TERTIARY LEVEL HOSPITAL MANAGEMENT AND PATIENT SATISFACTION: A comparative study between private and government sector.

by
Farhana Begum
April-2005

[A thesis submitted to the Department of Management Studies, Dhaka University for award of the degree of Master of Philosophy in management]

M. Phil

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Under the Supervision of

Dr. Shyam Sundar Karmaker
Professor
Department of Management Studies
University of Dhaka.

DECLARATION

I declare that the dissertation on "**Tertiary level hospital management and patient satisfaction : A comparative study between private and government sector**" embodies the results of my own research works pursued under the supervision of **Dr. Shyam Sundar Karmaker,** Professor of Management Studies, University of Dhaka.

I further affirm that the work reported in this thesis is original and no part or whole of the dissertation has been submitted to, in any form, any other university or institution for any degree or any other purpose.

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CERTIFICATE

This is to certify that **Farhana Begum** has completed the dissertation on **"Tertiary level hospital management and patient satisfaction : A comparative study between private and government sector"** under my supervision.

I recommend the thesis for evaluation for awarding the degree of Master of Philosophy in Management.

26.4.05

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ABSTRACT

Patient satisfaction with health care is seen as a dimension of quality of care. A cross sectional study was conducted with the objective of identifying differences in the level of satisfaction among patients in two hospitals of Dhaka city. Dhaka Medical College Hospital & Crescent Gastroliver & General Hospital Ltd. were selected for the study. Sixty eight respondents from the private hospital & thirty two from the public hospital were purposively drawn in the samples.

Satisfaction was categorized into five levels- not at all satisfied, somewhat satisfied, more or less satisfied, appreciable and excellent. The test statistics used to analyze the data were descriptive statistics, Chi-square, ANOVA and t-test.

The study identified age, marital status, occupation, socioeconomic condition, doctors services, nurses services, maintenance of cleanliness, laboratory services, electricity and overall care as determinants of patient satisfaction.

Comparing level of satisfaction as a whole (mean total satisfaction score) with socio-demographic variables revealed that no particular age or occupation group had any influence on the level of satisfaction (P=0.923 and P=0.104 respectively). However sex and socio economic conditions were found to be associated with level of satisfaction with female sex and rich social class having higher level of satisfaction (P<0.05 and < 0.05 respectively). But as

the same variables were compared with the outcome of treatment, none of them except sex was found to bear any relationship with the outcome (P-values were 0.409 for age, 0.111 for social class and 0.306 for occupation). The study showed that 92.6% of the female sex improved from their ailments compared to 66.2% of their male counterpart (P<0.007).

As mean total satisfaction scores attained by the private and public groups were compared, it was found that the private group attained score 155.78 ± 37.44, almost double that attained by the public group 79.81 ± 41.68. The difference between the two groups with respect to mean total score was found statistically significant (P<0.0001).

Of the nine kind of services evaluated in the present study, only the supply of electricity including provision of twenty four hours generator service was evaluated as 'excellently satisfactory' by both public and private respondents. In case of other services like doctors' services, nurses' services, provision of medicine supply, services given at the reception, ward-boy/aya/cleaners' services, services of other staffs, laboratory services and maintenance of cleanliness, majority of the public respondents held the view that they were 'not at all satisfactory'. On the contrary, majority of the private respondents, commenting on the same services given at the private setting, expressed that the services were 'excellent'.

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CHAPTER - 1

BACKGROUND INFORMATION

1.1 Introduction

Every human being expects that in case of his/her falling sick will be taken to a qualified health practitioner or hospital in the quickest possible time, where he/she will be welcome. It will be expected that hospital personnel will speak in the same or an understandable language and are courteous & caring. It may also be expected that they will take keen interest in treating patient, create homely and comfortable environment, provide for best investigation facilities & competent care ensuring quickest recovery. Patients expect that they will not have to wait for treatment, which will be free of cost or at an affordable cost and at every stage of decision making about the care opinion of the patients will be given due importance. When these expectations are met, then a sense of satisfaction prevails in the mind and body of the diseased and the same in turn quickens recovery. Satisfaction with hospital care is an outcome of hospital experience and is the result of individual evaluation by the patient of the multiple attributes of care in the background of his/her personal characteristics.

From the days of inception of the understandings of quality of care, doctors use to evaluate the service rendered by them through setting certain standards of their performance and comparing actual performance with the standard set. There was no reflection of opinion of the recipients of services. At present patients opinion about medical services, received from hospitals or individual

service providers is given due importance as it shapes attitude of the recipients about future utilization of the services.

Cathy Charles's (1994) "Patient satisfaction" with health care is seen as a dimension of quality of care. Pascoe (1983) defined patient satisfaction as a health care recipient's reaction to salient aspects of the context, process and result of their service experience. Ray Fitzpatric (1991) commented, "Discussion about how the quality of health care should be measured increasingly include patient satisfaction as one of the important dimensions." Susie Linder-Pelz defines patient satisfaction as "the individual's positive evaluations of distinct dimensions of health care."

Satisfaction ratings reflect three variables: the personal preferences of the patient, the patient's expectations and the realities of care received. Satisfaction with the realities of care received is affected by many different components of that care-access, cost, competence of care, personal qualities of service providers, participation of patient in decision making about his/her own care, provision of information about the disease, results of investigation, physical care, catering aspects of hospital care etc. Again, satisfaction level of patient will vary depending upon the expectations of and evaluations by the patient, which is determined by the socio-cultural background, age, economic status, educational qualifications, previous experience of hospital stay, severity of illness- etc. Patient variables including patient characteristics and expectations are often referred to as determinants of satisfaction, while care variables are referred to as the components of satisfaction (Ray Fitzpatric: 1991).

Health professionals should take patient satisfaction seriously as a measurement for three reasons. Firstly, there is convincing evidence that satisfaction is an important outcome measure. It may be a predictor of whether patients follow their recommended treatment and is related to whether patients re-attend for treatment and change their provider of health care. Secondly, patient satisfaction is an increasingly useful measure in assessing consultations and patterns of communication (such as the success of giving information, of involving the patient in decision about care, and of reassurance). Thirdly, patient feedback can be used systematically to choose between alternative methods of organizing or providing health care. Also there is evidence that satisfaction is related to improvements in health status (Susie Linder –Pelz: 1982).

"Patients' perceptions, especially about service quality which might shape confidence and subsequent behaviors with regard to choice and usage of the available health care facilities is reflected in the fact that many patients avoid the system or avail it only as a measure of last resort. Patients' voice must begin to play a greater role in the design of health care service delivery process in the developing countries" (Andaleeb: 2001). Satisfaction has several cross cutting dimensions of its own, like humanness, informativeness, overall quality, competence, access, cost facilities, outcome, continuity and attention to psycho-social problems. So patient satisfaction is an important issue in the

context of health care provision and utilization. It is pertinent to know why some services are overutilised, while others are not (Das AM Rahman: 1992).

Health care service delivery, like any other service, depends on the interaction between two parties - the provider and the client or consumer of the service. The interaction determines the level of utilization of the service by the individuals, group or the community. If a balance could be achieved between the demand of the client and the supply by the providers of service, then optimum utilization results. The level of health of a nation is, to a great extent, determined by the level of utilization of its health care services by its people.

In Bangladesh the health care service is designed in a three-tier system: primary, secondary and tertiary tiers. According to Bangladesh Health Bulletin 1998-99, UMIS, DHHS, August 2001, Bangladesh has a population of 129.9 million, per physician there are 4521 populations and population per bed is 3083 and there are 43293 hospital beds in public and private sectors taken together. Approximately, 60% of all public allocations to health are spent on hospital services. Rate of increase of hospital beds was 11.9% during years 1990-95 and 8.4% during years 1995-2000. Population growth rate is 151%. District hospitals are over-utilized (in-patient) by 52.62-71.97% but Upazilla hospitals are remaining underutilized by 80.76-60.3%, which suggest that people are inclined more towards using the services at the secondary and above levels, while at the primery level the services are remaining underutilized. This flows from the perceived idea of the people regarding quality of service

provided at different tiers. Social acceptability is an important dimension of quality of care and it encompasses patient satisfaction in it (Bangladesh Health Service: 1990).

In Bangladesh the proportion of GDP allocated to this sector was more than doubled between 1985/86 and 1995/96 (Health Family Planning: 2000). In addition, private sector health care has also been encouraged since 1982, leading to establishment of 346 private hospitals in the country by June 1996 (Khan: 1996). Even with these improvements in access & allocation, however, there is evidence that those who can afford it are obtaining health care services in neighboring countries. Despite the overwhelming personal cost and inconveniences of going abroad, people in need of health care are doing so. In the process they are conveying a staring message: they want quality services (Andaleeb: 2001). It was rightly mentioned in the concept paper for the 5th five-year plan that "the problem of supervision and accountability exacerbated the problems. Other issues of concern are poor utilization of government service and quality of service."

Andaleeb (2001) mentions that the health care delivery system in Bangladesh faces three major challenges: improving quality, increasing access and reducing cost. There is growing evidence that the perceived quality of medical care services has a relative greater influence on patient behaviors (satisfaction, referrals, choice, usage, etc) compared to access and cost.

1.2 Background

There is a common belief that better management of hospital or health centres is essential if higher standards of health and of health care are to be achieved and ensured (Park: 1989; WHO: 1963). Without effective administration and management of health services organisation to improve upon its structure, task and technology of services will meet with little success. (WHO:1963; WHO:1974). Proper management of hospital or health centre in countries with large population is the first and most cost- effective means of improving delivery of services.

A large number of hospitals and health centres exist in the country to generate quality of services and sometimes gap exist between inputs, processing and output. A hospital is catalyst that causes conversion of inputs to outputs through the act of managing. There have been shortcomings in absence of emphasis on continuous risk management, supervision and rapid evaluation of performance so as to bridge the gap between what is to be done and what actually be set with problems. In spite of investing large amount of money on health services, the shortages of services have been a perpetual problem to the administrator. On the one hand, huge increases in demand for services and, on the other, an equally huge increase in managerial problems have overloaded the delivery of services. Only better management can alleviate these problems.

As a signatory to the Alma-Ata declaration in 1978, the Government of Bangladesh is committed to taking steps to provide "Health for All" (HFA) to

its citizens by 2000 AD. We have agreed to adopt primary health care (PHC) for achieving the goal of HFA. In this larger context only hospital and health centers can play a major role. Furthermore, it will not possible to achieve the goal of PHC unless hospitals adequately start functioning as health centres and, therefore, do not remain as the ivory towers of disease in a community. The hospital and health centre services are of the most important components of comprehensive health care delivery system. Among the various units or institutions, the hospital and health centres are highly visible organisation. As a result many professionals, non-professionals and bureaucrats scrutinize them and sometimes directly or indirectly intervene to impose standards of performance both in terms of input resources utilized and output generated. There have been gradual increase in the utilization of hospital services and its impact on management has only been felt relatively recently. The expectation of people have increased enormously and sometimes asking questions regarding the adequacy of patient care, total health care being served by a hospital or health centres.

