of enrollment in managed care and the disruption of provider relationship is major cause of disenrollment. (76)

Interpersonal relationship between patient and the provider is reported by many authors to be one of the most important issues for patient perception of quality. Specifically the patient prefers a service provider whom:

- Gives them a warm welcome, acts friendly and polite shows respect and treats patients as human beings and is sympathetic
- Acts fair and does not discriminate (practice first come and first serve principle)
- Communicate well in a language that the patient understands
- Express or demonstrate a commitment to their work
- Assure patients of confidentiality

Margaret reported client perspective that client centered care require health providers to respect a clients 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 (77). The relationship between health worker and client is a tenuous one. The health worker has an opportunity to be extremely influential on client simply by the way he or she interacts with that person. Many people view health worker in the same light as parent. Consequently, clients expect health providers to behave and act in manner deserving such respect. Numerous studies cited low satisfaction of quality of care because of poor attitude from health care workers. For example, in Tanzania it was discovered that some dispensaries were perceived as offering bad delivery case because of bad attitude of the staff.

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

- Low income
- People's tradition, belief, culture and habits
- Distance of health facility from the house of clients

### **2.17 Attitude scaling Method**

Attitude scales are relating crude measuring instruments and we must not expect too much from them. Their chief function is to divide people roughly into number of

broad groups, with regard to particular attitude. Such scales cannot be themselves been exposed to provide us with suitable insight in an individual case. They are technical in placing people in a continued relation to one another and absolutely impossible to say which method is best. Each has imported desirable features but each of them is also open to criticism. If we wish to stay attitude patterning or explore theories of attitudes then probably the Likert procedure will be the most relevant.

Likert's primary concern was un-dimensionally making sure that all items would measure the same thing. He also wanted to eliminate the need for judges by getting subjects in a trial sample to place them an attitude continuum for each statement running from "strongly agree, agree, uncertain, disagree, and strongly disagree". These five positives were given simple weights of 5,4,3,2 and 1 for scoring purpose after more complex scoring methods had been showed to posses no advantages.

To produce Likert scale we proceed as follows; first as usual we compare an item pool. However for the lifetree procedure it is the best not to be had neither many neutral items nor many extremes at either end of continuum. Next we score the record of each respondent. To do this we must decide whether we want a high scale score to mean a favorable or unfavorable attitude. It does not matter what we decide but from then on we must be consistent.

If we decide that a high score on the scale will mean a favorable attitude, then favorable statement must be scored 5 for "strongly agree" down to 1 for "strongly disagree". If we decide that high score will mean an unfavorable attitude then the opposite system of scoring will apply.

## CHAPTER 3

### RESEARCH METHODOLOGY

#### 3.1 Research design

This cross sectional descriptive study was conducted in Banphaeo Hospital Samut Sakhon province, Thailand to determine patient satisfaction. The interview-questionnaire was the tool in collecting data for assessing the patient satisfaction towards the services in Banphaeo community hospital Medicine Department OPD. The interviews were held at the hospital outpatient department where the patients received medical care.

#### 3.2 Study Population/ Study Area

Banphaeo hospital was selected as the study health facility. This hospital is the only autonomous hospital in Thailand. The target population was patients attending the out patients Department of Banphaeo hospital, available at the time of data collection that was able to listen and understand Thai language, were ready and willing to give information. Age for the respondents was 16 years and above (both males and females) because respondents at this age are mature enough to answer questions independently.

#### 3.3 Sample size and sampling technique

The sample size of was estimated by using the statistical formula:

$$n = \frac{Z^2 pq}{d^2} \dots\dots\dots (44)$$

Where:

n = estimated sample size

Z = fixed alpha at 0.05 level which is 1.96, level of statistical significance

p = proportion of patient’s satisfaction with health services = 0.63..... (6)

q = 1-p, expected proportion of patients not satisfied with health services (0.365).

d = degree of accuracy/allowable error (0.06).

$$n = \frac{(1.96)^2 (0.63) (0.36)}{0.06 \times 0.06}$$

$$= 225$$

With 63.5 % satisfaction among patients at 95% confidence level the sample size according to the formula was included in study sampling technique so the estimated sample size was 225 patients.

The accidental sampling technique was used for this study but this technique cannot estimate sampling error. The sample was drawn from patients present at the OPD of Banphaeo hospital. Accidental sampling was a type of non-probability sampling which involved the sample being drawn from people/items that were readily available and convenient. The researcher using such a sample could not scientifically made generalizations about the total population from this sample because it would not be representative enough.

### 3.4 Research instruments for data collection

The research instrument for data collection was a structured questionnaire designed by the researcher under the supervision of advisors. This structured questionnaire was used as measurement tool. The data was collected by using pre-tested research instrument. Before collecting data for pre test, the questionnaire was submitted to thesis advisors in order to check content validity. Then, the questionnaires were adopted according to the suggestions and comments from thesis advisors and proceed to pretest them using devised questionnaire for thirty

respondents. The results were put into Minitab software to find out reliability coefficients. All together there were 66 questions focusing on socio-demographic factors, experience of patient to OPD services, accessibility to services of Banphaoe autonomous hospital OPD and patient satisfaction from Medicine Department OPD.

The questionnaire was tested for reliability at one community hospital in Samut-sakhon province after being translating it to English. The cronbach's co efficient of alpha was adopted for reliability analysis of each part of questionnaire as shown in Table 1.

**Table 1** Reliability Coefficient

Variable	Cronbach's co efficient of alpha
Experience of patients	0.86639
Accessibility of patients	0.73897
Satisfaction of patients	0.91095

Pre-testing was accomplished in group of respondents (30 subjects) who were socio-demographically and culturally similar to the study population. Then according to feedback from result of pre-test, questionnaire was reviewed and modified as necessary.

Most of the questions in the questionnaire consisted of closed ended questions. The questions are divided into sections according to requirement of research. This was face to face interview questionnaire. The experience & accessibility were categorized into good and poor while satisfaction into high and low using best criteria.

In best criteria, the maximum was minus from minimum and than was divided by total number of the responses the questionnaire had. Like in the following study there was three point likert's scale used so the minimum minus maximum was divided by three. The score from that was used for categorizing the experience, courtesy and quality of care.

**Table 2** Scoring using best criteria

<b>Variables</b>	<b>Low/Poor</b>	<b>High/Good</b>
<b>Experience</b>	24-56	57-72
-Physical Facilities	7-17	18-21
-Doctor Services	6-14	15-18
-Nurse Services	4-10	11-12
-Pharmacy Services	4-10	11-12
-Registration Services	3-7	8-9
<b>Accessibility</b>	7-17	18-21
-Waiting time	3-7	8-9
-Service process	2-4	5-6
-Working Hours	2-4	5-6
<b>Satisfaction</b>	26-60	61-78
-Convenience	12-28	29-36
-Courtesy	7-17	18-21
-Quality of Care	7-17	18-21

The questionnaire was divided into following sections:

**Part A. Socio-demographic characteristics of patients attending OPD of Banphaeo hospital**

This part consisted of general information about respondents like age, sex, marital status, education, monthly family income, family size, total number of visit to hospital so far and where the patient normally go when he get sick. There were nine questions and their characteristics were multiple choice and fill in the blanks.

**Age:** Only respondents aged more than 16 and over were selected. These were divided into four age groups with interval, of ten years in between them, as follow

1=16-30 years

2=31-40 years

3=41-50 years

4=51-60 years

5=61 years and above

**Sex:** Gender of respondent broke into male and female was coded as follow,

1=male

2=female

**Marital status:** It was divided into following groups as follows,

1=single

2=married

3=widowed

4=separated

**Education:** Education had the following groups and coding,

0=Illiterate

1=Primary school

2=Secondary school

3=Vocational school

4=Bachelor degree

**Main Occupation:**

1=Not employed

2=Government employed

3=Labor

4=Non-government employed

5=Agriculture

6=Student

**Family Income:** Based on the mean and standard deviation the family income was divided in following groups,

1= below and equal to 3000 baht

2= 3001- 5000 baht

3= 5001- 10,000 baht

4= above 10,000 baht

**Family size:** It was grouped on the basis of mean and standard deviation. It was coded as follow

1= 4 and less family members

2=5 and more family members

**Number of visits to hospital:** Grouped as:

1= 1 to 4 visits

2= 5 to 9 visits

### **Part B Experience of patients with OPD services**

Second part of the instrument consisted of questions on patient experience to OPD services. It included experience of patient about physical facilities, doctor services, nurse services, pharmacy service, and registration service. There were 24 questions in this part of the questionnaire. The questionnaire had 3 rating scales of agree, not sure and disagree. The label for agree was 3, for not sure was 2 and for disagree was 1. The experience was categorized into good and poor experience using best criteria.

### **Part C Accessibility to Banphae autonomous hospital Medicine**

#### **Department OPD**

The third part of the questionnaire consists of accessibility to services at Ban Phaeo hospital. The questions was consisted of waiting time, services processes, and working hours of OPD. There were 7 questions in this section and the questionnaire had a three rating scale as in previous section of agree, not sure and disagree and label same as in experience (3 for agree, 2 for not sure and 1 for disagree). The accessibility was categorized into good and poor using best criteria.

### **Part D Patient satisfaction with OPD**

The fourth part included questions on courtesy, convenience, and quality of care. There were 26 questions in this section. The satisfaction was divided into high and low using best criteria. According to best criteria the score set was 61-78 for high satisfaction and 26-60 for low satisfaction. The rating was done as 1=satisfactory, 2=not sure and 3=unsatisfactory

**Convenience** in this study referred to accessibility to health service including service system, availability of personnel, working hours, waiting time and condition of places. **Courtesy** referred to manner that provider expresses politely and respectfully to the patients. **Quality of care** referred to provider's skill and ability in treatment and sufficiency of health facilities. In this research, it included treatment received from doctor, the competency of doctors, nurses and pharmacists, opportunity provided by the doctor for asking about the illness and quality of medicines in pharmacy.

### **Part E Suggestion or comments for improvements of OPD services**

The fifth part is about patient comments or suggestions for the improvement of OPD service of medicine department of Banphaeo Hospital. It is the only open ended question. The questionnaire was piloted and necessary modification was made before introducing the questionnaire in the study area.

## **3.5 Data collection procedure**

Data collection in this research work was conducted as follows:

An official letter was sent to Director of hospital from AIHD, Mahidol University to explain about the objectives of research and to ask for permission to collect data at the Medicine Department OPD of the hospital.

Person who worked as research assistant was prepared by explaining study objectives, and explained characteristics of the questionnaires, questioning steps and

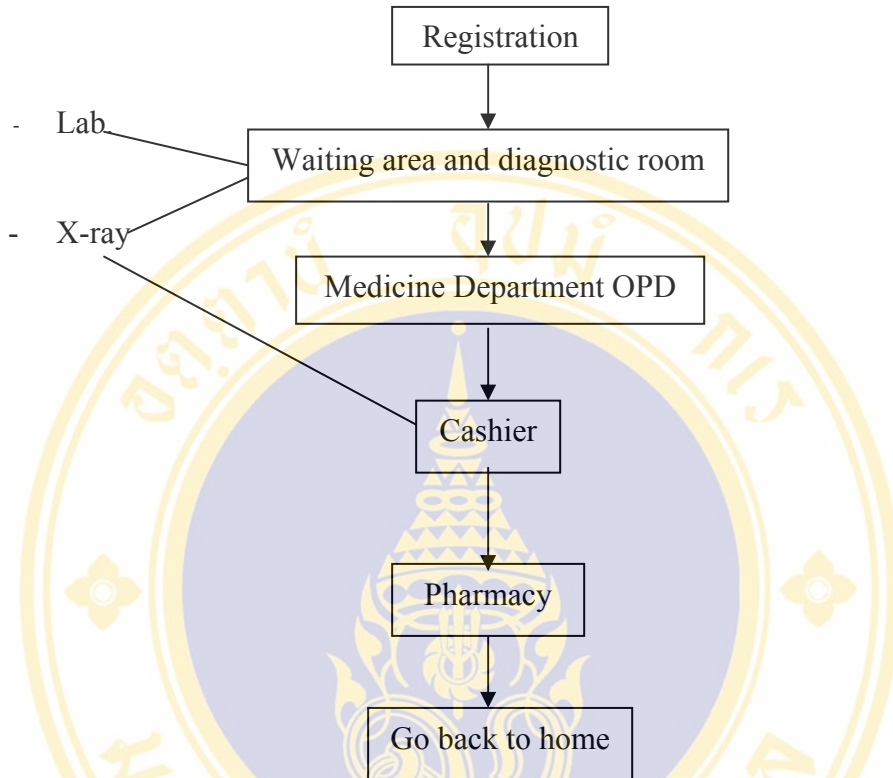
method of data collection. Before starting data collection, the director of the hospital was contacted and background information about the hospital was collected.

