IOSR Journal of Business and Management (IOSR-JBM)
e-ISSN: 2278-487X, p-ISSN: 2319-7668. Volume 17, Issue 5.Ver. I (May. 2015), PP 43-68
www.iosrjournals.org

"The Management of Homeopathy Medical Colleges and Hospitals in West Bengal, India – An Introspective Study"

Dr. Abhijit Pandit, M.Sc., M.B.A., Ph.D. *(email –abhijitpandit1978@gmail.com)*

Abstract: *This study was conducted to describe patient satisfaction towards out patient healthcare services at D.N.Dey Homeopathy Medical College Hospital (DNDH) and Pratap Chandra Memorial Homeopathy Medical College & Hospital (PCMH) in Kolkata, India. Sample size was 200 and data was collected by self-administered questionnaire. The main factors are socio-demography, accessibility, past experience and patient satisfaction. Chi-square test was performed to analyze association (p value=0.05). Later degree of association within the factors was obtained by correlation coefficient. Regression Analysis and Factor Analysis were also performed. Recommendation for improvement in level of patient satisfaction was made.*
Key Words: *Outpatient department, satisfaction, accessibility, socio-demography.*

I. Introduction

Health care is one of the most complex activities in which human beings engage. Health and Healthcare are conceptually different. Health is neither an absence of disease, nor freedom from illness – but the ability to realize one's potential. Health is therefore a person's sense of well being. Healthcare is not only medical care but also all aspects of pro-preventive care too. Good health is a basic right and produces civic consciousness. We should not look at health only as a means of economic development. What is more important is to view economic growth as contributing to the betterment of the health of people.

In practice it is very difficult to achieve the ideals of public health as mentioned in the constitution of WHO. Even the most advanced countries have not been able to meet this ideal. So we must focus attention on achieving a level of health which we can afford. Health administration, whether in developed or in developing countries face with different managerial problems ranging from the provision of the most basic health and sanitary measures to the best use of finite resources in elaborate medical care system. All countries have one basic common problem – how best the health status of a population can be improved. This problem has become more pressing owing to the changes in needs and expectation of communities to developments in health and other technologies, and to the urgent need to link health improvement with socio-economic development. In a developing country like India, the health administration should normally be concerned with the following:

- That the patients are treated as close to their homes as possible in the smallest, cheapest and simply equipped unit, such as sub centre which is capable of looking after them adequately.
- That the medical services should be organized and administered in such a way that the quality of medical care improves gradually.
- That medical care services should be organized from the bottom-up and not from top-down
- That the services planned should meet the needs of the people.

Improvement of population health status for social development can be achieved through improving the access and utilization of health services with special focus on underserved and under privileged segments of the population.

Ideal health care system should have the following four criteria.

1. Universal access, at adequate level, and without any excessive burden.
2. Fair distribution of financial costs for access and fair distribution of burden in rationing care and capacity and a constant search for improvement to a more just system.
3. Training providers for competence empathy and accountability, pursuit of quality care and cost effective use of the results of relevant research.
4. Special attention to vulnerable groups such as children, women, disabled and the aged.

Over the last five decades, India has built up a vast health infrastructure and manpower. Professionals and paraprofessionals are being trained in the medical colleges in modern medicine and Indigenous System of Medicine & Homoeopathy (ISM&H). However even after 67 years of independence of India the health care still remain uncared for by the health planner. This is due to the following reasons:

1. Money spent on health is treated as an expenditure and not as investment
2. Health aspect in government budget usually gets low priority

3. Absolute lack of professionalism in health care delivery system
4. Unrealistic Government policies, rules and regulations

The poor in India have more than double the rates of mortality and still suffer and die from preventable infections, malnutrition, pregnancy and childbirth. There is 'inverse law of care' in operation. While diseases are more common in the poorer segments resulting in the poor paying for their poverty with their lives, medical care is mostly concentrated around rich and powerful who do not need it so much.

In India, private expenditure dominates the cost financing health care. Article 25 of the universal declaration of Human Rights, is concerned with the 'Right to Health'. Everyone has the right to a standard of living adequate for the health and wellbeing of himself and of his family, including food, clothing, housing and medical care and necessary services. Health is considered as a fundamental human right. This implies that the state has a responsibility for the health of its people. The current criticism against health care services is that they are predominantly urban oriented, mostly curative in nature and accessible mainly to a small part of the population. The main problems related to health care are:

- Manpower and infrastructural shortage especially in most needed areas like slums, rural areas, tribal areas, remote areas.
- Sub-optimal performance of available infrastructure.
- Massive urban / rural, inter-district and inter-state difference in performance.
- Lack of co-ordination in health service providers
- Increasing awareness and expectations from the system
- Escalating of health service costs and increasing gap between expectation of people and what the country can afford.

The present scenario is quite depressing. Modern medicine has gone to the market place riding piggyback on technology resulting in health care cost escalating beyond the wildest imagination, making even the rich nations incapable of footing the bill. There is also 'Inverse Care Law' in operation. While diseases are more common in the poorer segments resulting in the poor paying for their poverty with their lives, medical care is mostly concentrated around rich and powerful who do not need it so much.

A recent development in health care delivery system is the encouragement of traditional medical systems including Homeopathy to help the poor and needy people. According to Dr. P.N.V. Kurup, advisor to the Government of India for ISM&H, said:

"To make an effective comprehensive health service available to the maximum number of people the available material, financial and manpower resources that are rooted in traditional and alternate medical practices should not be overlooked. The traditional systems of medicine and Homeopathy can play a vital role as an additional or alternative approach in the country's health care delivery programme."

China has also used this system with definite results. Out of the different recognized system of medicine (Allopathy – the modern medicine, Ayurvedic, Siddha, Unani and others) the most cost effective, affordable and user-friendly, undoubtedly is the 'Homeopathy System of Medicine'. This system of medicine with high potential has got universal access to provide health and hygiene support to the population, but till now not professionally organized and managed.

Initiative and efforts are to be made instantly to recognize and manage this potential system of homeopathy medicine to provide the balanced health care services to the target population, so far as the country like India is concerned and hence fulfill the mission and vision of National Health Policy (NHP).

It is in this context, this research study is being initiated to analyze the past, present and future vision in health care delivery system, so as to provide a balanced health care to the target group through the homeopathy system of medicine.

II. Objectives Of Study

Objectives

It is in this background that this research study has been taken up to find how far the homeopathy hospitals in Kolkata have become patient centered and patient care hospitals. Hospitals are basically service organizations. The professional area of an organization is influenced by its user's satisfaction. Healthcare services make up a significant portion of national expenses, and thus it is essential that the nature and quality of services be explored. Patient satisfaction is one of the primary outcome variables when considering healthcare services. Patient satisfaction has become an important performance indicator for the delivery of quality medical care services.

Uniqueness, universality and multi-facial advantages of homeopathy system of medicine are not known to the health planner and the population. Homeopathy institutions in west Bengal are uncared, ill maintained in

terms of teaching aids, financial assistance and student – faculty ratio. There are utter administrative lacunae from the point of medico-ethical and management view. They run in an unsystematic, unplanned manner and are now like dumping stations. The study especially aims at the following objectives:
Therefore the primary objectives of my research work are to study:

1. Whether the national and state level homeopathy medical colleges and hospitals are running at par with the defined hospital and health care management systems or not.
2. To make homeopathy more popular to the target group of the population on one hand and to the planner on the other.
3. The deficiencies of these medical colleges in the area of their administrative and management perspective.
4. Human resource management of existing homeopathy medical college in west Bengal in particular and at national level in general
5. SWOT analysis in state run homeopathy medical colleges and hospitals
6. To know the perceptions of out-patients and in-patients of selected hospitals and availability of patient care in selected homeopathy hospitals.
7. Finally to suggest some measures for policy makers, including the government and the administrators of hospitals, doctors, nursing and paramedical staff for creating, running and managing patient centered hospitals.

Research Gap

While surveying analytically the related literature, published documents, journals, periodicals, micro-literature, reports of the Ministry of Health and Family Welfare, both Central and State Government and also the departmental annual reports relevant to my research work, it is understood that several studies have been conducted both nationally and internationally in the field of medicine and health. Very few studies has been conducted on the management aspect of health care delivery system and no serious studies has been conducted on this particular topic of Management of Homeopathy Medical Colleges and its contribution to health care delivery mechanism in India with respect to the state of West Bengal. So there exists a research gap in this field of study.

Although there is significant impact of homeopathy in total health care delivery system in India as a whole and West Bengal in particular, but there is no study undertaken so far and it is therefore a neglected area of research. Because of this gap and for this reason the present study has been initiated.

The need of the hour is to conduct a critical study on the government policies to set up homeopathy medical colleges at every state of the country. It has been observed that some states have implemented homeopathy system of medicine in their health care delivery system right at the grass root level particularly targeting the poorer section of the community but on the other hand in some states the homeopathy system could not reach the unreached.

The homeopathy system of medicine is very much user friendly, cost-effective therapy for the mass and claimed to be without any side effects as rightly pointed out by our Father of Nation, Mahatma Gandhi – "Homeopathy cures larger percentage of cases than any other method of treatment and it is beyond all doubt safer and more economical and the most complete medical science." Therefore it emerges from this study that the poor patient in some part of the country is getting the facility and on other hand the poor patient from several other areas are still deprived.

Therefore it requires developing a concrete policy on homeopathy system of education and treatment in the country which should be based on strong research database. There is no comprehensive study available at the moment, which tells us about the acceptability of homeopathy system of medicine.
The study in this area has not been reported by researchers so far.

III. Research Methodology

i) Scope and Limitations of Study

The scope of the present study extends to analyze how far the management functions are carried out effectively to satisfy their Out and In-patients in sample units. The assumption is that the hospitals run on sound management principles and patient satisfaction will be high i.e. if the principles of management which are universal in nature are practiced properly, problems may not arise and even if they arise, they can be easily solved. The study however excludes the paramedical staff due to time constraints and poor capabilities in quantifying their qualitative attitudes. Other problems like workers' participation in management, political interference and finance related aspects are also excluded. Bed capacity, size, facilities offered are taken into account.