The Hospitals have a long history of providing social services for the poor, sick and wounded. It is a unique organisation of human beings. According to WHO expert committee (1963) a hospital is a residential establishment which provides short term and long term medical care, consisting of observational, diagnostic, therapeutic and rehabilitative services for persons suffering or suspected to be suffering from a disease or dying and for parturients

(WHO:1963). It may or may not also provide services for ambulatory patients on an outpatient's basis. The functions of hospitals have evolved through past several years in response to the growing need of the community as realized from time to time (Park: 1989: WHO: 1963). Such arising of hospitals has gained greater impetus in the past century but the criticisms leveled against the hospitals are as follows:

1. It exists splendid isolation in the community, acquiring the euphemism "an ivory tower of disease."
2. It absorbs vast proportion of health budget.
3. It is not people orientated.
4. Its procedures and styles are inflexible.
5. It overlooks the cultural aspects of illness.
6. The treatment is expensive.
7. It is intrinsically resistant to change.

It is to be noted that relative isolation of hospitals from the major health problems of the community, which has its roots in the historical development of health services, has contributed to the dominance of hospital in health care delivery systems. Unplanned growth of hospitals in haphazard way have been a great impediment in functional performance. Moreover, most of the hospital grows around personality of physicians or surgeon rather than the need of the community it served.

Therefore, once that personality disappeared from the place the organisation start decaying. If an organisation is built as per proper planning and organized

effectively, then in course of time it will come to maturity rather than looking old. There are few hospitals and health centres which are well functioning, because they are planned, organised and are directed as per management methods and techniques (Sinha: 1987). Hospital service is one of the most significant aspects of health care delivery system. It has been experienced that those hospitals and health complexes, where adequate and better support and supervision is given by hospital managers, are functioning efficiently and effectively (Sinha: 1992).

1.3 Statement of the Problem

Patient's satisfaction is one of the outcome variables in hospital management. Efficiency of health care delivery system depends on managerial capability of the institution. There is an urgent need to have a new look at the management problems faced by a manager, provider and consumers, who constantly intervene to meet up the demand for better hospital services. Now a days, there is a common headline of the daily newspapers that hospital and health complexes are beset with many-fold problems, making it difficult to provide medicare services to the patients. These problems might have arisen either from managerial incapability of problem solving and decision making or as a result of diverse problem of resource constraints, like shortage of doctor, nurse, medicines etc. Sometimes many decision makers and administrators do not agree with the prevailing hospital problems arising mainly due to resources

constraints, rather many of them sometimes directly and indirectly blame the hospital managers for their unsatisfactory performance.

Health service is the most important sector to fulfill the fundamental right of the people of a country. Thousands of people are going outside the country for getting specialised treatment and loosing huge foreign currency each year. To provide health care we have both government and private sector with different levels of speciality. Tertiary level hospitals are specialised hospitals including medical college hospitals. Tertiary level hospital is an index of our health service. It would be worth looking of their management skill, make a critical evaluation of patients' satisfaction and compare managerial quality and efficiency with the desired one. At the moment there is a little research undertaken in this important field of Bangladesh. So, it will be worth doing something in this particular field of management.

1.4 Rationale of the Study

This study have focused on difference of patients' satisfaction and compare management system in private and government tertiary health care centre and to realize what are the points to be praised or corrected in the management systems. This study would also make clear the management system of these hospitals. This study has pointed out the problems and suggested measures for improvement in health care delivery systems.

In a tertiary level hospital, patients used to have got the services from doctors, nurses, ward boys etc. on the ground of prescriptions, suggestion. Our health care systems are delivering services, but there is no role of consumers in this regard. Service delivery system rarely bothers for patients' or consumers' attitude, needs or opinion. This study would bring out the service system in the court of consumers. Health care system should be contributory. This study aims at to discover the new era, as consumers' (Patients) opinion will justify the system and will compare the services between govt. and private sector hospital. Government sector used to be careless on the one hand, and private sector is expensive on the other. The study would evaluate the nature of doctor-patient, and nurse-patient relationship. This study would also evaluate the service as a whole and in different branches. This careful evaluation would help in future planning and managing of these institutes.

1.5 Objectives and Implication of the Study

1.5.1 Objectives of the present study are as follows:

1. General Objectives:

To make a comparative evaluation of the services provided by the private and the public hospitals in terms of patient satisfaction and final outcome.

2. Specific Objectives:

a) To compare the patients' level of satisfaction with doctors' services between private and public hospitals in terms of care given, availability,

co-operative attitude, quality of services, regular visits and giving regular information to patients about prognosis of the disease.

b) To compare the patients' level of satisfaction with nurses' services in terms of care given by them, availability, punctuality, gentility & sympathy, sincerity and maintaining cleanliness.

c) To compare the management of medicine in terms of regular supplies and supply of emergency medicines.

d) To make a comparative evaluation of services at the reception sections between the private and public hospitals in terms of gentility & sympathy, courtesy, conduct of receptionist, cooperative attitude and open communication between the service-provider and client.

e) To compare the cleanliness status of the two types of hospitals with respect to discrete activities like hospital cleanliness, ward/cabin cleanliness, toilet cleanliness and operation theatre (OT) cleanliness.

f) To compare the services of ward boy / aya / cleaners between the private and public hospitals in terms of working skill, conduct, availability in times of need of the patient, maintenance of personal hygiene and gentility.

g) To compare the services of other support/auxiliary staff between the private and public hospitals in respect of discrete activities like punctuality, courtesy, working skill, and gentility.

h) To make a comparative statement of management of electricity between private and public hospitals in terms of regular supply of electricity and provision of emergency supply in case of failure of regular supply.

i) To compare the laboratory services between private and public hospitals in terms of provision of essential laboratory services, gentility & sympathy of the laboratory staff, cleanliness of laboratory and use of modern equipments.

1.5.2 Implication of the Study:

The ultimate objective of the study is to provide necessary information, which could be useful for:

1. The planners and policy-makers for making appropriate decision in order to improve the situation prevailing in both private and public hospitals.
2. The managers of the hospitals to implement the plan in most efficient way possible.
3. The researchers of the management field as well as of the related field to undertake further study to fill in gaps in information in the concerned discipline.

1. 6 Limitations of the Study:

Like most of the social studies, the present study also was not without limitations. The limitations that the researcher had to face were:

1. The places were selected purposively considering the convenience of the researcher and without employing any statistical procedure. This might have affected the result of the study. Had the places been selected following strict statistical procedure, a more representative study population would have been available and the study conducted on sample drawn from such population might have been different from that obtained from the present study.
2. Despite all out intentions and efforts to collect same number of respondents in both the groups (80 in each group), it had not been possible to collect the required number for either group, particularly in the public group. Because of non-cooperation of the staff as well as of the patients, the sample drawn was less than half than that drawn from the private group. As the sizes of the samples drawn from two different populations were widely different, it might have affected the comparability of the variables between the two populations.
3. The respondents selected in the public group were all from medicine ward: whereas respondents selected in the private group were both from medicine and surgery ward.

CHAPTER – 2

LITERATURE REVIEW

2.1 The Functions of Hospital

WHO defines a hospital as an integral part of a social and medical organisation, the function of which is to provide for the population complete health care, both curative and preventive, and whose out patient services reach out to the family and its home environment; the hospital is also a centre for the training of health workers and bio-social research.

Heinz Weihrich and Harold Koontz defines management as the process of designing and maintaining an environment in which individuals, working together in groups, efficiently accomplish selected aims. This basic definition needs to be expanded:

1. As managerial people carry out the managerial functions of planning, organizing, staffing, leading, and controlling.
2. Management applies to any kind of organization.
3. It applies to managers at all organizational levels.
4. The aim o f all managers is the same to create a surplus.
5. Managing is concerned with productivity; this implies effectiveness and efficiency.

Keeping in view the board social responsibilities and WHO definition of hospital, today there is no scope to consider hospital just mere a workshop to repair or cure diseases. The hospitals play an important role in maintaining and restoring the health of all members of the community. Moreover, it has to look after comprehensive community health care programmes and should start functioning as health centres. The functions of the modern hospital are essentially four.

1. Care of the sick and injured.

2. Education of physicians, nurses and other personnel.

3. Public health / community health: i.e. prevention of diseases and promotion of health.

4. Advancement of research in scientific medicine.

According to WHO, the functions of hospital for the delivery of comprehensive community health care are given as under:

1. Curative or Restorative: Diagnosis, treatment, rehabilitation and to provide emergency medical care for both sick and injured.

2. Prevention of disease and promotion of health: Supervision of general pregnancy, immunization, and control of communicable and non-communicable diseases like cardiovascular problems, diabetes etc. and health education.

3. Education and research: Education and training of medical staff, under and postgraduate nurses and other paramedical staff.

4. Professional Support: (a) Intellectual and professional support need to be provided to medical practitioners at stipulated cost. (b) To become a part of primary health care (PHC) programme, every hospital needs to take some role, such as:

- To provide support to PHC programme.
- To promote community health development action
- Basic and continuing education to health workers engaged in PHC.
- Research on PHC programme with a view to remove barriers.

2.2 Hospital Manager and Managerial Role in Hospital

Hospital managers are those personnel appointed to the positions of authority and direct the work efforts of others. They are responsible for utilisation of resources and are accountable for specific work results. Keeping in view the above defination, it may be noted that personnel having designates Matron, Dietician, Quarter Master and Medical Officer in charge of health centre, are all hospital managers.

All hospital managers are engaged in planning, decision making, organising, staffing, directing and controlling. They also perform other activities related to or affecting accomplishment of work and organisational objectives that do not readily fall within the functional classification. Their roles and their sub-classifications fall under interpersonal, informational and decision making roles (Henry: 1975).

1. INTERPERSONAL ROLES

a) Figure head: Greeting visitors, signing level documents, ribbon cutting for a new wing.

b) Liaison: Formal and informal contacts beyond the vertical chain of command inside the organisation as well as outside contacts.

c) Influence: Activities inherent in the directing function namely, motivating people and leadership.

2. INFORMATIONAL ROLES

a) Monitor and Disseminator: By virtue of managers' interpersonal contact he emerges as nerve centre of that unit. He gathers information and filter, evaluate and choose to react or act including whether to disseminate.

b) Spokesman: Make speeches to outside groups, represent their organisation to others.

3. DECISION MAKER ROLES

a) Change agent

b) Disturbance handler/ Resource allocator/ Negotiator

Level of position in Hierarchy	Kinds of Manager	Degrees of authority scope of responsibility
High	Senior Manager	Large
Middle	Mid-level Manager	Medium
Lower	First line Manager	Small
	Conceptual Technical And Human relation Skill	

Fig. 1: Kinds of managers

2.3 Managerial Skills:

This is the very important way of separating the kinds of managers. It is generally based on the degree to which they apply certain skills. Different managerial skills are discussed as under:

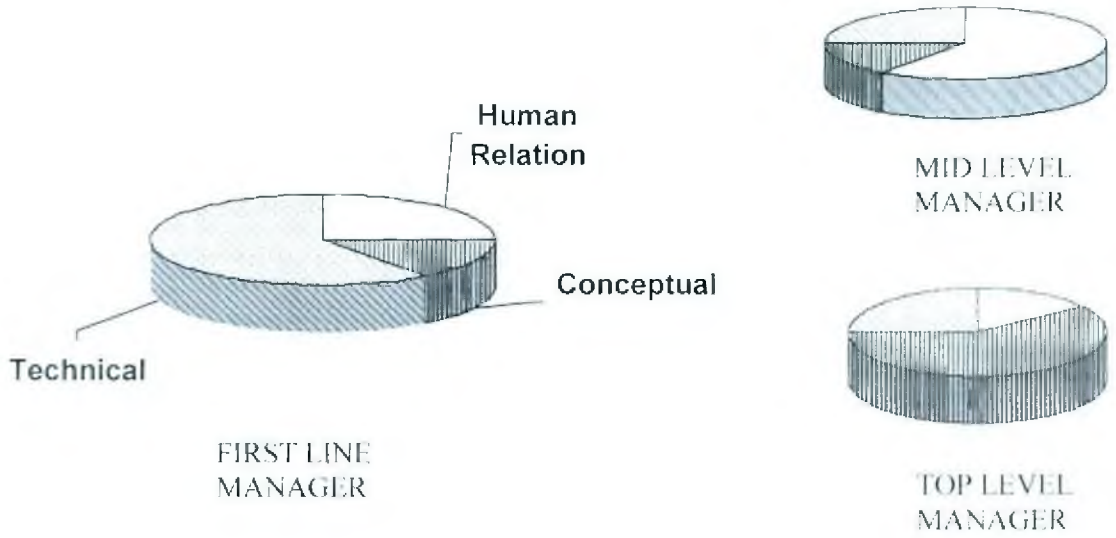


Fig. 2: Relative skills for different management level

1. Conceptual skill: It means understanding of organisational function as a whole e.g. hospital functioning and how the different systems and sub-systems depend and related to one another. Hospital manager must understand the quality of patient care in his hospital.
2. Human relation Skill: It is the ability to work with other people amicably. It is the vital part of the job of all managers regardless of level or function.

