

ASSESSMENT OF PATIENT SATISFACTION IN AN
OUTPATIENT DEPARTMENT OF AN AUTONOMOUS
HOSPITAL IN PHNOM PENH, CAMBODIA

By

MAO VADHANA

September 2012

Thesis Presented to the Higher Degree Committee of
Ritsumeikan Asia Pacific University in
Partial Fulfillment of the Requirements for the Degree of
Master of Science in International Cooperation Policy
(Public Health Management)

ACKNOWLEDGMENT

First of all, I would like to honestly express my heartfelt gratefulness towards my kind and great advisor, Professor GHOTBI, Narder for his always-significant guidance, countless supportive advices and recommendation since my first day in APU. After that, I am also deeply thankful to Professor MEIMANOV Serik for his active instructions and helpful recommendations not only on my thesis, but also on other subjects. I was fortunate enough to receive assistance from two great professors and equal opportunity as other students in the class.

Secondly, I feel deeply grateful towards the director of the Khmer-Soviet Friendship Autonomous Hospital, Dr. Say Sengly for his kind permission and heartfelt understanding in permitting me to conduct my research in the hospital under his intelligent administration. In addition, I also would like to express my thankfulness towards the relevant staffs in the hospital that have tried their best in helping my research process. Last but not least, I would like to specially thank my interview assistants, Ms. Sam Marakat and Ms. Sam Rathneary for their brilliant interviewing.

Thirdly, I am gratefully indebted to Japan International Cooperation Agency and the royal government of Cambodia for giving me this rare opportunity to come to continue my higher education in Japan. Particularly, I would like to thank Ms. Nishida Shiuko, my dear and kind coordinator, for her kindest help and support since the first day.

Fourthly, I am also deeply grateful towards Ritsumeikan Asia Pacific University and RCAPS for establishing a qualified educational institution and for the field research grant support I have received.

I would like to express my great gratefulness towards those authors and researchers of articles, books, and on-line information for the valuable works I have read and cited in my paper. I wouldn't have been able to achieve my goal if I hadn't got wonderful help from those relevant literatures.

Lastly, I would like to thank my parents for giving me the chance to see this beautiful world, my wife for her physical and emotional encouragement in any circumstances, my friends both in Japan and Cambodia for their great and memorial companions and contribution in my successful work.

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List of Acronyms and Abbreviations

OPD	:	Outpatient Department
CIA	:	Central Intelligent Agency
NIS	:	National Institute of Statistics
USSR	:	Union of Soviet Socialist Republics
ENT	:	Ear Nose Throat
KHR	:	Khmer Reil
SAMU	:	Service d'Aide Médicale d'Urgence
KSFH	:	Khmer-Soviet Friendship Hospital
JACHO	:	Joint Commission on Accreditation of Healthcare Organizations
SPSS	:	Statistical Package for the Social Sciences
NGO	:	Non-Government Organization
USD	:	United States Dollar

ABSTRACT

Patient satisfaction surveys are essential in obtaining a comprehensive understanding of the patient's need and their opinion of the service received. It is a vital tool in evaluating the quality of healthcare delivery service in hospital.

The current study is a cross-sectional descriptive research about assessment of patient satisfaction in Medicine Outpatient Department of Khmer-Soviet Friendship Autonomous Hospital, Phnom Penh city, Cambodia. Systemic sampling technique was employed and 200 respondents were statistically calculated. Only respondents whose ages were from 18 years old were included in this study. The research tool was a pre-structured questionnaire and data collection was conducted from December 19th, 2011 to January 5th, 2012. The components of satisfaction study were the socio-demographic characteristics, the patients' experience with medicine outpatient services, accessibility to hospital services, and patient satisfaction. This study aimed to find the levels of patients' satisfaction and the significant relationship between independent and dependent variables.

It was seen that 93.5% (187) of the respondents were satisfied with the services provided in the hospital. 98.5% of the patients were satisfied with hospital facilities. The assessment of the services offered by physicians, nurses, and pharmacists, also showed high levels of good experience from 81.5% to 96% of the patients. This study also revealed that the majority of the respondents were

relatively less satisfied with registration service at 64%. Moreover, inadequate amount of prescribed drugs and the unfriendly attitude of the registering staff were also mentioned. Regarding socio-demographic characteristics, education was found to have significant relationship with patient satisfaction level. Furthermore, physicians' services, nurses' services, and pharmacy's services also had significant relationship with the level of patient satisfaction. However, the tests between accessibility components and patient satisfaction level showed that there was no one component had significant relationship with the patient satisfaction level.

Based on the result of the study, training of code of conduct and courtesy should be given to both clinical and office staffs. Incentives and punishment should be carried out based on regular performance reviews. It is also highly suggested that needed and adequate amount of drugs should be available in the Pharmacy. From these findings, it is evident that the satisfaction level of patients attending the outpatient department should be accessed periodically. Further satisfaction study should be extended in scope and reach such as comparative study between patient satisfaction and staffs' satisfaction and between the hospital services and other hospitals' services etc. in order to gain better views of the field and produce more interesting result.

CHAPTER 1: INTRODUCTION

Beginning with this earliest chapter, some of general information regarding a brief background of the country and institution will be introduced accordingly. These basic backgrounds will help readers to get to know the general characteristics of the studied field. The rationale of the study, which gives the reasons why the study is implemented, the research problem, the study objectives, the overview of the methodology, the significance of the study, definitions of some important terms, and last by not least the organizational body of the thesis will follow to help the reader to deeply understand the whole story.

1a. General Information

According to the World Fact Book of CIA in 2012, Cambodia covers an area of 181,035 square kilometers. It is one of the developing countries located in Southeastern Asia. The country is located between Thailand, Laos, and Vietnam. To the Southwest, it borders with the Gulf of Thailand and a part of Thailand. To the Southeast, it borders with the Southern part of Vietnam. To the North, the country mostly borders with the Southeastern part of Thailand, and the remaining part borders with the Southern part of Laos (1).

According to Cambodia National Institute of Statistics (NIS) in 2008, Cambodia is comprised of twenty-four provinces and cities, one hundred and eighty-five districts, one thousand six hundred and twenty-one communes, and thirteen thousand eight hundred and eighty-six villages (2).

1b. Rationale of the Study

Cambodia has increasingly developed its healthcare services in response to patient needs over decades. Key performance indicators are used to monitor and evaluate the effectiveness and efficiencies of organizations and their staff. Patient satisfaction is one of the essential indicators for healthcare service improvement. From that view, the patient satisfaction survey is an instrument in monitoring health care delivery of a hospital in relation to cost and services. Specifically, outpatient department is the first-line healthcare consultation service that comes in contact with the patients. Therefore, the quality of care will indicate the quality of service of the hospital as perceived by the patients regarding various factors.

As witnessed by the researcher according to his seven-year experiences working in the biggest public hospital, the Khmer-Soviet Friendship Hospital, in Cambodia during the last decade, there were huge numbers of patients' complaints about poor healthcare delivery services. Most of the noticeable issues were about the few qualified and reliable physicians and nurses, the impolite manner of the service providers in all levels, the insufficient basic infrastructure, the poor functional buildings, the non-fashionable medical equipment, the ineffective medical supplies, the inadequate amount of drugs supplied and its poor quality, the absence of qualified hygiene procedures, and so on. As a result, these factors led the patients who could choose better alternatives to change their approach. Most of them chose to utilize private health care services such as private hospitals, polyclinics, specialized clinics, private consultation rooms, private laboratory, private drug stores; which were providing a better quality of medical care, highly

effective treatment, and good user-provider interaction. To cope with the matter, the royal government of Cambodia started to test the semi-autonomy policy in the most famous public hospital, Calmette Hospital, in 2006. The result seemed to be worth its cost in many aspects; however, there was no research focusing on users' opinion about the services. By the end of 2009, the royal government further introduced autonomy policy to 4 public hospitals located in the capital city, Phnom Penh, in the hope of continuous improvement of the health care delivery services. The Khmer-Soviet Friendship Autonomous Hospital was the second public hospital to become an autonomous hospital (Public health reform in Cambodia: hospitals gain autonomy, 2009) (3).

In this study, the researcher wishes to determine the level of patients' satisfaction in an Internal Medicine Outpatient Department (OPD) of Khmer-Soviet Friendship Autonomous Hospital, which is located in Phnom Penh city, Kingdom of Cambodia.

1c. Background of Khmer-Soviet Friendship Autonomous Hospital

According to Khmer-Soviet Friendship Hospital 13th Medico-Surgical Seminar on April 02, 2009, the hospital was built in the early 1960s by the royal government of Cambodia with significant technical support from Union of Soviet Socialist Republics (USSR). From 1975 to 1979 the hospital was shut down under the genocidal Khmer Rouge regime. However, the hospital started resuming its performance since the beginning of 1980s to respond to the healthcare services needed by the people (4).

Now it is the biggest national and university hospital in the capital city, Phnom Penh. The hospital became one of the biggest autonomous hospitals with direct supervision from Council Committee and Hospital Committee since late 2009 (Hospital Activity Report, 2011) (5).

According to Hospital Rapport De Garde Du Au Mois in 2012, there are 21 specialized clinical departments in the hospital including General Medicine A, General Medicine B, General Medicine C, Infection Department, Emergency Department, Operation A, Operation B, Operation C, Operation D, Pediatric Medicine, Gynecology Department, Maternity Department, Ear Nose Throat (ENT) Department, Ophthalmology Department, Dental Department, Neurology Department, Pneumology Department I, Pneumology Department II, Pre-Post Operation Department, Oncology Department, and Psychiatry Department. In addition, there are 8 Para-Clinics such as: Internal Medicine Outpatient Department, Physiotherapy Department, Kinesiotherapy Department, Pathology, Laboratory, Pharmacy, Imagery Department, and last but not least Service d'Aide Médicale d'Urgence (SAMU) and three offices-Administration Office, Accounting Office, and Technique Office. Regarding human resources, there are 1 director, 6 deputy directors, and 576 clinical personnel including 4 medical professors, 36 specialized doctors, 129 general doctors, 4 master degrees, 29 junior doctors, 11 pharmacists, 3 junior pharmacists, 12 dentists, 1 junior dentist, 10 physiotherapists, 197 senior nurses, 19 junior nurses, 63 senior midwives, 2 junior midwives, 26 senior laboratory technicians, 06 junior laboratory technicians, 10 other skillful staffs, 10 non-skillful staffs, 1 driver, and 72 workers.

There are 500 beds to serve the clients. In the Internal Medicine Outpatient Department, there are 1 specialized doctor, 6 general doctors, and 6 nurses. In addition, there are 5 separate consultation rooms equipped with medical supplies and equipment, which are ready to serve the clients anytime (6).

Figure 1: Human Resources in Khmer-Soviet Friendship Hospital

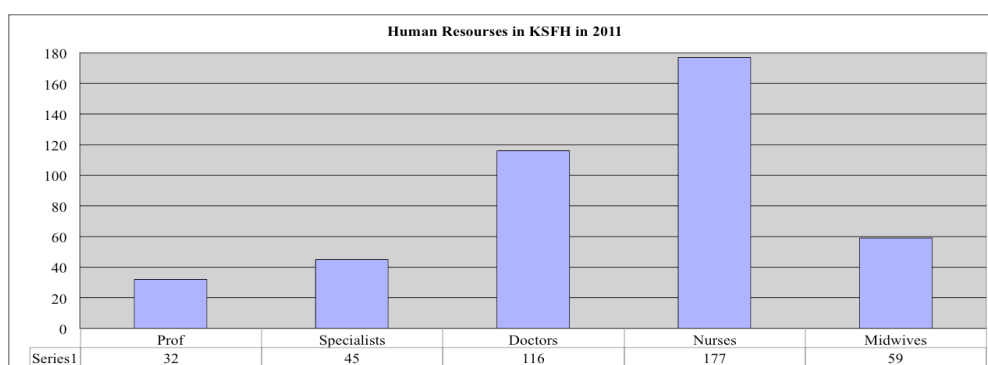


Figure 1 shows the huge numbers of medical doctors and nurses in the Khmer-Soviet Friendship Autonomous Hospital. They play a very important role in the image of the hospital in the patients' point of view.