The data was collected from 17<sup>th</sup> of January till 5<sup>th</sup> of February 2007 excluding public holidays. All respondents were taken from the patients 16 and above who visited the OPD and were not first time visitors to community hospital.

The steps for patient to follow are same for all the OPDs of the hospital. First of all the patient will go to the registration section. The patient come to Medicine Department OPD are classified as those who are in better health condition and they can walk themselves. If patient is in stable condition and walking then first of all patient will go to registration section where the patient profile will be created or if it's old cases then the profile will be updated. In case the patient cannot walk themselves then patient can be taken on stretcher/wheelchair and his/her profile will be created. In case of emergency the patient will be taken to the emergency room.

After registration section they will wait in the waiting area and in waiting area patient will be asked about detailed history which will include history of present illness, past history, family history etc. Here the patient vitals (B.P, pulse, and temperature), height, weight etc will be checked. This section will screen the patient before they send him to doctor. The patient will wait in waiting area after screening until their name called and then they will go to the place for diagnosis and treatment. In diagnostic room the doctor will examine the patient and give the treatment and will send the patient for investigations if required. After getting treatment if the patients need any advice or counseling, they will come back to the waiting area and from this section they will get advice about their health. After getting examined and getting prescription the patient will normally go to pharmacy section. The patient will give the prescription to the cashier. In case the patient is paying out of pocket the cashier will make the bill, if free of charge the patient will submit the prescription here and they will be asked to wait for receiving the medicine. After getting the medicines the pharmacist will explain about the use of medicine to patient. The head of the registration section is the nurse and this section is basically responsible for creating

and maintaining patient profile. The manager of Medicine Department OPD is a doctor working in the hospital.



**Figure 7** Process for access to OPDs of Banphaeo Hospital

### 3.6 Data analysis procedure and statistics used

After completing the process of data collection, the questionnaire was sorted out for defects or missing. To simplify the data entry and analysis, a code sheet was prepared. Data was entered into Epidata and then Minitab 13 program was used for data analysis. 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. Descriptive statistics was used for determining frequency, percent, mean, median, mode, maximum, minimum and standard deviation for variables under study. To find the relationship between the dependent and independent variables according to the objectives already listed chi square test was used.

## CHAPTER 4

### RESULTS

This descriptive cross sectional study was conducted in Banphaeo autonomous hospital to describe the patient satisfaction towards outpatient medical care services provided at the medicine department. A total of 225 patients were interviewed from the medicine outpatient department (OPD) in Banphaeo autonomous hospital. An interviewer was employed for data collection from 17<sup>th</sup> of January until 5<sup>th</sup> of February 2007 excluding public holidays. All respondents were OPD patients 16 years of age and above who returned to OPD after previous visits. The eligible respondents were asked about the basic information of socio-demographic characteristics, experience to Medicine OPD services, accessibility to Medicine OPD, and about the satisfaction of patients with services provided by Medicine OPD in terms of convenience, courtesy, and quality of care. The respondents who came to the Hospital Medicine OPD for utilization of services during the period of data collection were both males and females.

The study was conducted in order to measure the level of patient satisfaction on the OPD services using the best criteria. Moreover, this study was intended to find out the relationship between the socio demographic factors, experience, accessibility and patient satisfaction from Medicine OPD services.

The results for patient satisfaction towards the Medicine OPD were presented in the tubular and descriptive forms in the following parts:

Part 1 Socio-demographic characteristics of patients

Part 2 Experience of OPD services

Part 3 Accessibility to OPD

Part 4 Patient satisfaction with OPD

Part 5 Relationship between independent and dependent variables

### Part 1 Socio-demographic characteristics of the patients

**Table 3** Number and Percentage of Respondents by Socio-Demographic characteristics

Socio-demographic characteristics	Number N = 225	Percentage (%)
<b>Age (years)</b>		
16-30	88	39.11
31-40	49	21.78
41-50	39	17.33
51-60	25	11.11
61+	24	10.67
<b>Sex</b>		
Male	103	45.78
Female	122	54.22
<b>Marital status</b>		
Single	62	27.56
Married	141	62.67
Widowed/separated	22	9.78
<b>Education</b>		
Illiterate	9	4.00
Primary school	101	44.99
Secondary school	90	40.00
Vocational school	10	4.44
Bachelor's degree	15	6.67

**Table 3** Number and Percentage of Respondents by Socio-Demographic Characteristics (Cont.)

Socio-demographic characteristics	Number N = 225	Percentage (%)
<b>Main occupation</b>		
Unemployed	30	13.33
Government employed	12	5.36
Non-government employed	21	9.33
Agriculture	49	21.78
Labor	102	45.33
Student	11	4.89
<b>Family income per month</b>		
Below and equal to 3,000 Baht	23	10.22
3,001-5,000 Baht	32	14.22
5,001-10,000 Baht	117	52.78
Above 10,000 Baht	49	21.78
<b>Family size</b>		
≤4	107	47.56
>4	118	52.44
<b>Total number of visits to hospital during last 6 months</b>		
1 to 4 times	172	76.44
5 to 9 times	53	23.56

Table 3 shows the socio-demographic characteristics of the patient which included the age, gender, marital status, education, income, occupation, family size, total number of visits to hospital (during last six months), and place for obtaining treatment.

The age of the respondents was divided into five categories. Highest proportion (39.11%) of patients was age from 16 to 30 years; while the age group from 31 to 40 and 41 to 50 were 21.78 and 17.33 percent respectively and the patients aged 51 to 60 and above 60 years were 11.11 and 10.67 percent respectively.

Out of 225 patients surveyed, more than one half (54.22%) of them were females. Nearly two-third of the respondents was married (62.67%) while 27.56 percent were single and 9.78 percent widowed/separated respectively. Most of the patient's education was primary school (44.99%) followed by 40 percent with secondary school as highest level of education.

Related to the occupation, the respondents were divided into unemployed, government employed, non-government employed, agriculture, labor, and students. The majority of respondents (45.33 %) had labor as their main occupation followed by the people with agriculture (21.78%) as their main occupation.

Concerning the monthly family income of the patients, it was classified into four categories. More than one half (53.78%) of the respondents were earning between 5,000 Baht to 10,000 Baht. Almost three quarters of the respondents had income from 5,000 to 50,000 Baht. The maximum family income per month was 50,000 Baht with average of 10,395 Baht while standard deviation was 9218 Baht and Median of 8,000 Baht.

Family size was divided into two categories of less than four family members and four and more family members. The second group with four and less family members was more than half (52.44%) of the total respondents. The minimum number of one family was 1 while the maximum was 9 family members in a household.

The total number of visits to hospital during the last six months was divided into two categories. Accordingly those who made 1 to 4 visits constituted three quarter (76.44%). The maximum number of visits was 9 and minimum visits of 1. When the patients were asked about what they think is the most appropriate place for getting the treatment. The majority of patients said that they go to government hospital (72%) for treatment.

## Part 2 Experience of Patients about Medicine OPD Services

**Table 4** Number and percentage of Experience of Patient about Medicine OPD

Experience to Medicine OPD	Number and Percentage			Comment
	N = 225			
	Agree	Not sure	Disagree	
<b>Physical Facilities</b>				
- Ventilation inside OPD good	198 (88.00)	23 (10.22)	4 (1.78)	Good
- Enough light inside OPD	202 (89.78)	20 (8.89)	3 (1.33)	Good
- Enough sitting chairs and toilets in waiting area.	162 (72.00)	38 (16.89)	25 (11.11)	Good
- Enough space in diagnostic room	149 (66.22)	63 (28.00)	13 (5.78)	Poor
- Enough drinking water in waiting area	157 (69.78)	43 (19.11)	25 (11.11)	Good
- Enough clean toilets in waiting area	151 (67.11)	51 (22.67)	23 (10.22)	Good
- Clean and tidy waiting area.	194 (86.22)	18 (8.00)	13 (5.78)	Good
<b>Percentage: <math>\geq 66.67\%</math> = Good, <math>&lt; 66.67\%</math> = Poor</b>				

**Table 4** Number and percentage of Experience of Patient about Medicine  
OPD (Cont.)

Experience to Medicine OPD	Number and Percentage			Comment
	N = 225			
	Agree	Not sure	Disagree	
<b>Doctor's service</b>				
- Doctor did physical examination with respect	186 (82.67)	33 (14.67)	6 (2.67)	Good
- Doctor spent enough time for examination	170 (75.56)	45 (20.00)	10 (4.44)	Good
- Doctor listened carefully and understand your concern	176 (78.22)	48 (21.33)	1 (0.44)	Good
- Doctor gave you opportunity to discuss your treatment	182 (80.89)	34 (15.11)	9 (4.00)	Good
- Doctor asked about illness in detail	160 (71.11)	47 (20.89)	18 (8.00)	Good
- Enough doctors in OPD for patients	147 (65.33)	54 (24.00)	14 (10.67)	Poor
<b>Nurse Services</b>				
- Nurse listen health problem and explained treatment.	172 (76.44)	44 (19.56)	9 (4.00)	Good
- Enough nurses in medicine out patient.	159 (70.67)	49 (21.78)	17 (7.56)	Good
- Nurses were helpful to you.	185 (82.22)	29 (12.89)	11 (4.89)	Good
- Nurses showed good communication skills.	169 (75.11)	47 (20.89)	9 (4.00)	Good
<b>Pharmacy Service</b>				
- Drugs were expensive.	69 (30.67)	99 (44.00)	57 (25.33)	Poor
- Explanation about drugs from pharmacist.	184 (81.78)	28 (12.44)	13 (5.78)	Good
- Enough pharmacists in Medicine OPD.	150 (66.67)	54 (24.00)	21 (9.33)	Good
- Pharmacist showed good communication skills	186 (82.67)	33 (14.67)	6 (2.67)	Good
<b>Registration Service</b>				
- Enough registration staff in Medicine OPD	180 (80.00)	29 (12.89)	16 (7.11)	Good
- Registration staff cooperative.	167 (74.22)	55 (24.44)	3 (1.33)	Good
- Registration staff showed good communication skull.	180 (80.00)	38 (16.89)	7 (3.11)	Good

**Percentage:**  $\geq 66.67\%$  = Good,  $< 66.67\%$  = Poor

Experience to OPD services means that patient ever visited this hospital and used its services before the study and therefore had first hand experience to the services in terms of physical facilities, doctor services, nurse services, pharmacy service and registration service. Every question in experience section was studied against three different responses as agree, not sure and disagree.