3. Technical Skill: It is important to note that all managers use human relation skills, because they accomplish work through people. However relative degree or intensity for each vary depending on the nature of particular job, scope of responsibility, work activity, number, types and skills of subordinate reporting to the manager (John: 1969; Koontz: 1984). Top levels or senior managers use conceptual skill to a larger degree in performing their jobs than do midlevel or first-line managers. First-line managers generally use more technical skills than either mid-level or top-level managers. Relative needs for various skill as shown in figure 2 indicate that lower level manager needs substantial technical skill, moderate amount of human relations skill and very little amount of conceptual skill. Mid-level managers need substantial human skill, but only moderate amount of technical and conceptual skill. Finally, higher management needs substantial conceptual skills, moderate amount of human skills and lesser amount of technical skills (Robbins: 1984).

2.4 Problems and Deficiencies of Health Care Services in Bangladesh

1. Management Problems: There have been little application of modern management techniques or practices in running the adequate hospital services. As a result, the system of improved patents care and monitoring is hardly effective.

Due to shortage of requisite trained personnel, hospitals and health complexes are poorly managed. All defined levels of authority and inadequate local accountability create confusion in the management system.

At the District General Health Service (DGHS) head quarter level, project monitoring and evaluation is inadequate. At district level, the abolition of the posts of Additional Civil Surgeon and reduction of other posts are also responsible to some extent for deficient project management and monitoring.

2. Organizational problems: The bifurcation of health and family planning brought about a lack of coordination between the two. Though there was agreement in policy that the services provided by the personnel of the two wings were to be effectively coordinated and integrated, the actual modalities of achieving this objective are not fully defined at the district and divisional level where the two wings are completely separated. Because of these anomalies, the services at the grass root level including vital PHC services like Maternal and Child Health (MCH) care suffer (Khaleda and Anisul: 1992; SERO: 1987).

3. Unsatisfactory Utilization of Existing Facilities: Utilization of existing facilitates in the rural areas is not satisfactory. The bed utilization rate in the district hospitals, medical colleges and the post–graduate institute hospitals is over 100%. While in the Thana Health Complexes, it is only 50% to 60%. This is not due to less morbidity in the rural areas, rather it is a reflection of generally poor quality of services arising out of inadequate technical and management support coupled with insufficient essential supplies and

maintenance. Therefore, the peripheral rural institutions can not create confidence among the local clients who bypass such institutions, causing overcrowding in the large urban hospitals.

The quality and coverage of the population by primary health is not up to expectation. Health facilities to date cover only 30% of the total population.

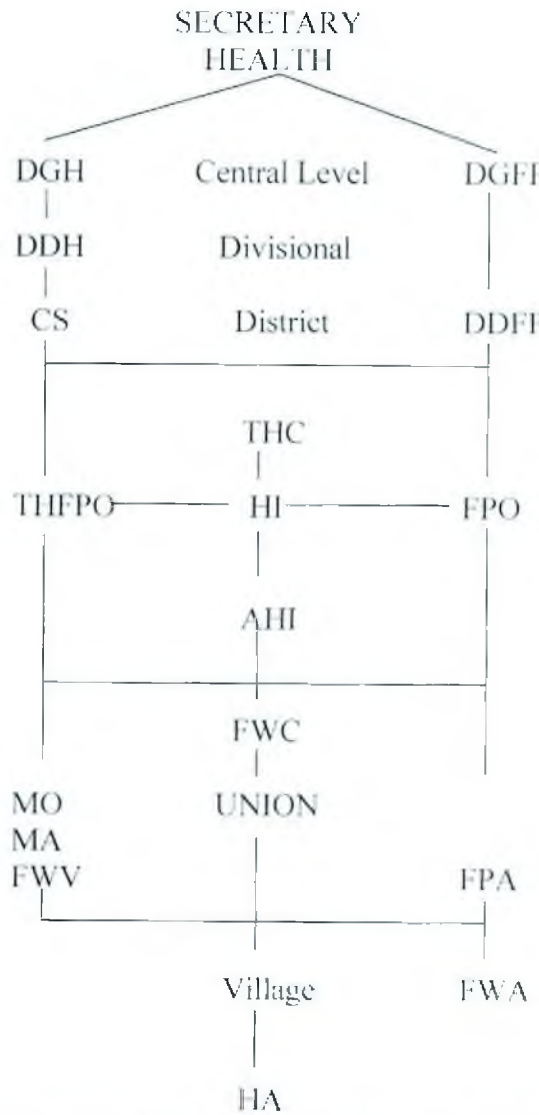


Fig.3: The infrastructure under the Ministry of Health and Family Planning (MOH and FP)

DGH- District General Health Services.

DDH- Deputy District of Health Service.

CS- Civil Surgeon.

HI - Health Inspector

MO- Medical Officer

HA- Health Assistant

THFP-Thana Health and Family Planning Officer

AHI- Assistant Health Inspector.

DDFP-Deputy Dte FP

FPO-Family Planning Officer

FWV-Family Welfare Visitor

FWA-Family Welfare Asst.

4. Other Deficiencies:

(a) Most of the THCS still lack essential physical and functional facilities. Similarly the district level hospitals suffer from inadequate facilities as manpower.

(b) Referral system with clearly spelt-out linkage and communication could not yet been established between THCS and district hospitals as well as national level specialised institutions.

(c) In Bangladesh the doctor/ population ratio is 1:5300. Health inspector/ population ratio is 1:72666 and the medical assistant / population ratio is 1:25060 (Khalada and Anisul: 1992). These figures suggest that the present programmes are of curative bias. Similarly, in the case of bed utilisation and population coverage, only 10% of the total bed facilities

are in the rural areas where 87% of the population lives. Rural people do not know how go to better hospitals for better treatment, a problem compounded by the lack of a referral system (Khalada and Anisul: 1992).

(d) Since it is assumed that curative treatment is urban- biased and preventive treatment is rural biased, the difference between preventive and curative treatment is that of urban and rural budgets. Close examination of the budget allocation shows gross differences. Very little attention has been accorded to PHC, the nucleus of health services. To reach the goal of HFA by the year 2000, a change of strategy for equitable distribution of the health budget for PHC is imperative.

(e) It is worth mentioning that Bangladesh is acutely suffering from a shortage of nurses. The nurse population ratio is 1:26, 669. The number of nurses at present is 91,000 which is not enough for the present requirements. Even Laboratory technicians are going aboard even though there is a demand for them in the local health network. Doctors are even changing their medical profession for better facilities and a secured future. Many of them are keeping joining other services like Administration, Police, Customs, Finance, Foreign services and other BCS cadres.

(f) Although Bangladesh is one of the signatories of the Alma Ata declaration on PHC, in reality the concept of the declaration is not reflected in its health service delivery systems. About 75% of the total expenditure of health

budget is for the urban areas, whereas only 25% of the health budget is allocated for 87% of the people who live in rural areas.

2.5 Health Services Administration in Bangladesh

The history of health services of Bangladesh, as part of the sub-continent, can be traced back to the 17th Century when the East India Company came here. The administrative machinery was then meant to govern as a police state from England and public health was a transferred subject. The early efforts of health administration were directed to the alleviation of sufferings due to sickness mostly catering to the needs of urban cities. Subsequently some facilities were extended to small towns in the form of hospitals with few beds (DGHS: 1985).

The concept of local bodies came into being in 1816. The attention of local bodies was drawn in 1888 to their duties in the matter of sanitation. The main emphasis, however, continued for provision of hospitals and dispensaries. The reports of the Plague Commission in 1904 recommended the strengthening of public health services and the establishment of laboratories for research and the preparation of vaccine and sera.

A Health Survey and Development Committee was formed in 1946. The report of the committee (popularly known as" Bhore Committee") recommended, inter alia, integration of curative and preventive services, production of "Basic Doctors" for the rural health institutions and the establishment of rural health centres.

A scheme for rural health centre came into being in 1961. Under this scheme one rural health centre having 6 maternity beds and with 3 sub-centres was planned to provide comprehensive health care for every 50,000 population. 150 such rural health centres were set up prior to the emergence of Bangladesh as an independent state (DGHS: 1985; SERO: 1987).

It was after liberation that the concept of the Thana Health Complex scheme evolved which envisaged the establishment of a 31bed hospital in each rural Thana with a view to providing integrated and comprehensive health care to the rural population. The scheme also envisaged the strengthening of the Directorate of Health service and of the health administration at the various levels. Subsequently, the Directorate of Health Services (Preventive and Curative) was reorganized and a unified channel of command was established under the Director-General of Health Services. It is against this background that the present organisational set up of health services in Bangladesh has emerged.

Since Bangladesh's independence in 1971, the Government has been following a policy of providing comprehensive health care, particularly to the rural masses that constitute 85% of the total population. While there is no formal document embodying a national health policy; the programmes of the first five-year, the two year and the second five-year plans, pursued this overall objective. In 1977, a 19-point pogramme was formulated which outlined the major objectives of national socioeconomic development. The provision of minimum medical care to all and reducing the population growth are primary

concerns of the health and the population sectors. The 18- point pogramme of 1982 and the 3rd five-year plan (1985-90) reaffirmed the same priority areas.

2.6 Doctor-Patient Relationship

Doctor- patient relationship is an important area of hospital sociology. This relationship not only depends on the values and norms of society but also depends on the varying environments. For example when patients admitted in hospital, it is just shifting of sick individual from one environment to the other environment.

From time immemorial health sciences have given suitable approaches for disease control and prevention. In the underdeveloped countries, indigenous medicine or doctors are not only credited with specialist knowledge, but many also have morale authority due to their role in religion as well as medicine (Hanny: 1981; Patick: 1982). Doctors and patients therefore, occupy social roles which are culturally determined. In the developed world, the sick role has been used to describe the expected behavior of patients and at the time many workers have suggested that there are reciprocal attitudes and expectation from doctors. This enables them to function effectively. These attitudes are:

1. Affective neutrality: - It means, standing back from the patient and maintaining objectivity without becoming emotionally involved.