Figure 2: Comparison of Medical Doctors and Nurses

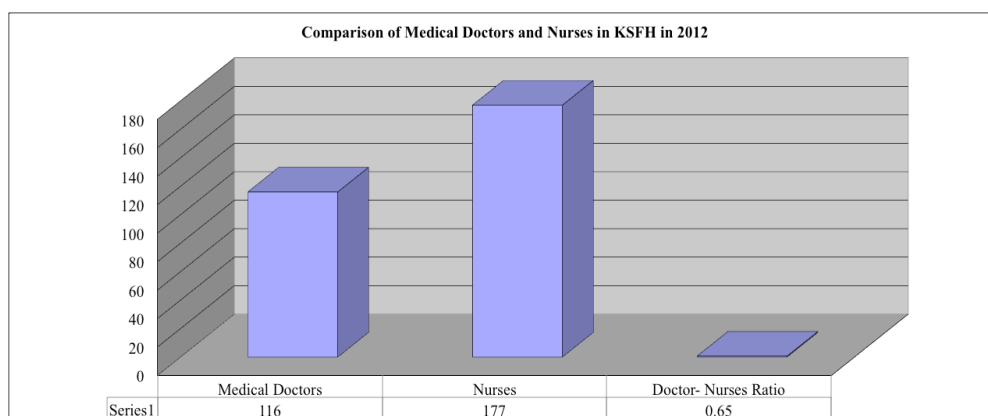


Figure 2 shows the ratio of doctor to nurse in 2012. It seems that the number of doctors and nurses is not the problem for the hospital to extend its health care delivery services.

1d. General Objective

To assess the level of patients' satisfaction with the health care services provided by the Medicine Outpatient Department (OPD) of Khmer-Soviet Friendship Hospital, Phnom Penh city, Cambodia.

1d.1. Specific Objectives

1. To assess the level of patient satisfaction with Medicine OPD services focusing on physician and nurses-patient interactions in terms of physicians' communication skills and nurses' communication skills; accessibility to services and facilities in terms of waiting time, working schedule, and service procedure; and patients' satisfactions in terms of convenience, courtesy, and quality of care.
2. To find the possible relationships between socio-demographic factors and patients' satisfaction levels.

1d.2. Significance of the Study

1. The result from the study will grant sophisticated indicators for health service improvement to the board managers, decision makers, planners, business partners and other related staff in the Khmer-Soviet Friendship Autonomous hospital.

2. It will also become an initiating document for other researchers to further discuss and improve the status of healthcare delivery services in Cambodia.

1e. Hypotheses

- As a result of introducing hospital autonomy policy, the majority of the patients are more likely to have good opinion about healthcare service delivery in Medicine Outpatient Department of Khmer-Soviet Friendship Autonomous Hospital.
- Patients with lower education are more likely to show a higher level of satisfaction.

1f. Research Questions

1. How good is the opinion of the respondents regarding healthcare services of the Internal Medicine Outpatient Department (OPD) in Khmer-Soviet Friendship Autonomous Hospital?
2. Are there any significant relationships between independent and dependent variables?

1g. Conceptual Framework

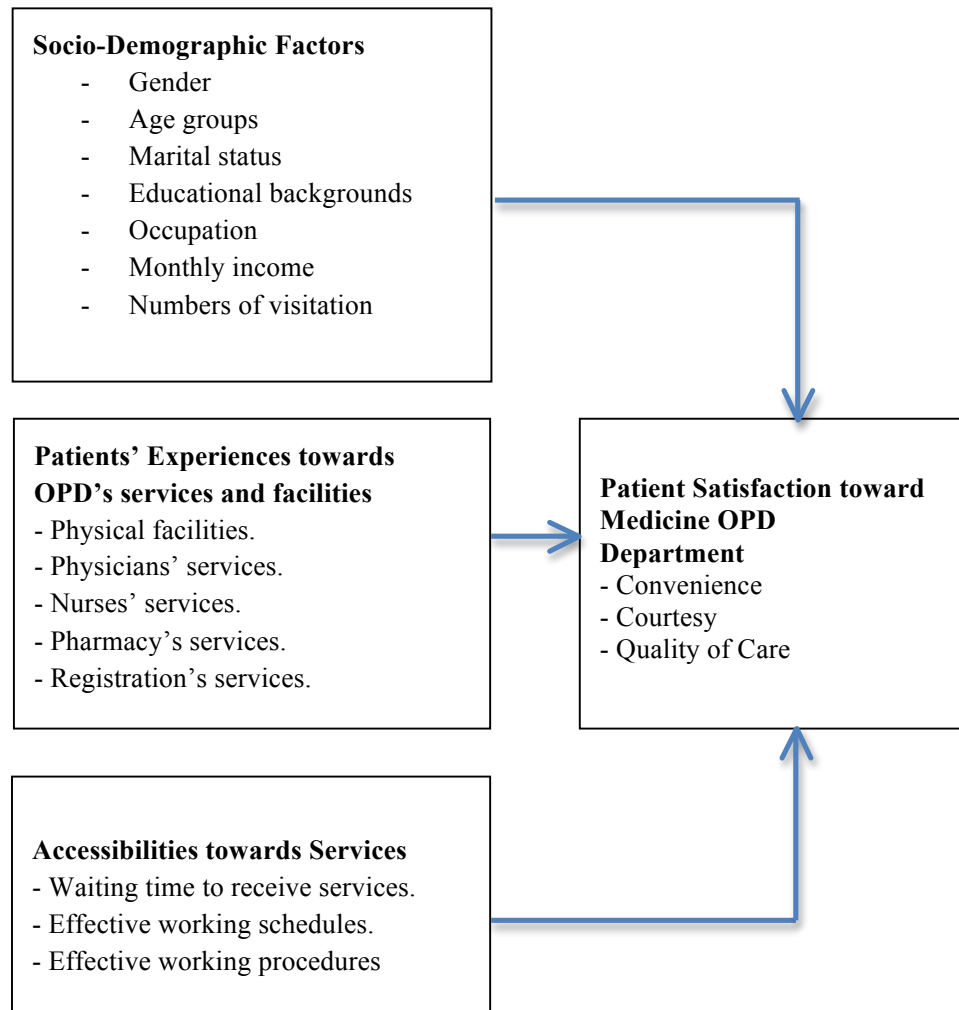
Figure 4 shows the conceptual framework using the general accepted health system model for construction of conceptual framework by Aday and Anderson, which was mentioned in their study of satisfaction of people towards health care delivery in United State from 1970 to 1975. (7) The purpose of utilizing this model is to help construct a questionnaire with a good reliability and to secure a

high degree of validity, which means that the questionnaire had strong internal consistency and was constructed to measure what it was supposed to measure.

Figure 3: Conceptual framework using Aday & Anderson's health symbol model.

Independent Variables

Dependent Variables



In order to reduce the level of misunderstanding of any sections in the questionnaire to the minimum degree, each individual operational term of independent and dependent variables was clearly defined to make sure that this questionnaire was fully understandable to obtain the right answers to the comprehensive questions.

1h. Operational Definitions:

1h.1. Dependent variables

Patient satisfaction:

Patient satisfaction was defined as the patients' opinion about health care delivery services in Internal Medicine OPD of the Khmer-Soviet Friendship Autonomous Hospital. The main indicators of patients' satisfaction level used in in current research were convenience, courtesy, and quality of care.

Outpatient Department:

An Outpatient Department was defined as a hospital department, which is primarily designed to accommodate the clinical consultants and the members of their teams to provide medical consultation and primary health care services.

1.h.2. Independent variables

Socio-demographic characteristics:

Socio-demographic characteristics were defined as the social and demographical nature of the subject being studied. It consisted of age, gender, marital status, education, occupation, monthly income, number of visits to the hospital, and the payment methods of the respondents.

Age referred to the ages of the respondents from 18 years old by the time of the study.

Gender was defined as the state of being male or female of the respondents.

Marital status referred to each individual respondent's state of being single, married or widowed/separated.

Education was defined as the individual respondent's academic qualification by the time of data collection.

Occupation referred to a job or profession of an individual patient.

Monthly income was defined as an average amount of revenue a patient and his/her family members earned per month in Khmer Riel. Exchange rate for Khmer Riel & USD was 4,000 Riels for 1USD.

Number of visits to hospital referred to the total number of times the patients had visited the Internal Medicine Department including the time of data collection.

Payment Method referred to the source of money spent for the hospital fee such as personal finance, non-government organizations' insurance, and equity fund of the royal government of Cambodia.

Experience of patient with Internal Medicine OPD's services

Experience was defined as the feeling and self-judgment the patients gained from the involvement in the health care delivery process in Internal Medicine OPD focusing on physical facilities, physicians' services, nurses' services, pharmacy's service, and registration's service.

Physical facilities was defined as the Internal Medicine OPD's tangible facilities and preparation such as ease of location, department's cleanliness and tidiness, bed, ventilation and lighting system, waiting chair, sanitary rest room and

adequate area space.

Physicians' services referred to the physicians' communication and consultation skills such as self-introduction, effective consultation techniques, attentiveness, time management, and physicians' punctuation.

Nurses' services referred to the nurses' communication and assistance skills such as polite and respectful manner towards the patients, feedback to patients' questions, patient-referring process, and nurses' punctuation.

Pharmacy's service referred to the respect and attention shown by pharmacy staff, drug preparation and explanation, adequate amount of drugs, and pharmacy staff's punctuation.

Registration's services referred to the respect and politeness shown by registration staff and staff's punctuation.

Accessibility to services was defined as the ease of access to the services resulting from effectiveness of working time, working schedule, and service procedure designation.

Waiting time referred to the duration of time the patients spent waiting for receiving receipt, consultation services, and drugs.

Working schedule was defined as the effective working shifts designated to respond to patients' need.

Service procedure was defined as the effective service process in terms of time and good coordination between relevant departments.

1.i. Limitations of Study

During research process, the researcher faced some constraints such as lack of requirement time, human resources, and permission to access some data; otherwise he would have also collected data focusing on staff's job satisfaction in order to find the relationship between staff's satisfaction and patients' satisfaction.

CHAPTER 2: REVIEWS OF RELEVANT LITERATURE

2a. Patients' Satisfaction

Clients' satisfaction was defined as the result of matching one's expectation of healthcare services with actual experiences whether it is pleasant or disappointed in *Advances in Service Marketing and Management* by Swartz TA, Bowen DE, Brown SN, and Stephen in 1993; pp. 65-85. (8)

The level of satisfaction will be low if the services do not meet what the patients have wished. However, the patients will show a high level of satisfaction if their expectations are met. In addition, patients will feel highly satisfied and delightful if services are even better than what they have expected (Swartz TA, Bowen DE, Brown SN, and Stephen; 1993) (9).

In 1985, Swan suggested that patients' positive opinion about services they have received is the process of matching between a set of generally accepted quality with their personal past involvement (10).

Many articles about patients' satisfaction suggested the following significant relationship:

- Satisfaction is the result of perceiving service implementation against expectation.
- Willingness to buy or come back to receive the same services is the effect of satisfaction.
- Expecting and willingness to have services create alternatives for patients.

The more the patients are pleased, the greater the level of satisfaction will be (Swan, et al.; 1985) (10).

Findings from various articles suggested that most patients are very sensitive about what is going on with their health condition. They honestly insist to know exactly what the problems are, the ways treatment might be taken in account and the consequences that might happen. They still do even though it might frighten or disappoint them in any ways (McQuity S, Finn A, and Willey JB, 2000) (11).

2b. Socio-Demographic Characteristics

Many people have a strong belief that the high levels of positive opinions of patients might be closely related to some independent factors such as standards of living, gender, age groups, and even status of the patients whether they are single, married, or widowed, etc. Nonetheless, some other researchers have concluded that there is little relationship between socio-demographic characteristics with satisfaction levels (Doborah L., 1997) (12).

Some findings confirm that people who are from the same ethnic groups tend to pay more attention or to help the people who are from the same sources. This idea is also said to apply in the performance done by physicians who are from the same groups as their patients (Aday LA, Anderson RM., 1981) (13).

There are also believes that some social advantages such as educational backgrounds, employments, revenues, an warranty are the keys for clients to decide which services to use (Hall J.A., Dornan M.C., 1990) (14).

Many suggestions regarding direct relationship between socio-demographic characteristics have been well documented. Some researchers suggested that the high levels of patients' satisfaction are significantly related to the patients' standards of living, namely the family income. While some others mentioned that age is the most noticeable independent variable that usually has very close relationship with patients' positive opinions about services. They believe that the older the patients are, the higher the level of satisfaction they will show while the younger the patients are, the lower the level of satisfaction they will give. Last but not least, some researchers also stated that some patients tend to medical services based on their reference groups' ideas. For instance, if their group says this service is good to use, they will be likely to decide to use this service rather than others (Lebow JL, 1983) (15).