The two hundred and twenty five respondents were interviewed at Banphaeo hospital Medicine OPD for evaluating their experience about Medicine OPD services. The number and percentage distribution of patient concerning their experience was shown in Table 3. The experience was classified as good and poor using best's criteria. In item analysis wise there were total of 23 statements. The component related to physical facilities consisted of 7 items. According to the Table 4, more than three quarters of the patients (88%) said that ventilation inside the OPD was good and there was enough light inside the OPD (89.78%) so the experience of the respondents was good about the ventilation and light, 72 percent of the respondents said that there was enough sitting chairs and toilets in waiting area of the OPD. When the patients were asked about the space in diagnosis room for patients, 66.22 percent said that there was enough space in diagnostic room. About the item on drinking water in waiting area of Medicine OPD 69.78 percent of respondents agreed that there was enough drinking water in waiting area of Medicine OPD for patients. With regards to toilet in waiting area 67.11 percent of patients said that there were enough and clean toilets in waiting area, for the cleanliness and tidiness of the waiting area the majority (86.22 %) of the respondent cited that the waiting area was clean and tidy. On the basis of result presented in Table 3, all the above-mentioned statements showed good experience of patients from Medicine OPD except about the space in diagnostic room from which respondents had poor experience.

The components related to doctor's services consisted of six items. Out of 225 respondents the majority (82.67%) of the patients agreed that the doctor did the examination with respect and this statement had the highest percentage in this section. About the time spent by doctor during examination, 75.56 percent agreed that doctor spent enough time during examining them, 78.22 percent of the patients agreed on

that doctor listened carefully to what they said and understand their concern. According to large majority of patients (80.89) the doctor gave them opportunity to discuss their treatment with them. 71.11 percent of the patients said that doctor asked about their illness in detail, and when the patients were asked about the number of doctors in Medicine OPD, 65.33 percent patient were agreed that there were enough doctors in Medicine OPD for the patients so the doctor service was good except that the number of doctors was not enough according to the result.

About the nurse services, large number (76.44 %) of respondents said that nurse listened to their problem and explained to them about the treatment they need, 70.67 percent of patients agreed with the statement that Medicine OPD had enough nurses. Maximum (82.22%) patient agreed that nurses were helpful to them, and the last statement about the nurse's service that nurses showed good communication skills with patients, majority (75.11%) of respondents were agreed with this statement so on the basis of result it was concluded that majority of patients had good experience about the nurse services.

The pharmacy service comprised of four items, less than one half (30.67 %) of respondents agreed that drugs were expensive in Medicine OPD pharmacy section for them while 25.33 percent were disagreed with the statement on the basis of their past experience about the expense of drugs, about the statement on explanation of pharmacist on the use of medicine maximum (81.78) respondents agreed that the pharmacist explained the use of medicine clearly. More than two third (66.67) of respondents said that there were enough pharmacist in Medicine OPD. About 82.67 percent of respondents agreed that pharmacist showed good communication skills with them. On the basis of the result about pharmacy service from Table 3 it was clear that the patients had good experience from all the items about pharmacy except about their experience on the expense of drugs from pharmacy was poor.

Majority (80 %) of patients said that there was enough registration staff in medicine outpatient department, most of the respondents (74.22%) agreed that registration staff was cooperative. When they were asked about communication skills

of registration staff, 80 percent of the patients agreed that the registration staff had good communication skills with patients. From registration section the patients had good experience from all the statements asked from them regarding pharmacy services.

**Table.5** Number and Percentage of Respondents by overall Experience to Medicine OPD

Experience to Medicine OPD	Level of Experience N = 225	
	Good	Poor
Physical facilities	165 (73.33%)	60 (26.67%)
Doctor's service	187 (83.11%)	38 (16.89%)
Nurse service	164 (72.89%)	61 (27.11%)
Pharmacy service	97 (43.11%)	128 (56.89%)
Registration service	177 (78.67%)	48 (21.33%)

Table 5 shows the number and percentage distribution of respondents by overall experience to Medicine OPD; about physical facilities majority (73.33%) of the respondents showed good experience. It was noted that more than three quarter (83.11%) of the respondents showed good experience about doctor service. Almost three quarter (72.89%) of the patients had good experience about nurse service Less than one half (43.11%) of the patients showed good experience about pharmacy service while more than one half of the respondents showed poor experience about the pharmacy service. About the registration service, more than three quarters (78.67%) of the patients had good experience. The highest level of good experience was about doctor services while the lowest about pharmacy service.

**Table 6** Number and Percentage of Respondents by level of total Experience concerning Medicine OPD Services.

Level of Experience	Number N = 225	Percentage (%)
Good experience	197	87.56
Poor experience	28	12.44

Table 6 shows the number and percentage of the respondents by level of total experience towards medical care services from Medicine OPD. The experience was divided into two groups of good experience and poor experience using best criteria. It was noted that maximum (87.56) of the respondents had good experience and the patients with good experience may be interpreted as the patients who had good experience with health facilities mostly.

### **Part 3 Accessibility of patients to Medicine OPD services at Banphaeo hospital**

Two hundred and twenty five respondents were interviewed to know about their attitude towards accessibility to Medicine OPD. The best criterion was used to categorize the accessibility into good and poor accessibility.

The section related to accessibility comprised of three components as: waiting time, service process and working hours of OPD. In items analysis wise, there were 7 items in this part of accessibility study and the questionnaire had three rating scale as in previous section, agree, not sure and disagree. Table 7 shows the descriptive data related to the accessibility of the patients to the OPD services at Banphaeo autonomous hospital.

The section on waiting time comprised of three questions. During data analysis it was found that more than half (55.11 %) of respondents agreed that waiting time for getting treatment from doctor was appropriate for them so the accessibility for receiving card was poor. Replying to question of waiting time for getting the

prescribed drugs from pharmacy about 61.78 percent patients declared that the waiting time for getting the prescribed drugs from pharmacy was appropriate for them so using the best criteria there was poor accessibility to the drugs from pharmacy section of Medicine OPD. About three fourth (72.89%) of the patients agreed that waiting time for getting outpatient appointment was appropriate for them so the accessibility for getting the outpatient appointment was good for patients.

The section on service process comprised of two questions. Responding to the service process of the registration, more than half (61.33%) of respondents considered the service process of the registration fast, simple and trouble free for patients. When the patients were asked about the coordination between different sections of Medicine OPD, about three quarter (70.22%) of respondents agreed there was good coordination between different sections of Medicine OPD, so on the basis of result the coordination was good between different sections.

The section on working hours of OPD contained two items. About the statement on the availability of required medical staff during working hours of Medicine OPD, more than two thirds of patients (77.33%) agreed that the required medical staff were available during working hours of Medicine OPD, majority (76 %) of patient agreed that schedule of the working hours of OPD was adequate for them. On the basis of above results it was clear that the patients were having good experience except from diagnostic space, number of doctors and expense of drugs.

**Table 7** Number and percentage of Accessibility of Patients towards Medicine OPD Services

Accessibility towards OPD services	Number and Percentage			Comment
	N = 225			
	Agree	Not sure	Disagree	
<b>Waiting time</b>				
- Waiting time for getting treatment from doctor	124 (55.11)	52 (23.11)	49 (21.78)	Poor
- Waiting time for getting the prescribed drugs.	139 (61.78)	49 (21.78)	37 (16.44)	Poor
- Waiting time for getting outpatient appointment.	164 ( 72.89)	47 (20.89)	14 (6.22)	Good
<b>Service Process</b>				
- Service process of the registration is fast, simple, trouble free.	138 (61.33)	78 (34.67)	9 (4.00)	Poor
- Good coordination between sections of Medicine OPD.	158 (70.22)	59 (26.22)	8 (3.56)	Good
<b>Working hours of OPD</b>				
- Required medical staffs available during working hours of OPD.	174 (77.33)	42 (18.67)	9 (4.00)	Good
- Schedule of working hours of OPD adequate.	171 (76.00)	44 (19.56)	10 (4.44)	Good

Table 8 shows number and percentage of respondents and it was noted that more than half (52.89%) of the respondents had good accessibility in terms of waiting time but 47.11 percent had poor accessibility. For service process about three quarter (74.67%) of the patients had good accessibility. Regarding working hours of OPD three quarter (84%) of the respondents had good accessibility.

**Table.8** Number and Percentage of Respondents by overall Accessibility to Medicine OPD

Accessibility towards OPD services	Level of Accessibility N = 225	
	Good	Poor
<b>Waiting time</b>	119 (52.89%)	106 (47.11%)
<b>Service process</b>	168 (74.67%)	57 (25.33%)
<b>Working hours</b>	189 (84.00%)	36 (16.00%)

Table 9 shows the total accessibility towards Medicine OPD services. During computation of data analysis, it was found that overall accessibility to Medicine OPD, nearly two third (64.89%) of respondents had the good accessibility while remaining 35.11 percent had poor accessibility to Medicine OPD.

**Table 9** Number and Percentage of Respondents by total Accessibility to Medicine OPD Services

Level of Accessibility	Number N = 225	Percentage (%)
<b>Good accessibility</b>	146	64.89
<b>Poor accessibility</b>	79	35.11

Mean. = 18.14, SD. = 2.60, Median = 19.00, Min. = 9.00, Max. = 21.00

**Part 4 Patient satisfaction towards Medicine OPD services****Table 10** Number and percentage of Patient Satisfaction towards Medicine OPD Services regarding Convenience.

Patient satisfaction	Number and Percentage			Comment
	N = 225			
	S	NS	US	
<b>Convenience</b>				
- Ease of finding Medicine OPD	186 (82.67)	35 (15.56)	4 (1.78)	High
- Instruments in Medicine OPD for health care facilities.	186 (82.67)	34 (15.11)	5 (2.22)	High
- Arrangements for heating and cooling.	119 (52.89)	59 (26.22)	47 (20.89)	Low
- Doctors/nurses keeping you from worrying.	138 (61.33)	77 (34.22)	10 (4.44)	Low
- Explanation by doctors and nurses.	167 (74.22)	41 (18.22)	17 (7.56)	High
- Convenience of going from house to hospital	163 (72.44)	51 (22.67)	11 (4.89)	High
- Explanation from doctor about illness and treatment.	178 (79.11)	41 (18.22)	6 (2.67)	High
- Amount and availability of medicines prescribed by doctor.	164 (72.89)	54 (24.00)	7 (3.11)	High
- The place for receiving the drugs	170 (75.56)	46 (20.44)	9 (4.00)	High
- Availability of required medical staff during working hours of OPD	155 (68.89)	43 (19.11)	27 (12.00)	High
- Appropriateness of waiting time for receiving drugs.	153 (68.00)	52 (23.11)	20 (8.89)	High
- Convenience of going from one to other section of Medicine OPD.	167 (74.22)	49 (21.78)	9 (4.00)	High
- Courtesy and respect from doctors	185 (82.22)	34 (15.11)	6 (2.67)	High
- Privacy from doctors and nurses	173 (76.89)	38 (16.89)	14 (6.22)	High

S=Satisfactory, NS=Not sure, US= Unsatisfactory

Many factors influence the level of satisfaction but as mentioned in conceptual framework, it was tried to see the satisfaction in three different prospective: convenience, courtesy and quality of care. The questionnaire had 26 questions which asked about the level of satisfaction. The score of satisfaction was measured by Likert's scale, as satisfactory, not sure and unsatisfactory. The best criterion was used to categorize the satisfaction into low and high satisfaction.

According to the Table 10, the items on convenience comprised of twelve items. As can be seen from Table, maximum (82.67 %) of the respondents were satisfied from finding the Medicine OPD and from the instruments in OPD for providing health care facilities, on the statement about the appropriateness of arrangements for heating and cooling in waiting area about 52.89 percent of the respondents were satisfied while 20.89 percent of the respondents were unsatisfied with the arrangements for cooling and heating in the waiting area of the OPD and the satisfaction was low for the heating and cooling arrangements in waiting area.

Replying to the statement about the doctors and nurses keeping you from worrying more than one half (61.33%) of the patients were satisfied so the satisfaction about the doctors and nurses for keeping the patient from worrying was low according to best criterion scoring as mentioned in last chapter, two third (74.22%) of respondents agreed that the doctors and nurses explained them what they would like to do before doing any process. Answering to the convenience of going from their home to hospital about two third (72.44%) of respondents agreed that convenience of going from home to hospital was satisfactory and the satisfaction was high. Majority (79.11%) of the consumers were satisfied from explanation by doctor about their illness and treatment. To the statement about the amount and availability of medicine from pharmacy, about three quarter (72.89%) of the patients were satisfied that there was enough medicine available from pharmacy section of the Medicine OPD for patients.