2. Universalism: - It means regarding all patients as being of the same value. So that no medical details such as race or social class do not influence medical decision.

3. Functional specificity: - It means that the doctor should only be concurred with those matters which are of direct medical relevance to the patient.

In fact, the above attitudes are changing due to incurred emphasis of sympathy and empathy.

2.7 Nurse-Patient Relationship

Hospital deals with sick people where the patients are under the care of physicians, who are aided by nurses and many other supporting personnel. Among them nurses are the most important. Nurses' role is considered to be as mediator between physician and patient. Nurses can reduce the mortality and morbidity by their careful practice. Nurse-Patient relationship is very much important in case of health care delivery system. When the patient and the nurse have developed a feeling of mutual trust, the working phase of the nurse patient relationship has begun and the patient will begin to talk more freely about himself.

The nursing service is an important area of hospital management. Therefore, for the delivery of satisfactory patient care considerable importance should also be given to achieve an efficient and well organised nursing staffs. We know that diseases or ailments always demand for medical treatment. As a role doctors first investigate the illness and then give necessary advice, medication or hospitalization. To execute the suggestion/advice given by the doctor, nursing staffs play dominant role in every stage of care and cure (Grant: 1973; Rakich: 1985). Diseases also produce some sort of dependency for patient care.

For example for personal service of patient in hospital, it is also carried out by the nursing staff.

In view of the above, for acquiring the satisfactory community's image of the hospital, a nursing staff should have the following objectives as far as patients' care is concerned:

1. Provision of timely medicines and other instructions.
2. To check the food adequacy and cleanliness of linen.
3. Disinfection of floors and other necessary equipment.
4. To provide adequate privacy of the patients when needed.
5. When necessary patient should be treated with due dignity and respect, looked after his personal needs or requirement.
6. Carry out and execute Laboratory and other investigations as per written or verbal instructions.

2.8 Dietary Management In Hospital

Dietary service is one of the most important services in a hospital. Efficient dietary management could elevate the mood of the patients, as well as plays a vital role in patients care. Adequate dietary services not only improve the patient care but also create a good impression of the hospital. If the food having nutritive values, well prepared and is served properly the patient will leave the hospital with satisfaction. The food service produces expenditure of about one fifth of the total cost of the hospital care. Thus the management has to give serious considerations on proper planning of facilities, organisation, staffing

orientation and training of food handlers, acceptable method of food purchasing handling, preparation and services etc.

PURPOSE & IMPORTANCE OF DIETARY SERVICE

1. **The purposes of dietary service are**:

   a) The preparation of nutritionally adequate, attractive meals in a scientific and sanitary way.

   b) To serve in an aesthetic manner.

   c) To make the service economic & effective.

2. **Importance of dietary services are:**

   a) Important for the treatment of the patients.

   b) It is a part of his total care.

   c) Adequate diet helps in quick recovery of the patient.

   d) It creates a good impression to the visitors.

   e) Proper food service gives a psychological moral boosting to the patient.

FUNCTIONS OF DIETARY SERVICES

1) **Selection and purchase of food:**

   The dietician should be solely responsible for requisitioning of food and dietary supplies, which the purchasing agents purchase. There should be policy for the source of purchase and the method of purchase. Food standards should be specified before purchase. Receiving food, checking quality and weight and rejecting food which does not meet the standard are the important elements of purchasing.

2) **Receipt and storage:**

Receiving area should be nearer to the food service department. The entrance will be located where the noise of trucks will not disturb the patients. A platform scale is essential in the receiving area. The storage space will be required depending upon the system of obtaining supplies. In some places everything is received daily from the contractor and in other places perishable items are received daily & edible oil etc are held in stock for certain period.

3) **Preparation & distribution of food**:

Preliminary preparation of food involves peeling, washing, soaking, cutting and sorting of food before being sent to the cooks unit. The main kitchen drives it supplies from stores, and refrigerators as well as from preparation room. After completion of cooking this unit issues food to the service room for the distribution.

Distribution of food may be centralised, decentralised or combination of both. In centralised system all foods are prepared and cooked in the main kitchen and the food trays set up, served then conveyed to the floors by trolley. In a decentralised service, food is cooked in the main kitchen and transferred in bulk to patient areas where the trays are served either in a floor pantry or at the patients' bedside.

4) **Sanitation, cleanliness, personal hygiene of food handlers:**

a) Regular cleaning schedule and periodic inspection of dietary utensils.

b) Periodic health examination of the food handlers should be carried out. They must change their dress before entering into the kitchen.

c) Sanitary method for handling and disposal of garbage and wastes should be established. The wastage of food should not exceed 10-12 oz per capita per day. More than this will indicate extravagant use of supplied or the poor quality of food.

d) Sanitary regulations for procurement, storing, preparation and service of food should be enforced.

e) Protection of food from dogs, cats, rodents and other animals.

5) **Menu planning including special diet:**

Menu should be planned in advance. The meals should supply the physiological needs and should appeal to the patients. Special diets like diabetes diet or formula diet needs the attention of the dietician.

2.9 Hospitals as Health Centres: A Newly Emerging Concept:

All modern hospitals will function as health centres. It is an important concept of health development and its impact has been felt relatively recently by many health professionals. During the year 1965 it was felt that hospitals should function as health centres (Pandit: 1992). Since the state has direct responsibility for the provision of basic health services through the medium of primary health centres (Park & K.A: 1989), the hospital should no longer

remains to be an " ivory tower of disease in a community." One great movement was lounched in this regard.

Many experts opined the fact that a general hospital can't work in isolation; it must be a part of social and medical system that provides comprehensive health care. Afterwards many other expert committees recommended that the role and functions of hospital needs to be changed radically. The international conference on hospital and PHC in Karachi in 1981 has recommended that hospitals should have an important role in fostering and encouraging the growth of PHC (Pandit: 1992 & WHO; CIEA: 1981). The trend is and should progressively be of "Hospitals without walls" so that accumulated wisdom and skills may flow out of them for the benefit and wider use of the common man who really is in vast majority and has unmet health needs (WHO & CIEA: 1981).

It has already been stated that, apart from the treatment of individual patients hospitals should be involved in the planning, co-ordination and evaluation of the main components of PHC. Hospitals can play a vital role in different types of programmes as under:

1. **Programmes confined to hospital patients** and their families such as health education in hospitals.

2. **Comprehensive PHC programme** e.g. when hospitals as like as health centres are given tasks of total health care within a defined geographical area. PHC programmes such as immunization, nutrition and MCH & FP.

3. **Community development programme,** community participation, including comprehensive actions to promote health. Thus hospitals as health centres must become involved at the most fundamental level of health promotion and disease prevention.

2.10 Hospital Acquired Infection

Hospital acquired infection is also known as nosocomial infection. This type of infections usually occurs when patient stay in hospital. In under- developed worlds it is considered as an important problem in most hospitals. Even in the developed countries, despite improvement in hygiene and sanitation, hospital acquired infection tends to be high (Park and Park: 1980). Considering the extensive efforts of hospital towards infection control, the efficacy of such procedures is of highly important.

For the control and prevention of hospital acquired infection there should have a infection control committee. Its purpose is to formulate policies regarding admission of infectious cases, notification, isolation, hospital cleaning, and disinfection procedures. General control and prevention are being discussed in relevance to the three epidemiological factors as under:

1. ISOLATION: Isolation is done in special wards. In infectious wards/ unit there are three types of ward design.

a) **Chamber ward**: Where patients are separated by full partitions from floor to ceiling.

b) **Cubicle ward**: It is a make shift arrangement for temporary purpose.

c) **Open wards**: In open wards it is difficult to prevent cross infection

2. ROUTES OF SPREAD

a) **Hand washing**: It is the most significant way to control and prevent hospital infection. Hand washing with soap and water is always a simple and major aspect to prevent the spread.

b) **Disinfection**: Hospital linen used by the patients, patient's urine, faces and sputum should be properly disinfected.

c) **Droplet infection**: It can be prevented by the use of face masks, bed spacing and reducing unnecessary hospital visitors. Prevention of over crowding by ensuring a minimum floor space of 144 sq. feet per patient. Control of dust and ensuring adequate ventilation would yield better dividends.

3. DISINECTION:

Until fairly recent times disinfection plays an important role in protecting and maintaining the healthful hospital environment (Sterilization Australia). A **disinfectant** is an agent which destroys disease producing micro-organism, but not usually bacterial spores, not necessary kills all, but reduce them to a level not normally harmful to health i.e. phenol, Lysol.

2.11 Hospital Sanitation

Hospital sanitation is a most neglected and difficult part of the managerial process. The sanitation and hygiene are closely associated with infection control and the same is highly important to reduce hospital hazards i.e. hospital acquired infection. The later term is used to mean for acquiring infection by a

patient during his stay in hospital. Therefore, it increases the suffering of some patients, as well as length and cost of their stay.

It may be noted here that entire responsibility for the cleaning of a hospital lies with commanding officer (CO) or director of that hospital. He has the real tasks of co-ordinating the cleanliness and sanitary works of all maintenance staff and cleaners. All categories of maintenance staff shall pay their vital role in hospital cleaning. Cleaning is a useful method of disinfection. It does not kill organism but remove the risks of danger. A clean hospital is safer than a dirty one (Mourer: 1985; Connins: 1972; Ayliffe: 1967).

2.12 The Concept of Patient Satisfaction

Susie Linder-Pelz (1982) defines patient satisfaction as-"the individual's positive evaluations of distinct dimensions of health care".

There is general agreement that client satisfaction is an integral component of service quality. Argument has been offered that the effectiveness of health care is determined, in some degree, by consumers' satisfaction with the service provided. Support for this view has been found in studies that have reported that a satisfied patient is more likely to comply with the medical treatment prescribed, to produce medically relevant information to the provider, and to continue using medical services (Ware et al. 1983; Aharony and Strasser: 1993)

Health Action Journal (1996) defined the quality assessment as the process of determining whether goods or services reach an established standard. The

quality assurance is a management system, which builds quality assessment, monitoring and improving into normal working practices. The quality assurance strategies have been developed in Europe and USA. The most widely used model includes:

Total quality management, hospital accredition, medical/ clinical audit, consumer satisfaction, professional standards and dimensions of quality.

More recently, in both USA and Europe, providers have also been turning towards approaches that attempt to measure the views of users.

David Armstrong and Richard Savage (1990) stated, "Discussion about how the quality of health care should be measured increasingly include patient satisfaction as one of the important dimensions". The lack of attention to the meaning of the construct "patient satisfaction" has been as the greatest single flow in patient satisfaction research. Logically, discussions on conceptual and theoretical issues should come before measurement but the opposite has been the case with patient satisfaction research. Satisfaction ratings reflect three variables: the personal preferences of the patient, the patient's expectations and the realities of care received. Satisfaction with the realities of care received is affected by many different components of that care. Patient variables including patient characteristics and expectation are referred to as determination of satisfaction, while care variables are referred to as the components of satisfaction (Sitzia J & Wood: 1997).

Ray Fitzpatric (1991) also exerts that there are three reasons why health professionals should take patient satisfaction seriously as a measurement.

Firstly, there is convincing evidence that satisfaction is an important outcome measure. It may be a predictor of whether patients follow their recommended treatment and change their provider of health care. **Secondly,** patient satisfaction is an increasingly useful manure in assessing consultations and patterns of communication (such as the success of giving information, of involving the patient in decision about care, and of reassurance.) **Thirdly,** patient feedback can be used systematically to choose between alternative methods of organizing or providing health care. Evidence has also begun to emerge that satisfaction is related to improvements in health status.