Even though many trends of direct relationship between socio-demographic characteristics and patients' satisfaction are highly discussed among many researchers, these independent variables are not used as the tool to predict the patients' satisfaction in all cases.

Sometimes, it is hard for the service providers to meet some patients' high expectation. Some researchers have found out that the characters of socio-demographic factors vary vastly according to the actual aspects. The nature of patients' expectation may be widely different and complicated. One cannot base on a set of standard rules to satisfy different groups of people and to expect that

they will show a similar satisfaction level. Therefore, significant factors around them might become effective tools to predict what they really want.

People with a low standard of living tend to experience a low level of health care services when they have health problems. In addition, because they really have to work hard to survive, they might not be able to follow more schedules of treatments. In some case, their physicians do not treat them equally as the patients who have full coverage of insurance. This factor unavoidably might lead them to have a low level of satisfaction (Pasaribu SI, 1996) (16).

A significant trend is matching a low level of educational background of the users with high level of satisfaction all over the world by satisfaction research (Rodney W.Quigly, C.Werblun et al, 1986) (17).

Nervous effects from unclear reasons of health problems, which patients have experienced, were suggested as a reason for patients to start their visitation to hospital and even continue increasing the numbers of visitation in a period of time. These effects are also said to be influenced by gender. It usually means that female patients seem to pay more visitations to hospital than male ones.

Dozens of research have been done in order to find out the significant associations between socio-demographic characteristics and the results of satisfaction researches in health care industry.

In a study by Setter JF, Thomas V. Perenger in 1997, they found out that the trend of satisfaction seems to fall high on male respondents rather than female

respondents. Nonetheless, many other researches regarding patients' opinion about services they have received provided statistical results that female patients usually showed higher levels of satisfaction than male patients (18).

The concern about relationship between age groups and level of satisfaction has also been studied. Some previous researchers have suggested that the older respondents seem to give more scores to the service providers since they have been going through the social services all their lives. They are said to be more understanding and accepting than younger respondents who usually have less social and commercial experiences of the real world and seem to judge things very quickly (Doborah L, 1997) (19).

More and more enthusiastic belief that age groups are significant elements to predict a high level of satisfaction has been repeated over the times. The elderly tends to be more satisfied than youngsters when they are receiving the same services (Wiadnyana, IGP. et.al, 1995) (20).

Many reports have associated a low level of patients' satisfaction with low family income. They say that people's monthly incomes play important roles in purchasing power of goods and services. It also classifies the users' social status with a set of standard quality of services, which is usually highly expected by the user of healthcare services (Channawangse K, Chamreng B, Niyoyaht S, 3rd edition) (21).

Nevertheless, Sumtrapapoot P in his study suggested that the respondents who have lower revenues tended to have a higher level of satisfaction than those who have higher monthly incomes. Normally, the patients who earned less revenue, experienced poor health conditions and it is hard for them to get better health care services with less continuous follow-up through their physicians. Moreover, they are thought to receive less care by physicians than those who have been covered by any insurance schemes. All in all, they don't have choices, but to feel dissatisfied with the services provided (22).

2c. Patients' Experiences with Healthcare Service

One significant dependent variable in the study of patients' satisfaction is the patients' own experiences of the real service performances. This vital factor later also creates ones' hopes of receiving the same or a better quality of services than they get used to. People normally base their judgment of the services on seeing, touching, listening, smelling and tasting than the elements included in a set of quality service. For healthcare service, particularly patients will decide whether they are low or highly satisfied with service through feeling the direct elements of the services such as physical facility, physicians' consultation and treatment skill, nurses' consoling skill, pharmacy service, registering service, and so on.

Patients' opinion about qualify services would be instantly changed if the patient continuously experiences same services with different ways of serving. Self-involvement really matters in determination of ones' way of perceiving quality of

care they received. Ways of judging patients' satisfaction are convincing if the evidence provided is the latest, particular, reachable, and comprehensible.

Proposals of some elements regarding clients' satisfaction have been done. Some are particularly fit with the healthcare industry, but some come with a common sense of good governance. Some key components are as follows: good facility management, well-functioning organizational framework, intelligent and qualified personnel, and service. In addition, some other results have been found after doing some article review from the United States of America such as, expense effects, comforts, particular service providers' capabilities, and the movements of client-server's relationships.

2c.1. Physical Facility

Upreti in 1994 revealed in his research that the majority of his respondents 71% showed a high level of satisfaction while the other 29% had a low level of satisfaction regarding waiting time, cleanliness, and the setting of infrastructure around (23). Furthermore, Pasaribu in 1996 stated that he found the causes of patients' satisfaction, to be a low level of quality of care and less amount drugs provided (24).

2c.2 Physicians' and Nurses' Services

There are some findings that physicians' and nurses' communication skills with patients are the key components to a high level of patients' satisfaction. In a research done in Switzerland, physician-patient interaction has been suggested as the vital factor in predicting patients' satisfaction (Robert JS, Coale Redman RR,

1987) (25). Likewise, way of raising voice, physical feeling, communication and personal behaviors of physicians really contribute in bringing a higher level of users' satisfaction (Afridi MI, 2002) (26). Last but not least, Barry in 2001 mentioned in a study in Ireland that good interaction between physicians and their patients is the milestone to reach clients' satisfaction and continuous improvement of quality of care (Likun P, 1996) (27).

2c.3 Pharmacy, Registration and, Service Principles

Additional services like pharmacy, registration and service flow are particularly mentioned to significantly influence the level of patients' satisfaction. Phyunyathikum clarified in his 1994 research that the quality of pharmacy service including numbers of personnel, rates of prescribing medicines and waiting time to receiving medicines determine the result of patients' satisfaction (28).

2d. Accessibility to Healthcare Service

Accessibility means physician-visiting structure, first-line reception, and availability of different physicians, personal house visitation, and the follow-up visits. Many factors are leading patients to feel frustrated when they are admitted to a hospital usually indicated as an embarrassing aspect, is the absence of clinical staffs in any working shifts, especially at nighttime. Emergency cases can happen anytime without warning; therefore, punctual and critical presence of necessary personnel must be under close monitoring. The trend of moving from public healthcare body to private one is increasing day to day as the result of such neglect. Good communication and capability to understand and share the feeling

of others are now being perceived as the main aspects to patients' satisfaction (Aday LA, 1983) (29).

The activity of removing a person's doubt or fear, capability to understand and share the feeling of others, are among other significant factors to extend the value of physician-patient interaction. However, a straight relationship between them and satisfaction was not assured. Patients tend to give value to their physicians and nurses in term of respects and friendly attitudes rather than technical matters. Removing a person's doubt or fear and capability to understand and share the feeling of others reflect the value of health profession and are well recognized in treating patients with cancer.

Demand for health care service is always there. Therefore, healthcare service providers should be ready to serve anytime. Ease of accessing to health care facilities has become a potential goal for policy makers throughout the world. Nonetheless, attempt in conceptualize and assess the accessibility still vary based on people's perception (Cockerham, 1982) (30).

Significant finds of Ross CK, Stert CA, and Sincore JM in 1993 provide evidences that most of the respondents decided to prioritize clinical quality of care followed by physicians/nurses' communication skills, and ended up by the accessibility to healthcare facilities as their preferences. Likewise, the respondents who prioritized the accessibility were from older-age group with a low educational background and low income (31).

2e. Components of Patients' Satisfaction

The main elements of satisfaction proposed by the researcher in the Khmer-Soviet Friendship Autonomous Hospital comprise of *convenience, courtesy, and quality of care*.

2e.1. Convenience

Convenience is defined as the comfort in approaching a set of standard quality of care such as chances of seeing wanted physicians, adequate waiting time, ease of meeting the required expectation and qualified services.

Users usually will come back to receive services from where they used to be satisfied. Researchers can use this characteristic to differentiate the quality of services provided. Furthermore, one main factor that should be considered for predicting the level of convenience is waiting time (Kunarantrapruek S, Boonpadoong, D, 1989) (32).

In a study of patients' satisfaction in the Outpatient Department of Chulalongkorn Hospital by Sriratanabul and Pimpakovit, a significant factor led the majority of the respondents to feel uncomfortable with the services provided was long waiting time. 83% of the respondents showed positive feeling towards services provided in the department while disappointed with very long waiting time to receiving services (33).

Again, Likun mentioned waiting time services in a study of "Ways and Means to Reduce the Waiting Time and Improve Patient Satisfaction" in 1996. He revealed that there was a significant relationship between waiting time to receive service,

and patients' satisfaction level. The majority of his respondents, 61% complained that waiting was not good for them (34).

Likewise, in a research in Ramathibodi Hospital, long waiting time was indicated as the significant factor for a low level of satisfaction. There is a report that the respondents who were highly educated showed a low level of satisfaction in the Registration section while similar effect also happened in the Pharmacy section (Tessler R, Mechanic D, Dimond M, 1976) (35).

2e.2. Quality of Care

Nowadays, hot issues like qualified health care service and patients' satisfaction are being crucially discussed throughout the world. Many different institutions have adopted a means to reflect on their service providing. Hi-tech, humanistic approach, educational backgrounds, communication, and means of transferring qualified service quality to the patients constitute the vitality of patients' satisfaction (Al-Bashir M, Armstrong D, 1991) (36).

Efficacy, effectiveness, efficiency, optimality, acceptability, legitimacy, and equity are the seven main factors suggested by Donabedian. Significant changes in health care service evaluating and enhancement are opening a new health care portrait for the service user. Formally accepted principles and apparatus to assessing and improving of health care service users are dated to the American College of Surgeon's 1971, Hospital Standardization Program when it evolved into the Joint Commission on Accreditation of Healthcare Organization Accreditation Process (Williams SJ, Calnan M, 1991) (37).

A new trend in combining quality assurance from other commercial industries with health care delivery strategies is the main indicator for quality of care. Generally accepted and hi-tech methods of health care services have led the industry to the contemporary way of qualified healthcare management (Piyathida Sumtraprapoot, 1997) (38).

Quality of hospital care was created by The American College of Surgeons as a fundamental formula in 1933 and gradually this principle in 1917 became its hospital standardization program. Furthermore, The Canadian Hospital Association with American College of Physicians, The American Hospital Association, and American Medical Association has established a Joint Commission on Accreditation of Hospital (JACHO) that originated the criteria-based audit method.

An article regarding Resource Dependency was written by P. Garpenby from Sweden in 1999. It mainly indicated the relationship between the aspect of national-level clinical profession and patient satisfaction level. It also suggested that service quality advancement should be the main focus in order not to lose the public expectation. He also mentioned that the health care framework should be regarded as in other industries by characterizing its quality profession. An accepted set of qualified standards of care such as accessibility, availability, personnel's qualifications, and mutual understanding are not only the significant factors considered by the management level, but also by the users of the healthcare services who are normally called clients (39).

2e.3. Courtesy

The last mentioned element of patients' satisfaction is courtesy. Courtesy is usually defined by respect, attentiveness, and care shown by the clinical personnel.

2f. Assessment of Patient Satisfaction in Healthcare Service

Assessment of users' satisfaction in healthcare services is a means of evaluating the healthcare service performances by clinical personnel. In addition, it also indicates the success and failure of service implementation and development in a way of perceived services.

Patient satisfaction is a very complicated principle, which is usually affected by some significant factors such as socio-demographic factors, personal characters, physical and mental aspects, cause and effect of the services, and patients' expectations (Barry CA, et al, 2001) (40).

In spite of these complexes, ways of assessing patients' satisfaction have been proposed as:

1. An accurate merging of consumers' opinions about healthcare service for the sake of quality improvement and assurance.
2. Marketing strategies regarding consumers' satisfaction that have been introduced in the health care industry.

3. Increasing the level of complying with treatment, originated from the vital study of patients' behaviors toward services.

By quality improvement, assessment of the patients' satisfaction becomes a significant educational process to find the developments that are inexpensive to make, have better service performance and sets of qualified standards.