The place for receiving the drugs was satisfactory for 75.56 percent of the respondents and the patients were highly satisfied from the place for receiving the

drugs. Regarding the availability of required medical staff during the working hours of Medicine OPD, nearly two third (68.89%) of the patients were satisfied. The respondents were highly satisfied from the availability of the medical staff required during working hours. About the statement on appropriateness of the waiting time for receiving the drugs, 68 percent of the respondents were satisfied, the patients were in overall satisfied from waiting time for receiving drugs. About convenience of going from one to other unit of Medicine OPD about three quarters (72.22%) of the patient were satisfied and the respondents were satisfied from convenience of going from one to other unit of medicine.

**Table 11** Number and percentage of Patient Satisfaction towards Medicine OPD Services regarding to courtesy

Patient satisfaction	Number and Percentage			Comment
	S	NS	US	
<b>Courtesy</b>				
- Friendliness, readiness of doctors.	188 (83.56)	33 (14.67)	4 (1.78)	High
- Friendliness, respect from pharmacy unit staff.	185 (82.22)	33 (14.67)	7 (3.11)	High
- Introduction from doctors and nurses about themselves	125 (55.56)	66 (29.33)	34 (15.11)	Low
- Permission of the doctors before examination.	149 (66.22)	52 (23.11)	24 (10.67)	Low
- Attentiveness from doctors and nurse while answering your questions.	170 (75.56)	39 (17.33)	16 (7.11)	High
- Courtesy of nursing staff	185 (82.22)	34 (15.11)	6 (2.67)	High
- Privacy from doctors and nurses during examination & treatment	173 (76.89)	38 (16.89)	14 (6.22)	High

S=Satisfactory, NS=Not sure, US= Unsatisfactory

As showed in Table 11, the section on courtesy consisted of seven items on the friendliness and readiness of doctors, friendliness and respect from pharmacy staff, introduction from doctors and nurses before history and examination, permission of doctors before examination, attentiveness from doctor, courtesy and respect from doctor and privacy from doctors and nurses during examination and treatment. On the basis of results maximum (83.56 %) numbers of the patients were satisfied from the friendliness and readiness of the doctor and about the friendliness and respect from pharmacy unit staff majority (82.22%) of the patients were satisfied so as a the patients were satisfied from friendliness and readiness of doctors and friendliness and respect of pharmacy staff. More than half (55.56%) of the respondents were satisfied with the introduction from doctors and nurses to them. The respondents were having low satisfaction from the introduction of doctors and nurses to them about themselves. About more than half (66.22 %) of the patients were satisfied from the permission by the doctors from them before examination. The patients had low satisfaction about the permission of doctor from them before examining them. Three quarter (75.56%) reported that the doctors and nurses were attentive while answering their question. On the statement about courtesy and respect from doctors majority (82.22 %) of respondents were satisfied and they had high satisfaction, more than two third (76.89%) were satisfied from the privacy provided by doctors and nurses during examination and treatment. The respondents had high satisfaction from the privacy provided by nurses and doctors.

The last section of satisfaction was about the quality of care as showed in Table 10. This section comprised of seven items. Responding to the understanding of your illness after seeing the doctor three fourth (74.67%) of the patient were satisfied. About the question on quality of medicine given to patient from pharmacy unit 77.33 percent of patients were satisfied. More than two third (79.56%) of patients were satisfied from the willingness of doctors and nurses in treating them and overall they were highly satisfied from the willingness of doctors and nurses in treating them, 71.11 percent of respondents were satisfied that the doctors and nurses examined them in detail. Replying to the question about the skill and experience of doctors and nurses in OPD, almost three quarter (72.44%) of the respondents had high satisfaction

and the patients were highly satisfied from the skill and experience of the doctors and nurses in OPD who treated them. When asked about the opportunity given to them to ask about their illness large majority (84.89%) of the respondents was agreed with statement. Replying to the statement about the competency of nurses in nursing care in Medicine OPD maximum numbers of the patients (81.78) were satisfied.

**Table 12** Number and percentage of Patient Satisfaction towards Medicine OPD Services regarding to Quality of Care

Patient satisfaction	Number and Percentage			Comment
	N = 225			
	S	NS	US	
<b>Quality of Care</b>				
- Your understanding of illness after seeing the doctor.	168 (74.67)	48 (21.33)	9 (4.00)	High
- Quality of medicines given to patients from pharmacy unit.	174 (77.33)	41 (18.22)	10 (4.44)	High
- Willingness of doctors and nurses to treat.	179 (79.56)	44 (19.56)	2 (0.89)	High
- Examination by doctors and nurses.	160 (71.11)	57 (25.33)	8 (3.56)	High
- The skill & experience of doctors in OPD.	163 (72.44)	56 (24.89)	6 (2.67)	High
- Opportunity given to ask about your illness	191 (84.89)	29 (12.89)	5 (2.22)	High
- Competency of nurses in nursing	184 (81.78)	37 (16.44)	4 (1.78)	High

S=Satisfactory, NS=Not sure, US= Unsatisfactory

**Table 13** Number and Percentage of Respondents by overall Satisfaction to Medicine OPD

Patient satisfaction	Level of Satisfaction N = 225	
	High	Low
Convenience	189 (84.00%)	36 (16.00%)
Courtesy	169 (75.11%)	56 (24.89%)
Quality of Care	188 (83.56%)	37 (16.44%)

Table 13 shows number and percentage of respondents by overall satisfaction to Medicine OPD. More than three quarter (84 %) of the respondents had high satisfaction from convenience, 75.11 percent of the patients had high level of satisfaction from courtesy while about the quality of care, and 83.56 percent of patients had high satisfaction.

**Table 14** Number and percentage of Respondents by total level of satisfaction from Medicine OPD

Level of satisfaction	Number N = 225	Percentage (%)
High Satisfaction (61-78 scores)	195	86.67
Low Satisfaction (26-60 scores)	30	13.33

As shown in Table 14, total level of satisfaction with Medicine OPD services at Banphaeo hospital was computed by dividing it into high satisfaction and low satisfaction using best criteria. The score was set as 61 to 78 for high satisfaction while from 20 to 60 for low satisfaction. During the computation of data analysis, it was found that majority (86.67%) of the respondents had high level of satisfaction while just 13.33 percent of respondents had low level of satisfaction.

## Part 5 Relationship between independent and dependent variables

Chi Square test was used to find the association between dependent and independent variables.

### Socio-demographic factors and Patient Satisfaction

**Table 15** Relationship between socio-demographic factors and patient satisfaction towards Medicine OPD services

Socio-demographic factors	Patient satisfaction		$\chi^2$	p-value
	High N (%)	Low N (%)		
<b>Age(years)</b>			1.680	0.641
16-30	75 (85.23)	13(14.77)		
31-40	41 (83.67)	8 (16.33)		
41-50	34 (87.18)	5(12.82)		
≥51	45 (91.84)	4(8.16)		
<b>Gender</b>			0.249	0.618
Male	88 (85.44)	15 (14.56)		
Female	107 (87.70)	15(12.30)		
<b>Marital status</b>			6.329	0.042*
Single	58 (93.55)	4 (6.45)		
Married	121 (85.82)	20 (14.18)		
Widowed/ Separated	16(72.73)	6 (27.27)		

\*Statistically significant level = 0.05

**Table 15** Relationship between socio-demographic factors and patient satisfaction towards Medicine OPD services (Cont.)

Socio-demographic factors	Patient satisfaction		$\chi^2$	p-value
	High N (%)	Low N (%)		
<b>Education</b>			0.833	0.659
Illiterate	7(77.78)	2(22.22)		
Primary school	89(88.12)	12(11.88)		
Secondary school and above	99(86.09)	16(13.91)		
<b>Main occupation</b>				
Unemployed	37(90.24)	4(9.76)	11.176	0.011*
Government employed	7(58.33)	5(41.67)		
Non-government employed	105(85.37)	18(14.63)		
Agriculture	46(93.88)	3(6.12)		
<b>Family income per month</b>			6.842	0.077
Below and equal to 3,000 baht	21(91.30)	2(18.70)		
3,001-5,000 baht	29(90.63)	3(9.38)		
5,001-10,000 baht	108 (89.26)	13 (10.74)		
Above 10,000 baht	37 (75.51)	12(24.49)		
<b>Family size</b>			0.083	0.773
4 and less ( $\leq 4$ )	92 (85.98)	15 (14.02)		
5 and more ( $\geq 5$ )	103 (87.29)	15 (12.71)		
<b>Total number of visits to hospital during last 6 months</b>			0.001	0.975
1 to 4 times	149 (86.63)	23 (13.37)		
5 to 9 times	46 (86.79)	7 (13.21)		

\*Statistically significant level = 0.05

In this study, as shown in Table 15, the socio-demographic characteristics of the respondents were composed of age, gender, marital status, education, family size

occupation, family income per month and total number of visits hospital during last six months.

The relationship of the age with satisfaction was analyzed. The age was categorized into four groups after regrouping. When computed the age of respondents, it was found that all age groups had almost same level of satisfaction. The highest proportion of high satisfaction was in age group above 50. After analyzing the association of age with satisfaction it was concluded that age had no significant association with satisfaction (p value = 0.641).

About the gender, it was found that both males and females had almost the same level of satisfaction. It was concluded that there was no association between gender and satisfaction (p=0.618).

Talking about the marital status which was categorized into single, married and widow/separated groups it was found that single group had high percentage of patients with satisfaction (93.55%) and 85.82 percent of married group of respondents had high satisfaction. The widows/separated respondents had 27.27 percent of respondents with low satisfaction and just 72.73 percent respondents with high satisfaction as compared to singles and married respondents. By comparison, the single group had highest proportion of the high satisfaction when compared with other two groups while the widow/separated group have high proportion of low satisfaction compared with single and married group. Finally statistically it can be concluded that there was significant association between marital status and satisfaction with the p-value of 0.042 and chi-square of 6.329.

In context of education of respondents, it was divided into three categories of illiterate, primary, secondary and above after regrouping. The patients with different education levels had almost the same level of satisfaction. The respondents with primary educational qualification of primary school had the slightly higher proportion of high satisfaction compared with illiterates and respondents with respondents with qualification of secondary school and above qualification. The p value was 0.659 with

standard deviation of 0.833 which confirmed that there was no association of education with satisfaction. Looking at various groups of different occupations, which were unemployed, government employed, non-government employed and agriculture after regrouping as the students were grouped with unemployed while labor and business were grouped with non government employed, maximum (93.88%) respondents with agriculture as their main occupation had high satisfaction while the government employed had lowest proportion of respondents with high satisfaction (58.33%) compared with other groups. Unemployed/students had high satisfaction of 90.24 percent and non-government employed/labor/business had high satisfaction of 85.37 percent respectively. Statistical analysis showed the relationship between occupation and patient satisfaction (p value=0.011, chi square= 11.176).

Annual average family income was divided into four groups of respondents with income below and equal to 3,000 Baht, 3,001 to 5,000 Baht, 5,001 to 10,000 Baht and above 10,000 Baht. The respondents with income from 5000 to 10,000 had highest proportion with high satisfaction but the chi-Square test did not reveal any significant association of income with satisfaction (p-value= 0.077). With regards to family size it was found that group with 4 and less family members and those with more than five family members both groups had same level of satisfaction. Finally it can be concluded that chi square test did not reveal statistically significant association between family size and satisfaction (p-value = 0.773 and  $\chi^2 = 0.083$ ).