Ann Bowling mentions that health service outcomes are the effects of health services on patients' health as well as patients' evaluation of their health care. Donabedian (1980) defined health outcomes as a change as a result of antecedent health care. Lohr (1988) defined outcome in relation to death, disability, disease, discomfort, disfunction and argued that measurement instrument should focus on each of these concepts. However, the trend now is to incorporate positive indicators (degrees of well-being, ability, comfort, satisfaction), rather than to focus entirely on negative aspects. Health and ill health is a consequence of the interaction of social, psychological and biological events. Thus each of these elements requires measurement in relation to patients' perceived health status and health related quality of life; reduced symptoms and toxicity; and patients 'satisfaction with treatment and outcome (Research Methods in Investigating Health and Health Services (Open University Press: 1997).

Syed Saad Andaleeb (2001) stated, " patient perceptions, especially about service quality, might shape confidence and subsequent behavior with regard to choice and usage of the available health care facilities is reflected in the fact that many patients avoid the system or avail it only as a measure of last resort." Patients' voice must begin to play a greater role in the design of health care service delivery process in the developing countries (Open University press: 1999).

The health care delivery system in Bangladesh faces three major challenges- firstly, improving quality, secondly, increasing access and thirdly- reducing cost. There is growing evidence that the perceived quality of medical care services has a relatively greater influence on patient behaviors (satisfaction, referrals, choice, usage, etc) compared to access and cost. In Bangladesh budgetary allocations to health care were increased between 1991/92 and 1994/95 by almost 75 million US$. The proportion of GDP allocated to this sector was more than doubled between 1985/86 and 1995/96. In addition, private sector health care has also been encouraged since 1982, leading to establishment of 346 private hospitals in the country by June 1996 (khan: 1996). Even with these improvements in access & allocation, however, there is evidence that those who can afford it are obtaining health care services in neighboring countries. The burden it places on the country's foreign exchange is also not insignificant about 10 billion taka (Khan: 1996). Despite the overwhelming personal cost and inconveniences of going abroad, people in need of health care are doing so. In the process they are conveying a staring message: they want quality services.

Health professionals try to estimate patients' satisfaction level through surveys. They usually seem to estimate greater levels of dissatisfaction in patients than surveys disclose. Virtually all surveys indicate only a few patients who express negative views about any particular issue. One assumption commonly made by health professionals is that surveys will uncover widespread dissatisfaction, whereas in practice the opposite often is true. Fitzpatrick (1984) put forward four distinct functions of patient satisfaction measurement- understanding patients experiences of care, promoting cooperation with treatment, identifying problems in health care and evaluation of medical care. But there seem essentially three: satisfaction work can simply describe health care services from patients point of view, problem areas can be isolated and ideas towards solutions may be generated. Evaluation of health care is regarded by many as the most important function of patient satisfaction research (Sitzia J. & Wood: 1997).

In the last few decades a wide range of activities have been performed in order to assure and improve quality of health care. In this respect more & more attention is being given to contribution patients can make. Several methods of such contribution have been proposed like systematic complaint evaluation, patient participation in governing bodies, inspection by patients committees, and patients report (satisfaction research).

Patients' satisfactions can either:

- Be a means of achieving quality care,
- Be the outcome of the care provided,

- Be an indicator of those aspects of care than can be improved. (In case of dissatisfaction).
- Be used for evaluating the quality of care by means of previously determined target values.

Brian Williams (1994) states, "Consumer satisfaction has gained recognition as a measure of quality in many public sector services. It is at present considered an important outcome measure for health care services. Patients may have a complete set of important and relevant beliefs, which cannot be embodied in terms of expressions of satisfaction to ascertain meaningfully the perception & experience of patients. Research must be conducted to identify the ways & terms in which those patients perceive & evaluate that service" (Williams B: 1994). Linder-pelz (1982) said, "Patient satisfaction is a positive attitude which is related to both patients beliefs that the care possess certain attributes and to patients' evaluation of those attributes." Attributes can be seen as distinct dimensions of health care (cost, convenience, efficiency, access etc) (Fitzpatrick R, Survey: 1991).

Satisfaction is based on two pieces of information – Belief (B) strength and (E) evaluation of dimensions of care. Very little satisfaction has been explained in terms of expectations and values despite there being some correlation. Satisfaction has been shown to be positively related to age, a finding that might be expected if the traditionally passive role predominates among the elderly as opposed to the more consumerist-oriented role among younger generations (Linder-pelz: 1982).

Susie Linder-Pelz (1982) mentioned that determinants of patients' satisfaction are his/her attitudes, perceptions prior to experiencing that care. Five social psychological variables affect satisfaction rating and define patient satisfaction such as expectation, value, entitlement, occurrences and interpersonal comparison. Satisfaction is always relative; satisfaction rates change when standards of comparison or expectation change even though the object of evaluation may stay constant. Thus satisfaction measures are quite distinct from objective evaluations of occurrences. At best, satisfaction measures can be reliable indicators of individuals' relative evaluation of those occurrences.

Most of the research on satisfaction has focused on the construct either as a dependent variable (determined by patient and service character) or as an independent variable (predictive of subsequent behavior). In either case the research has been primarily problem-oriented, its purpose is to provide data on the basis of which practical conclusions can be dawn by administration, practitioners & consumer groups in a variety of health care settings.

2.13 Dimensions of Satisfaction

Patient satisfaction is related to a number of dimensions: humaneness, information giving, overall quality, competence, bureaucracy, access, cost, facility, outcome, continuity, attention to psychosocial problems, etc. (Fitzpatrick R, Survey: 1991).

Expectations emerge repeatedly as having a fundamental role in expression of satisfaction. Abramowitz et al. (1987) found that not only can patient held

different expectations for different aspects of care but that expectation and satisfaction with specific aspects or care play independent roles in predicting patient satisfaction. The more the doctors' performance meets patients' expectations, the more satisfied the patients will be with the physicians' services. Patients with lower expectation tend to be more satisfied.

Stemson and Webb (1975) identified three categories of expectations: "Background", "Interaction" and "Action". Background expectations resulting from accumulated learning of the consultation/treatment process, interaction expectations refer to patients' expectation regarding the exchange, which will take place with their doctor. Expectations about the action the doctor will take such as presiding, referral or advice are action expectation of the three interaction expectation are regarded as the most important.

There is however, evidence that expectation vary according to knowledge and prior experience, increasing quality of care raises expectation. As a result of increasing expectation high levels of quality of care may gradually become associated with lower levels of satisfaction (Sitzia J &Wood: 1997).

2.14 Patient Characteristics

It is commonly believed that satisfaction with health care may be dependent upon variables such as social class, marital status, gender and age. A Meta analysis or work reported before 1989, however, concluded that socio-demographic characteristic is at best a minor predictor of satisfaction. Evidence from various countries suggests that older people tend to be more satisfied with

health care than do younger people. Younger patients were also less likely to comply with prescriptions or medical advice. Educational attainment has been identified as having a significant bearing on satisfaction, the trend being that greater satisfaction is associated with lower levels of education (Hall and Dornan: 1990). The relationship between satisfaction and social class is less consistent. Hall and Dornan (1990) viewed social status as having "nearly significant relations" with satisfaction, but as greater satisfaction was associated with higher social status the authors added that it was "Perplexing" to say the least.

It has generally been found that patients' gender does not affect satisfaction values. Lawler found that satisfaction was associated with younger female physicians, least satisfied were male patients examined by younger female physician (Hall et al: 1994). Ethnic origin is perhaps one of the most complex determinant characteristics. From the US there is evidence that whites are, on the whole, more satisfied than non-whites. Jain found that choice of doctor was determined more by the proximity of the patients home to the practice premises than by ethnic consideration (Fitzpatrick R. Survey: 1991 & Hall J & Dornan: 1990).

2.15 Psycho-Social Determinants

A number of observers have suggested that patients may be reluctant to complain for fear of unfavorable treatment in the future. Similarly, Patients evaluations of

services may in some cases reflect a sensitivity to the "Hawthorne effect" which postulates that additional attention implicit in the data collection process and the apparent concern of the research sponsors about the patients level of satisfaction are likely to lead to a positive perception of the service and consequently to positive ratings. Two further phenomena are particularly interesting when considering William's theory that dissatisfaction is only expressed when an extreme negative evens occurs. "Gratitude" as a phenomenon is well recognized as confusing satisfaction results. In UK gratitude has often been associated with more elderly population (Open University: 1999).

Components of Satisfaction

a. Abdellah and Levine (1965) attempted an early identification of key components, proposing the following adequacy of the facilities, effectiveness of the organizational structure, professional qualification and competence of personal and the effect to care on the consumers.

b. Reisser (1975) reported about four components: cost; convenience; the providers' personal qualities and the nature of interpersonal relationship; and the providers' professional competence and the perceived quality of care received.

c. Abramowitz et al. (1987) proposed 10 key areas: medical care, housekeeping, nursing care, nurses aides, staff explanations of procedure and treatments, noise level, food, cleanliness services and overall quality.

d. The key elements of patient satisfaction listed by a group of surgeons included; expectations, comprehension, participation, information and informed consent, risk perception and preference (Meredith et al: 1993).

2.16 Interpersonal Aspect of Care

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 direct association with satisfaction is unproved. There is evidence, however, to show that while nurses perceive technical competence as the main stay of "high quality patient care", patients are strongly influenced by nurse' interpersonal manner. Tishelman (1994) found that almost all encounters described by patients as exceptionally good focused on aspects such as kindness, friendliness & technical aspects of care.

Fitzpatric (1984) noted that many patients appear to have more confidence in commenting on convenience, cost, and doctors' and nurses' personal qualities than in expressing dissatisfaction with medical skill. Stimson and Webb (1975) propose several reasons why the competence should not be seen as absolute. Firstly, the health professional's knowledge is never complete: The degree of knowledge about medicine in general, or a particular medical problem will vary from practitioner to practitioner. Secondly, physicians can never be certain of the outcomes of their action, as medicine operates at the level of the probable course

of an illness and the probable effect of fortune. Thirdly, the doctor never has complete monopoly over relevant medical knowledge. Patients assume a basic level of competence in medical procedures undertaken upon them. If medical procedures are found to be deficient, this is associated with patient complaints-a clear indicator of dissatisfaction with a service (Sitzia J & Wood: 1997).

The dimensions studied by Cathy Charles in Canada were provider-patient communication, providers' respect for patients' preference, attentiveness to patients' physical needs, education of patient regarding medication and tests, quality of relationship between patient and physician-in-charge, education and communication with patients' family regarding care, pain management and hospital discharge planning (Charles C : 1994).

A weak but a statistically significant relationship was found for age (B=0.10) and a stronger was found satisfied with the care they received. The association between each of the info factors and satisfaction was considerably stronger, with the strongest correlation between general info and satisfaction (r=0.41). Perceived control was also found to be strongly correlated with satisfaction(r=0.36). The info received by surgical patients is in important determinate patent satisfaction, and suggestive that more attention should be devoted to this area (Fox JG & Storms: 1981).

2.17 Determinants of Patient Satisfaction

Fishbine and Ajzen distinguished attitudes from perception. One type of perception is belief: beliefs refer to cognition whereas attitude refers to affect. Beliefs link an object to some attribute. People differ in their belief strengths. Value-expectancy theories of Fishbone & Ajzen explain the interrelation: attitude is based on two distinct pieces of information-belief strength and attribute evaluation.