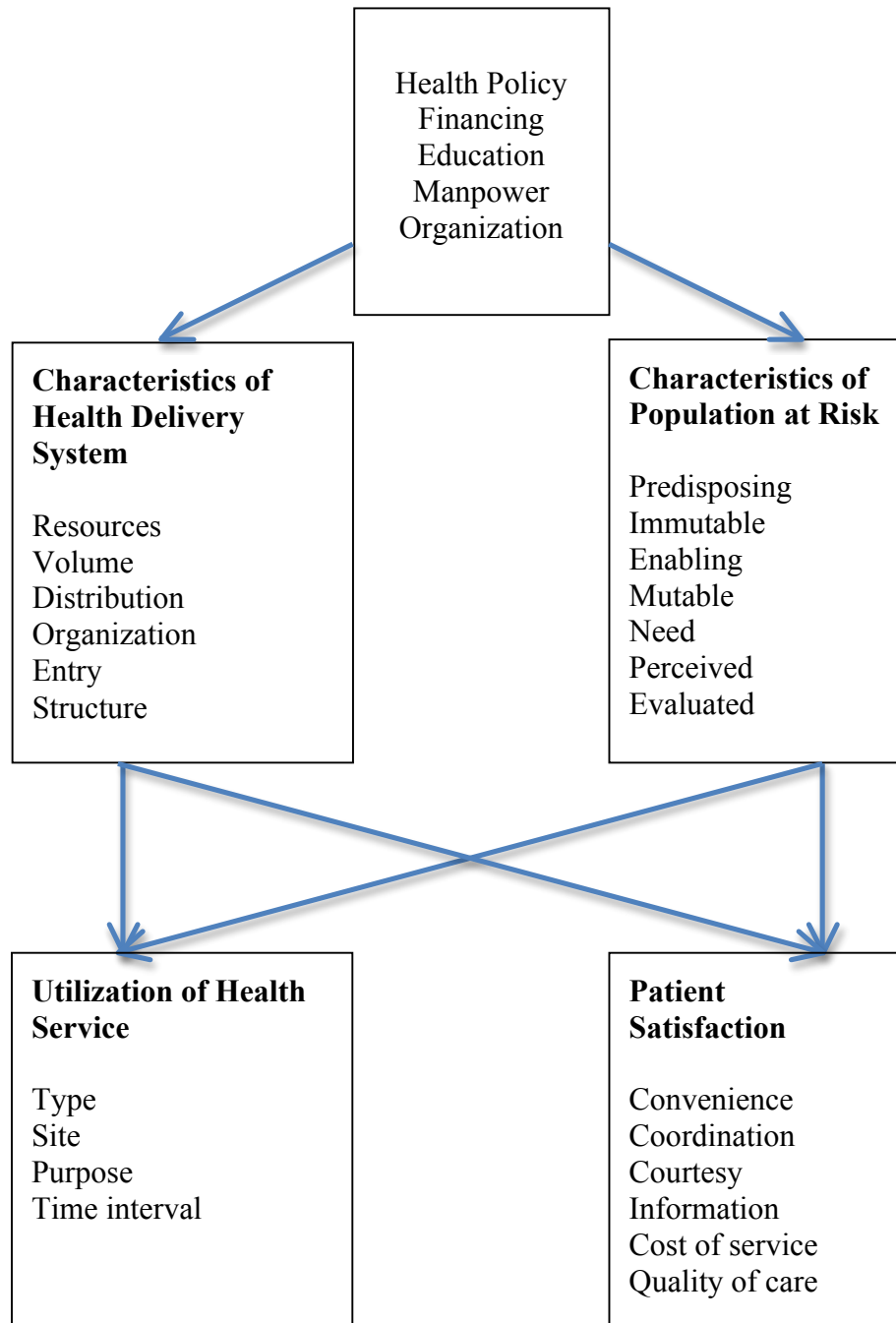
2g. Theoretical Model for Constructing Conceptual Framework

In the study of people's satisfaction with health care delivery in the United States of America from 1970 to 1975, Aday and Anderson pointed out six principles focusing on patient satisfaction, and three of them are presented below:

1. Satisfaction in term of convenience:
 - Waiting time to obtain service
 - Available care when required
 - Base of receiving care
 2. Satisfaction in term of courtesy:
 - Friendly and polite attitude of the service providers
 - Provision of what is necessary for the welfare of a patient.
 3. Satisfaction in term of quality of care:
 - The patients' perception of the service performance
- (Aday LA, Anderson R. 1978) (41).

In 1974, they also mentioned that patient satisfaction is the attitude of people who were involved in the health care system that is different from the elements of the predisposing variables, as it measures the people's satisfaction against the amount of care and its quality. Furthermore, Aday & Anderson also suggested that evaluation of the patient satisfaction might be best performed in the form of relevant medical service seeking behavior, which is clear, up-to-date, and classifiable, in order to elicit the subjective perception about access which points out the satisfaction with the convenience of service, its correspondence and cost, courtesy of the servers, information the patients obtained about the treatment, and the patients' opinion based on the quality of care. Patients' satisfaction is the indicator of the outcome in a theoretical model of access, which indicated the use of the services (Aday LA, Anderson R.; 1983) (42)

Figure 4: Aday & Anderson's Health System Model, the development Indices of Access to Medical Care. (Avis M, Bond M, 1995) (43)



CHAPTER 3: METHODOLOGY

The Khmer-Soviet Friendship Autonomous hospital is the biggest national and one of several autonomous hospitals based in the capital city of Cambodia, Phnom Penh. The main objectives of this research was to assess the level of patient satisfaction with Medicine Outpatient Department's services regarding physician-patient interaction; nurse-patient interaction; and patients' satisfaction in term of convenience, courtesy, and quality of care of Khmer-Soviet Friendship Autonomous hospital in Phnom Penh city, Cambodia. By receiving permission from the director of the hospital, the research process was started from in-office data collection, while intensive interview training was given to two experienced interview assistants on how to deal with the current situation

3a. Study Design

A cross-sectional study design was employed on the designated date in the Medicine Outpatient Department of the Khmer-Soviet Friendship Autonomous hospital, Phnom Penh city, the Kingdom of Cambodia. This design is particularly aimed to find out the levels of patients' satisfaction and its significant relationships with socio-demographic characteristics of the studied samples. Meanwhile, in order to achieve the set goals, a pre-interviewed questionnaire adopted from a previous researcher has been comprehensively tested, justified, and applied, accordingly.

3b. Study Population

The Medicine Outpatient Department of the Khmer-Soviet Friendship Autonomous Hospital in the capital city, Phnom Penh, was selected as the study site. This hospital is one of several new autonomous hospitals in the Kingdom of Cambodia at the time it was chosen. Targeted samples were drawn from the patients who had visited the Medicine Outpatient Department of the Khmer-Soviet Friendship Hospital at the time of data collection.

3b.1. Inclusion Criteria

1. The outpatients of the Medicine Department whose age ranges are from 18 years to 65 years old.
2. The patients who were willing to give consent.
3. The patients who have at least visited Medicine Outpatient Department for times and pharmacy for 1 time.
4. The patients who were able to listen and understand Khmer language.

3b.2. Exclusion Criteria

1. Patients who had mental problems.
2. Patients who needed emergency attention.
3. Patients who had not finished the interview process.

3c. Sample Size and Sampling Technique

The following statistical formula has been used to measure the proper sample size of the studied population:

$$\begin{aligned}
n &= \frac{Z^2 p(1-p)}{d^2 + Z^2 p(1-p)} \\
&= \frac{(1.96)^2 [0.635(1-0.635)]}{(0.068)^2} \\
&= \frac{(3.8416) (0.231775)}{0.004624} = \frac{0.89038684}{0.004624} \\
&= 192.56 \approx 193 \text{ patients}
\end{aligned}$$

Formula components:

- n: number of sample size.
- Z: desired 95% confidence, $Z = 1.96$.
- P: percentage of patients' satisfaction level in OPD (2).
- d: degree of accuracy/allowable error (0.068).

By expecting 63.5 % of overall satisfaction from interviewed patients at 95 % confidence level, the result of formula computation was 193 patients. In addition, for supplementing any unpredictable error samples, 200 patients were interviewed instead of 193 patients as stated above.

In order to obtain statistically significant representatives of the population who have been visiting the Medicine Outpatient Department, a systematic random sampling was used to draw the interval sampling number of patients that should be skipped for each sample selection (4).

The value for sampling interval K^{th} was calculated by using the following formula:

$$\begin{aligned}
K &= \frac{a}{n} d \\
&= \frac{30}{200} 25 \\
&= 3.75 \approx 4 \text{ patients}
\end{aligned}$$

Where:

- K: the sampling interval.
- d: number of data collection days.
- a: the estimated average population number per month.
- n: the sample size.

Therefore, the researcher selected every fourth patient from the samples available at the time of data collection to be interviewed. Moreover, samples were collected in all shifts of working hours to ensure the proper distribution of patients who represented the total population.

3d. Research Instruments

The research instrument used by the researcher in collecting data was a pre-structured questionnaire adopted from a previous patient satisfaction research implemented by Amin Khan Mandokhail in 2007 (44).

There were 60 fill-in-blank and closed-ended questions and 1 descriptive question, which were divided into 3 key parts:

1. Socio-demographic characteristics of the patients,
2. Experiences of patients about medicine outpatient department

- a. Physical facilities,
 - b. Physician-patient interaction,
 - c. Nurse-patient interaction,
 - d. Experiences with pharmacy,
 - e. ,and experiences with Registration.
3. Accessibility to Medicine Outpatient Department
- a. Waiting time,
 - b. Working schedule,
 - c. and Service procedure.
4. Patient Satisfaction towards Outpatient Department
- a. Accessibility,
 - b. Courtesy,
 - c. and quality of care, and last but not least
5. Suggestion and comment for the improvement of Medicine Outpatient Department service.

This final research instrument was a pre-tested research questionnaire conducted by the researcher in an Outpatient Department socio-demographically and culturally similar to the Medicine Outpatient Department. 30 patients were systematically-randomly selected as the samples of the pre-test. The result from the test was run on SPSS 18 to find out the reliability coefficients using Cronbach's Coefficient Alpha analysis.

Table 1: Reliability Coefficient

Variable	Cronbach's Coefficient Alpha
Experiences with Outpatient Department	0.792
Accessibility towards Outpatient Department	0.631
Patients' Satisfactions towards Medicine OPD	0.800

This internal consistency measurement tool produces a very effective result for the level of correlation of each individual item of a scale with the sum of the remaining items. Streiner and Norman offer this advice on Cronbach's Alpha.

“It is nearly impossible these days to see a scale development paper that has not used alpha, and the implication is usually made that the higher the coefficient, the better. However, there are problems in uncritically accepting high values of alpha (or KR-20), and especially in interpreting them as reflecting simply internal consistency. The first problem is that alpha is dependent not only on the magnitude of the correlations among items, but also on the number of items in the scale. A scale can be made to look more 'homogenous' simply by doubling the number of items, even though the average correlation remains the same. This leads directly to the second problem. If we have two scales which each measure a distinct construct, and combine them to form one long scale, alpha would probably be high, although the merged scale is obviously tapping two different attributes. Third, if alpha is too high, then it may suggest a high level of item redundancy; that is, a number of items asking the same question in slightly different ways.” (Streiner DL, Norman GR, 1989, pp. 64-65) (45)

Based on the result of the pre-test, the questionnaire was reviewed and modified as needed.

The data collection process was done as face-to-face interviews (face-to-face interview to refer to personal interview not in-depth interview as it has always been referred).

The Experiences and Accessibility to Medicine Outpatient Department were classified *into good and poor, while high and low were used* for Patients' Satisfaction towards Medicine Outpatient Department Services.

Best criteria were used as the method of items classifications. The value of best criteria was obtained from deduction of the minimum scale from the maximum scale in each individual statement.

In this study, the researcher employed two-point Likert's Scale in each component of experiences, accessibility services, and the patients' satisfaction towards Medicine Outpatient Department services. As a result, the value of best criteria in the current study was 0.5 (50%).

In table 2 shows the ranges of scores for labeling the level of experiences, accessibility and patient satisfaction.

- In experience and accessibility sections, the patients who secured scores in the first ranges were labeled as having poor experience or accessibility. Whereas the patients who secured scores in the second ranges were

labeled as having good experience or accessibility.

- In patient satisfaction section, the patients who secured scores in the first ranges were labeled as having low satisfaction. Whereas the patients who secured scores in the second ranges were labeled as having high satisfaction.