In the next step, an attempt has been made to elicit the opinions from patients, because every human being carries a particular set of thoughts, feelings and needs. It gives new ideas and suggestions. Once upon a time, the hospitals were regarded as curative institutions and today these hospitals are being recognized more

and more as social institutions and the focal point is patient's satisfaction.

Patients' perceptions about medical care are increasingly important because the success of a hospital depends on the satisfaction of the users. Moreover an organization exists to achieve its goal; and the goal of a hospital, whatever one may say, is always primarily to provide highest quality of patient care. For this one has to determine what questions could be put to the patient and which needs are important to satisfy the patient. There are various factors which influence a patient's expectations. Some of the expectations include efficiency, confidence, helpfulness, personal interest and reliability. These are intrinsic factors. External factors like media influence and experience of others also influence a patient's response. Hence, a study is undertaken to identify the various factors influencing patients' satisfaction in the two sample hospitals that are having similar and identical facilities.

ii) Research Design

This study is mostly exploratory in nature and it aims at discovering the variables related to patient satisfaction. In this part, an attempt has been made to explain the research design, the procedure of sample selection, methodology used in data collection, analysis, and presentation. To make the research meaningful and manageable, the scope of the study is confined to some selected Homeopathy Medical Colleges in West Bengal only.

1. **DNDH** (Government Homeopathy General Hospital) which is still running on traditional management principles, completely owned by State Government where I have decided to study the Out Patient Department.
2. **PCMH** is an old Homeopathy Hospital in North Kolkata. It is a non-profit organization administered by the "Society" on Private basis where I have decided to study the Inpatients and the outpatient Department, its facilities and management.

iii) Research Methods

Questions will be framed and distributed to the patients and staffs of the hospitals for assessing the patient satisfaction. To facilitate understanding, the questions were translated by the researchers into local vernacular Bengali The feedback thus received was measured in a balanced five-point Likert scale used for the responses to the question items, labeled as 'strongly agree', 'agree', uncertain', 'disagree', and 'strongly disagree'. For analytical purposes, zero, one, two, three and four were assigned respectively to these responses. Simple statistical methods such as mean, standard deviation and graphical representations will be used. Chi-square test was performed to analyze the association (p-value = 0.05)

Different secondary data available for different homeopathy hospitals were elaborately studied and explored. Different government publications and reports will be studied to find the financial and budgetary implications on homeopathy and what both the state and central government has done to spread this low cost efficient therapy system for the poor country like India.

iv) Hypothesis

A) At D.N.Dey Homeopathy Medical College Hospital

Hypothesis that were tested are as follows:

H1	**:**	Patient Satisfaction level is independent of Age of the Patient.
H2	**:**	Patient Satisfaction level is independent of Gender of the Patient.
H3	**:**	Patient Satisfaction level is independent of Marital status of the Patient.
H4	**:**	Patient Satisfaction level is independent of Education of the Patient.
H5	**:**	Patient Satisfaction level is independent of Occupation of the Patient.
H6	**:**	Patient Satisfaction level is independent of Family Income of the Patient.
H7	**:**	Patient Satisfaction level is independent of Family Size of the Patient.
H8	**:**	Patient Satisfaction level is independent of Distance from the Hospital.
H9	**:**	Patient Satisfaction level is independent of Waiting Time of Doctor's Examination / Checkup.
H10	**:**	Patient Satisfaction level is independent of total time spent in OPD.
H11	**:**	Patient Satisfaction level is independent of whether timing of OPD adequate.
H12	**:**	Patient Satisfaction level is independent of whether adequate information available for OPD.

B) At PCM Homeopathy Medical College Hospital

Hypothesis that were tested are as follows:

H1	**:**	Patient Satisfaction level is independent of Gender of the Patient.
H2	**:**	Patient Satisfaction level is independent of Education of the Patient.
H3	**:**	Patient Satisfaction level is independent of Economic Role in household of Patient.
H4	**:**	Patient Satisfaction level is independent of Duration of Stay in hospital.
H5	**:**	Patient Satisfaction level is independent of Access of Patient to the Hospital.
H6	**:**	Patient Satisfaction level is independent of Familiarity of patient with the hospital.

Management Of Hospitals

Hospital performance can be best assessed by measuring patient's satisfaction level. A completely satisfied patient believes that the organization has potential in understanding patient's personal needs, and demands related to **health care**

Health care has seen many changes over the time. When it is looked back to know the history of evolution of health care, and it comes to know that objectives of health care changed with requirement of society and availability of resources and technology. The 19th century (1850) was an era which was "symptom-centered". Health was being referred to the elements of empirical perception/local understanding without any scientific examination. Early 20th century (1900) was basic science or disease centered era. Health was being referred to scientific reasoning and experimenting disease. It included diagnosis and treatment of diseases. Mid of the 20th century (1950) experienced clinical science or patient centered era. Health was centered mainly in hospitals and clinics and diagnosis and treatment of individuals was preferred. Late of 20th century (1975) was public health centered era. Health had been focused on diagnosis and treatment of community. End of 21st century (2000) saw political health science or people-centered era. Health has become people's matter and need public participation, including proper allocation of resources responding to public needs. The WHO conference, supporting health for all, held in 1990 defined future development in health to be human centered. A lot of stress has been made on investment in health, patient care and patient's right to delivery of quality health care leading to patient satisfaction.

Considering the above historical facts, it is needed to establish the strategy that should lead to delivery of equitable, easily accessible and satisfactory medical care to all patients including patients attending the outpatient department of DNDH. Patient satisfaction is therefore of high value and it is useful to understand the need of users. By understanding the importance of satisfaction and determining its existing level, health care services can be made relevant to the requirements of people and patients. A Review of relevant literature supports that assessment of level of patient satisfaction is the tool to determine the level of health care delivery, analyze the existing situation and workout strategy to improve it. This is supported and emphasized by following references.

Fitz Patrick Ray, (1991) stated that patient satisfaction provides potentially a direct indicator of system performance and is a mean of choosing alternative strategies in health care provision. (3) Hence, assessing satisfaction is not a one-time action; instead of that it needs continuous monitoring and evaluation. By adopting this procedure, service providers would be able to learn about the deficiencies in the health delivery system and will be able to take timely appropriate alternative steps.

Linder-Peltz, (1992) mentioned that client satisfaction with health care is getting increasing attention from administrators, practitioners, consumers and evaluators of health care.(5). Consequently patients as service users and physicians and administrators as service providers are conscious about the satisfactory health care delivery.

Patient satisfaction is essential due to multiple reasons. Any unsatisfied patient will not come back to the hospital, and it will lead to financial loss, as well as wastage of resources. High satisfaction level will indicate that hospital is working efficiently. On the other hand, poor satisfaction level helps the management of a hospital to improve on the health services.

After reaching to the conclusion that patient satisfaction is vital for hospitals and other health organizations, it would be appropriate to uncover the issue and determine the factors influencing the satisfaction. Satisfaction may be influenced by socio-economic factors, accessibility to the health care services and experience or perception of patients towards health services. Experience or knowledge of patients about health care service contributes in establishing expectation or perception of patients. This fact makes the experience or perception a very vital variable.

It is a common understanding that a patient can assess only general aspects of health care but he/she is not competent to assess its technical aspects. **General aspects** of treatment have many dimensions: for example, health providers including doctors and nurses should be courteous and caring to the patients. Health care providers should explain them treatment and prognosis with management instructions. Meal served to patients should be properly cooked and hot etc. these should be considered by them are more important because it will convince that patient is well aware about their importance and they can judge their quality. On the other hand, it might be thought that those patients are not able to judge or perceive the **technical aspects** of treatment.

The study of management of hospitals proposed to be involved starts with

1. The examination of the existing administration and management activities.
2. The structures involved.
3. The process followed.
4. The review mechanism involved in fully examining the basic criteria.

For the sake of the management control system and the necessary criteria involved, a study also needs to be taken up for considering whether

1. The operational cost fully covers the expenditure.
2. An analysis of the variable costs for some of the vital institutional programmes like teaching, admission, servicing the rural sectors, dispersal of medical personnel in the country side and providing medicines in the rural areas having a low pattern of livings.

In order to control hospital expenditure and improve the efficiency, management and role of hospitals in the health sector, there is a need to introduce professionalization in health care management.
To strengthen health services management, it needs to:

- be taken seriously by government (good management can save resources)
- be used to develop the most able managers (health management is demanding and requires a reasonable share of country's talent)
- achieve a multiplier effect (trained managers need to train their own staff in management)
- focus on real life situations in training methods and
- contribute to multi-professional team working
- Health care organizations need to be competent in four distinct fields:
- Maintenance management for continuity, to keep the organization going at all
- Integrative management for coordination, to pull the organization together for a purpose
- Evaluation management for correction, to compare results with intentions and
- Adaptive management for change, to make the organization different where necessary.

Strong health services management depends on expertise in all four areas of performance because these are the typical requirements of health organizations. Management of very high quality is needed for the efficient functioning of health care institutions.

An organization's success or failure is wholly dependent on how effectively it copes with the competing demands of its environment. Management can develop appropriate strategies and structures to meet these demands. The main problem faced by the hospital services is their increasing costs or the changes needed to make them more efficient. Technology can provide more interactive ways of curing, caring, and training.

Patient satisfaction is important because satisfied patients are more likely to cooperate with the people giving them health care.

To improve timely access to good quality patient information and share relevant information with all health care professionals involved in the care of the patient, a management and technology strategy has to be developed which will ensure that the hospital moves to an information society in a structured and controlled way.

Effectiveness of any health care organization is directly proportional to the cumulative efficiency and effectiveness of its workers.