The total numbers of visits to hospital during last 6 months were categorized into 1 to 4 times and 5-9 visits during last six months. It was found that those who visited hospital 1 to 4 times had almost the same level of satisfaction as the respondents who visited the hospital 5 to 9 times with high satisfactions of 86.63 and 86.79 percent respectively. It was also found that there was no significant association between the number of hospital visits and satisfaction (p-value = 0.975,  $\chi^2 = 0.001$ )

### Relationship between experience concerning OPD and patient satisfaction

**Table 16** Relationship between experience and patient satisfaction towards Medicine OPD services

Experience of patient	Patient satisfaction		$\chi^2$	p-value
	High N (%)	Low N (%)		
<b>Physical facilities</b>			38.549	<0.001*
Good	157 (95.15%)	8 (26.67%)		
Poor	38 (63.33%)	22 (36.67%)		
<b>Doctor's service</b>			88.123	<0.001*
Good	180 (96.26%)	7 (23.33%)		
Poor	15 (7.69%)	23 (60.53%)		
<b>Nurse service</b>			69.280	<0.001*
Good	161 (98.17%)	3 (1.83%)		
Poor	34 (55.74%)	27 (44.26%)		
<b>Pharmacy service</b>			15.474	<0.001*
Good	94 (96.91%)	3 (3.09%)		
Poor	101 (78.91%)	27 (21.09%)		
<b>Registration service</b>			48.852	<0.001*
Good	168 (94.92%)	9 (5.08%)		
Poor	27 (56.25%)	21 (43.75%)		

\*Statistically significant level = 0.05

Experience to services was studied with respect to physical facilities, doctor services, nurse services, pharmacy services and registration service, as shown in Table 16.

Maximum (95.15 %) number of the patients with good experience about physical facilities had high satisfaction while 26.67 percent of patients with good experience about physical facilities had low satisfaction but just 63.33 percent of respondents

with poor physical facilities had high satisfaction. By comparison, the respondents having poor experience about physical facilities had lower proportion of high satisfaction score when compared with respondents having good experience about physical facilities. Finally it was concluded that experience with physical facilities had association with satisfaction score significantly ( $p\text{-value} = <0.01$ ).

The patients who had poor experience about doctor service had high and low satisfaction of 7.69 percent and 60.53 percent respectively. By comparison, the respondents who had good experience about doctor service had higher proportion of high satisfaction (96.26%) and lower proportion of the patients with low satisfaction (23.33%) in contrast to the respondents who had poor experience about doctor's service. At last, it could be concluded that experience with doctor services had association with patient satisfaction ( $p\text{-value} = <0.01$ ).

From the result, it was found that 98.17 percent of respondents with good experience about nurse service had high satisfaction while just only 1.83 percent of respondents with good experience had low satisfaction but in contrast about 55.74 percent of the respondents with poor experience had high satisfaction while 44.26 percent with poor experience had low satisfaction. Those who had good experience about nurse service had higher proportion of high satisfaction (98.17%) while those respondents who had poor experiences about nurse service had poor satisfaction. Finally it can be concluded that experience with nurse service had association with satisfaction score significantly ( $p\text{-value} = <0.01$ ).

According to the study result, it was found that the respondents who had poor experience with pharmacy service had high and low satisfaction scores of 78.91 percent and 21.09 percent respectively while those respondents who had good experience with pharmacy service had their score of satisfaction at high and low criteria accounted to 96.91 percent and 3.09 percent respectively. Finally it could be concluded that pharmacy service had association with satisfaction score significantly ( $p\text{-value} = <0.01$ ).

The study result showed that 94.92 percent of the respondents with good experience about registration service had high satisfaction while just 5.08 percent of respondents with poor experience about pharmacy service had low satisfaction. In contrast to good experience of respondents, the respondents with poor experience had high satisfaction of 56.25 percent while less than one half (43.75%) of respondents with poor experience from registration service had low satisfaction. At last, it can be concluded that registration service had association with satisfaction score significantly ( $p < 0.01$ ), as shown in Table 20

**Table 17** Relationship between total experience and patient satisfaction

Level of experience of patient	Patient satisfaction		$\chi^2$	p-value
	High N (%)	Low N (%)		
Good experience	190 (96.45%)	7 (3.55%)	52.535	<0.001**
Poor experience	5 (17.86%)	23 (82.14%)		

\*Statistically significant level = 0.05, \*\*Fisher's exact test

According to result in Table 17, about 96.54 percent of the respondents with good experience had high satisfaction while just 3.55 percent of them had low satisfaction, in contrast 82.14 percent of respondents with poor experience had low satisfaction but 17.86 percent had high satisfaction. It is revealed that patient with good experience had high satisfaction (96.45%) while those patients with poor experience had low satisfaction (82.14 %). It can be concluded that experience to medical care service had association with satisfaction score significantly ( $p \leq 0.001$ ).

#### **Relationship between accessibility and patient satisfaction**

The Fisher exact test was used to find association between waiting time and patient satisfaction According to Table 18, about 100 percent of respondents with good waiting time had high satisfaction and 71.70 percent with poor waiting time had high satisfaction while 28.30 had low satisfaction. At last, it can be concluded that

there was significant association between waiting time and satisfaction ( $p = <0.001$ ). From the result it was found that 95.83 percent of the patients who said that the accessibility to service process was good had high satisfaction while just 4.17 percent had low satisfaction with good accessibility. On the other hand the respondents who said that service process was poor had their score of satisfaction at high and low satisfaction of 59.65 percent and 40.35 percent respectively. By comparison the respondents who had good accessibility to service process had higher number of patient with high satisfaction in contrast to the respondents group who had poor accessibility to the service process. Finally it can be concluded that service process had association with satisfaction score significantly ( $p\text{-value} < 0.01$ ).

About 92.59 percent of respondents who had good accessibility regarding working hours had high and low satisfaction of 92.59 percent and 7.41 percent respectively.

**Table 18** Relationship between overall Accessibility and Satisfaction

Level of accessibility of Patient	Patient Satisfaction		$\chi^2$	p-value
	High N (%)	Low N (%)		
<b>Waiting time</b>			38.861	<0.001*
Good	119 (100.00 %)	0 (0.00%)		
Poor	76 (71.70%)	30 (28.30%)		
<b>Service process</b>			48.222	<0.001*
Good	161 (95.83%)	7 (4.17%)		
Poor	34 (59.65%)	23 (40.35%)		
<b>Working hours</b>				<0.001**
Good	175 (92.59%)	14 (7.41%)		
Poor	20 (55.56%)	16 (44.44%)		

\*Statistically significant level = 0.05, \*\*Fisher's exact test

**Table 19** Relationship between total Accessibility and Patient Satisfaction

Level of accessibility of patient	Patient satisfaction		$\chi^2$	p-value
	High N (%)	Low N (%)		
			63.973	<0.001*
<b>Good accessibility</b>	146 (100.00%)	0 (0.00%)		
<b>Poor accessibility</b>	49 (62.03%)	30 (37.97%)		

\*Statistically significant level = 0.05

Table 19 shows overall picture of the accessibility which showed that 100 percent of patients with good accessibility had high satisfaction while 62.23 percent with poor accessibility had high satisfaction. From the result it can be interrupted that good accessibility was related to good satisfaction while poor accessibility was related to poor satisfaction. Finally it can be concluded that accessibility had association with satisfaction score significantly ( $\chi^2 = 33.343$  and p-value less than 0.001).

## CHAPTER 5

### DISCUSSION

Banphaeo autonomous hospital is an autonomous hospital located in Samut Sakhon province, Thailand. The main purpose of the study was to describe patient satisfaction on outpatient medical care services provided by Medicine Department OPD of Banphaeo autonomous hospital, Samut Sakhon province, Thailand. In addition it was to determine the relationship of satisfaction with socio-demographic factors, experience and accessibility. After getting the permission from hospital authority for the study, orientation training was given to the interviewer on how to collect the data, how to clean the data and how to convince the respondents. Then the target patients were interviewed using the structured questionnaire till all 225 patients were completed. Descriptive statistics, chi-square test and fisher's exact test were applied for analysis of raw data.

This survey provides an insight to hospital administration, staff, doctors and researchers who want to improve the quality of service and patient satisfaction levels. It appears that such well manageable Hospitals may be an answer to the widespread unsatisfactory conditions prevailing in general in public sector hospitals in some of public sector hospitals in Thailand.

This descriptive study was conducted in Banphaeo autonomous hospital from 17<sup>th</sup> of January till 5<sup>th</sup> of February 2007 excluding public holidays. 225 patients (16 and above) were selected who come to out patient department of medicine for medical care services. The data was collected by constructed questionnaire using the interview method. The questionnaire was checked by experts and pre tested prior to the data collection. Using the best criteria the satisfaction was categorized into high and low satisfaction. The score was set as from 61 to 78 for high satisfaction while 20 to 60 for low satisfaction using best criteria.

In this study the questionnaire comprised of 66 items in total concerning the Socio-demographic factors, Experience of patient concerning Medicine Department OPD services, Accessibility to Medicine Department OPD and Patient Satisfaction. 26 questions on satisfaction using likert's 3 points rating scale was used to identify the level of satisfaction focusing on courtesy, convenience and quality of care.

As there is only one autonomous hospital in Thailand so the results of studies conducted in government hospital were compared with the result of this study.

For this chapter these following topics were discussed;

Part 1 Methodological concerned

Part 2 Socio-demographic characteristics of the patients

Part 3 Patient satisfaction towards services of Medicine Department OPD

Part 4 Patient experience towards the services of the hospital

Part 5 Patient accessibility to the services of Medicine Department OPD

Part 6 Suggestions and comments from the patients

### **Part 1 Methodological Concerned**

This study was hospital based survey conducted during the office hours so that information bias from the respondent could be inevitable since the surrounding of the hospital may cause the patient feel reluctant to complain for fear of unfavorable treatment. The questionnaire was designed as self administrating in order to reduce the hesitation of answering their real opinion and time saving as well. However, the patient might not understand clearly how to answer each question or what the objectives of the study were. Moreover, self administered questions could not be used with patients who were not able to read and write so that the self administered questions were changed to interview method on the advice of the advisor so the interview was performed to facilitate these patients participate in this study. The advantages of the interview were; any misunderstanding or concern about the questions had a chance to be clarified; missing data were minimized. To obtain the good quality of the data, the interviewer had to be well trained and properly selected.

In this study data was collected by one of the hospital nurse after her duty hours but during data collection she was not in the official nursing dress but instead in non formal dress as her personality and recognition could influence the patients in telling the real situation. Nevertheless monitoring had been done along the process of the data collection with the intention that the mistakes or incomplete filled questionnaire could be corrected in time.

## **Part 2 Socio-demographic characteristics**

The youngest patient was 16 years old and the eldest was 80 years old. The mean age was 39 years and the standard deviation was 15.32. The majority of patients were from age group 16 to 30 years followed by 31 to 40 years old patients so the age group from 16 to 40 was 70 percent of the total respondents. This is the physically very active working class of the patients. The older age groups were probably under-represented. Age group above 60 was the least respondents and majority of respondents were young age as the old age group normally prefer to go to health centers for treatment which are more convenient for them.

The level of satisfaction was almost the same in all age groups and there was no significant association between age and satisfaction. The result was opposite to the study by Al-Bashir M, et. al (1991), in which he concluded that old aged patients had high level of satisfaction as compared to younger age group. Another study carried out by Rodthip B. (1992) about the health consumer view on nurse's ethical behavior was having the same result. He found that sixty years old patients were more satisfied than those of between 20-29 years. Another study by Piyawan (1990) found that age of respondents was not associated with level of satisfaction. Hall and Dornan in 1988 said that older age people are more satisfied than younger age from medical care. The reason for almost equal level of satisfaction might be because of high quality of services as well as the extra care for old age group by the hospital especially from nurses.

In this satisfaction study more than one half (54.22%) of respondents were females because the ratio of females to males is higher in Thailand and the rate of illness is normally higher in females than in males. It was found out that there was no association between gender and satisfaction and there was no significance in terms of statistics. This finding was not consistent with study conducted by Tran Thi Luu and Hussam Altibi (80). Most of the studies including this one found that satisfaction is unrelated to gender. However some research identified women as being more satisfied than men with the medical care received.