Table 2: Scoring table using best criteria

Variables	Poor/Low (First Range)	Good/High (Second Range)
<u>Experience:</u>		
Physical facilities	5-7	8-10
Physicians' services	7-10	11-14
Nurses' services	4-6	7-8
Pharmacy's services	4-6	7-8
Registration's services	3-4	5-6
<u>Accessibility:</u>		
Waiting time	3-4	5-6
Working schedule	2	3-4
Service procedure	2	3-4
<u>Patient satisfaction:</u>		
Convenience	7-10	11-14
Courtesy	6-9	10-12
Quality of care	9-13	14-18

The researcher adopted the method of scoring from a research article of patient satisfaction towards outpatient department by Amin Khan Mandokhail in 2007. The scores to set the borderline between poor/low and good/high were obtained from multiplying the total scores of a component by the value of best criteria (44).

Part 1. Socio-Demographic Factors of the Patient Visiting the Medicine Outpatient Department of Khmer-Soviet Friendship Autonomous Hospital

This first part comprises patients' general information regarding gender, age groups, marital status, educational degrees, occupations, monthly incomes, number of visits to the hospital, and last but not least means of payments. Totally, there were nine multiple-choice and fill-in-blank questions.

Age Groups: Five different age groups were constructed. Within each group, there is a 10-year interval. The researcher decided to start from the age of 18 years to make sure that the samples from this age are capable enough to understand and answer the questions rightly and independently.

1 = 18-30

2 = 31-40

3 = 41-50

4 = 51-60

5 = > 60

Gender: This part was divided into two groups—male and female as showed below:

1 = Male

2 = Female

Marital Status: The research have divided marital status into three different characteristics as below:

1 = Single

2 = Married

3 = Separated/Widowed

Education: Five different educational degrees were chosen as below:

1 = Illiterate

2 = Primary school

3 = Junior high school

4 = Senior high school

5 = Post-graduates

Occupations: The researcher has divided patients' occupation into eight different groups including:

1 = Student

5 = Farmer

2 = Unemployed

6 = Worker

3 = Self-employment

7 = Private Company

4 = Government Staff

8 = NGO

Monthly Incomes: It was divided into four different income groups as follow:

1 = \leq 200,000 Riel

2 = 200,001-400,000 Riel

3 = 400,001-600,000 Riel

4 = $>$ 600,000 Riel

Note: The exchange rate was 4,000 R = 1 USD during data collection time.

Number of Visits: Samples were drawn from only the patients who had visited the Medicine Outpatient Department at least two times and Pharmacy at least one time by the time of data collection. This part was categorized into two groups as below:

1 = 2-4 times

2 = $>$ 4 times

Means of Payment: The researcher divided patients into 3 groups in this part.

1 = Personal Finance

2 = NGO (insurance schemes)

3 = Equity fund (Budget given by the government to the hospital)

Part 2. Experiences of Patients about Medicine Outpatient Department

Experiences of patients who attended the services were divided into 3 sub-main parts including physician-patient interaction, nurse-patient interaction, experiences with pharmacy, and registration section. There were totally 17 multiple-choice questions characterized by two-point Likert Scales. The scales were labeled as agreed, and disagreed, accordingly. Moreover, the levels of

experiences were differentiated by best criteria (50%) and categorized as good and poor according to the scores obtained.

Part 3. Accessibility to Medicine Outpatient Department

Accessibility to Medicine Outpatient Department comprises waiting times for receiving services, working hours, physical facility, and service processes. There are 12 multiple-choice questions characterized by two-point Likert scales. This time, the scales were also labeled as agree and disagree, respectively. Good and poor levels of experiences were also assigned based on the scores obtained from data collection.

Part 4. Patients' Satisfaction with Medicine Outpatient Department

Patient satisfaction statements were divided into 3 sub-main parts including convenience, courtesy, and quality of care by clinical staff. These parts totally comprise 22 multiple-choice questions. Each question was characterized by two-point Likert scales and labeled as satisfactory and unsatisfactory. In order to find the characteristics of satisfactory levels, best criteria (50%) were used to differentiate between high and low satisfaction levels.

Part 5. Suggestion or Comments for Improvements of Medicine Outpatient Department

This last part is the only open-ended question described through patients' comments or suggestions for the improvement of Medicine Outpatient Department operation in Khmer-Soviet Friendship Autonomous hospital.

3e. Data Collection Procedure

First, the researcher sent an official letter endorsed by the researcher's supervisor to the director of the Khmer-Soviet Friendship hospital to explain about the objectives and significance of the field research and to ask for the permission to do the data collection in the Medicine Outpatient Department of the Khmer-Soviet Friendship Autonomous hospital.

Then the researcher went to visit the director of the Khmer-Soviet Friendship Autonomous Hospital. The researcher explained the objectives, backgrounds, significances, and research plan to the director in detail. The director read the research proposal and plan written by the researcher. Then he told the researcher to wait for some time since he had to discuss the matter in the board meeting. One day after that, a staff from administration office called the researcher to let him know that his research proposal was approved and asked him to confirm the date he would like to start his research process.

The day after that the researcher went to visit the director again and thanked for his kind permission. On the same day the director assigned an administration staff to accompany the researcher through the three main offices such as administration office, technique office, and accounting office, and the researcher ended up in the Department of Medicine Outpatient. The chief of the Department warmly welcomed him. He then had a fairly long discussion about the purpose of his field research with him. In addition, the department chief also described the past and current situation of the department to the researcher. He also appreciated the

researcher's activity in his department. After the discussion, the researcher asked for the permission to independently observe the actual performances of the clinical staff without disrupting them. In the observation, the researcher realized that the department has just been renovated. The ward was more spacious, neater, and tidier than the last time. Furthermore, essential medical supplies and equipment were sufficiently supplied. And the consultation rooms were also increased.

According to the plan, a day after that an administration staff responsible for keeping the office files was assigned to work with the researcher in the administration office. They were working all day. Some necessary documents for researcher's introduction part as well as other parts were collected such as the profile of the hospital, the organizational structure, the policy structure, the internal regulation, personnel assigning structure, the number of departments, the number of beds, the working shift list, the incentive policy, and so on. The day after that day, the researcher went to the Technique Office and worked with a staff there. The researcher collected some patient-related documents such as Medicine Out-Patient records, the documents regarding government agencies, non-government organizations, private companies who are partners of the hospital, working for the welfare of the patients, the complaints from the patients regarding Medicine Outpatient services, and so on.

After reading those secondary data, the researcher did some amendments to his questionnaires, which he had prepared before going to the field. Next, he

contacted two trusted persons who are well known for their field interview skills from their previous interview experiences. He spent two days working with them on the pre-structure questionnaire and tried to find an effective way to direct their interview timely and efficiently. Finally, they came up with an idea that they should do a pilot study for a week before they started their actual research.

The data was collected from December 19th, 2011 till January 5th, 2012. All respondents were selected from the patients who were 18 years old and above and visited the Medicine Outpatient Department at the data collection period.

The process of interview started from the earliest time the patients arrived in the Medicine Outpatient Department. A nurse was responsible for recording patients' general information. This process would then ease the researcher in selecting a sample with a four-patient interval as he had already done the calculation. Just before finishing the consultation, patients were informed about the research process and asked for consent.

In three pilot study days, the researcher was able to collect 30 samples. His colleagues and he went back to their discussion on the data they had collected so far. They were discussing on the strength and weakness of their research circle as well as the burdens they had faced during the interview process. Finally, they decided to make a small change to their research circle to fit the real field situation. In addition, they also decreased the number of their questions to fit the duration they had in order to get the most out of their operation. They spent another 20 days in actual research. They collected data from all working shifts

such as morning, afternoon and evening. Moreover, they also collected data on weekend days in order to have all kinds of data samples. In the actual research process, they were facing some problems regarding patient consents, context misunderstanding, and waiting for patients to come back from their other treatment processes. Other than that, they have successfully collected the necessary number of samples for their research.

As the result from my research, some necessary secondary documents such as organizational structure, policy structure, personnel documents, performance and evaluation reports were collected during the inside-office research. Importantly, fresh field data were collected via a pilot study. Last but not least, main data from the targeting samples were also successfully collected.

3f. Data Analysis Procedure

First, data collected was put into Microsoft Office Excel 2011. Sorting and coding processes were performed. After that, the process of exporting the coded data from excel to SPSS was employed.

In SPSS, the following tests were used to obtained the desirable results:

1. Descriptive statistics: frequencies, mean, median, mode, standard deviation, chi-squared test, and fisher's exact test.
2. Correlation analyses.
3. Computing variable and recoding into different variables.

CHAPTER 4: RESULTS

This study was aimed to find the level of patient satisfaction in Medicine Outpatient Department based on best criteria. In addition, the researcher tried to figure out the possible relationship between the independent and dependent variables.

Tables and description presented in each section below are the results of data collection and analysis processes:

Section 1: Socio-demographic characteristics of patients

Section 2: Experiences towards Medicine Outpatient Department

Section 3: Accessibility towards Medicine Outpatient Department

Section 4: Patients' satisfaction towards Medicine Outpatient Department

Section 5: The relationship between independent & dependent variables

Section 1: Socio-Demographic Characteristics of the Patients

Table 2 shows the socio-demographic characteristics of the samples collected at the time of data collection. The information includes age groups, gender, marital status, education background, occupations, monthly income, and the number of visits to hospital. The respondents' ages were divided into five categories.

Table 3: Number and Percentage of Socio-Demographic Characteristics

Socio-Demographic Characteristics	Frequency	
	Number	Percentage
<u>Gender:</u>		
Female	110	55%
Male	90	45%
<u>Age (years):</u>		
18-30	77	38.5%
31-40	29	14.5%
41-50	35	17.5%
51-60	35	17.5%
Above 60	24	12%
<u>Marital Status:</u>		
Single	62	31%
Married	127	63.5%
Widowed/Separated	11	5.5%
<u>Educations:</u>		
Illiterate	26	13%
Primary	50	25%
Secondary	72	36%
High School/Diploma	18	9%
Post-graduates	34	17%
<u>Occupations:</u>		
Student	17	8.5%
Unemployed	34	17%
Self-employed	24	12%
Government Staff	23	11.5%
Farmer	54	27%
Worker	25	12.5%
Private Company staff	20	10%
NGO	03	1.5%
<u>Family Income:</u>		
Less than or equal 200,000 Riel	80	40%
200,001-400,000 Riel	68	34%
400,001-600,000 Riel	31	15.5%
Above 600,000 Riel	2	10.5%
<u>Number of Visits (time):</u>		
2-4	169	84.5%
Above 4	31	15.5%
<u>Payment Methods:</u>		
Personal Finance	136	68%
NGO	42	21%
Equity Fund	22	11%

Table 3 shows the socio-demographic characteristics of the samples collected at the time of data collection. The information included age groups, gender, marital status, education background, occupations, monthly income, and the number of visits to hospital. The respondents' ages were divided into five categories.

Gender:

More than one half of the total samples of 200 patients, 55% were females. The rest, 45% were males.

Age Groups:

The first group, from 18 years old to 30 years old, has the highest percentage of 38.50%; while the third group, from 41 years old to 50 years old, has 17.5% and the fourth group, from 51 years old to 60 years old, has the same percentage of 17.5%. The second group from 31 years old to 40 years old; has 14.5% and the last group, from 60 years old and above has 12%.

Marital Status:

The highest proportion of the total sample tends to be the respondents who were married, accounting for 63.5%. Meanwhile, 31% of the respondents were single and 5.5% were separated or widows.

Education Background:

36% of the respondents had finished secondary school followed by 25% of the respondents who had ended up in primary school. Third in row, 17% of the respondents were patients with post-graduate degrees; while 13% and 9% of the respondents were illiterate, and finished high school, respectively.

Occupations:

In this section, the respondents were divided into eight different groups such as student, unemployed, self-employed, government staff, farmer, worker, private staff, and NGO staff. The highest proportions, 27% were farmers. 17% of the respondents were unemployed, in the second place; while 12.5%, 12%, and 10% were workers, self-employed, and private company staff respectively. The rest, 8.5% and 1.5% were students and NGOs' staff, respectively.

Monthly Incomes:

Regarding monthly incomes, the respondents were divided into four different income groups. The group who won the highest proportion, 40%, were able to earn less than or equal to 200,000 Riel per month. A little more than one-third, 34%, of the respondents were able to earn from 200,001 to 400,000 Riels. Meanwhile, 15.5% and 10.5% of the respondents earned from 400,001 to 600,000 Riel and above 600,000 Riel respectively. The exchange rate from KHR to USD was 4,000 Riel equal to 1USD at the time of data collection.

Number of Visits:

In this section, the majority, 84.5% of the total respondents had visited the Medicine Outpatient Department from 2 to 4 times and the rest, 15.5% had visited the department more than 4 times.