To make health care delivery more accessible, more effective and more self reliance it is imperative that all hospital management system should adapt and have a conceptual knowledge of the modern management techniques, viz,

- The feedback loop
- Time series analysis
- Value analysis
- Queuing theory
- PERT and CPM
- Statistical quality control
- Operation research / work study
- Cost analysis
- MBO
- Quality circles

Above all for management efficiency and consecutively effective health care delivery, public support is essential for efficient working and for generating confidence in the hospital.

IV. Literature Review

In the mainframe of the research methodology identified and tested, reliance has been made upon selected academic information obtained through availability pursuits in administrative control and management of the homeopathy medical college and hospitals in the State of West Bengal.

Health services have always been an essential human requirement because all human beings need them for curative, preventive and rehabilitative purpose. The good quality health service can confer healing and only attainment of quality service or health can physically and psychologically satisfy the patient. Studies regarding patient satisfaction are important for smooth running of the health organization such that they should have built-in mechanisms that should bring changes according to needs of the consumers.

For this I have made use of available published and unpublished data, relevant literature available (in India and abroad) in this field and a structural questionnaire designed to collect, analyze and interpret relevant primary data for obtaining the response from the operational units involved in the process and to make the research study more utility oriented and user friendly

The study is fashioned in such a manner as to provide a basic handy work upon which further projections can be made to acquire and develop subsequent health care management intelligence and programmes nationally.

The Patient Satisfaction

Satisfaction is a function of perceived performance and expectations. If the performance falls short of expectations, the patient is dissatisfied. If the performance matches the expectations, the patient is satisfied. If the performance exceeds expectations, the patient is delighted.

Patient's satisfaction is a person's feeling of pleasure or disappointment resulting from a service's perceived performance in relation to patient's expectations. So therefore, patient satisfaction is directly proportional to expectation.

Different researcher has different ideas or views regarding Patient satisfaction with reference to the different parameters and aspects but none of them have denied its importance. Hence it is determined that patient's are happy when all his needs are met according to his expectations.

***Risser* (1975):**

He pointed out that patient satisfaction has been defined as "the degree of congruency between a patient's expectations of ideal nursing care and his perception of real nursing care he receives".

***Oliver* (1993):**

He pointed out that word satisfaction is from Satis=enough and faction= to do or make. Hence satisfaction is a fulfillment response.

***Swan* (1985):**

He suggested that patient satisfaction is a positive emotional response that is desired from cognitive process in which patient compare their individual experience to the set of subjective standards.

***Linder-Pelz* (1982):**

He defined patient's satisfaction as the individual's positive evaluations of distinct dimensions of healthcare. Satisfaction is an expression of an attitude, an effective response, which is related to both the belief that the care possesses certain attributes.

***Giese et al,* (2000):**

He determined that when examining satisfaction as a whole, three general components can be identified:

1) Patient satisfaction as a response (emotional or cognitive)
2) Response pertains to a particular focus (expectations, product, consumption experience etc) and
3) Response occurs at a particular time (after consumption, after choice, based on overall experience).

***Donabedian* (1980):**

He proposed a conceptual structure and explained satisfaction study as a provider's success to meet patient values and expectations. He in 1990 determined that when patient gets medical assistance needed in sufficient amount and at appropriate cost, he becomes satisfied and consider the services to be accessible.

***Lebow,* (1983):**

He reported that satisfaction level has never been fixed nor had a consistent score. It changes with circumstances and quality and quantity of service provided. It has been reported by examining several studies that satisfaction rate was as high as 91-100 percent and as low as 51-60 percent.

***Mechanic's* (1954):**

He revealed that one third of those who changed doctor or clinic did so because of dissatisfaction as the physician is failed to do what seemed indicated. It is implied that doctor did not adequately meet patient's satisfaction and failed to explain the procedure and assumption in treatment process. The other reason for dissatisfaction which led to change of doctor according to Mechanic's study was the doctor's lack of interest, motivation and skill in competency.

***Chetwynd,* (1988):**

He reported that most common complaints of his subject were that the hospital was under staffed and waiting list was long, lowering the level of patient satisfaction.

***Rodney* (1986):**

He indicated that patient satisfaction is measured in terms of continuity, humanness, effectiveness of care and dissatisfaction in areas of cost and accessibility. In a study about satisfaction in 30 hospitals, it was determined that areas of dissatisfaction were long waiting time, poor cleaning and hospital settings, and weak doctor patient relationship.

***Mahon*, (1996):**

He said that satisfaction implies complete fulfillment of patient's desires, wishes and needs and patient satisfaction is influenced by the degree to which care fulfils expectations.

***Kareem et al* (1996):**

He found that where on one hand, studies related to patient's satisfaction are important; on the contrary this important topic has always been ignored by service providers. It is therefore important that regular internal audits on quarterly basis may be undertaken to understand the behavior of consumers.

***Kunaratnapruk* (1989):**

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

***Linder-Peltz* (1992):**

He has mentioned that client satisfaction with health care is getting increasing attention from administrators, practitioners, consumers and evaluators of health care. Client satisfaction has become one goal of health care delivery as a consequence of consumer movement. Satisfaction of consumer is seen as a necessary outcome of any transaction irrespective of the efficacy of that transaction.

Patient satisfaction is therefore, the key in measuring the effectiveness of health care delivery. It is now acknowledged that patients' feedback of their health and quality of life, and their satisfaction with the quality of care and services, are the important criteria for clinical health measures.

Evolution/History of Patient Satisfaction

Previous studies on patients' satisfaction show that satisfaction to most people means knowledge of as much as about their illness and treatment. Satisfaction studies dates back in health care from late 1950's. At that time there was growing awareness of the patients as an evaluator of health care. During 1960 – 1970, number of studies had been done to assess the quality of health care to reveal patient satisfaction. In fact satisfaction is influenced by numerous factors and only continuous evaluation can identify the factors which can affect the satisfaction. Patient perception of satisfaction and their positive evaluation makes the determination of satisfaction a very complex affair. It involves trust, patient characteristics, need as well as their perception of physicians and interpersonal skills, together with their perception of whether or not they are responding appropriately to treatment.

Among the pioneers, Florence Nightingale was the first to make a methodological assessment, to the low standard of medical care in the army. She exposed that the key determinant of regimental survival was distance of Crimean hospital. The least fortunate regiments were those with good access to hospital beds, because death depends less on casualties in battle than on acquiring an infection within the hospital. She later developed her uniform system of hospital statistics, designed among other things to compare death rates with diagnostic category.

Taxonomy of patient satisfaction was first developed by ware and associates that included satisfaction questionnaire and patient response to open ended questions posed to identify satisfaction and dissatisfaction. Since then a great number of studies have been done on patient satisfaction evaluating service and service providers.

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

Hewitt Associates, the international management consulting firm, in 1996 started to develop health plan database: the Hewitt Health Value Initiative. The database involves over 500 responses about operations, quality-improvement programs, providers contracting, and other activities.

Socio-demographic and Socio-economic Factors

Socio-demographic variables (social class, marital status, gender and age) are those variables which are related to patients' health care experiences, and the way they interpret them. For example, better educated patients may participate in diagnosis and treatment decisions more than less educated patients but remain less satisfied with their degree of participation because physicians are not meeting their higher expectations. Consequently, it is often difficult to interpret findings of relationships between socio-demographic and satisfaction.

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

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

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

SK Hoppe, PI Heller (1975) :

Cultural similarity between the prospective patients and health care professionals was found to be an important determinant for satisfaction because the patient gets help from the doctors whenever needed.

W.C.Cockerham(1982) :

It has also been determined that enabling factors like family income, sex, education and occupation influence the use of health services.

Perhaps the most consistent determinant characteristic is age, with a body of evidence from various countries to suggest that older people tend to be more satisfied with health care than younger people.

E.Friedson (1972) & EA Suchman (1976):

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

CM Jacobs, et al:

In US there is the evidence that whites on the whole are more satisfied than non-whites. Ethnic Origin is perhaps one of the most complex determinant characteristics.

However, the interaction of ethnicity and socio-economic status has been shown to confuse results.

A number of social-psychological response patterns may affect expression of patient satisfaction. "Social desirability response bias" argues that patients may report greater satisfaction then they actually feel because they believe positive comments are more acceptable to survey administrators. Similarly, "ingratiating response bias" occurs when patient use the satisfaction survey to ingratiate themselves over the anonymity of respondents. A number of observers have suggested that patient may be reluctant to complain for fear of unfavorable treatment in the future

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

Almost eighty four references were extensively studied and analyzed to find the relationship between socio-demographic and socio-economic factors with patient satisfaction in healthcare. Some of their conclusions are summarized below:

GENDER

***D.Armstrong (1999)*:**

He concluded that men were more satisfied then women. However, in many other studies women were more satisfied than men.

AGE

D.Armstrong & Al-Bashir (1999):

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

William et al.(1991):

He concluded that older respondents generally record higher satisfaction. The most consistent determinant of patient satisfaction from health care is patient age, with a body of evidence from different countries to suggest that older people tend to be more satisfied with health care than do younger people. The

literature appear to support this, it was found that older respondents expected less information from their doctor and younger patients were less satisfied with issues surrounding the consultation and less likely to comply with prescriptions or medical advice. Older people have also been found to be far more satisfied with most aspects of their hospital care than younger or middle aged people.

EDUCATION

D.Armstrong & Al-Bashir (1999):

They found no significant effect of education with satisfaction. However, higher level of education was less satisfied with health care.

P.Sumtraprapoot (1997):

He determined that lower education group (primary and less) is more satisfied than the high education group.

Schauffler H.L. et al (1996) :

Their study on OPD and patient satisfaction found that age and education were not statistically significantly associated with level of patient satisfaction. Sex was significantly associated; women were more satisfied with their physician then men

MARITAL STATUS

Tran Thi Nga (2002):

He concluded that there was no association between marital status and satisfaction.