Lawler distinguished discrepancy theory, equity theory and fulfillment theory. Satisfaction is the perceived difference between what an individual desires and what occurs. It is the differences between rewards desired and those received. Satisfaction is perceived equity of balance of inputs and outputs.

Thiault & kelley showed that satisfaction is related to other perception variables- entitlement, attractiveness & alternatives. An individual rating on these variables is functions of social influence process. Various antecedent perceptions and attitude variables has been proposed as explanatory variable. Some interaction or discrepancy relation among the antecedent variable results is feelings of satisfaction or dissatisfaction.

Interpersonal comparison seen to be a key determinant of antecedent variable and thereby in the whole process of evaluating. A combination of positive expectation & perceived concrescence will yield the highest satisfaction score, while positive expectation & negative occurrence the lowest score. Satisfaction

will be the greatest when occurrence is perceived to be as good as or better than that received by others (Hall J & Dorman: 1990).

The different dimensions of patient satisfaction are: humaneness, informativeness, overall quality, competence, bureaucracy, access, cost facilities, outcome, continuity, attention to psychosocial problems. A full list of dimensions in terms of which patients' views need to be examined would be much large. The investigator therefore needs to consider which aspects are relevant to the research question. Studies have been much more likely to include dimensions such as humanness and information giving; whereas surprisingly, patients' views on outcomes have been neglected (Michael H. et al: 1999).

It will be unlikely that surveys will continue to concentrate narrowly on so called "hotel" aspects of health care, such as entering. The patients' views will increasingly be sought on such mattes as information needs; interpersonal, and organizational aspects of care; and, indeed, the value of medical treatments. One study suggested that patient's views about the technical skills and medical competence of their personal doctors as expressed in a survey were largely determined by their perceptions of quite different qualities of the doctor-the extent of friendly and reassuring interpersonal manners (Fitzpatrick R: 1991).

The current literature reports greatly inconsistent relationship of socio-demographic (SD) variables to satisfaction with health care so that attention has turned away from socio-demographic prediction of satisfaction. Two intervening variables, orientation towards care and condition of care, should

produce consistency and refine the role of SD variables. When an individual's condition of care match his orientation towards care satisfaction results. Lack of comparability of expectation and experience thus alter the SD satisfaction correlations between studies. If there were one good set of measures, then different researchers might obtain stable results. People differ in their orientation toward care in what they want and expect form the health care encounter. This occurs because people differ in what they believe causes illness and in their socially patterned responses to illness because of the broader social and cultural systems in which they exist. Care providers differ in their conditions of care, including theoretical approaches to care (metaphysics, chiropractic, allopathic etc), situation of care (location, speed cost) and outcomes of care (cure, fining etc). If orientations and conditions are congruent people are satisfied, if not, they are dissatisfied. Most people say they are satisfied in almost all studies even those from less developed countries with substantial traditional medicines.

Greater satisfaction was significantly associated with greater age and less education, and marginally significantly associated with being married and having higher social status scored as a composite variable emphasizing occupational status. The average magnitude of relations was very small with age being the strongest correlate of satisfaction (mean p=0.13). No overall relationship was found for ethnicity, sex, income or family size. For all socio-demographic variables, the distribution of correlations was significantly

heterogeneous and statistical contrast revealed the operation of several moderating variables (Krupat E, Fancy: 2000).

2.18 Methods of Survey

According to Ray Fitzpatrick survey should be used to answer a question: the more precisely question is formulated, the more successful the survey is likely to prove. The question need not be in the form of a hypothesis. Surveys are frequently descriptive in nature, to ascertain which aspects of care are related to the highest and lowest level of satisfaction in a given patient group. A broad consideration is whether to gather information by means of a self-completed questionnaire or by interview. It is often argued that an interview will always "outperform" a questionnaire in obtaining sensitive information accurately (Fitzpatrick R: 1991).

Most health care evaluation relies on observational studies, a major drawback of which is that it is usually impossible to directly attribute the observed outcomes to the process of care as social, economic and other factors can influence the course of an illness (Coulter: 1991). It has been argued that only population surveys can reveal a failure to provide appropriate services and also are only means of ascertaining the reasons for low use or non use of services (Michael H et al: 1999).

The instruments which have been developed to increase patient satisfaction are primarily closed questionnaires with tick-box format. The allure of questionnaires can be explained by their relative cheapness and ease of

administration, distrust in medicine of qualitative research soft data and the heed, with performance monitoring to have something hard to measure. Baker and Whitfield consider that poor questionnaires act as a form of censorship imposed on patients. They give misleading results, limit the opportunity of patients to express their concerns about different aspects of care and can encourage professionals to believe that patients are satisfied when they are really highly discontented.

Patient satisfaction questionnaires provide a troubleshooting function. This dose not mean that current surveys are useless but that they are unnecessarily blunt: if dissatisfaction is expressed then there is likely to be something varying with the service provision. There is clearly need to improve the quality of questionnaires, such as by reflecting multidimensional facets of satisfaction with more focused episode specific questions (Fitzpatrick: 1991). We need to know more about patient's prior belief, experiences and knowledge of health service as they may influence their judgments about satisfaction (Avis et al: 1977). Williams (1994: 1998) goes further arguing the need for more qualitative approaches. Quantitative research by definition involves a limited response from a wider number of participants. But qualitative research enriches such data (Sitzia J & Wood: 1997).

Designing questionnaires of patient satisfaction take one of two forms: They may be either episode specific or more general in terms of the focus of the questions. Those with more episode specific content tend to produce more uniformly favorable responses from patient compared with somewhat more

negative views elicited by means of generally worded questions. One study that did directly compare general questions resulted in more variation in answers. A second broad choice of approach is between questions, which directly ask about level of satisfaction compared with indirect approaches in which satisfaction is inferred from the choice of answer. There are no established advantages to either approach. (Ray Fitzpatrick: 1991).

Most respondents give the favorable answer to any item about health care. This is a major problem given the overall need to maximize the variability of responses in any survey. Therefore most survey questionnaires now favor more than two alternative responses per question. Moreover, the reliability of items increases as the number of response alternatives increases.

Level of satisfaction with doctor-patient communication and involvement in decisions are sensitive to charges in wording. Asking patients if they agree with a negative description of their hospital experience tends to produce greater apparent satisfaction than asking if they agree with a positive description (Cohen G.Forbes J & Garraway: 1996).

2.19 Conduct of Survey

Two broad principles need to be adhered to as far as possible, the anonymity and confidentiality of the respondents' answers and the neutrality of the person gathering the data. Sampling avoids cost, controls potential biases in a smaller scale sampling procedure. Whatever method is adopted, any survey will be

more convincing if every effort is made to recruit initial non-respondents by follow-up (Jahan N: 2000).

Sensible analysis and interpretation of a survey of patient satisfaction will require at least two kinds of manipulation of variables, which means that a computer, and a statistical package will be highly desirable. The manipulations are (a) Combining single satisfaction items into summed scales and (b) Subgroup analysis. The need for subgroup analysis is a direct consequence of the effects that demographic, social and other "Background" variables may have on satisfaction. Subgroup analysis has another role in studies of patients' satisfaction important relations may emerge only from such analysis. The survey makes its greatest contribution to knowledge when relations between variables are clarified and specific in this way and methods of doing this have been clearly described (Jahan N: 2000).

Though there are many processes by which patients' views can be elicited and brought to bear on improving health care, there has been disenchantment with structured questionnaire surveys as appropriate instrument. Not only are the problems of ensuring adequate coverage, a high response, and reliable questions often addressed inadequately, but the patient populations surveyed may be far too heterogeneous to generate information relevant to the heads of specific client groups. Despite these reservations it seams likely that structured questionnaire continue to be used in the health sector as a fairly inexpensive way of eliciting opinion, views and preferences of patients and the general public.

It has long been acknowledged that the wording and the presentation of questionnaire may influence response. Levels of satisfaction with doctor-patient communication & involvement are sensitive to changes in wording. Asking patients if they agree with a negative description of their hospital experience tends to produce greater apparent satisfaction than asking it they agree with a positive description (Cohen G. Forbes: 1996).

It is unclear how many patients to the interviewed in order to able to obtain a valid picture of the quality of care provided. Among other things it depends on the homogeneity of the population & the provided care. It seems plausible that the choice of a particular procedure can seriously affect the acceptance of a survey by the patient & physician involved. The number of aspects that can be included has to remain limited. Questions in the form of statements to which respondents have to answer agree/disagree. seen to be the most discriminative ones. Strikingly there did not seen to be a connection between number of items & the level of non-response. Regarding method of interview-by mail is most attractive as far as optimizing discrimination is concerned but non-response is more in it. Oral & written interview yielded similar no-response. Oral had better score with respect to discrimination but not suited for large scale. It is worth emphasizing that there is no gold standard measure of patient satisfaction (Fitzpatrick: 1991).

CHAPTER – 3

METHODOLOGY

3.1 Study Design

Having reviewed the literatures a cross sectional comparative design was contemplated to test the hypotheses formulated and thus to attain the objectives of the study.

3.2 Variables Studied and Operational Definitions

Operational definitions of some terms of importance used in the study are as follows:

Working skill: The working skill of a staff means to perform his or her respective activities with requisite accuracy and excellence.

Cured: The disease/problem for which the patient got admitted in the hospital was completely absent at discharge.

Improved: The cardinal complaints of the disease/problem for which the patient was admitted in the hospital went away but complete eradication of the disease was not attained at discharge.

Deteriorated: The disease / problem for which the patient got admitted in the hospital worsen during the period of hospital stay.

Open Communication: Two-way exchange of views between client (patient / patient's attendants) and service provider to create confidence upon the client about the services being provided in the hospital.

Cooperative Attitude: The attitude of the service providers that makes all the problems, starting from admission to discharge, easier and help the client (patient / patient's attendants) to feel relaxed.

Availability: Availability of staff means patients get help from them as and when they need.

Quality: Quality means the accuracy, degree or standard with which a certain activity is to be performed.

Poor: Monthly family income of respondent < 2000 Tks. was considered as poor.

Middle Class: Monthly family income of respondent from 2000-15000 Tks. was considered as middle class.

Solvent: Monthly family income of respondent > 15000 Tks. was defined as Rich.

Public Hospital: Hospital run by Government fund.

Private Hospital: Hospital run by personal fund or fund derived from sources other than Government.

Key variables:

In the present study the services given in the public and private hospitals were mainly evaluated on the basis of the respondents' (patients') satisfaction upon the services. For that purpose the variables that were thought to be of significance to assess the patients' satisfaction level are stated below. The variables were studied under two headings, such as, independent variables and dependent variables.