Payment Methods:

It seems that more than half of the respondents, 68% depended on their own personal finance, while another 21% and 11% were using some non-government organization insurance programs and the government's equity fund, respectively.

Section 2: Experiences with Health Services:

Table 4: Number and Percentages of Experiences with Health Care Service

Experience with Health Care Service	Frequency				Comment
	Agree		Disagree		
	#	%	#	%	
<u>Physical Facilities:</u>					
- OPD’s location is easy to find.	199	99.5	1	0.5	Good
- OPD is clean and tidy.	193	96.5	7	3.5	Good
- There are enough waiting chairs.	177	88.5	23	11.5	Good
- There are clean toilets in the waiting area.	70	35	130	65	Poor
- The room is spacious, bright and airy.	197	98.5	3	1.5	Good
<u>Physicians’ Services:</u>					
- Physicians introduced themselves to patients.	49	24.5	151	75.5	Poor
- Physicians told you the treatment procedure.	132	66	68	34	Good
- Physicians critically asked your health problem.	176	88	24	12	Good
- Physicians fully understood your complaint.	191	95.5	9	4.5	Good
- You had chance to discuss your health problems.	155	77.5	45	22.5	Good
- Physicians spent enough time in each consultation.	89	44.5	111	55.5	Poor
- There are adequate numbers of physicians.	169	84.5	31	15.5	Good
<u>Nurses’ Services:</u>					
- Nurses welcomed you with respect.	95	47.5	105	52.5	Poor
- Nurses listened and answered to your complaints.	144	72	56	28	Good
- Nurses prepared you for the consultation process.	189	189	11	5.5	Good
- There are adequate numbers of nurses.	174	174	26	13	Good

Table 4: Number and Percentages of Experiences with Health Care Service

Experience with Health Care Service	Frequency				Comment
	Agree		Disagree		
	#	%	#	%	
<u>Pharmacy Service:</u>					
- Pharmacy staff showed respect towards you.	135	67.5	65	32.5	Good
- Pharmacy staff explained how to use medicines.	157	78.5	43	21.5	Good
- There were adequate amount of medicines.	84	42	116	58	Poor
- There were adequate staff in pharmacy.	194	97	6	3	Good
<u>Registration:</u>					
- Registration staff warmly welcomed you.	136	68	64	32	Good
- Registration staff politely told you where to go.	55	27.5	145	72.5	Poor
- There were adequate staff in the registration.	182	91	18	9	Good

In table 4, a descriptive statistics computation was done to obtain the frequency of the patients' responses to the questions in experience section as displayed in number and percentage. Experience score was divided into two groups using best criteria values in table 2 (Scoring table). Those securing scores in the first range were labeled as having good experience. Those securing scores in the second were labeled as having poor experience.

In physical facilities, the majority of respondents, 99.5% mentioned that the location of Medicine Outpatient Department was easy to find; 98.5% of the respondents agreed that the consultation rooms were spacious enough, equipped with good lighting system and well-functional ventilation appliances; 96.5% of

the respondents stated that the department was clean and tidy; and 88.5% of the respondents also agreed that there were enough waiting chairs in the waiting area. However, the rate dramatically dropped down to 35% when the patients were asked about experiences regarding clean toilets in the waiting area.

Regarding physicians' services, 24.5% of the respondents agreed that physicians had introduced themselves to the patients before giving consultation, while 66% of the respondents mentioned that physicians had informed them of what they were going to do before beginning treatment processes. Nonetheless, the majority of the respondents, accounting for 88% and 95.5%, said that physicians had critically asked and listened to the patients' complaints, respectively. Moreover, 84.5% of the respondents agreed that there were adequate numbers of physicians in each consultation room; while 77.5% and 74.5% of the patients mentioned that they had chances to discuss their health problems, and physicians had spent adequate times in consultation process.

Regarding nurses' services, 47.5% of the respondents agreed that nurses had welcomed them with respect. However, 72% of the respondents mentioned that nurses had listened and answered to patients' complaints. Moreover, the majority of the respondents, accounting for 94% and 87%, said that nurses had carefully prepared them for consultation process and there were adequate numbers of nurses in each consultation room.

Less than one-half, accounting for 42% of the respondents, agreed that there were adequate amount of free medicines. Nonetheless, the majority of respondents,

accounting for 97%, agreed that there were adequate numbers of staff in the pharmacy section; while 78.5% and 67.5% of the respondents agreed that pharmacy staff had carefully prepared and explained how to use medicines and showed respectful attention towards the patients. On the basis of the result from pharmacy service, it is certain that the patients had a good experience with all items about pharmacy except the amount of drugs from pharmacy.

In registration section, the majority of respondents, accounting for 91%, agreed that there were adequate numbers of registration staff and 68% of the respondents mentioned that registration staff had shown respect and warm welcome towards them. However, when patients were asked about registration staffs' way of asking information, 27.5% of the respondents agreed that the registration staff had politely asked patients' personal information and told them where to go next.

Table 5: Respondents' Opinions by Components of Experiences in OPD

Level of Experiences	Frequency			
	Good		Poor	
	#	%	#	%
Physical facilities	197	98.5	3	1.5
Physicians' services	168	84	32	16
Nurses' services	192	96	8	8
Pharmacy's services	163	81.5	37	18.5
Registration's services	128	64	72	36

In table 5, total experience score of each component was computed to determine the respondents' perception level towards healthcare services they experienced.

Experience score was divided into two groups using best criteria values in table 2 (Scoring table). Those securing scores in the first range were labeled as having good experience. Those securing scores in the second were labeled as having poor experience.

Table 4 shows the respondents' opinions by each component of experiences in Medicine Outpatient Department. First, for physical facilities, the majority of the respondents, accounting for 98.5%, showed good experience. Second, it was noted that more than three-quarter, 84%, of the respondents showed good experience regarding doctors' service. Third, 96% of the patients showed good experiences regarding nurse services. Fourth, more than three-quarter of the respondents, 81.5%, showed good experiences of pharmacy service. Finally, more than three-quarter of the respondents, 64% of them, also showed good experiences with registration services.

Table 6: Respondents' Opinions by Levels of Total Experiences in OPD

Level of Experiences	Frequency	
	Number	Percentage
Good	193	98.5%
Poor	7	3.5%

Table 6 shows the respondents' opinions by the level of total experience in Medicine Outpatient Department. Total experience score was divided into two groups using best criteria values in table 2 (Scoring table). Those securing score in the first range were labeled as having good experience. Those securing score in the second were labeled as having poor experience. It was noted that 98.5% of the

respondents had good experiences while 3.5% showed poor experiences.

In overall, the majority of the patients had good experience with physical facilities, nurses' services, physicians' services, pharmacy's services, and registration's services, respectively. However, it was noticed that there was some problem regarding time physicians spent consulting, nurses' politeness, amount of provided drugs, and registration services. More than one-half of the respondents had poor experiences with these statements. The worst case was the majority of the respondents accounting for 72.5% had poor experience with registration staff's manner.

Section 3: Access to Health Care Services:

Table 7: Number and Percentages of Accessibility to Health Care Service

Access to Health Care Service	Frequency				Comment
	Agree		Disagree		
	#	%	#	%	
<u>Waiting Time:</u>					
- Waiting time in registration process is appropriate.	99	49.5	101	50.5	Poor
- Waiting time for consultation is appropriate.	178	89	22	11	Good
- Waiting time for medicines is appropriate.	188	94	12	12	Good
<u>Working Schedule:</u>					
- Work schedules of O.P.D. are appropriate for you.	198	99	2	1	Good
- Clinical staff is present in all shifts.	82	41	118	59	Poor
<u>Service Procedure:</u>					
- Registration process was done timely.	85	42.5	115	57.5	Poor
- Good coordination was established between Registration, Medicine OPD, and Pharmacy section.	191	95.5	9	4.5	Good

Once again, a descriptive statistics computation was done to obtain the frequency of the patients' responses to the questions in accessibility section as displayed in number and percentage. Accessibility score was divided into two groups using best criteria values in table 2 (Scoring table). Those securing scores in the first range were labeled as having good access. Those securing scores in the second were labeled as having poor access.

In waiting time part, it was noticed that the majority of the respondents, 94% and 89%, respectively agreed that waiting times for receiving consultation and medicines were appropriate. However, less than one-half of the respondents showed positive signs when they were asked about waiting time for receiving receipts from Registration section.

In working schedule section, with the question on the availability of required clinical staff during working shifts of the Medicine Outpatient Department, less than one-half of the respondents, 41% of them, agreed that the required clinical staff were available in all working shifts; while the majority, 99%, agreed that the working schedule of Medicine Outpatient Department were adequate for them.

Regarding service procedure of the Registration section, less than one-half, 42.5%, of the respondents mentioned that the service process of the registration was timely done. However, when the respondents were asked about the coordinating characteristics between Registration and Medicine Outpatient Department, the majority of the respondents, 95.5%, agreed that there was good coordination between the two departments. Therefore, based on the results

described above, it seems that the majority of the respondents had good access with waiting time for receiving consultation from Medicine Outpatient Department and waiting time for receiving medicines from Pharmacy section. In addition, most of the respondents also mentioned that they had good access with working schedule of the Medicine Outpatient Department, while there were also positive signs of accessibility with good coordination between Registration section, Medicine Outpatient Department, and Pharmacy section. However, less than one-half of the respondents claimed good access regarding waiting time for receiving the receipt from registration, presence of clinical staff in all working shifts, and registration process.

Table 8: Respondents' Opinions by Components of Accessibility to OPD

Level of Experiences	Frequency			
	Good		Poor	
	#	%	#	%
Waiting time	87	93.5	13	6.5
Working schedule	199	99.5	1	0.5
Service procedure	191	95.5	9	4.5

In table 8, total accessibility score of each component was computed to determine the respondents' perception level towards healthcare services. Accessibility score was divided into two groups using best criteria values in table 2 (Scoring table). Those securing scores in the first range were labeled as having good access. Those securing scores in the second range were labeled as having poor access.

In waiting time section, 93.5% of the respondents accepted good access of the services. Moreover, it was noticed that 99.5% of the respondents, had good access regarding working schedule of the Medicine Outpatient Department, while 95.5% of the respondents had good access regarding service process of the three sections.

Table 9: Respondents' Opinions by Levels of Total Accessibility

Level of Accessibility	Frequency	
	Number	Percentage
Good	189	94.5%
Poor	11	5.5%

Table 9 shows the respondents' opinions by the level of total accessibility to Medicine Outpatient Department. Total accessibility score was divided into two groups using best criteria values in table 2 (Scoring table). Those securing scores in the first range were labeled as having good access. Those securing scores in the second were labeled as having poor access.

After performing data analysis, the researcher found out that total good access to the three sections was more than three-quarter accounting for 94.5% of the respondents, while the remaining 5.5% had poor access.

In overall, the majority of the respondents had good access to health care services and facilities in terms of waiting time, working schedule, and service procedure except a few noticeable problem such as waiting time in registration process and presence of clinical staff in all shifts, which more than one-half of the respondents at 57.5% and 59% had poor access, respectively.

Section 4: Patient Satisfaction in Medicine OPD:

Table 10: Number and Percentages of Patient Satisfaction in Medicine OPD

Accessibility to Health Care Service	Frequency				Comment
	Satisfactory		Dissatisfactory		
	#	%	#	%	
<u>Convenience:</u>					
- Ease of registering process	88	44	112	56	Low
- Ease of finding Medicine O.P.D.	194	97	6	3	High
- Equipment (Waiting chairs, toilets, rooms, beds, ventilation, and light.)	196	98	4	2	High
- Appropriate waiting time for consultation.	181	90.5	19	9.5	High
- Medical supplies (Blood pressure monitor, thermometers, stethoscopes, and scales.	183	91.5	17	8.5	High
- Presence of clinical staff.	91	45.5	109	55.5	Low
- Ease of coming back to visit in the same day if necessary.	69	34.5	131	65.5	Low
<u>Courtesy:</u>					
- Welcome attitudes by registration staff.	95	47.5	105	52.5	Low
- Language used by physicians.	157	78.5	43	21.5	High
- Friendly manners of nurses.	184	92	16	8	High
- Physicians’ communication skills.	175	87.5	25	12.5	High
- Confidentiality of the patient records.	154	77	46	23	High
- Respectful manner by Pharmacy staff.	183	91.5	17	8.5	High
<u>Quality of Care:</u>					
- Physicians and nurses helped you to stay away from worrying.	154	77	46	23	High
- Self-confidence and ethic of physicians.	164	82	37	18.5	High
- Quality of taking care by nurses.	85	42.5	115	57.5	Low
- Chances in discussing with clinical staff.	158	79	42	21	High
- Consultation and treatment methods.	164	82	36	18	High
- Explanation and diagnosis by physicians.	171	85.5	29	14.5	High
- Awareness of your health conditions.	90	45	110	55	Low
- Adequate amount of drugs.	82	41	118	59	Low
- Patients’ condition after treatment.	169	84.5	31	15.5	High

In table 8, a descriptive statistics computation was done to obtain the frequency of the patients' responses to the questions in patient satisfaction section as displayed in number and percentage. Patient satisfaction score was divided into two groups using best criteria values in table 2 (Scoring table). Those securing scores in the first range were labeled as having high satisfaction. Those securing scores in the second were labeled as having low satisfaction.