INCOME

Rouge.L, Cleary.P et al (1996):

Income of an individual is one indicator of his life security and economic status. Higher income has been associated with greater satisfaction with doctor's interpersonal communication skill and people with lower income report more problems in hospital. Monthly family income **i**s an indicator of having or not having the ability to pay for goods or services.

P.Sumtraprapoot (1992):

He concluded that low income group was more satisfied than higher income groups.

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

FAMILY SIZE

Tran Thi Luu (2002):

She concluded that family size had no association with satisfaction.

Experience of Patients

Experience of patient to health services is an important variable because it made the expectations of patient which in turn are dependent on perceptive image. Patient satisfaction is measured as an attitude, the attitude of those who have experienced medical care both in the quantity and quality of care actually received.

Crow et al, (2003):

He in his literature identified that satisfaction was linked to prior experience with health care and granting patient's desires e.g. for tests. The prior experience in this research was analyzed with reference to convenience of care, quality of care and medical expenses. Experience of patient creates expectations and perceptive image about quality of care. A common definition of perception is to become aware of something through one's senses - touch, taste, smell, hearing or sight. Perception or expectations and experience as shown by many researches are influenced by many factors. Patient's cultural background, level of aspiration and worldview do exert some influence on the setting of experience. Patient's expectation is usually higher if there is a direct out-of-pocket expense.

Regular use of services shapes patient's perceptive expectation and experience; people tend to have much more accurate perception and expectation for a service that they use regularly, than for one that they seldom use. Other factors of patient's perceived experience include, the personal needs of patient, their past experience with similar services provided by other organizations, and what they hear from other users of the service.

Physical Facilities

Upreti (1994);

The researcher concluded that most patients were satisfied, but the reason of poor satisfaction were mostly in the areas related to waiting time, inadequate cleaning, and setting of health center surroundings.

Pasaribu (1996):

He found out that patient were not satisfied due to low quality of care and inadequate supply of medicine.

Doctor and Nursing Services

Thomas.V et al (1997):

He revealed that patient-doctor communication is most important factor in measuring patient satisfaction. This study was conducted at Switzerland.

Doborah L (1997):

He showed that tone of physician, his touch, interaction and manner of speaking contributes to patient satisfaction. He conducted this study at Australia.

Barry CA, et al (2001):

The study conducted at Ireland, showed that interpersonal communication between physician and patient is the corner stone for consumer satisfaction and improving quality of life.

Pharmacy Service /Registration Service/Service Procedure

Pyunyathikum (1994):

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

Muller et al.(1998):

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

Accessibility to health care Services

Accessibility to health care services refers to physical access to hospitals, appointment systems, receptionists, doctors, and appointment time.

Most of the literature suggests that patients like to have increased access to health care providers and look for:

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

Aday and Anderson (1974):

In many cases, patients requiring emergency services in odd hours reported sense of frustration and helplessness when providers did not arrive to assist. The importance of health staff living close to health facility to provide service whenever needed was cited as one main reason that patients prefer private clinics. The interpersonal aspects of care are regarded as the principal component of satisfaction. Two aspects are regarded as particularly important: communication and empathy.

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

Patient always need health care facilities. Therefore, it is a natural that health care services should remain available at any time and at all time. There should be sufficient number of health providers who could meet the demand without delay and with minimum waiting time. However, convenience has a price to pay. It may not be fully true for public hospitals, but it is a fact in case of private hospital.

Chenawangse et al. (1996):

Considering the cost incurred from treatment in terms of transportation expenditures and inconvenience caused by traveling long distance, he demonstrated that patient satisfaction is influenced by distance to the health facility and price of transportation. Most of the patients do not like to come back to the hospital for even free daily dressing due to transportation and other expenditures.

Operational measures of access means availability of health personnel, regular care of patient, convenience of services, user rate, use of services as per need, and patient satisfaction with services.

Rose et al (1993):

He determined that the majority of patient's selected technical quality of care as first preference, interpersonal care as second preference and accessibility of care as their third preference. Access to the medical care included 'convenience' and 'waiting time'. Moreover, the patients who considered access as first priority belonged to the elderly group. They were from a low education and low income group.

To conclude, patient desire to have a free access to medical services that should be free of location and language barriers. They expect to incur only minimal cost and waiting time

Components of Satisfaction

Three components of satisfaction considered are convenience, quality of care and medical expense.

i) Convenience

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

Sriratanabul and Pimpakovit (1973):

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

Likun, (1996):

He studied ways and means to reduce the waiting time and improve patient satisfaction. The association between waiting time, doctor, nurse and pharmacist services was computed with satisfaction and strong correlation was found between waiting time and nursing service with patient satisfaction. About 61 percent patients reported that the waiting time was not reasonable.

Durongpisitkul V(1992):

In a study at Ramathibodi hospital, Bankok it was shown that the waiting time was the most important factor influencing the satisfaction. At registration counter it was noticed that patients with higher education and longer waiting time had lower satisfaction. At pharmacy unit same pattern was observed.

ii) Quality of Care

'Quality in Health Service' and 'Patient Satisfaction' is two sides of the same coin. Donabedian explained the quality of health service in seven factors. These are efficacy, effectiveness, efficiency, optimality, acceptability, legitimacy, and equity. The determiner of quality and patient satisfaction is patient expectations.

The approaching millennium is witnessing a fundamental transformation of health care quality evaluation and improvement.

Berwick DM (1989):

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

Roberts J S, et al (1987);

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

Jacobs CM, et al (1976):

In the late 1970 , it was determined that examination of individual patient acquiring hospital infection is not much important. But tracking hospital infection (nosocomial infection) in comparison with the statistical norms is more beneficial. Epidemiological methods employed for investigating and controlling potential cause is a better remedy. So JACHO evolved criteria based audit method.

Garvin DA (1990):

In 1990 many related organizations reviewed the regulation to make it more users friendly and adopted participatory approach under slogan of " we are here to help you" instead of promulgating law/ rules regulations and compulsorily implementing and enforcing it.

P. Garpenby (1999):

He wrote a research paper in Sweden, focusing on the interaction between medical professional with respect to patient satisfaction in health care. The paper suggested that in order to prevent erosion of public confidence on health care services, quality improvement needs to be intensified. The author stated that trust in profession and the health care system needs to be treated as other professional industries. Appropriate standard of care as accessibility, availability, provider's competency and responsiveness are issues not only related to the health managers or policy makers, but also for patients, who are increasingly referred to as consumers.

Factors influencing the quality of services are:

1. **The availability of resources such as**

- Quality and quantity of manpower
- Availability of standard equipment required for service delivery
- Availability of funds required for service delivery
- Adequate referral back up service

2. **Standard operational procedure (SOP)**

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

3. **Standard managerial process**

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

4. **Output of service**

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

iii) Medical Expense.

Elafsson S, et al (1998):

In Sweden, in a study it was examined to which extent people may neglect getting PHC services due to the cost associating physical, social demographic and psychological factors. It was concluded that rapidly increasing patient charges particularly affect the weaker social group and thus hamper the idea of equitable service to all.

Measuring Patient Satisfaction with Health Services

Barry CA, et al (2001):

"Satisfaction is a complex concept that is influenced by factors including socio-demographic characteristics, physical and psychological status, attitude and expectations about medical care structure, process and outcome of care.

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

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

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

Theoretical Model for patient Satisfaction (an outcome of use of services)

Aday and Anderson (1974):

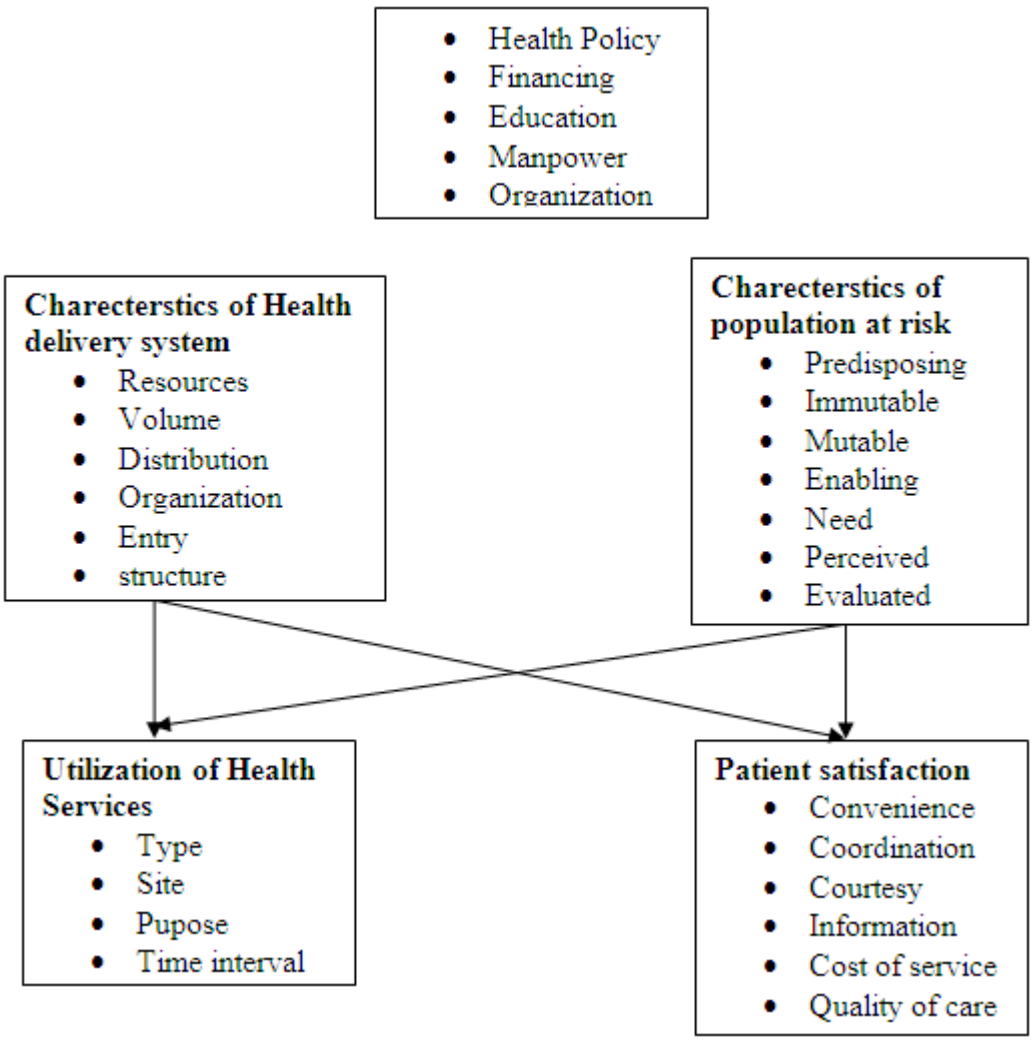
They studied satisfaction of people toward health care delivery in United States during 1970-1975 and pointed out 6 fundamentals related to patient satisfaction, three of the fundamentals of those six are as follow:

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

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

received. Patient satisfaction is an outcome indicator in a theoretical model of access, which indicated the use of the services.