The reason for almost same level of satisfaction in both males and females and all age groups was because of high quality of health care services provided by medicine OPD, good accessibility to health care services, service equity, efficiency and sustainability.

Most of the respondents were married, since the study population was patients utilizing services of hospital with age not less than 16 years old and as prior mentioning about average age of respondents, very few people were still single at this age.

According to the patient marital status, the widowed/separated group had lower proportion of high satisfaction score when it was compared with other groups and the single group had highest proportion of the high satisfaction when compared with other two groups. Finally statistically it can be concluded that there was significant association between marital status and satisfaction with the p-value of 0.042. The result was opposite to the study carried out by Tran Thi Nga in 2002 which concluded that there was no association between marital status and satisfaction. The high satisfaction of singles as compared to widows was because of more experience of widows/separated group about health services and the when the patients had more experience they had more expectations from health services. Singles appeared to know less about medical matters, regulation and hospital facilities and more importantly they had less emotional problems.

Majority of respondents graduated at level of primary school level which is expected for Samut Sakorn province while just few graduated at bachelor degree. In general, people who graduated at higher level earn their living in the urban area or in the big cities so that the chance of obtaining respondents graduating at high level might be very little. If the study would be conducted in private hospital or the bigger hospital then this autonomous hospital then the number of the respondents with higher education level might be increased. The age of the patients could also be used for explaining the educational level of the patients. The older people, especially in rural area, were grown up during the period that education was not encouraged and the education provided in the area was limited at the level of the primary school. The satisfaction level was almost the same in all respondents irrespective of their educational background. The p value was 0.659 with standard deviation of 0.833 which confirmed that there was no association of education with satisfaction. The result of this study is different from the study done by Kareem A.A, et. al (1996) who revealed that patient with lower education was more satisfied. From this study it can not be concluded that education was one of the factors that influence the level of satisfaction. The reason for almost equal level of satisfaction might be because the hospital had good quality of services as well as there were just very few respondents with high education level. Educational level was also found to be factor associated with patient satisfaction in previous studies. It was found that education level has been identified as having significant bearing on the satisfaction but some studies reported that educational attainment does not influence satisfaction. Hulka and Zastowny et al reported that educational attainment and patient satisfaction are positively related, while Linn and Chaska et al had found satisfaction to be lower among the more highly educated group.

Labor and agriculture were the two most common occupations of the respondents in this study (Table 2). According to the Thailand health profile 1999-2000, the proportion of agriculture sector in 2000 was 10.3 percent and that of industry sector was 32 percent. Large number of migrants are coming to Samut Sakhon province and working as laborers and farmers in group sessions. Samut Sakhon also have allot of factories as well as the climate and topographic

characteristics of district ideal for agriculture. Rice and fruits are the main products of the district so the majority of patients were laborers and farmers. The time of data collection could also affect the occupation as very few respondents were government officials/servants who must work during office hours. The proportion of respondents working as government officials would rise if study had been conducted in overtime clinics.

In occupation category, the agriculture group was found more satisfied than other groups. Statistical association was significant with p value of 0.011. The reason for relationship between satisfaction and occupation was because the groups were not equally satisfied. The result of the study is similar with the findings in study by Roy (2002) which also showed association between occupation and satisfaction. The reason for very high satisfaction among the farmers might be because of their less expectations and quality of services.

Income was asked to determine economic status of the respondents. The majority of people in the area belong to middle income group as they worked as farmers and laborers. Regarding the income group, biggest income group was the one earning between 5,000- 10,000 Baht, which mean that almost half than patients belonged to moderate income group. The patients earning less than 3000 Baht had high proportion of satisfaction as compared to other groups but there was no association between income and satisfaction.

More than one half of the respondents had more than more than 4 family members. The majority of patients were from middle class and normally middle class have more family. The respondents had almost same satisfaction level. Finally it can be could be concluded that chi square test did not revealed statistically significant difference (p value of 0.618 and chi square 0.249). This finding is consistent with the study of the Tran Thi Luu who determined that family size of the respondent had no significant association with satisfaction and health service utilization.

The patients who visited 1 to 4 times were the majority (76.44%). The number of total visits during last six month was just 1 to 4 times because the majority of respondents in this study were young people and they normally don't get sick often. Another reason for just 1 to 4 visits might be educational level of the respondents as well, as more educated respondents are more cautious about their health. About the total number of visits to hospital it was found that those who visited the hospital during last six month about 1 to 4 times and 5 to 9 times both have same proportion of high satisfaction of 86.63 and 86.79 percent respectively. It was also found that there was no significant difference between the total number of hospital visits and satisfaction ( $p= 0.975$ , chi- square= 0.001).

It is concluded that no consistent pattern of association of socio-demographic factors and patient satisfaction has been established so far. It has a wide variation in different studies and Weiss (1988) mentioned that most difficult relationship is to pin down socio-demographic factors and level of patient satisfaction. This may be due to the fact that different studies had varied broadly in nature of particular sample studies and specific package of background characteristic examined. A particular scale used may also have affected perceived relationship (81).

As mentioned earlier that 80% is the minimum goal for the rate of the patient satisfaction towards services of Banphaeo hospital. The services achieving the lower satisfaction level should promptly reconsider their performance to improve the satisfactory situation whereas the services achieving the higher satisfaction level still need to progress their performance. The hospital cannot do any thing with the ages and educational level of the patients where as the actual performance that meet or better than patient expectations and the good attitude towards the hospital can be created by the hospital

### **Part 3 Patient satisfaction**

Satisfaction was calculated as the width of gap between 'expectations' and 'perceptions'. A negative gap is usually anticipated, as typically expectations of an ideal service are not completely filled.

The patient satisfaction was assessed in terms of convenience, courtesy and quality of the care. The satisfaction was measured from the point of view of the respondents who came to Medicine Department OPD at the time of the interview.

According to the result of the study, it was found that that 86.67 percent of patients were having high level of satisfaction with health care facilities provided by Medicine Department OPD while just 13.33 percent of patients had low level of satisfaction. The reason for high satisfaction was 30 Baht capitation scheme, long range capital improvement plan, donation/support from the community, community leaders and experts on board of directors, staff directly involved in improving customer service and overall hospital operations, non- profit organization, effective reporting and evaluating system, accountability and transparency, looking for improving quality service and last but not the least the hospital is able to meet the expectations of the community. The level of patient satisfaction is also influenced by different factors like socio-demographic factors, accessibility and availability of health care facilities.

The result of study coincides with the satisfaction study done at health centers of salaya sub-district Thailand by Afridi in 2002 which indicated that 88.6 percent of the respondents were highly satisfied. However satisfactions study findings of Sita Ram Devkota, conducted in 1997 was showing moderate level of satisfaction (71 %). According to another study by Ismail Jama in 2004, only one half (51.7 %) had high satisfaction from the health care services. According to another study by Saurma Ida pasaribu in health centers in Bankok (1996) about 53.3 percent of patients were highly satisfied. The patient satisfaction varies in different health facilities and

circumstances. This variation may be due to difference in quality of services provided or difference in expectations of the patients.

Regarding the level of satisfaction in terms of courtesy, convenience and quality of care, almost all the items showed high level of satisfaction. The level of high satisfaction varies from 52 to 84.89 percent. The lowest level of satisfaction was from heating and cooling arrangement while the highest level of satisfaction was from the opportunity given by doctor to patients to ask about their illness. The comfort of patients is very important for keeping the patients satisfied. The patients were given opportunity to ask about their illness was showing the good quality of service offered by the hospital. The patients have the right to know about their illness and treatment so the health care providers should explain every thing to them in detail. By overall satisfaction, the highest satisfaction was from convenience (84%) followed by quality of care (83.56%) and courtesy (75.11%). Only 55.56 percent of patients were highly satisfied from introduction from nurses and doctors, 66.22 percent of respondents were highly satisfied from permission by doctors and nurses before examining you. The doctors should introduce themselves and get permission before examination as this can decrease the anxiety of patients and will help them to be more comfortable and explain their complaints more in detail. About the doctors and nurse keeping you from worrying about 61.33 percent showed high satisfaction. If the patient is very anxious and nervous he cannot explain about his illness in detail and he cannot be completely satisfied from the treatment so he might not follow the doctor instruction and treatment completely

This different finding may be due to the difference in their cultural setting in providers and also receivers. But the study showed that medical care services would develop according to the needs and wants of patients. For this purpose the providers were needed to understand the expectations of patients. Fitzpatrick (1991) in measurement of client satisfaction wrote that clients evaluate their medical care on number of different and separate aspects. How many dimension clients distinguish in their evaluation of care was not universally agreed, but several studies asses client view separately. The key dimension of satisfaction was quality of care, personal

aspect of care, convenience, physical facilities, and expenses of medical care and outcome of care.

To compare different findings of satisfaction studies it could be found that there was different level of percentage based on their measurement. All these studies were performed in different places of Thailand in different times and they also used different cut off points

The patients were less satisfied from some items of convenience and courtesy while mostly satisfied from all the items of the quality of care. The reason being is that majority of the respondents belong to working class (non-government employed and labor) and they don't want to lose time simply because of courtesy and convenience. Similar results were showed by a study conducted by Ross, steward and Sinacore in 1993, who measured satisfaction with respect to accessibility, availability of services, and quality of care, interpersonal care and cost of care. Highest score was shown by quality of care and interpersonal care, while lower score was shown by availability and accessibility of the services.

The greater time taken for waiting before consultation may be sorted out by appropriate distribution of patients among all the consultants and also by having separate queues for old and new patients, as new patients need more time for history and workup.

Patient satisfaction is one of the key performance indicators of Banphaeo autonomous hospital to ascertain that services provided to patients have been acceptable or any improvement is needed. Patient satisfaction survey conducted in the hospital area could not address all inquiry of patient opinion towards hospital, there are various methods those can help reflect the feeling, opinion or complaint from the patients who experienced the hospital services both formal and informal ways. The administrators of the hospital should not use only the figures of satisfaction level to assess how well the performance of the hospital is.

#### **Part 4 Experience to medical care services**

As already mentioned in chapter 4, total experience of 225 patients was computed to determine their experience from the services availed in the past about the OPD. Experience had two groups; good experience and poor experience. The patients with good experience were those who had high experience while respondents with poor experience had opposite feelings.

The patient with good experience showed high satisfaction as compared to those who had poor experience with satisfaction. Experience was associated with satisfaction with p value of  $<0.01$ . 83.56 percent of respondents had good experience while just 12.44 percent had poor experience in total. From the result it can be interpreted that the patient provided with good quality services from hospitals were positively expecting and experiencing highly satisfactory services.

Item wise the patients had the highest level of experience from Medicine Department OPD about helpfulness of nurses, about light inside the OPD, the ventilation inside the OPD and about the good communication from pharmacist. The poor experience was about the expense of drugs, number of doctors in OPD and about the diagnostic place.

Components wise the patients had good experience from all the components but for doctor's service the patients had highest level of good satisfaction while highest proportion of poor satisfaction was from pharmacy service where more than one half of the respondents were having poor experience while just 43.11 percent having good experience.

Regarding the registration staff, majority of patients were agreed that there was enough registration staff in medicine outpatient department but 16 percent did not agree that registration staff is enough, majority of patient were agreed that registration staff was cooperative and that the registration staff had good communication skills with patients.

Patients who are ready to pay, who are educated, whose income level is good, they always demand the best of services. In the past a similar study was performed by Mansour and Muneera in 1993, who studied patient satisfaction from primary care services at the city of Riyadh city, Saudi Arabia patients were found to be moderately satisfied. The categories studied for satisfaction were effectiveness (examination, medicines, and equipments), humaneness (doctor, nurse, health staff, paramedical staff, and registration staff), and thoroughness of care and continuity of care. Patients were most satisfied with effectiveness and humanness of the care (83). Another study by Chanwongse in 1988 showed that villagers feel more comfortable with midwives and sanitarian in village health centers, because interpersonal relationship is very high.