In convenience section, the majority of the respondents, 98%, 97%, 91.5%, and 90.5% were satisfied with equipment (waiting chairs, toilets, consultation rooms, patient beds, ventilation, and light), ease of finding Medicine Outpatient Department, medical supplies (blood pressure appliances, thermometers, stethoscopes, and scales), and appropriateness of waiting time for receiving consultation, respectively.

Regarding courtesy section, the respondents seemed to be satisfied by most of the components described in the section, except one statement about welcome attitudes and respect shown by the registration staff, where less than one-half of the respondents, 47.5%, showed high satisfaction. Apart from that, more than three-quarter of the respondents, 92% and 91.5%, were highly satisfied with friendly manners and attentiveness of nurses, and respectful manner and cooperation by pharmacy staffs, respectively.

The majority of the respondents, 87.5%, 78.5%, and 77%, were highly satisfied with physicians' communication skill in asking for problem history and giving consultation, self-introduction and language used by physicians, and

confidentiality of the patient records, respectively. Last but not least, in quality of care section, the respondents seemed to show low rates of satisfaction when they were asked about quality of care by nurses, awareness of one's health condition after receiving consultation, and effectiveness and adequate amounts of medicines provided. Each of these three components were rated less than one-half, the standard score to differentiate between high and low satisfaction; 41% for effectiveness and adequate amounts of medicines provided, 42.5% for quality of care by nurses, and 45% for awareness of one's health condition after receiving consultation. However, when they were asked whether physicians and nurses helped patients to stay away from worry and pressure, 77% of the respondents were highly satisfied; and 82% of respondents felt highly satisfied with physicians' self-confidence and profession ethic. Moreover, the majority of the respondents, 78%, also showed high satisfaction regarding chances in describing discussing the problem with physicians and nurses, while 82%, 84.5%, and 85.5% felt highly satisfied with ways of consultation and treatment by physician and nurses; respondents' condition after treatment, and clear explanation of problem roots and accuracy of diagnosis by physicians, respectively.

Table 11: Respondents' Opinions by Components of Patient Satisfaction

Level of Patient Satisfaction	Frequency			
	High		Low	
	#	%	#	%
Convenience	187	93.5	13	6.5
Courtesy	195	97.5	5	2.5
Quality of care	167	83.5	33	16.5

In table 11, total patient satisfaction score of each component was computed to determine the respondents' perception level towards healthcare services. Patient satisfaction score was divided into two groups using best criteria values in table 2 (Scoring table). Those securing scores in the first range were labeled as having high satisfaction. Those securing scores in the second were labeled as having low satisfaction.

First, the majority of respondents, 93.5%, showed high satisfaction about convenience. Then, more than three-quarter of the respondents, about 97.5%, also were highly satisfied about courtesy, while another 83.5% of the respondents had high satisfaction regarding quality of care by clinical staff.

Table 12: Respondents' Opinions by Level of total Patients' Satisfaction

Level of Satisfaction	Frequency	
	Number	Percentage
High	187	93.5%
Low	13	6.5%

Table 11 shows the respondents' opinions by the level of total patient satisfaction level toward Medicine Outpatient Department. Total patient satisfaction score was divided into two groups using best criteria values in table 2 (Scoring table). Those securing scores in the first range were labeled as having high satisfaction. Those securing scores in the second were labeled as having low satisfaction.

The actual result showed that more than three-quarter of the respondents, about 93.5%, showed high total satisfaction and only 6.5% of respondents showed a low total level of satisfaction.

All in all, in patients' satisfaction section, the majority of the respondents seemed to be highly satisfied with most of the components in each section, except ease of registering process, presence of clinical staff, welcome attitude by registration staff, and quality of care by nurses, awareness of one's health condition after receiving consultation, and effectiveness and adequate amount of medicines provided from the quality of care perspective. Namely, more than one-half of the respondents had low satisfaction scores in these statements.

SUMMARY OF LEVEL OF SATISFACTION:

- The majority of the respondents had good experience with all components of experience section except some problem regarding
 - duration of time physicians spent consulting,
 - nurses' politeness,
 - amount of provided drugs,
 - and registration staff's manner.

The worst case was the majority of the respondents accounting for 72.5% had poor experience with registration staff's manner.

- Regarding accessibility, two problem was found and presented below:
 - waiting time in registration process
 - and presence of clinical staff in all shifts

- Last, the majority of the respondents showed high satisfaction in terms of convenience, courtesy, and quality of care except:
 - ease of registering process,
 - presence of clinical staff,
 - welcome attitude by registration staff,
 - quality of care by nurses,
 - awareness of one's health condition after consultation,
 - and effectiveness and adequate amount of drugs provided.

Section 5: The Relationship between Independent and Dependent Variables

Table 13: Relationship between Socio-Demographic Characteristics & Patient Satisfaction (Significant level = 0.05)

Socio-Demographic Characteristics	Patient Satisfaction				Pearson's Correlation	Sig. (2 Tails)
	High		Low			
	#	%	#	%		
Ages:					0.077	0.277
• 18-30	70	90	7	10		
• 31-40	27	93	2	7		
• 41-50	34	97	1	3		
• 51-60	33	94	2	6		
• Above 60	23	96	1	4		
Education:					- 0.148	0.036*
• Illiterate	26	100	0	0		
• Primary	48	96	2	4		
• Secondary	67	93	5	7		
• High school	16	89	2	1		
• Post-graduate	30	88	4	12		
Family income	74	93	6	7	0.030	0.674
• Equal or above 200000	66	97	2	3		
• 200001-400000	28	90	3	10		
• 400001-600000	19	90	2	10		
• Above 600000						
Number of visit	159	94	10	6	0.055	0.438
• 2-4	28	90	3	10		
• Above 4						

As illustrated in table 13, a correlation analysis was implemented to prove whether there were significant relationships between 4 continuous independent variables of socio-demographic characteristics and patient satisfaction as he suggested in his second. Significant level used in this test was 0.05.

Ages, education, family income, and number of visit were associated with 22 statements of patient satisfaction section. The significant value employed was 0.05. The test was run on SPSS 18 and both significant and insignificant results were displayed.

The results showed that amongst four factors, there was only education showed a negative significant relationship with patient satisfaction level at significant level of 0.036. This result statistically proved that the second hypothesis was right.

Table 14: Relationship between Experience & Patient Satisfaction

Experience with Healthcare Services	Patient Satisfaction		Chi-squared	Sig. (2 Tails)
	High	Low		
Physical facilities			0.212	0.645
• Good	184	13		
• Poor	3	0		
Physicians' services			14.818	< 0.001*
• Good	162	6		
• Poor	25	7		
Nurses' services			89.963	< 0.001**
• Good	186	6		
• Poor	1	7		
Pharmacy's services			7.052	0.008*
• Good	156	7		
• Poor	31	6		
Registration's services			1.922	0.166
• Good	122	6		
• Poor	65	7		

*Significant level = 0.05, **Fisher's exact test

Table 14 showed the results of chi-squared test between components of experience with healthcare service and patient satisfaction level. Physical facilities, physicians' services, nurses' services, pharmacy's services, and registration's services were associated with 22 statements of patient satisfaction section. The significant value employed was 0.05. The test was run on SPSS 18 and both significant and insignificant results were displayed.

The results showed that amongst five components, physicians' services, nurses' services, and pharmacy's services showed significant relationship with patient satisfaction level at significant value less than 0.001, 0.001, and at 0.008, respectively.

Table 15: Relationship between Accessibility & Patient Satisfaction

Experience with Healthcare Services	Patient Satisfaction		Chi-squared	Sig. (2 Tails)
	High	Low		
Waiting time			1.806	0.179
• Good	176	11		
• Poor	11	2		
Working schedule			0.070	0.792
• Good	186	13		
• Poor	1	0		
Service procedure			0.655	0.418
• Good	178	13		
• Poor	9	0		

Table 15 showed the results of chi-squared test between components of accessibility to healthcare service and patient satisfaction level. Waiting time, working schedule, and service procedure were associated with 22 statements of patient satisfaction section. The significant value employed was 0.05. The test was run on SPSS 18 and both significant and insignificant results were displayed.

The results showed that there was no a significant relationship between each component of accessibility and patient satisfaction level at significant value of 0.05.

SUMMARY OF SIGNIFICANT TEST:

Correlation analysis:

- As a result from correlation analysis, there was a statistical evidence of the negative relationship between education and patient satisfaction—patients with lower education are more likely to show higher level of satisfaction.

Chi-square test:

- The results of the test between patients' experience components and patient satisfaction level showed that there were 3 components had significant relationship with the patient satisfaction level. They were physicians' services, nurses' services, and pharmacy's services.
- The results of the test between accessibility components and patient satisfaction level showed that there was no one component had significant relationship with the patient satisfaction level.

CHAPTER 5: DISCUSSION

The following are the main topics in this chapter:

Topic I: Research process.

Topic II: Comments and suggestion of the respondents.

Topic III: Predictors of patient satisfaction.

Topic IV: Discussion

5a. Research Process

Remember that this research was about patients' opinions in terms of services provided by several sections in the hospital; therefore, the researcher didn't have a choice, but to conduct it during working hours.

- The respondents felt uncomfortable in describing their experiences and personal opinions about the hospital services.
- After receiving some important information from the pilot study, the data collection process was amended from self-administered questionnaire alone to assistance from the research assistants. The purpose in doing so was first to give the sense of confidentiality of the respondents' opinions, and second to ease the comprehensive understanding of the questionnaire components of the respondents.
- A comprehensive explanation of the identities of the researcher and his assistants, the purpose, and the use of the data collected was given to each respondent before starting the interview process.

In conclusion, the research process was gradually changed from its previous procedure in terms of contents of the questionnaire, the method of approaching the subjects, and the art of addressing the problem. This was made to response to the actual research environment and to enrich the quality of the data collected.

5b. Predictors of Satisfaction

93.5% (187) of the respondents were found to have high satisfaction scores with health care services in Medicine Outpatient Department of the Khmer-Soviet Friendship Autonomous Hospital, Phnom Penh city, Cambodia.

This finding positively answered to the first research question and hypothesis addressed by the researcher in the early stage of the current study.

Some information found in a study of the hospital policy transformation (autonomy) and financing improvement by the end of 2009 suggested the prediction of this finding.

Those predictors were:

- Reasonable consultation fee of 8,000 Riel (2USD).
- Equity fund program offered by the royal government.
- Enhancement of cooperation between hospital and other business partners such as government security fund agency, foreign investors, and other non-government organizations that involved with bettering the welfare of Cambodian people.

- Improvement of healthcare facilities such as new high-tech medical equipment, new hospital buildings and infrastructure.
 - Improvement of personnel's clinical and communication skills through providing various short-term training programs and annual performance evaluation.
 - Improvement of benefit and incentive policy by the new hospital board management
 - Improvement of internal regulation and personnel's code of conduct.
- (KSFH, Performance Review Report, 2010-2011) (46)

5c. Suggestions and Comments from the Patients

Even though the respondents were clearly explained about the significance of the research and the use of their comments or suggestion as the indicators to improve the quality of care at Khmer-Soviet Friendship Autonomous hospital, there were only 45 respondents among 200 gave comments or suggestions. This showed a lack of interest in giving comments regarding their personal experiences.

The reasons behind this matter were noticed and presented below:

- the lack of interaction skill to persuade the respondents to express their personal opinion rather than the questions provided,
- the uncomfortable feeling in an uncomfortable environment the respondents might have had,
- time constraint the patients had for the interview process,
- and the respondents' personal behaviors.