The figure given below gives the Aday and Anderson's Health System Model, the development of indices of access to medical care.



Partha Pratim Roy(2002):

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

The Characteristics of good Medical Care Services

Yougyut Pongsupha (1980):

He stated that a good service did not require only knowledge and ability of the persons who offered the service, but also the management system that influenced this factor as well.

Good service characteristics can be explained as follows:

i) Acknowledging patients care

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

ii) Continuous care

A service should be offered, starting from the onset of the health problems till the complete disappearance of these problems.

iii) Mixed care

This consists of curative, prevention, promotion and rehabilitation. If a health service facility can effectively provide health care, it can significantly upgrade the trust and belief, resulting in health promotion, prevention and education activities.

All above said three characteristics complement each other and if one of them is missing, the other two will lose their value.

The Importance of Patient satisfaction

Mechanic D, et al (1990):

He stated that satisfied patients are likely to continue enrolling in health plans and more likely to return to their physician or hospital and less likely to bring a malpractice suit. Patients who find the medical care satisfying more complaint with their treatment regimes and thereby produce more clinical outcomes and better results. Therefore the importance of patient satisfaction may be summarized as follows:

- Satisfied patients improve the quality of the work experience for providers, reducing staff turnover.
- Patient's feedback about their level of satisfaction and plotting the results can help managers to understand how the patients are satisfied or dissatisfied dealing with both the hospital in general and with their various services in particular.
- Measuring patient satisfaction is one of the safest ways to obtain the information.
- Satisfied patient believes that the organization understand and address his or her personnel preference, needs or problems.

Health Care Providers

Hall and Dornan (1988):

They reported that satisfaction with health care services is determined by satisfaction with one's physician, while satisfaction with the outpatient experience is determined by the quality of health care workers. The satisfaction is divided into two parts: the satisfaction with technical competence and satisfaction with interpersonal skills.

Interpersonal relationship between patient and the provider is reported by many authors to be one of the most important issues for patient perception of quality. Characteristics of health care providers, specifically the patient prefers are:

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

Margaret B (2000):

She reported that client centered care require health providers to respect a clients point of view, encourage clients to discuss their needs, provide the appropriate medical information to the client and assist them in making decisions rather than telling them what to do.

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

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

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

Tabulation Of Data

TABLE 1
DETERMINATION OF IMPACT OF VARIOUS PARAMETERS ON PATIENT SATISFACTION

NULL HYPOTHESIS Patient Satisfaction (P.S.) is independent of :	DNDH	PCMH	Chi-square value	P value (if p < 0.05 then null hypothesis is accepted at 5% significance level, otherwise it is rejected)	At 5% level of significance is null hypothesis accepted or rejected	Conclusion (if Null Hypothesis is rejected then parameter affects P.S. and vice-versa)
*Gender	Applicable	Applicable	DNDH:1.39 PCMH:1.11	DNDH:**0.23** PCMH:**0.29**	REJECTED FOR BOTH HOSPITALS	Gender affects P.S.
*Education	Applicable	Applicable	DNDH:3.92 PCMH:0.15	DNDH:0.04 PCMH:**0.7**	ACCEPTED FOR DNDH BUT REJECTED FOR PCMH	Education partially affects P.S.
*Economic Role in Household	Not Applicable	Applicable	PCMH:5.97	PCMH:0.01	ACCEPTED FOR PCMH	Economic role does not affect P.S.
*Duration of Stay at Hospital	Not Applicable	Applicable	PCMH:0.04	PCMH:**0.08**	REJECTED FOR PCMH	Duration of stay affects P.S.
*Access of Patient to Hospital	Not Applicable	Applicable	PCMH:3.18	PCMH:**0.07**	REJECTED FOR PCMH	Access of patient to hospital affects P.S.
*Familiarity of Patient with Hospital	Not Applicable	Applicable	PCMH:1.75	PCMH:**0.19**	REJECTED FOR PCMH	Familiarity affects P.S.
*Age	Applicable	Not Applicable	DNDH:21.75	DNDH:0	ACCEPTED FOR DNDH	Age does not affect P.S.
*Marital Status	Applicable	Not Applicable	DNDH:47.02	DNDH:0	ACCEPTED FOR DNDH	Marital status does not affect P.S.
*Occupation	Applicable	Not Applicable	DNDH:28.78	DNDH:0	ACCEPTED FOR DNDH	Occupation does not affect P.S.
*Family Income	Applicable	Not Applicable	DNDH:2.46	DNDH:**0.11**	REJECTED FOR DNDH	Family Income affects P.S.
*Family Size	Applicable	Not Applicable	DNDH:4.99	DNDH:0.025	ACCEPTED FOR DNDH	Family size does not affect P.S.
*Distance from Hospital	Applicable	Not Applicable	DNDH:20.04	DNDH:0	ACCEPTED FOR DNDH	Distance from hospital does not affect P.S.
*Waiting Time of Doctor Examination	Applicable	Not Applicable	DNDH:0.39	DNDH:**0.53**	REJECTED FOR DNDH	Waiting time of doctor examination affects P.S.
*Total time spent in OPD	Applicable	Not Applicable	DNDH:0.56	DNDH:**0.45**	REJECTED FOR DNDH	Total time spent in OPD affects P.S.
*Whether Timing of OPD Adequate	Applicable	Not Applicable	DNDH:17.464	DNDH:0	ACCEPTED FOR DNDH	Whether timing of OPD adequate does not affect P.S.
*Whether Adequate Information Available for OPD	Applicable	Not Applicable	DNDH:1.21	DNDH:**0.27**	REJECTED FOR DNDH	Whether adequate information available about OPD affects P.S.

TABLE 2

SEGREGATION OF PARAMETERS WHICH AFFECT AND DONOT AFFECT PATIENT SATISFACTION

PARAMETERS WHICH AFFECT PATIENT SATISFACTION			PARAMETERS WHICH DO NOT AFFECT PATIENT SATISFACTION		
S. No	**Parameters** (with p values & percentages of respondents responding to high satisfaction level)	**Which group more satisfied**	S. No	**Parameters** (with p values & percentages of respondents responding to high satisfaction level)	**Which group more satisfied**
1	**Gender** (both hospitals) (p values: DNDH:**0.23**,PCMH:**0.29**) *Male (PCMH) ----------24% *Female (PCMH) ----------50%	Female	1	**Education** (DNDH) (p value : 0.04) *Primary & lower ----------68.4% *Secondary & above ----------50.6%	**Primary and lower education**
	*Male (DNDH) ----------49.5% *Female (DNDH) ----------57.8%				
2	**Education** (PCMH) (p value : **0.7**) *Primary & lower ----------65% *Secondary & above ----------75%	Secondary & above education	2	**Economic role in household** (PCMH) (p value : 0.01) *Non-earner ---------- 13% *Earner ---------- 67%	**Earner in house**
3	**Duration of stay at hospital**(PCMH) (p value : **0.08**) *Less than seven days --------57% *More than one weeks -------50%	Less than 7 days of hospital stay	3	**Age** (DNDH) (p value : 0) *16-25yr ----------29% *26-35yr ----------70.7% *36-45yr ----------60.7% *46 & more----------75.9%	**Age group 46 & more years and then 26-35 years in decreasing order**
4	**Access of patient to hospital**(PCMH) (p value : **0.07**) *Helped by member of staff ------60% *Not helped by member of staff--19%	Helped by staff member	4	**Marital status**(DNDH) (p value : 0) * Single ----------36% * Married ----------77.9%	**Married**
5	**Familiarity of patient with hospital**(PCMH) (p value : **0.19**) *No familiarity: first visit ---------33% *Not first visit ----------72%	Not first visit to hospital	5	**Occupation**(DNDH) (p value : 0) * Not employed ----------39.7% *Government employee --------84.8% * Non-government employee --63.6%	**Govt. employee**
6	**Family income**(DNDH) (p value : **0.11**) *Less than mean(**Mean=Rs15243**)---58% *Mean and more ----------46.4%	Family income less than mean	6	**Family size**(DNDH) (p value : 0.025) *04 and less ----------64.4% *05 and more----------48%	**Family size 4 or less**
7	**Waiting time of doctor examination**(DNDH) (p value : **0.53**) *30 minutes and less ----------52.3% *More than 30 minutes ----------56.9%	**More than 30 minutes waiting of doctor examination**	7	**Distance from hospital**(DNDH) (p value : 0) *5 and less Km ----------64.1% *More than 5 km ----------29.3%	**Staying at a distance less than or equal to 5 km from hospital**
8	**Total time spent in OPD**(DNDH) (p value : **0.45**) *60 minutes and less ----------56.1% *More than 60 minutes -------50.6%	Total time spent in OPD is less than or equal to 1 hour	8	**Whether timing of OPD adequate**(DNDH) (p value : 0) * No=difficult access ----------26.7% * Yes=easy access ----------61.9%	**Easy access to OPD timings**
9	**Whether adequate information available for OPD**(DNDH) (p value : **0.27**) *No ----------58.8% *Yes ----------50.8%	Adequate information is not available for OPD			

TABLE 3

Table showing Ranks of Various parameters affecting Patient Satisfaction with reference to PCMH

Rank	Parameter	Value Of R*	Comment On The Result
1	Economic condition	0.53	As R > 0.5 patient satisfaction is dependent on economic condition
2	Familiarity	0.32	As 0.1<R < 0.5 patient satisfaction is weakly dependent of familiarity
3	Gender	0.23	As 0.1<R < 0.5 patient satisfaction is weakly dependent of gender
4	Education	0.03	As -0.1<R < 0.1 patient satisfaction is independent of education
5	Duration	-0.07	As -0.1<R < 0.1 patient satisfaction is independent of duration
6	Access	-0.73	As R < -0.1 patient satisfaction is dependent on access but negatively correlated

*R= COEFFICIENT OF CORRELATION

The parameters which are within control (intrinsic) of PCMH are "Duration of Stay of Patient" and "Familiarity of Patient with hospital". Out of these two parameters, one could observe that "Duration of Stay of Patient" does not have significant impact on patient satisfaction whereas "Familiarity of Patient with hospital" has weak association with patient satisfaction. Hence PCMH needs to put more emphasis on "Familiarity" than "Duration".