Independent Variables:

Type of hospital:

Public

Private

Age of the respondents:

Sex:

Male

Female

Marital status:

Married

Unmarried

Occupation:

Service

Student

Business

Farming

Others

Socio-economic Condition:

Poor

Middle Class

Rich

Type of treatment given:

Operative

Conservative

Dependent Variables:

Patients' Satisfaction on Doctors' services:

Care given

Availability when needed by the patients

Cooperation to solve the day to day problems

Quality of the Service

Regular visit

Giving regular information about

Prognosis of the disease

Patients' Satisfaction on Nurses' services:

Care given

Availability when needed

Punctuality

Gentility & Sympathy

Sincerity

Maintaining cleanliness

Patients' Satisfaction on Medicine supply:

Regular supply of Medicine

Supply of needed Medicine

Patients' Satisfaction on services given at the reception:

Gentility & Sympathy of the staff at reception

Courtesy

Conduct of the receptionist

Cooperative attitude

Open communication

Patients' Satisfaction on Cleanliness:

Hospital cleanliness

Ward/Cabin cleanliness

Toilet cleanliness

OT cleanliness

Patients' Satisfaction on services of Ward Boy/Aya/Cleaner:

Working skill

Conduct

Availability when needed

Personal Hygiene maintenance

Gentility

Patients' Satisfaction on services of other staffs:

Punctuality

Courtesy

Working skill

Gentility

Patients' Satisfaction on Provision of electricity:

Regular supply of electricity

Provision of twenty four hours Generator service for emergency supply

Patients' Satisfaction on Laboratory services

Essential Lab. services

Gentility & Sympathy

Cleanliness of Laboratory

Use of Modern Equipments

Outcome of treatment:

Cured

Improved

Deteriorated

Death

Operational definitions:

Level of satisfaction: This was defined as the subjective judgement of the patients upon the quality of services given to them by the service providers during the course of their treatment in the given hospital. Each of the discrete activities rendered by the different level of service providers was evaluated on the basis of patients' level of satisfaction.

3.3 Study Places

The study was carried out in Dhaka Medical College Hospital (a public hospital) and Crescent Gastroliver & General Hospital Ltd. (a private hospital). The above study places were selected for:

1. All the places were within easy reach of the researcher, and

2. It was evident during preliminary survey for choosing study places that cooperation from these hospitals would be satisfactory.

3.4 Duration of Study

July 2003 to June 2004 (one year).

3.5 Study Population

All the patients attending at OPD (Out Patient Department) or admitted in the above two hospitals during the period of data collection were the study population for the present study.

Samples:

Respondents were drawn in the samples conveniently from the study population. The same number of respondents were targeted to be selected in both the groups, although, because of non-cooperation of the staff as well as of the patients in the Dhaka Medical College Hospital, required number of respondents was not possible to be included in the sample. Thus in the private group sixty eight respondents were chosen and interviewed, while in the public group only thirty two respondents were interviewed.

3.6 Hypotheses

The hypothesis, which prompted the researcher to conduct this study, were as follows:

Doctors' Services:

1. Doctors of private hospital have more caring attitude than that of public hospital.

2. Doctors of private hospital are readily available when needed by the patients than their counterpart in the public hospital.
3. Doctors of public hospital are less cooperative to solve the day to day problems of the patients than that of private hospital.
4. Private doctors seem to be more concerned about quality of the service than doctors engaged in public services.
5. Private doctors are more cautious about regular visit in the ward than do their public counterparts.
6. Private doctors are more sincere in giving regular information to their patients about prognosis of the disease than do the public doctors.

Nurses' Services:

7. Nurses of private hospital have more caring attitude than that of public hospital.
8. Nurses of private hospital are readily available when called in by the patients than their counterparts in the public hospital.
9. Nurses of public hospital are less punctual in discharging their duties to the patients than that of private hospital.
10. Private nurses seem to be gentle and sympathetic to their patients than nurses engaged in public services.
11. Private nurses are more sincere to their services than do their public counterparts.
12. Private nurses are more cautious about maintaining personal cleanliness compared to their public counterparts.

Medicine Supply:

13. Regular supply of essential medicine in the private hospital is better than that in the public hospital.
14. Supply of emergency medicine in private hospital is less hampered than that in public hospital

Services at the reception:

1. Receptionist in the private hospital seems to be gentler and more sympathetic to their patients than the staff working at the reception in public services.
2. Receptionist of the private hospitals is courteous compared to that of the public hospital.
3. Conduct of the receptionist of the private hospital is more appreciable than that of the public hospital.
4. Staff employed at the reception section of the public hospital is less cooperative than that at the private hospital.
5. Communication for the patient is easier in the private hospital than that in the public hospital.

Cleanliness:

1. Private hospitals are more clean than the public hospitals.

2. Ward/cabins of private hospitals are more clean than public hospitals.
3. Maintenance of toilet cleanliness is more marked in the private than in the public hospital.
4. OTs of the private hospitals are more clean than that of the public hospitals.

Services of Ward Boy/Aya/Cleaner

1. Support staffs like ward boy/aya/cleaners of private hospitals are more skilled than do the public hospitals.
2. Conduct of the support staff of the private hospitals is better than that of the public hospitals.
3. Support staffs of private hospital are readily available as needed by the patients than their counterpart of the public hospital.
4. Support staffs of private hospital are more cautious about maintaining personal hygiene than do their counterparts of the public hospital.
5. Support staff in the private hospital seems to be gentle than that in the public hospital.

Services of other staffs:

1. Other auxiliary staffs of public hospital are less punctual in discharging their duties to the patients than that of private hospital.
2. Other staffs in the private hospital are more courteous compared to that in the public hospital.
3. Other staffs of private hospitals are more skilled than their counterparts of public hospitals.

4. Other staffs of private hospitals are comparatively gentle than that of public hospitals.

Provision of electricity:

1. Regular supply of electricity is more disturbed in public hospitals than that in the private hospitals.
2. Provision of 24 hours generator service for emergency supply of electricity is better in private hospitals than that in the public hospitals.

Laboratory services:

1. Provision of essential laboratory services is better in private hospitals than that in public hospitals.
2. Laboratory staffs of private hospitals are gentle and more sympathetic to the laboratory clients than that of public hospitals.
3. Private hospital laboratories are cleaner than the public hospital laboratories.
4. Private laboratories are better equipped with modern technologies than the public laboratories.

3.7 Sampling Method

Non-probability or purposive sampling was followed to select the respondents.

3.8 Research Instrument

Following literature review a structured form for data collection was developed which included the variables of interest. The form was finalized after modifications following pretesting.

The respondents' level of satisfaction was measured on a 1-5 Likert scale, where 1 meant for 'not at all satisfactory' and 5 for 'excellent' with 'somewhat satisfactory, 2', 'more or less satisfactory, 3' and 'appreciable, 4' in between them. Level of satisfaction was measured on all the discrete services (mentioned under the key variable section) received by the respondents.

3.9 Data Collection

Data were collected from only those respondents who were willing to give a interview and who were not too ill to be interviewed. After necessary instruction to fill in the questions, the questionnaire were given to those respondents who could fill in themselves. The respondents who were not able to fill in the questionnaire, their interview was taken and the questionnaire was filled in by the researcher herself.

3.10 Data Processing

All the collected data for the study were processed through a microcomputer using Statistical Package for Social Science (SPSS). Before processing, data were checked and edited where needed.

3.11 Data Analysis

The test statistics used to analyze the data were descriptive statistics, Chi-square and t-statistics. The descriptive statistics were frequency, mean, median and standard deviation. The summarized information was then presented in the form: tables and charts.

CHAPTER – 4

EVALUATION OF HOSPITAL SERVICES

It has been described earlier that there were altogether 100 respondents selected for study – thirty-two from the public hospital and sixty-eight from the private hospital. All respondents did not have the scope to answer all the questions. Besides this some respondents did not answer some questions without explaining any reason.

Table. 1: Age distribution of the respondents (N = 100):

Group	*Age of the respondents (in yrs.)					Total
	< 20	20-30	30-40	40-50	>= 50	
Public	2 (6.3)**	9 (28.1)	6 (18.8)	5 (15.6)	10 (31.3)	32
Private	1 (1.5)	8 (11.8)	7 (10.3)	15 (22.1)	37 (54.4)	68
Total	**3**	**17**	**13**	**20**	**47**	**100**

*Mean age (Public Group) = 37 ± 9.5 years and mean age (Private Group) = 50 ± 16 years.

The values in the parentheses indicate corresponding percentage.

4.1 Distribution of the respondents

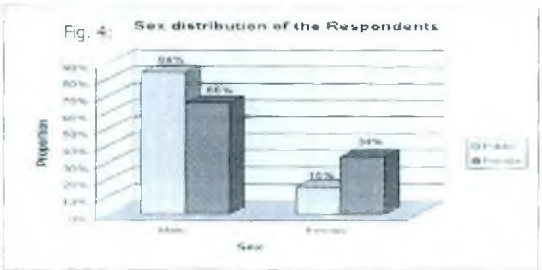
❑ By age ❑

It can be seen from Table 1 that the age distribution of the respondents in the two groups is not uniform. In the public group about one-third (31.3%) of the

respondents were of ages 50 or above, whereas more than half (54.4%) of the private group respondents were of the same ages. About 16% of the public respondents and 15% of the private respondents were comprised of 40-50 years age category. Nearly 20% of the public respondents and over 10% of the private respondents consisted of 30-40 years age category. Approximately 30% of the Public respondents and 12% of the private respondents belonged to the 20-30 years age category. The least representative category was <20 years comprising 6.3% of the public group and 1.5% of the private group.

Table. 2: Sex distribution of the respondents (N = 100):

Group	Sex of the respondents		Total
	Male	Female	
Public	27 (84.4)	5 (15.6)	32
Private	45 (66.2)	23 (33.8)	68
Total	**72**	**28**	**100**

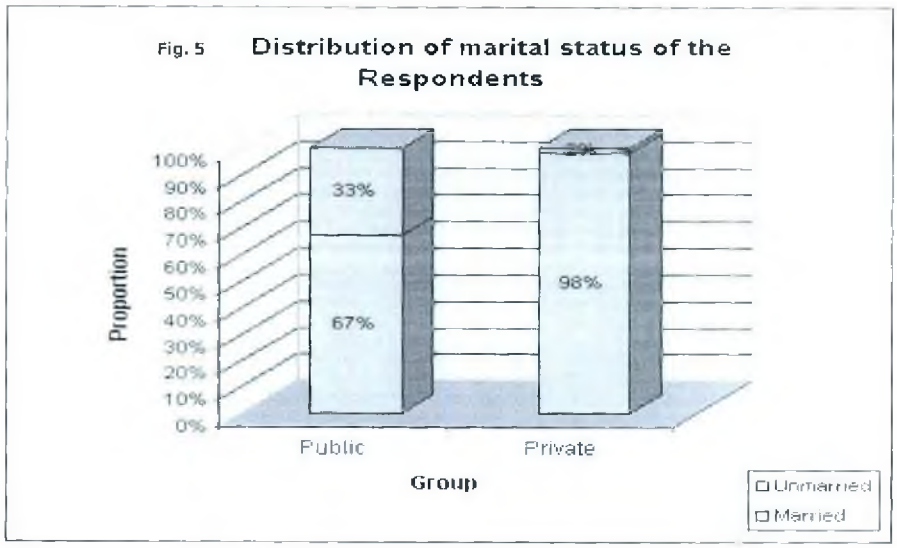


❑ **By sex** ❑

Table 2 shows the sex distribution of the respondents. Of the thirty-two public respondents about 85% were male and the rest were female. On the other hand, two-third (66.2%) of the private respondents were male.

Table. 3: Marital status of the respondents (N = 95):

Group	Marital status		Total
	Married	Unmarried	
Public	20 (66.7)	10 (33.3)	30 (31.6)
Private	64 (98.5)	01 (1.5)	65 (68.4)
Total	**84 (88.4)**	**11 (11.6)**	**95**



❑ By marital status ❑

All respondents did not give the history of marital status. Two-third (66.7%) of 30 respondents from the public group were found to be married, on the other hand, (98.5%) of the private respondents were married.