5d. Discussion

Patient satisfaction surveys are essential in obtaining a comprehensive understanding of the patient's need and their opinion of the service received. In a survey conducted by Amin Khan Mandokhail in 2007, Thailand, the level of satisfaction among 225 Medicine OPD patients was 86.67%. Physicians and nurses were perceived as friendly and helpful by 82.67% and 82.22%, respectively. Physical facilities and pharmacy services were perceived as good by 73.33% and 78.67% of the patients, respectively; and drugs were perceived as expensive by 30.67%. Access to the services was perceived as poor by 35.11%. Satisfaction level was influenced by marital status, main occupation, physical facilities, physicians' service, nurses' service, pharmacy services, registration services, waiting time, service process, and working hours. The study indicated the areas for improvement from the respondents' points of perspective (44).

Low patient satisfaction can lead to poor compliance with treatment and end up in poor health outcome. In a study implemented by Asma Ibrahim in 2008 at Indira Gandhi Memorial Hospital, Male' Maldives only 10.4% of 251 patients were highly satisfied. It revealed that the respondents' perceptions of the services were not good in term of convenience, courtesy, quality of care, hospital fee, and physical facilities. Particularly, the patients' opinion was mainly affected by the staff's attitude (47).

Patient satisfaction is a vital tool in evaluating the quality of the healthcare service in the outpatient department. In another study conducted on a sample of outpatient at Pakistan Institute of Medical Science, Islamabad by Anjum Javed in 2005, out of 200 randomly selected patients, 108 had high level of satisfaction. Medical expense, registration service and nurse's services were perceived as good by 81%, 77.5% and 76.5%, respectively, while pharmacy service, medical equipment, doctor's service, and physical facilities were relatively less satisfied by 65%, 65%, 61.5%, and 53% of the patients, respectively. Satisfaction level was said to have significant relationship with distance from patient patients' living areas to the hospital and outpatient department timing. The study suggested that waiting time for service should be improved (48).

From these studies, it is evident that the satisfaction level of patients attending the outpatient department should be accessed periodically. From the current study in an internal medicine outpatient department of Khmer-Soviet Friendship Autonomous hospital in Cambodia, it is seen that 93.5% (187) of the respondents were satisfied with the services provided in the hospital. 98.5% of the patients were satisfied with hospital facilities. The assessment of the services offered by physicians, nurses, and pharmacists, also showed that 81.5-96% of patients were highly satisfied with the service. This study also revealed that the majority of the respondents were relatively less satisfied with registration service. Moreover, amount of prescribed drugs and the friendliness of the registering staff need to be improved. Last, education was proved to have significant relationship with patient satisfaction level at p-value of 0.036 and pharmacy services physicians' services,

and nurses' services also had significant relationship with patient satisfaction level at p-value 0.008 and less than 0.001 respectively.

Chapter 6: Conclusion and Recommendations

6a. Conclusion

Patients receiving each hospital service are responsible for conveying the good image of the hospital; therefore, securing high satisfaction of patients attending the hospital is equally important for a hospital management team. Many studies about outpatient services have revealed some problem like overcrowding, long waiting time, high hospital fee, and poor behavior of staff, etc. In current study, it was found that the majority of the respondents were highly satisfied with the services offered. Patients were satisfied with logistic arrangement, nursing care, physicians' communication skills, number of staff etc. wherever there is misbehavior of receptionists in serving the customer, it is to be explored to elicit the lacunae. Education, physicians' services, nurses' services, and pharmacy's services were found to have significant relationships with patient satisfaction level. It is beneficial to understand that there is a opportunity for the improvement of the Outpatient Department service. Hence, it can be concluded that the outpatient department services form a vital element to draw a good image of the hospital services and the patients' opinion are essential in quality improvement.

6b. Recommendation

6b.1. Recommendation for Performances

1. Community participation activities of the clinical staffs should be increasingly implemented to get to know more and more patients' expectation and opinions about the hospital services.

2. Methods of getting daily feedback from the patients such as creating feedback box, patient information center, and hospital official website should be enhanced.
3. Patients often have high expectation about the services they would receive from clinical staff. Therefore, a proper training of code of conduct and courtesy should be given to both clinical and office staffs. Incentives and punishment should be carried out based on regular performance reviews.
4. Patients should be able to access clean drinking water during waiting time and treatment process.
5. Sanitary facilities should also be available in waiting and consultation areas.
6. It is highly suggested that needed and adequate amount of drugs should be available in the Pharmacy.

6b.2. Recommendation for Further Researches

1. Periodical study focusing on patients' satisfaction in the hospital should be implemented to keep up with the change of the phenomena.
2. Further satisfaction study should be extended in scope and reach such as comparative study between patient satisfaction and staffs' satisfaction and between a hospital services and other hospitals' services etc. in order to gain better views of the field and produce more meaningful results.

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Appendix

QUESTIONNAIRE

Assessment of Patient Satisfaction in Medicine Outpatient Department of Khmer-Soviet Friendship Autonomous Hospital

This questionnaire was constructed with the purpose of finding the patient satisfaction level based on the healthcare services provided by the Medicine Outpatient Department of Khmer-Soviet Friendship Autonomous Hospital. Any information collected will be used for the purpose of improving the quality of healthcare services only.

N°:.....

Date:..../..../....

Part A. Socio-Demographic Characteristic

Please write (✓) in the appropriate column provided:

1. Gender

Male ☐ Female ☐

2. How old are you?

18-30 ☐ 31-40 ☐ 41-50 ☐ 51-60 ☐ > 60 ☐

3. What is your marital status?

Single ☐ Married ☐ Widowed/Separated ☐

4. What is your educational degree?

Illiterate ☐ Primary ☐ Secondary ☐ High school ☐ Post-graduate ☐

5. What do you do for living?

Student ☐ Unemployed ☐ Self-employed ☐ Self-employed ☐

Government staff ☐ Farmer ☐ Worker ☐ Company staff ☐

NGOs' staff ☐

6. How much do you earn per month?

<= 200,000 Riel ☐ 200,001-400,000 Riel ☐ 400,001-600,000 Riel ☐

more than 600,000 Riel ☐

7. How many times have you visited Medicine Outpatient Department?

2-4 times ☐ more than 4 times ☐

8. Who paid the treatment fee?

Personal finance ☐ NGO ☐ Equity fund ☐

B. Experiences with Healthcare Services:

Please write (✓) in the box that is appropriate for you. Note that the questions in this section are about patients' opinions on services they have received.

Physical Facilities	Agreed	Disagreed
9. Medicine OPD's location is easy to find.	<input type="checkbox"/>	<input type="checkbox"/>
10. Medicine OPD is clean and tidy.	<input type="checkbox"/>	<input type="checkbox"/>
11. There are enough waiting chairs in the waiting area.	<input type="checkbox"/>	<input type="checkbox"/>
12. There is a clean restroom in the waiting area.	<input type="checkbox"/>	<input type="checkbox"/>
13. The room is spacious, bright, and airy.	<input type="checkbox"/>	<input type="checkbox"/>

Physicians' Services	Agreed	Disagreed
14. Physicians introduced their names to you.	<input type="checkbox"/>	<input type="checkbox"/>
15. Physicians informed you the treatment process.	<input type="checkbox"/>	<input type="checkbox"/>
16. Physicians took your health history in detail.	<input type="checkbox"/>	<input type="checkbox"/>
17. Physicians understood your health complaint.	<input type="checkbox"/>	<input type="checkbox"/>
18. You had chances to discuss problems with physicians.	<input type="checkbox"/>	<input type="checkbox"/>
19. Physicians spent enough time in consultation.	<input type="checkbox"/>	<input type="checkbox"/>
20. Physicians were punctual and reachable.	<input type="checkbox"/>	<input type="checkbox"/>
Nurses' Services	Agreed	Disagreed
21. Nurses welcomed you with respect.	<input type="checkbox"/>	<input type="checkbox"/>
22. Nurses answer to your questions gently.	<input type="checkbox"/>	<input type="checkbox"/>
23. Nurses prepared you for the consultation.	<input type="checkbox"/>	<input type="checkbox"/>
24. Nurses were punctual and reachable.	<input type="checkbox"/>	<input type="checkbox"/>
Pharmacy Services	Agreed	Disagreed
25. Pharmacy staffs showed respect toward you.	<input type="checkbox"/>	<input type="checkbox"/>
26. Pharmacy staffs explained how to use drugs.	<input type="checkbox"/>	<input type="checkbox"/>
27. There were adequate amount of medicines.	<input type="checkbox"/>	<input type="checkbox"/>
28. Pharmacists were punctual and reachable	<input type="checkbox"/>	<input type="checkbox"/>

Registration Services	Agreed	Disagreed
29. Registration staffs warmly welcomed you.	<input type="checkbox"/>	<input type="checkbox"/>
30. Registration staffs informed you where OPD is.	<input type="checkbox"/>	<input type="checkbox"/>
31. Registration staffs were punctual and reachable.	<input type="checkbox"/>	<input type="checkbox"/>

Part C. Accessibility to Services

Please write (✓) in the box that is appropriate for you. Note that the questions in this section are about patients' opinions on services they have received.

Waiting Time	Agreed	Disagreed
32. Waiting time in registration process is appropriate.	<input type="checkbox"/>	<input type="checkbox"/>
33. Waiting time for receiving consultation is appropriate.	<input type="checkbox"/>	<input type="checkbox"/>
34. Waiting time for receiving medicines is appropriate.	<input type="checkbox"/>	<input type="checkbox"/>

Working Schedule	Agreed	Disagreed
35. OPD's working shift was easy for you.	<input type="checkbox"/>	<input type="checkbox"/>
36. Clinical staffs were available when required.	<input type="checkbox"/>	<input type="checkbox"/>

Service Procedure:	Agreed	Disagreed
37. Registration process was done timely.	<input type="checkbox"/>	<input type="checkbox"/>
38. Good coordination was established between wards.	<input type="checkbox"/>	<input type="checkbox"/>

Part D. Patient Satisfaction:

Please write (✓) in the box that is appropriate for you. Note that the questions in this section are about patients' opinions on services they have received

Convenience:	Satisfactory	Unsatisfactory
39. Ease of registering process.	<input type="checkbox"/>	<input type="checkbox"/>
40. Ease of finding Medicine OPD.	<input type="checkbox"/>	<input type="checkbox"/>
41. Hospital facilities (bed, chair, restroom etc.)	<input type="checkbox"/>	<input type="checkbox"/>
42. Appropriate waiting time.	<input type="checkbox"/>	<input type="checkbox"/>
43. Medical supplies (thermometers, stethoscopes etc.)	<input type="checkbox"/>	<input type="checkbox"/>
44. Regular presence of clinical staffs.	<input type="checkbox"/>	<input type="checkbox"/>
45. Ease of coming back to visit in the same day.	<input type="checkbox"/>	<input type="checkbox"/>

Courtesy:	Satisfactory	Unsatisfactory
46. The attitude and respect of receptionist.	<input type="checkbox"/>	<input type="checkbox"/>
47. Language used by physicians.	<input type="checkbox"/>	<input type="checkbox"/>
48. Friendly manners and attentiveness of nurses.	<input type="checkbox"/>	<input type="checkbox"/>
49. Physicians' communication skill.	<input type="checkbox"/>	<input type="checkbox"/>
50. Confidentiality of the patient records.	<input type="checkbox"/>	<input type="checkbox"/>
51. Attitude and cooperation of Pharmacy staffs.	<input type="checkbox"/>	<input type="checkbox"/>

Quality of Care	Satisfactory	Unsatisfactory
52. Physicians and nurses kept your from worrying	<input type="checkbox"/>	<input type="checkbox"/>
53. Self-confidence and ethic of the physicians.	<input type="checkbox"/>	<input type="checkbox"/>
54. Quality of care by nurses.	<input type="checkbox"/>	<input type="checkbox"/>
55. Chances in describing your health conditions	<input type="checkbox"/>	<input type="checkbox"/>
56. Method of consultation and treatment.	<input type="checkbox"/>	<input type="checkbox"/>
57. Explanation and accuracy of the diagnosis.	<input type="checkbox"/>	<input type="checkbox"/>
58. Awareness of your health conditions.	<input type="checkbox"/>	<input type="checkbox"/>
59. Amount of needed drugs.	<input type="checkbox"/>	<input type="checkbox"/>
60. Health improvement after treatment.	<input type="checkbox"/>	<input type="checkbox"/>

Part 5. Suggestions or Comments for the Improvement of the Outpatient

Department:

Thank you very much for your valuable time.