The parameters which are extrinsic (external) and not within control of PCMH are "Economic Condition", "Gender", "Education", "Access". Out of them "Economic condition" has maximum impact on Patient Satisfaction followed by "Gender", "Education", "Access" in decreasing order.

TABLE 4

Table showing Correlation Coefficient (R) within various parameters affecting Patient Satisfaction with reference to DNDH

R* values	OPD time adequate	Waiting time	Age	Distance	Gender	Marital status	Occupation	Time in OPD	Education	Family size	Income
OPD time adequate	1.000	.016	.031	.072	.099	.034	.065	.063	-.005	-.232	.070
Waiting time	.016	1.000	-.027	.031	-.049	.068	.048	.142	-.057	-.055	-.322
Age	.031	-.027	1.000	-.038	.017	.033	.029	-.017	-.142	.081	.083
Distance	.072	.031	-.038	1.000	-.013	.001	.098	-.052	.008	-.135	.080
Gender	.099	-.049	.017	-.013	1.000	.008	.027	-.016	-.073	.022	.054
Marital status	.034	.068	.033	.001	.008	1.000	-.082	.010	.036	.095	.010
Occupation	.065	.048	.029	.098	.027	-.082	1.000	-.013	.017	-.074	-.092
Time in OPD	.063	.142	-.017	-.052	-.016	.010	-.013	1.000	.058	-.007	-.092
Education	-.005	-.057	-.142	.008	-.073	.036	.017	.058	1.000	-.119	-.021
Family size	-.232	-.055	.081	-.135	.022	.095	-.074	-.007	-.119	1.000	.077
Income	.070	-.322	.083	.080	.054	.010	-.092	-.092	-.021	.077	1.000

TABLE 5

Table showing Correlation Coefficient (R) within various parameters affecting Patient Satisfaction in decreasing order of Correlation Coefficient (R) values with reference to DNDH

S.No.	CORRELATION BETWEEN	R VALUES (in decreasing order)	COMMENT
1	Time in OPD & Waiting time	**0.142**	There exists weak but positive correlation
2	Gender & OPD Time adequate	**0.099**	There exists weak but positive correlation
3	Occupation & Distance	**0.098**	There exists weak but positive correlation
4	Family size & Marital Status	**0.095**	There exists weak but positive correlation
5	Income & Age	**0.083**	There exists weak but positive correlation
6	Family size & Age	**0.081**	There exists weak but positive correlation
7	Income & Distance	**0.08**	There exists weak but positive correlation
8	Income & Family size	**0.077**	There exists weak but positive correlation
9	Distance & OPD Time adequate	**0.072**	There exists weak but positive correlation
10	Income & OPD Time adequate	**0.07**	There exists weak but positive correlation
11	Marital Status & Waiting time	**0.068**	There exists weak but positive correlation
12	Occupation & OPD Time adequate	**0.065**	There exists weak but positive correlation
13	Time in OPD & OPD Time adequate	**0.063**	There exists weak but positive correlation
14	Education & Time in OPD	**0.058**	There exists weak but positive correlation
15	Income & Gender	**0.054**	There exists weak but positive correlation
16	Occupation & Waiting time	**0.048**	There exists weak but positive correlation
17	Education & Marital Status	**0.036**	There exists weak but positive correlation
18	Marital Status & OPD Time adequate	**0.034**	There exists weak but positive correlation
19	Marital Status & Age	**0.033**	There exists weak but positive correlation
20	Age & OPD Time adequate	**0.031**	There exists weak but positive correlation
21	Distance & Waiting time	**0.031**	There exists weak but positive correlation
22	Occupation & Age	**0.029**	There exists weak but positive correlation
23	Occupation & Gender	**0.027**	There exists weak but positive correlation
24	Family size & Gender	**0.022**	There exists weak but positive correlation
25	Gender & Age	**0.017**	There exists weak but positive correlation
26	Education & Occupation	**0.017**	There exists weak but positive correlation
27	Waiting time & OPD Time adequate	**0.016**	There exists weak but positive correlation
28	Time in OPD & Occupation	**0.01**	There exists very weak but positive correlation
29	Income & Marital Status	**0.01**	There exists very weak but positive correlation
30	Marital Status & Gender	**0.008**	There exists very weak but positive correlation
31	Education & Distance	**0.008**	There exists very weak but positive correlation

32	Marital Status & Distance	**0.001**	There exists very weak but positive correlation
33	Education & OPD Time adequate	**-0.005**	There exists very weak but negative correlation
34	Family size & Time in OPD	**-0.007**	There exists very weak but negative correlation
35	Gender & Distance	**-0.013**	There exists very weak but negative correlation
36	Time in OPD & Marital Status	**-0.013**	There exists very weak but negative correlation
37	Time in OPD & Gender	**-0.016**	There exists very weak but negative correlation
38	Time in OPD & Age	**-0.017**	There exists very weak but negative correlation
39	Income & Education	**-0.021**	There exists very weak but negative correlation
40	Age & Waiting time	**-0.027**	There exists very weak but negative correlation
41	Distance & Age	**-0.038**	There exists very weak but negative correlation
42	Gender & Waiting time	**-0.049**	There exists very weak but negative correlation
43	Time in OPD & Distance	**-0.052**	There exists very weak but negative correlation
44	Family size & Waiting time	**-0.055**	There exists very weak but negative correlation
45	Education & Waiting time	**-0.057**	There exists very weak but negative correlation
46	Education & Gender	**-0.073**	There exists very weak but negative correlation
47	Family size & Occupation	**-0.074**	There exists very weak but negative correlation
48	Occupation & Marital Status	**-0.082**	There exists very weak but negative correlation
49	Income & Occupation	**-0.092**	There exists very weak but negative correlation
50	Income & Time in OPD	**-0.092**	There exists very weak but negative correlation
51	Family size & Education	**-0.119**	There exists weak but negative correlation
52	Family size & Distance	**-0.135**	There exists weak but negative correlation
53	Education & Age	**-0.142**	There exists weak but negative correlation
54	Family size & OPD Time adequate	**-0.232**	There exists weak but negative correlation
55	Income & Waiting time	**-0.322**	There exists weak but negative correlation

TABLE 6

Table showing Ranks of various factors affecting Patient Satisfaction on basis of Correlation Coefficient (R) values with reference to DNDH

S. No.	Correlation Between Patient Satisfaction And Parameter :	R Values (in decreasing order)	Rank	Comment
1	OPD time adequate	0.157	1	There exists weak but positive correlation
2	Gender	0.081	2	There exists weak but positive correlation
3	Waiting time	0.077	3	There exists weak but positive correlation
4	Income	0.071	4	There exists weak but positive correlation
5	Time in OPD	0.061	5	There exists weak but positive correlation
6	Occupation	0.024	6	There exists weak but positive correlation
7	Marital status	-0.006	7	There exists weak but negative correlation
8	Family size	-0.008	8	There exists weak but negative correlation
9	Age	-0.059	9	There exists weak but negative correlation
10	Adequate information available	-0.085	10	There exists weak but negative correlation
11	Education	-0.094	11	There exists weak but negative correlation
12	Distance	-0.113	12	There exists weak but negative correlation

TABLE 7

Comparative Analysis of Parameters (in Both DNDH And PCMH) which affect Patient Satisfaction as obtained from Regression Analysis

Parameter	Rank (DNDH)	Rank (PCMH)
OPD time adequate	**1**	-
Gender	**2**	**3**
Waiting time	**3**	-
Income (or Economic condition)	**4**	**1**
Time in OPD	**5**	-
Occupation	**6**	-
Marital status	**7**	-
Family size	**8**	-
Age	**9**	-

Adequate information available	**10**	
Education	**11**	**4**
Distance	**12**	**-**
Familiarity	**-**	**2**
Duration of stay	**-**	**5**
Access to hopital	**-**	**6**

TABLE 8
Summary of Factor Analysis with reference to DNDH (numerical values represent Correlation Coefficient (R) values of parameter/factor v/s patient satisfaction)

12 FACTORS											
Income	Waiting time	Family size	OPD time adequate	Gender	Adequate information	Distance	Occupation	Marital status	Age	Education	Time in OPD
0.071	0.077	-0.008	0.157	0.081	-0.085	-0.113	0.024	-0.006	-0.059	-0.094	0.061

6 FACTORS					
Income, Waiting Time	Family size, OPD time adequate	Gender, Adequate information ,Distance	Occupation, Marital status	Age, Education	Time in OPD
0.113	0.028	-0.113	0.090	-0.079	-0.015