For a health care organization to be successful, monitoring customer's perceptions is a simple but important strategy to assess and improve their performance. In the usual practice, a doctor gathers information regarding the illness makes a diagnosis and then prescribes a treatment plan. The doctor may be satisfied with his technical role but the question is whether the patient is also satisfied. In a busy setting like the outpatient clinic, the doctor should develop a skill to gather adequate information, do the necessary examination and come to a reasonable diagnosis and treatment in a limited time.

Various surveys have shown that the most important factor in the patient's choice of a hospital is its perceived quality in addition to other considerations. The total time spent in waiting and consultation in OPD and parental satisfaction are also important factors for creation of a good image of a hospital.

Traditionally, the medical profession was expected to maintain high quality of standards in the hospitals. In general, the quality was defined by the clinicians in terms of technical delivery of medical care<sup>5</sup>. However, it appears that infrastructure and attitudes require to be improved significantly in the public sector hospitals to meet the consumer's expectations.

The hospital should periodically measure the satisfaction level of patients as an indicator of how well the services have been provided and their needs fulfilled. Measurement must be continuous and never ending because patient's needs and expectations changes over time. We should share these findings with staff and patients and act on the findings.

### **Part 5 Accessibility to Medicine Department OPD**

The relationship between accessibility and patient satisfaction was assessed by using Chi-square test. The major factors used for accessibility analysis were waiting time, service process and working hours of Medicine Department OPD.

According to the result of the study, 64.89 percent were having good accessibility while just 35.11 percent of the respondents had poor accessibility to the Medicine Department OPD services so it means the higher the accessibility, the higher will be satisfaction level of the patients.

It was found out that more than half of the patients were agreed that the waiting time for receiving the OPD card is appropriate for them while 21.78 percent were not agreed with this statement that the waiting time for receiving the OPD card is appropriate for them and in suggestions and comments as well patient complained from the registration section so this area need attention from the hospital authorities. On the question of waiting time for getting the prescribed drugs from pharmacy, 16.44 percent of the patient said that waiting time for getting the prescribed drugs from pharmacy is not appropriate for them and they said that some time the pharmacy staff do injustice with the patients waiting for getting the prescribed drugs.

Administrator may consider the ways to reduce the waiting time for receiving the drugs from pharmacy section. Responding to the service process of the registration, more then half of the patients agreed that the service process of the registration is fast, simple and trouble free for patients. When they were asked about the coordination between different sections of Medicine Department OPD, majority of patients were

agreed that there is good coordination between different sections of Medicine Department OPD.

More than two thirds of patients agreed that the required medical staff were available during working hours of Medicine Department OPD and the schedule of the working hours of OPD is adequate for them.

Various surveys showed that the most important factor in the patient's choice of a hospital is its perceived quality in addition to other considerations. The total time spent in waiting and consultation in OPD and parental satisfaction are also important factors for creation of a good image of a hospital

For the majority of patients the accessibility was good with percentage of 100 percent. A study at Zambia by Winny Koster in 1998 showed the antenatal services in rural areas were inaccessible which resulted in high rate of illegal abortion by Zambian teen aged un-married school girls. It posed a public health problem because although abortion was legal there, yet people preferred illegal abortions in the private clinic because their services were accessible, acceptable and confidential. The study shows that health care services should be more acceptable and confidential. The study shows that health care services should be made more acceptable, accessible and confidential so that patients should utilize the services for their benefit; otherwise they shall use other means of services as overburdening hospital for minor complaints and attending clinics of quacks.

Upreti conducted similar study in 1994. This study was concerning the services of health centers. In this study, he found that 71% of the respondents were satisfied while 29% not satisfied. The dimensions he studied were related to accessibility components as distance, waiting time, working hours. The satisfaction percentage of accessibility components was 64.1 %.

It can be concluded that although the unit under study provides satisfactory health care services in terms of technical quality, physical facilities, doctor service,

nurse service, registration service; coordination between sections of medicine OPD, certain areas need improvement namely toilet facilities, facilities for attendants as well as attitude and behavior of staff, sitting facilities, . This improvement can be achieved by repeated monitoring of patient satisfaction.

### **Part 6 Suggestions and comments from the patients**

Out of the 225 respondents only 20 of the respondents (8%) had suggestions. This showed a lack of interest on the patient part and clearly indicated a lack of community participation. Users input to the services which provide health care is being increasingly emphasized as an important tool to improve health services.

The suggestion and comments from the patients were for improving the Banphaeo hospital Medicine Department OPD services. The comments and suggestions from patients are:

- Doctors and other hospital staff are not polite, they should be more polite.
- On the weekends the large numbers of the patients are coming to the Medicine Department OPD and the waiting time for seeing doctor and getting the medicines are very long so the hospital administration should try to manage this problem of decreasing the waiting time.
- When the patients are waiting for the doctor, there should be some news paper/magazine or television for the patients during the waiting hours.
- The Medicine Department OPD should have more doctors so that the waiting time for the patients can be decreased.
- In case when there are more patients in waiting area of OPD then the seats are not enough for patients in the OPD especially on the first floor of the hospital. When the patients are standing in case no chairs are available then the nurses are coming and not even allowing waiting while standing and asking the patients to go outside. There should be more seats for patients in the waiting area.

- The waiting for getting the medicine from pharmacy section is very long. There should be more pharmacists available in the pharmacy section.
- The number of diagnostic rooms not enough so the hospital should have more diagnostic rooms and this will also decrease the waiting time and the convenience of the patients.
- The doctor in the OPD was not experienced enough. The Medicine Department OPD should have specialist doctors instead of the only junior doctors running the OPD.
- Some time the registration staff is not polite so the registration staff need to be more polite.
- The staff in the cash section is not polite and they are not looking very impolite and they did not explain about any thing when asked.
- The doctors seem to be lacking the experience and confidence.
- There is no sufficient drinking water in the waiting area; the hospital should make more arrangement in this regard and the hospital should take care of the patients more.
- The doctors and nurses should be more polite and the treatment should be improved.

Satisfaction as an overall showed percentage of 86.67 but providers should consider ways and means to improve it more to higher level. Although the hospital may be understaffed and overworked but the administrators should work out some strategy to cater maximum patients in less time i.e. waiting time is required to be reduced as much as possible. Similarly, total time spent in OPD could be reduced by expediting the patient work at registration counter and medicine receiving counter.

## **CHAPTER 6**

### **CONCLUSION AND RECOMMENDATION**

#### **6.1 Conclusion**

Patient satisfaction is the essential indicator that reflects the service quality at any level of health services. Banphaeo autonomous hospital had conducted the several methods to improve their own service quality and had assessed the level of patient satisfaction. However, the whole picture of satisfaction towards services of the hospital had not been documented as this study was just conducted in one out patient unit of the hospital. The study on the patient satisfaction is an effective mean of evaluating the performance of hospital from the view of the patients. The information obtained through this type of studies is valuable to remove discrepancies which are distorting the patient satisfaction so as to make this hospital and Medicine Department OPD more attractive for the patients.

The patient's satisfaction was studied as convenience, courtesy and quality of care. The score of satisfaction was measured by Likert's scale and the satisfaction was classified into high and low using best criteria.

Regarding convenience, majority of patients had high satisfaction from instruments in Medicine OPD for health care facilities, explanation given by doctors and nurses, amount and availability of Medicine, the place for receiving the drugs, availability of required medical staff during working hour of OPD, appropriateness of waiting time for receiving the drugs, convenience of going from one to other section of the Medicine OPD. The patients had low satisfaction from arrangements for heating and cooling, doctors and nurses keeping the patients from worrying so the improvements in these few aspects should create even more satisfaction among patients.

In courtesy the patients had high satisfaction from the friendliness, attentiveness and readiness of doctors, pharmacy unit staffs, privacy provided by doctors and nurses during examination and treatment. The low satisfaction was just from introduction of doctors and nurses and permission of doctors and nurses before examination.

About the quality of care the patients had high satisfaction about the quality of medicines, the willingness of doctors and nurses for treatment of patients, skills and experience of doctors, competency of nurses, patient understanding of their illness after seeing the doctor.

Maximum number of the respondents had high satisfaction from convenience, courtesy and quality of care. More than two third of respondents had high satisfaction while less than one third of the respondents had low satisfaction.

According to the results of the study the youngest patient was 16 years old and the eldest was 80 years old. It was found that females were attending the OPD more than male patients. The majority of the patients were married and most of the patient's education was primary school. The majority of patients were laborers and farmers. The patients earning between 5,000 Baht to 10,000 Baht was having the highest percentage so it means that majority of patients belonged to middle class. The patients with 5 and more family members were having the highest percentage of the patients. According to the result the patients who visited the hospital 1-4 times were the majority.

Marital status and occupations were socio-demographic characteristics those were associated with satisfaction level of the patient in this study. It was concluded that was no consistent pattern of association of socio-demographic factors and patient satisfaction. The widows had low level of high satisfaction as compared to singles and married respondents. The Government employed had low level of high satisfaction as compared to unemployed, non-government employed and farmers.

In conclusion about the experience of patients the study indicated that patients had good satisfaction from all the items, the patients had high proportion of patients with good experience about light, ventilation, cleanness and tidiness, examination by doctors, helpfulness of nurses, communication skill of pharmacists. Item wise the poor satisfaction was from diagnostic space, number of doctors, and expense of drugs. About the respondents experience highest satisfaction was from doctor's service while lowest satisfaction was from pharmacy service. Maximum number of the respondents had very good experience while just small number of the respondents had poor experience.

There was association of all the components of experience like physical facilities, doctor's service, nurse service, pharmacy service and registration service with satisfaction of the patients. There was association of total experience with satisfaction and the patients with good experience had very high satisfaction while respondents with poor experience had very low satisfaction.

In accessibility, the highest proportion of respondents agreed that the required medical staff was available during working hours of OPD, schedule of working hours of OPD was adequate while comparatively less patients were agreed on the waiting time for getting treatment from doctor and waiting time for getting prescribed drug so the waiting time was the main concern of the patients.

Just one half of patients had good accessibility regarding waiting time while majority of the patients had good accessibility regarding service process and working hours. In total two third of respondents had good accessibility while one third had poor accessibility.

There was association of waiting time, service process and working hours with satisfaction. In total the accessibility had association with satisfaction level and the respondents with good accessibility had high satisfaction while those with poor accessibility had poor satisfaction.

The study on the patient satisfaction showed that the determination of the satisfaction is very complex. It involves trust, patient characteristics and need as well as their perception to physicians and interpersonal skill, together with their perception whether or not they are responding appropriately to the treatment. When the providers (nurse, doctor) were trusted and respected by the patients, their behavior should support and keep this condition because once people established faith with one health service, they continue it for long time until their faith is lost. Good understanding between the hospital staff and patient usually mean good participation. A good understanding can only develop when patients were assured with service quality. The increase in the service facilities is not the only solution, quality must also be considered.

Many findings of this study may be useful for future improvements. Patient satisfaction assessment should be regular assignment of all hospitals that should be conducted at least twice a year. It will be helpful in keep knowing the problems of patients and improving the quality of care, ultimately earning good name and prestige for the institution.

It was concluded from this study, that data collection needed need utmost care at the time of data collection. This was imperative for quality control of data. Data collectors and interviewer must have full experience in their job and they should have sufficient comprehension in narrating the questionnaire particularly the open ended and negative questions. Questions should be in easily understandable wordings. Data must be cleaned before going out of the field.

Continuous efforts should be made by the hospital administrative to improve certain area in the service based on satisfaction level of the dimensions in this patient satisfaction study. Overall improvement in facilities and hospital environment, customer services quality and the effects of committed work force were reflected by improved level of patient satisfaction.

The author is hopeful that results of this research will motivate a lot of researchers to undertake various research projects in order to improve the services of both in and out patient departments of hospital for the best interest of patients for whom these institutions have been opened.