5 FACTORS				
Income , Waiting time ,Adequate information	Family size , OPD time adequate	Occupation , Marital status	Age, Education, Gender	Time in OPD, Distance
0.106	0.037	0.120	-0.111	-0.038

4 FACTORS			
Income , Waiting time ,Occupation	Gender , Adequate information ,Time in OPD	Family size , OPD time adequate ,Distance	Age, Education ,Marital status
0.128	-0.153	-0.010	-0.029

3 FACTORS		
Income , Waiting time ,Occupation ,Marital status	Family size , OPD time adequate ,Education	Gender , Adequate information ,Time in OPD ,Age ,Distance
0.131	0.015	-0.151

2 FACTORS	
Income , Waiting time ,Occupation ,Marital status, Gender , Adequate information ,Time in OPD	Family size , OPD time adequate ,Education , Age ,Distance
0.041	-0.007

New Findings

New Finding No 1

Group of patients having education of secondary level or above are more satisfied than the group of patients having education of primary level or below primary level

Education in patients enhances various types of awareness levels in a person among which awareness related to various types of health types like physical health, mental health and social health are also involved. Hence patients who have at least secondary level of education can better comprehend healthcare facilities available in a health-care organization compared to group of patients having education primary level or below primary level. Thanks to various health camps organized by several private and government hospitals, NGOs

throughout the country, even to its various remote villages, awareness level of healthcare facilities in the minds of all types of people keeps on steadily increasing which can indirectly enhance level of patient satisfaction.

New Finding No 2

Group of patients who stay in hospital for less than 7 days are more satisfied than the group who stay for more than or equal to 7 days

In the present research, researcher has observed a very common psychological aspect in human beings i.e. "More a person gets access to a certain product or service, more the person wants to have less of it" to become true in case of healthcare services as the patients who are staying for at least seven days show a higher rate of decline of utility of healthcare services compared to patients who stay for less than seven days. This particular new observation in healthcare is in accordance with "Law of Diminishing Marginal Utility".

New Finding No 3

Group of patients who are not making first visit to hospital are more satisfied than the group who are making visit to hospital more than once

It is a common saying that "First Impression is Last Impression". So the level of utility a patient gets should be the highest provided healthcare professionals can successfully fulfill the highest need of the patient visiting hospital for first time. After satisfactory treatment received from healthcare professionals like doctors, nurses, support staff at first visit, the requirement of patients decreases to a great extent. If the same patient makes subsequent visits in the same healthcare organization, the utility level keeps on decreasing. In the present research, a favourable situation in the place of study that healthcare professionals are successfully catering to the need of the patients is found out. This condition can be improved by proper manpower planning in hospital.

New Finding No 4

Group of patients who wait for more than 30 minutes for doctor examination are more satisfied than the group who wait for less than or equal to 30 minutes

It is a common psychological aspect in human behaviour that customers desire to avail products or services from those who are in great demand by similar-minded customers. So in this regard, patients get a similar apprehension that if the waiting time of doctor examination is more then the doctor should be of high profile, highly demanded by customers, known for quality service delivery and an approachable person compared to many other doctors. It is a common human belief that great things happen in life only after patience and perseverance. Hence patients prefer to wait for a longer time to get better value-added-services from healthcare experts than get fast below-average services. That means "Patients must have Patience"

New Finding No 5

Total time spent in OPD for less than or equal to one hour creates more satisfaction in compare to time spent more than one hour in OPD in the minds of patients and those who accompany them.

Waiting time in OPD gets enhanced due to several factors like organizational factors, economic factors, political factors, legal factors, technological factors etc. Factors like political, legal, economic, technological are not within the control of organization but factors like organizational factors like manpower planning, corporate governance, company policies, vision, mission, goals etc are internal to the organization and can be controlled. In the present study it was found that dissatisfaction level in patients and patient-party is more if waiting time in OPD goes beyond one hour. Hence the hospitals need to take special care of all its internal aspects to decrease OPD waiting time to enhance satisfaction level of their customers as hospital service is meant for the patients who are considered as "God" in marketing context.

New Finding No 6

Factors like "distance of patients' home from hospital", "whether timing of OPD is adequate or not" do not affect satisfaction level of patients

Healthcare is a necessity of life compared to other features like comfort and luxury. The price elasticity of demand in case of necessity of life is less than 1 and in comfort and luxury price elasticity is more than 1. Hence necessities of life are price inelastic (or price insensitive) whereas comfort and luxury are price elastic (or price sensitive). Hence if a patient has to pay high or low price for getting quality healthcare services (necessity

of life) the demand of such healthcare will not be much affected. So people are quite eager to sacrifice their precious resources like time, energy, money, peace of mind etc at the cost of getting value-added healthcare facilities.

New Finding No 7

Group of patients who are employed are more satisfied than unemployed group of patients.

Researcher observed that group of patients who are employed have more purchasing power than unemployed group. So employed group have higher satisfaction level which could probably be due to the following reasons:

- Employed group is in a better condition than unemployed group for making payment towards medical treatment like buying medicines, fooding charges, bed charges, etc
- Medical treatment is a necessary item in life and so during an urgent healthcare requirement unemployed group are more prone to borrow money from others than employed group thus getting exposed to all sorts of untoward circumstances while borrowing and even after that when it comes to repay loan.

Bibliography

[1]. World Health Organization. Formulating strategies for health for all by the year 2000. Geneva: The Organization; 1979. Health for all series no.2
[2]. Fitzpatrick R. Surveys of patient satisfaction: Important general considerations. British Medical Journal. 1991; 302: 8870-9.
[3]. Abdul Kareem A, Aday LA, Walker GM. Patient Satisfaction in government health facilities in the state of Qatar. J community Health 1996 Sct; 21(5): 349-58.
[4]. Anjum J. Patient satisfaction towards out patient department services in Pakistan Institute of Medical sciences, Islamabad.
[5]. Sita RD. Consumer's Satisfaction toward health care services provided by health center in Muang district, Loei Province, Thailand.
[6]. Upreti SR. Consumer Satisfaction towards Health centers in Suphanburi province, Thailand
[7]. Roy, P.P. Client Satisfaction on Outopatient Medical Care Service in Sampran Community Hospital, Thailand.
[8]. Ansari, S.P. Client Satisfaction Towards Health Center Services In Urban Islamabad, Pakistan
[9]. Health Care Management Express. Customer satisfaction in Hospitals Indian Express Newspapers (Bombay) Limited (Mumbai, India); 2001.
[10]. Linder-Pelz SU. Toward a theory of patient satisfaction. Social science & Medicine. 1982; 16(5): 577-82.
[11]. Oliver, R.L. A conceptual model of service quality and service satisfaction: Compatible goals, different concepts.
[12]. Swartz TA, Bowen DE, Brown SN, and Stephen: Advances in services marketing and management Research and practice, Vol. 2, Greenwich, CT: JAI Press; 1993. p.65-85
[13]. Medical director, Holy family hospital, Mumbai business publications division, Indian express newspapers (Bombay) Limited [on line]; 2001.
[14]. Risser, Panchansky R, Thomas JW. The concept of access definition and relationship to consumer satisfaction. Med care 1981; 19(2): 127-40.
[15]. Oliver, Richard L. A conceptual Model of service quality and service satisfaction: Compatible Goals, different concepts. In: Swartz TA, Bowen DE, Brown SN, and Stephen, Advances in services marketing and management: Research and practice, Vol. 2, Greenwich, CT: JAI Press; 1993. p.65-85
[16]. Swan, et al. Deepening the understanding of hospital patient satisfaction fulfillment and quality effects. J health care marketing. 1985; 5(3): 7-8.
[17]. Lebow JL. Similarities and differences between mental health and health care evaluation studies assessing consumer satisfaction. Eval Plann J 1983; 237-45.
[18]. Chetwynd J. Satisfaction and dissatiafaction with the public and private hospitals. Newzealand Medical Journal 1988; 101: 563-69.
[19]. Young- Mahoon P. An analysis of the concept patient satisfaction as it relates to contemporary nursing care. J Adv Nursing 1996; 24:1241-48.
[20]. Aday LA, Anderson RM. Equity of access to medical care: a concept and empirical overview. Med care 1981; 19(12): 4-27.
[21]. Piyathida Sumtraprapoot. Patient satisfaction towards health center services of BMA health center 24
[22]. Barry CA, et al. Giving voice to life world, more humans and more effective medical care. Soc Science Med 2001; 51(4): 487-505.
[23]. Mechanic D. et al. choosing among health insurance options: A study of new Employees. Inquiry 1990; 27: 14-23
[24]. Weiss GL.: Patient satisfaction with primary medical care: an evaluation of socio-demographic and predisposing factors of medical care. Med Care 1988 Apr; 26(4).
[25]. Mansour AA, Muneera HO. Study of the patient satisfaction among primary health care patients in Saudi Arabia. J community Health 1993;18:163

Questionnaires
(A) Questionnaire for PCMH

Date:

Interview Schedule For In-Patients
This questionnaire is prepared for assessing the satisfaction of patients towards OPD services in PCMH. The information will be kept confidential and help in improving the services of this hospital. Your kind cooperation is expected. Therefore, please feel free to answer the questions.
Thanks and wish you a speedy recovery.
Name of the patient: _____
ed No.:_____ Date of Admission: ____/____/____

Diagnosis *(to be copied from case sheet)* _____

PART A – Patient Profile and their Living Conditions
1. Patient's residence for most of the year: Kolkata [ ] Outside Kolkata [ ]
2. Complete address: _____
3. Gender: Male [ ] Female [ ]
4. Completed age : _____years
5. Marital Status: Never married [ ] currently married [ ] Separated/divorced [ ] Widowed [ ]
6. Religion: _____ **7.** Caste: _____
8. Completed education: _____
9. Occupation: Employed [ ] Self Employed [ ] Student [ ] Housework [ ] Seeking employment [ ]
(a) Monthly income: Rs. _____
(b) If self employed : Nature of work: _____
(c) Other Occupation/Income related details: _____
10. Total family size : _____
11. Type of Housing: Slum [ ] On Pavement [ ] Flat [ ] Any other: _____

PART B – Contact with the PCMH Hospital
1. Prior to this, have you ever come to this hospital ? Yes [ ] No [ ]
If yes, how many times have you come here ?
_____times as an out-patient _____times as an in-patient
2. What was your opinion about the hospital before coming here ? _____
3. How long have you been suffering from your present illness ? _____
4. For this current episode of illness, where did you go for treatment before coming to this hospital ?
Medical Care Provider For how long ? Why did you discontinue? Money spent
5. Considering there are so many other hospitals you could have gone to, what made you come to this hospital for treatment ?
_____
_____
6. Were you referred to this hospital or did you come here on your own ?
Referred from OPD [ ] Referred by govt. dispensary/hospital [ ] Referred by private doctor/hospital [ ]
Came on my own to OPD [ ] Came on my own for admission [ ] Any other: ____
7. Are you acquainted with any of the staff of the hospital ? Yes [ ] No [ ]
If yes, who ? Doctor [ ] Nurse [ ] Ward boy [ ] Ayah [ ] Clerk [ ] Social worker [ ]
Any other: _____ No acquaintance [ ]
Did this person help you with your admission and stay at the hospital ?
Yes, this time [ ] Not this time but in the past [ ] Never [ ] No Acquaintance [ ]
If no, were you helped by someone who knows a staff member or who knows procedures here ?
Yes, this time [ ] Not this time but in the past [ ] Never [ ] Not Applicable [ ]
8. Have you been treated in any other Municipal/govt. hospitals in Bombay before? Yes [ ] No [ ]

PART C – Patient's Perception of Care Rendered by the Hospital.
1. Did you encounter any problems while seeking admission in the ward ? Yes [ ] No [ ]
Did you encounter delays in the process of registration/form filling ? Yes [ ] No [ ]
Did you encounter delays in the process of history taking ? Yes [ ] No [ ]
Was there a delay in getting a bed ? Yes [ ] No [ ]
Do you get information about the procedures to be followed easily ? Yes [ ] No [ ]
2.* Provision of facilities for sleeping *(to be filled by interviewer without asking)* :
Bed [ ] Mattress on floor [ ] Any other: _____
How long after admission were you provided with a bed ? _____
3.* Provision of linen (bedsheet, pillow cover, sheet for covering) (*to be filled by interviewer without asking)*
Bedsheet : Provided [ ] Not provided [ ]
Pillow cover : Provided [ ] Not provided [ ]
Sheet to cover oneself : Provided [ ] Not provided [ ]
How long after admission was bed linen provided ? *(Question to be asked if linen has been provided)*
Immediately after admitted [ ] After _____hours After _____days Not provided [ ]
After admission, have your sheets and covers been changed ? Yes [ ] No [ ]
If yes, how many times ? _____
4.* Is the patient wearing a hospital gown *(to be filled by interviewer without asking)* : Yes [ ] No [ ]
Condition of the gown *(to be filled by interviewer without asking)* : Torn [ ] Does not fit [ ]
(If patient is wearing a gown) : Were you provided with a gown on admission ?
Immediately after admission [ ] After _____hours After _____days Not provided [ ]
How often has it been changed since then ?
_____
5. Are you disturbed by the noise in the ward ? Yes [ ] No [ ]
Do you think the ward is clean ? Yes [ ] No [ ]

6. Have you been eating food provided by the hospital ? Yes [ ] No [ ]
What is your opinion about the quality of the food ? Good [ ] Tolerably good [ ] Bad [ ]
Is the food sufficient ? Sufficient [ ] Not always sufficient [ ] Insufficient [ ]
7. Has the hospital been providing you with clean drinking water ?
Yes, provided without having to ask [ ] Provided only when asked [ ] Not provided at all [ ]
8. Have you had any direct contact with any of the wardboys of the hospital so far? Yes [ ] No [ ]
How would you describe their behaviour towards patients ? _____
9. Have you had any direct contact with any of the ayahs of the hospital so far ? Yes [ ] No [ ]
How would you describe their behaviour towards patients ? _____
10. How many of your medicines have been provided by the hospital ? _____out of _____
Have these been given on time ? On time [ ] Erratically [ ] Never on time [ ]
11. Have you been required to do diagnostic tests so far ? Yes [ ] No [ ]
If yes, were all of these done in the hospital or were you required to do some outside the hospital ?
Wholly done in hospital [ ] Partly done in hospital [ ] Not done in hospital [ ]
12. Did the doctor(s) treating you explain about the nature of your illness and its cure ?
Gave information readily [ ] Gave information only when I asked [ ] Did not give information [ ]
I did not ask for information [ ] Any other: _____
If information was given, were you able to understand what the doctor said ?
Able to understand everything clearly [ ] Able to understand only some things [ ]
Unable to understand anything [ ] No information was given [ ]
Would you say that the doctor(s) attending to you are competent ?
Yes, all of them [ ] Some are competent [ ] None are competent [ ]
How would you describe the behaviour of doctors ?
_____
13. Would you say that the nurses attending to you are competent ?
Yes, all of them [ ] Some are competent [ ] None are competent [ ]
How would you describe their behaviour towards patients ?
_____
14. Have any of your relatives/friends been staying with you at the hospital ? Yes [ ] No [ ]
How would you describe facilities provided for them ?
Facilities for Eating : Adequate & good [ ] Good but inadequate [ ] No facilities [ ]
Facilities for sleeping :
Adequate & good [ ] Good but inadequate [ ] No facilities [ ]
15. So far, how much money have you spent during your stay at this hospital ?
Admission fees : _____) : Rs._____
Bed rent (@ Rs._____per day) : Rs._____
Medicines (namely, _____) : Rs._____
Tests (namely, _____) : Rs._____
Tips/bribes to (_____ _) : Rs._____

PART D – Satisfaction Level and Patients' Suggestions
1. Please tell us whether you are satisfied with each of the services/facilities listed below:
Hospital Procedures/Facilities/Services Level of satisfaction:

Criteria	Good	Average	Poor
Procedures preceding admission			
Sleeping facility			
Hospital linen			
Hospital gown			
Hospital ward			
Toilets in the ward			
Food provided by the hospital			
Doctors of the hospital			
Nursing staff of the hospital			
Hospital ward boys			
Hospital ayahs			

2. On the whole, are you satisfied with the care received from this hospital ? Why ?
_____
_____
_____

3. Would you return to this hospital the next time you need treatment? Under what circumstances? Why?
_____
_____
_____
_____

4. Would you recommend this hospital to your relatives/friends? Under what circumstances? Why?
_____
_____
_____
_____

5. What improvements would you like to see in the hospital ?

(B) Questionnaire for DNDH

This questionnaire is prepared for assessing the satisfaction of patients towards OPD services in DNDH. The informations will be kept confidential and help in improving the services of this hospital. Your kind cooperation is expected. Therefore, please feel free to answer the questions.
Thanks and wish you a speedy recovery.

Patient ID: Date:_____
Name:

Please tick the appropriate answers in the boxes or fill in the blanks as required.

Part-A. Socio- demographic Characteristics

Q.1**.** Sex

- □ Male
- □ Female

Q.2. Age

_____(Years)

Q.3.Marital Status

- □ Single
- □ Married

Q.4. What level did you finish your education?

- □ Never attended school.
- □ Primary
- □ Secondary
- □ Higher school / diploma

Q.5.Main occupation

- □ Not employed
- □ Government employed
- □ Non-Govt. employed

Q.6. Family income per month
Rs. _____

Q.7. Total members currently living in your family:

Part-B. Accessibility to the Health Care Services at DNDH
Distance from hospital

Q 1. How far do you live from the hospital?
_____ Km.
Q 2. Is it easy to get public transport to the hospital from your home?
Yes No
Q.3.How much time did you have to travel to the hospital?
_____hrs_____min ----------
Q.4. How much money did you spent in traveling to the hospital?
Rupees

Waiting time
Q.5. How much time did you have to wait for examination by the doctor?

_____hrs_____min

Q.6.What was the total time you spent in the OPD for getting complete health service?

_____ hrs_____min

Information received

Q.7. Is the schedule (8AM to 2PM) of working hours of OPD adequate?

Yes No

Q.8. Did you receive enough general information about this hospital?

Yes No

Q.9. How did you come to know about this hospital? (Please specify only the main source).

- □ TV
- □ Radio
- □ Friend

Part- C. Satisfaction towards OPD Services at DNDH

Please tick the level of your satisfaction against the following statement in the relevant box.

	Parameter	**Satisfaction level**				
		5= SA	**4= A**	**3= NA**	**2= DA**	**1= SDA**
Physical facilities						
1.	Building of this hospital is clean.					
2.	Ventilation inside the hospital is good.					
3.	Enough light inside the building of hospital					
4.	No noise around the hospital.					
5.	Waiting room has enough sitting chairs.					
6.	Enough clean toilets are available.					
7.	Enough physical examination rooms are available.					
Medical Equipment						
8.	Enough medical equipment for examination is available.					
9.	Medical equipment is in good working order.					
Doctor Service						
10.	Hospital doctors do physical examination with respect.					
11.	Doctors spend enough time with patient in examination.					
Nurse's Service						
12.	Hospital nurses treat the patient with respect.					
13.	Nurses explain the treatment clearly.					
Pharmacy Service						
14.	Hospital pharmacist treats patients with respect.					
15.	Pharmacists explain the use of medicine clearly.					
Registration Service						
16.	Registration staff treats the patient with respect.					
17.	Registration staff has good communication skills.					
Expenses for laboratory tests						
18	Expenses for pathology laboratory test are affordable.					
19	Medical Expenses for X-ray laboratory tests are affordable.					