## **6.2 Recommendation**

### **6.2.1 Recommendation for implementation**

In the present era of competition, with the increasing number of health service infrastructure, a process of natural selection and competition is expected to favor those who offer the best services at the lowest price. It is therefore recommended that this only autonomous hospital of Thailand should professionally serve the patients with their utmost skills and capabilities so as to make maximum utilization of their services and in return benefit the patients. This study has brought to light a few short comings in services of Banphaeo hospital Medicine Department OPD.

Therefore following recommendations were proposed:

1. To gain patient positive attitude towards Banphaeo autonomous hospital, the good image of the hospital must be advocated.
2. The staff working in hospital should be motivated in terms of careful and enthusiastic services (the director of hospital and nurse staff must wonder around hospital during the rush hours.)
3. More community participation should be encouraged by the hospital administration.
4. Providing the chances to the patients in sending their recommendations or constructive comments via postcards or sms by monthly offering the motivations such as special awards to the most useful recommendation or randomly selected for the fortune participants.
5. Medicine Department OPD is the place where the patients come with all general medical conditions and its is one of the most crowded OPD in any setup, it is therefore recommended that the internal environment of hospital should be made more convenient specially the registration section where

long queues should be discouraged as few patients complained about this section as mentioned in last chapter.

6. Illness leads to mental disturbances. Patients need good behavior on part of staff of OPD and hospital. As mentioned in last chapter that few patients mentioned about the courtesy of staff especially registration, pharmacy and nursing staff, it is therefore recommended that proper training should be given to staff in which they should be taught how to receive and dispense the patients. The researcher recommends that short training course in effective communication should be given to doctors, nurses and other staffs so that they can use their expertise more effectively.
7. As a convenience to the patients, newspapers, health related magazines, brochures etc should be provided in waiting area.
8. As hospitals are the institutions where people from different socio-demographic background visit with different level of expectations but it is provider's responsibility to satisfy them with the services. For this reason the health workers must be provided with sufficient knowledge on how to understand psychosocial aspects of consumers.
9. Safe, drinking water would be easily available.

Since both positive and negative comments related to courtesy of staff working in hospital were given as well as inconvenience related to long waiting time and inadequate staffs, hospital must search for appropriate strategies to deal with these kinds of complaints. To tackle the problem of staff inadequacies, there are two classic ways; first is allocating new staffs and second is try to increase the competency of the staffs for higher productivity. The poor courtesy of the staffs can lead interpersonal conflict and the situation of dissatisfaction.

The comments and suggestions from patients from several routes are helpful for guiding and monitoring the performance of hospital since satisfaction survey could not be implemented daily thus satisfaction monitoring system should be set up in order that good things can be maintained and the bad things will be earlier corrected or improved.

### 6.2.2 Recommendation for further research

The basic motive behind every research is to find out the problem, study it systematically and find ways and means to solve it. Audit and research is therefore a requirement for any institution that deals with public. This study can be useful for researcher who are interested in interested in the health care industry and wants to improve the services of hospitals especially outpatient departments. The author proposes following recommendations for further study;

1. A detailed and extensive study should be conducted to get the clearer picture of the whole situation. The researcher should also use technique of observation and informal discussion with the patients in order to get a concrete picture of patient satisfaction.
2. In the future studies, the study population should include both types of the patients, those who attended the hospital OPD and those who did not attend the OPD. The service providers should also be included in the study. This will make the finding more interesting.
3. Patient satisfaction surveys should be studied in the community. Community based survey is another effective way of knowing the level of patient satisfaction. The results will have less bias and will provide wide spread opinion of community regarding the quality of care and hospital functioning. With the different setting, interesting variables for the study and results possibly will come up in different dimensions and study mythology may also differ from this study. Recall bias should be cautious so appropriate study design must be encouraged. Moreover, patient may be less influenced by the environment during the process of data collection since the study will be performed in their own territory. The complaints or suggestions for service improvement might be expressed more genuinely and the obtained satisfaction level might be lower than those when studied within the surrounding of the hospital. May the attitude of patients in the community differ from this study? Or any variables can influence the patients in the community to be satisfied or dissatisfied?

4. Subsequent repeat study may be conducted to know the latest satisfaction level. Future studies should include other public hospitals of the area in order to compare the difference in service delivery by these institutions with this only autonomous public institution. Moreover, services of public hospital can also be compared with hospitals working in private sector by using important indicators of patient satisfaction.



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## APPENDIX

### QUESTIONNAIRE

#### Patient Satisfaction towards Medicine Out Patient Department services

Your response will be for purpose of research and will not be exposed to any one for any other purpose. The information provided will help in improving the service of health care. Therefore honesty on part of the respondent is expected.

Serial no. ....  
 Date of interview: / / (d/m/y)  
 Name of Interviewer: .....

#### Part-A. Socio-demographic Factors

Please check (✓) the appropriate answer in the boxes or fill in the blanks as required.

1. What is your Gender?  
 Male  Female
2. What is your Age (in years)? \_\_\_\_\_
3. What is your marital status?  
 Single  Married  
 Widow  Separated
4. What is your highest Education level?  
 Illiterate  Finish Primary School  
 Finish Secondary School  Finish vocational School  
 Finish bachelor degree  If Other (please specify).....
5. What is your current occupation?  
 Unemployed  Government Employed  
 Labor  Non-Government employed  
 Agriculture  Student  
 Other (please specify).....
6. What is you family income per month? .....Baht
7. What is the total members currently living in your family:  
 .....
8. Total number of visits to hospital so far (during last six months).....

**Part B Experience of patient about Medicine section OPD services.**

Please check (✓) the appropriate answer in the boxes

**Note:** Questions of this part are related to the past experience (perception) to all health care facilities ever visited by the respondents.

No	Experience of patient about Medicine section OPD services	Agree	Not sure	Disagree
<b>Physical Facilities</b>				
9.	From your past experience, the ventilation inside the OPD was good for patients.	( )	( )	( )
10.	From your past experience, there was enough light inside the OPD for patients.	( )	( )	( )
11.	From your past experience, there were enough sitting chairs and toilets in waiting area of Medicine section OPD for patients.	( )	( )	( )
12.	From your past experience the diagnostic room is having enough space.	( )	( )	( )
13.	From your past experience, there was enough drinking water in waiting area of Medicine section OPD for patients.	( )	( )	( )
14.	From your past experience, the toilets were clean.	( )	( )	( )
15.	From your past experience, the waiting area was clean.	( )	( )	( )
<b>Doctors Services</b>				
16.	From your past experience, the doctor did the examination with respect.	( )	( )	( )
17.	From your past experience, the doctor spent enough time when examining you.	( )	( )	( )
18.	From your past experience, doctor listened carefully to what you said to him and fully understood your concern	( )	( )	( )
19.	From your past experience, the doctor gave you the opportunity to discuss your treatment with him.	( )	( )	( )

No	Experience of patient about Medicine section OPD services	Agree	Not sure	Disagree
20.	From your past experience, doctors asked about your illness in detail.	( )	( )	( )
21.	From your past experience, there are enough doctors in OPD	( )	( )	( )
<b>Nurse Services</b>				
22.	From your past experience, the nurse listened to your health problem and explained to you about any treatment that you need.	( )	( )	( )
23.	From your past experience, the medicine outpatient is having enough nurses.	( )	( )	( )
24.	From your past experience, nurses were helpful to you.	( )	( )	( )
25.	From your past experience, nurses showed good communication skills with patients.	( )	( )	( )
<b>Pharmacy Service</b>				
26.	From your past experience, the drugs were expensive in Medicine section OPD pharmacy section for you.	( )	( )	( )
27.	From your past experience, pharmacist explained the use of medicines clearly.	( )	( )	( )
28.	From your past experience, there were enough pharmacists in the medicine outpatient department.	( )	( )	( )
29.	From your past experience, pharmacist showed good communication skills with patients.	( )	( )	( )
<b>Registration Service</b>				
30.	From your past experience, there was enough registration staff in medicine outpatient department.	( )	( )	( )
31.	From your past experience, registration staffs were cooperative with you.	( )	( )	( )
32.	From your past experience, registration staff had good communication skill with patients.	( )	( )	( )

**Part C: Accessibility to Medicine section OPD service at Banphaeo Hospital**

Please check (✓) the appropriate answer in the boxes

No	Waiting time	Agree	Not sure	Disagree
33.	The waiting time for receiving OPD card/ registration is appropriate for you.	( )	( )	( )
34.	The waiting time for getting the prescribed drugs from pharmacy is appropriate for you.	( )	( )	( )
35.	The waiting time for getting outpatient appointment is appropriate for you.	( )	( )	( )
<b>Service Process</b>				
36.	The service process of the registration is fast, simple and trouble free for patients.	( )	( )	( )
37.	There is good coordination between different sections of Medicine section OPD.	( )	( )	( )
<b>Working hours of OPD</b>				
38.	Required medical staffs were available during working hours of the Medicine section OPD.	( )	( )	( )
39.	Working hour schedule of OPD is adequate for you.	( )	( )	( )

**Part D. Satisfaction towards Medicine section OPD services**

Please check (✓) the appropriate answer in the boxes

No	Satisfaction to the Medicine section OPD services	Satisfactory	Not sure	Unsatisfactory
<b>Convenience</b>				
40.	The ease of finding the Medicine section OPD in hospital for you.	( )	( )	( )
41.	Instruments (B.P apparatus, thermometer, weighting scale, and stethoscope) in Medicine section OPD for providing health care facilities to you.	( )	( )	( )
42.	The appropriateness of arrangements for heating and cooling in waiting area for patients.	( )	( )	( )
43.	The doctors and nurses keeping you from worrying.	( )	( )	( )
44.	The explanation given by doctor and nurses to you before doing any thing.	( )	( )	( )
45.	In terms of expense and time convenience of going from your house to Medicine OPD.	( )	( )	( )
46.	The explanation from doctor about your illness and treatment.	( )	( )	( )
47.	The amount and availability of medicines prescribed by doctor from the pharmacy section	( )	( )	( )
48.	The place for receiving the drugs	( )	( )	( )
49.	The availability of required medical staff during the working hours of Medicine section OPD	( )	( )	( )

No	Satisfaction to the Medicine section OPD services	Satisfactory	Not sure	Unsatisfactory
50.	The appropriateness of waiting time in receiving the drugs for you.	( )	( )	( )
51.	Convenience of going from one to other unit of Medicine section OPD for you.	( )	( )	( )
<b>Courtesy</b>				
52.	The friendliness and readiness of doctors to help you.	( )	( )	( )
53.	The friendliness and respect from pharmacy unit staff for you.	( )	( )	( )
54.	The introduction from doctors and nurses to you about themselves before taking history/examination.	( )	( )	( )
55.	The permission of the doctors from you before examining you.	( )	( )	( )
56.	The attentiveness from doctors and nurse while answering your questions.	( )	( )	( )
57.	The courtesy from nursing staff.	( )	( )	( )
58.	The privacy from doctors and nurses during examining and treating you.	( )	( )	( )
<b>Quality of Care</b>				
59.	Your understanding of your illness after seeing the doctor.	( )	( )	( )
60.	The quality of medicines given to patients from pharmacy unit.	( )	( )	( )
61.	The willingness of doctors and nurses to treat you.	( )	( )	( )
62.	The doctor and nurse examined you in detail.	( )	( )	( )
63.	The skill and experience of doctors in OPD who treated you.	( )	( )	( )

No	Satisfaction to the Medicine section OPD services	Satisfactory	Not sure	Unsatisfactory
64.	You were given opportunity to ask about your illness.	( )	( )	( )
65.	The competency of nurses in nursing care in OPD.	( )	( )	( )

**Part E. Any suggestions or comments for improvements of OPD services**

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**Thank you for spending time to answer this questionnaire!**

## BIOGRAPHY

<b>NAME</b>	Mr. Amin Khan Mandokhail
<b>DATE OF BIRTH</b>	February 13, 1980
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