Table. 4: Occupation of the respondents: (N = 67):

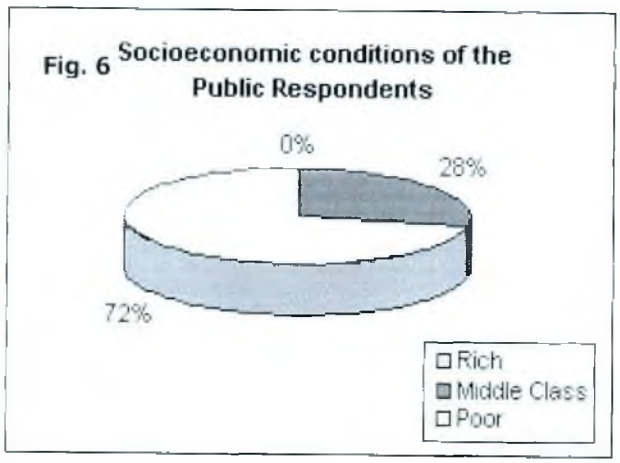
Group	Occupation				Total
	Service	Student	Business	Farming	
Public	10 (37.03)	04 (14.81)	05 (18.51)	08 (29.62)	27
Private	20 (50)	10 (25)	10 (25)	00	40
Total	**30 (44.78)**	**14 (20.89)**	**15 (22.39)**	**08 (11.94)**	67

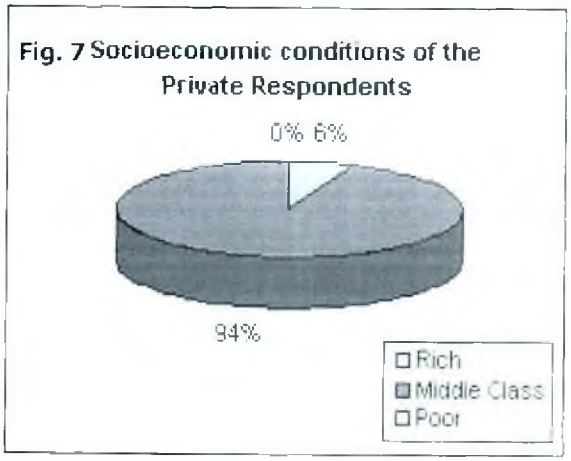
❑ By occupation of the respondents ❑

67 respondents from both the groups answered this question. In the public group service holders occupied the highest proportion (37.03%) and the farmers occupied the next higher position (29.62%). Businessman and students occupied 18.51% and 14.81% respectively. In the private group, service holders occupied the highest proportion (50%) and the students occupied the next higher position (25%).

Table 5: Socio-economic condition of the respondents (N = 78):

Group	Socio-economic condition			Total
	Rich	Middle class	Poor	
Public	00	7 (28.0)	18 (72.0)	25 (32.1)
Private	03 (5.7)	50 (94.3)	00	53 (67.9)
Total	**03 (3.8)**	**57 (73.1)**	**18 (23.1)**	78





❑ By socio-economic condition of the public respondents ❑

Table 5 describes the socio-economic condition of the respondents. In the public group nearly three-quarter (72%) of the respondents were from the poor socio-economic class, while none belonged to the rich class. The rest were from the middle class. In the private group, approximately 95% were from the middle class and none from the poor class.

Table. 6: Type of the respondents (N = 100):

Group	Type		Total
	Indoor	Outdoor	
Public	25 (78.1)	07 (21.9)	32
Private	68 (100.0)	00	68
Total	**93**	**7**	**100**

❑ By type of respondents ❑

Nearly 80% of the public respondents were Indoor and the rest were outdoor patients while all the private respondents were indoor patients (Table 6).

❑ By type of treatment given to the respondents ❑

Based on the type of treatment, patients were categorized into operative and conservative. In the public group all were given conservative treatment, but in private group some 22% of the patients received operative treatment and the rest had conservative treatment.

4.2 Doctors' Services

Evaluation of doctors services by the respondents were done on their discrete activities like patient care, availability of doctors to the patients in times of need, cooperative attitude, quality service, regular visit and giving information about prognosis of the disease. All the discrete activities were scored from 1-5 based on the level of satisfaction of the service-users (Table 7). From the table it is seen that nearly 60% of the private respondents commented that the services of the doctors were 'excellent'. Only a few (2.9%) respondents from this group described the same as 'not at all satisfactory'. The others were at varying level of satisfaction, such as, somewhat satisfied (1.5%), more or less satisfied (16.2%) and appreciable (20.6%). However, in the public group 'not at all satisfied' (37.5%) and 'more or less satisfied' (34.4%) constituted the main bulk of the respondents and only 12.5% described the doctors' services as excellent'. The difference between the two groups with respect to doctors' services were found to be statistically significant ($p < 0.001$).

Table 7: Evaluation of Doctors' services by the respondents:

Services evaluated	Level of Satisfaction					Total	P-value
	Not at all satisfactory (= 1)	Somewhat satisfactory (= 2)	More or Less satisfactory (= 3)	Appreciable (= 4)	Excellent (= 5)		
Patient care:							
Public	12 (37.5)	11 (34.4)	01 (3.1)	04 (12.5)	04 (12.5)	32	<0.001
Private	02 (2.9)	01 (1.5)	11 (16.2)	14 (20.6)	40 (58.8)	68	
Availability:							
Public	12 (37.5)	10 (31.3)	02 (6.3)	04 (12.5)	04 (12.5)	32	<0.001
Private	02 (2.9)	01 (1.5)	11 (16.2)	14 (20.6)	40 (58.8)	68	
Cooperation:							
Public	12 (37.5)	11 (34.4)	01 (3.1)	04 (12.5)	04 (12.5)	32	<0.001
Private	02 (2.9)	01 (1.5)	11 (16.2)	14 (20.6)	40 (58.8)	68	
Quality Service:							
Public	12 (37.5)	11 (34.4)	1 (3.1)	4 (12.5)	4 (12.5)	32	<0.001
Private	2 (2.9)	1 (1.5)	11 (16.2)	14 (20.6)	40 (58.8)	68	
Visits Regularly:							
Public	12 (37.5)	10 (31.3)	1 (3.1)	5 (15.6)	4 (12.5)	32	<0.001
Private	2 (2.9)	1 (1.5)	11 (16.2)	14 (20.6)	40 (58.8)	68	
Giving Message:							
Public	12 (37.5)	10 (31.3)	2 (6.3)	4 (12.5)	4 (12.5)	32	<0.001
Private	2 (2.9)	1 (1.5)	11 (16.2)	14 (20.6)	40 (58.8)	68	

4.3 Nurses' Services

Same as doctors' services, nurses' services were also evaluated on six discrete activities. They were patient care, availability of nurses, maintaining time in administering medicine, gentility & sympathy, sincerity and in maintaining personal cleanliness. Each of the six discrete activities was given a score from 1-5 based on the level of satisfaction of the service-users (Table 8). From the table it is evident that more than 55% of the respondents of the private group opined that the services of the

nurses were 'excellent', while some 10% of the respondents described the same as 'not at all satisfactory'. The others were at varying level of satisfaction. In the public Group 'not at all satisfied' (43.8%) and 'more or less satisfied' (31.3%) together constituted 70% of the respondents. Only 12.5% respondents described the nurses' services as 'excellent'. The difference between the two groups with respect to nurses' services was found to be statistically significant ($p < 0.001$).

Table 8: Evaluation of Nurses' services by the respondents:

Service evaluated	Different level of satisfaction					Total	P-value
	Not at all satisfactory (= 1)	Somewhat satisfactory (= 2)	More or Less satisfactory (= 3)	Appreciable (= 4)	Excellent (= 5)		
Patient care:							
Public	14 (43.8)	10 (31.3)	01 (3.1)	03 (9.4)	04 (12.5)	32	< 0.001
Private	07 (10.3)	01 (1.5)	11 (16.2)	11 (16.2)	38 (55.9)	68	
Availability:							
Public	14 (43.8)	09 (28.1)	02 (6.3)	03 (9.4)	04 (12.5)	32	< 0.001
Private	07 (10.3)	01 (1.5)	11 (16.2)	11 (16.2)	38 (55.9)	68	
Maintaining time:							
Public	14 (43.8)	09 (28.1)	02 (6.3)	03 (9.4)	04 (12.5)	32	< 0.001
Private	07 (10.3)	01 (1.5)	11 (16.2)	11 (16.2)	38 (55.9)	68	
Gentility & Sympathy:							
Public	14 (43.8)	10 (31.3)	01 (3.1)	03 (9.4)	4 (12.5)	32	< 0.001
Private	07 (10.3)	1 (1.5)	11 (16.2)	11 (16.2)	38 (55.9)	68	
Sincerity:							
Public	14 (43.8)	10 (31.3)	1 (3.1)	03 (9.4)	4 (12.5)	32	< 0.001
Private	07 (10.3)	1 (1.5)	11 (1.5)	11 (1.5)	38 (55.9)	68	
Cleanliness Maintenance:							
Public	14 (43.8)	09 (28.1)	01 (3.1)	4 (12.5)	4 (12.5)	32	< 0.001
Private	07 (10.3)	1 (1.5)	11 (1.5)	11 (1.5)	38 (55.9)	68	

4.4 Medicine Supply

Table 9 shows that provision of medicine supply was evaluated on two criteria, 'regular supply of medicine' and 'supply of needed medicine'. The users of only outpatient service did not have the scope to see the regular supply of medicine in a hospital and, therefore, they did not answer the first question, 'regular supply of medicine'. Majority (55.9%) of the private respondents described that provision of medicine supply was 'excellent'; whereas reverse comment was found on the same issue from the public service-user respondents. Regarding 'regular supply of medicine' 44% of the public respondents expressed gross dissatisfaction saying that the service was 'not at all satisfactory'. Regarding 'supply of needed medicine' an even more number of respondents (53.1%) expressed their dissatisfaction commenting likewise. Thus the satisfaction level about the 'regular supply of medicine' and 'supply of needed medicine' was found to be highly associated with the group ($p < 0.001$).

Table 9: Evaluation of Medicine supply by the respondents:

Services evaluated	Level of Satisfaction					Total	P-value
	Not at all satisfactory (= 1)	Somewhat satisfactory (= 2)	More or Less satisfactory (= 3)	Appreciable (= 4)	Excellent (= 5)		
Regular supply of Medicine:							
Public	11 (44.0)	07 (28.0)	02 (8.0)	02 (8.0)	03 (12.0)	25	< 0.001
Private	07 (10.3)	01 (1.5)	11 (16.2)	11 (16.2)	38 (55.9)	68	
Supply of needed Medicine:							
Public	17 (53.1)	08 (25.0)	02 (6.3)	02 (6.3)	03 (9.4)	32	< 0.001
Private	07 (10.3)	01 (1.5)	11 (16.2)	11 (16.2)	38 (55.9)	68	

Table 10: Evaluation of the Services given at the Reception:

Services evaluated	Level of Satisfaction					Total	P-value
	Not at all satisfactory (= 1)	Somewhat satisfactory (= 2)	More or Less satisfactory (= 3)	Appreciable (= 4)	Excellent (= 5)		
Gentility & Sympathy:							
Public	16 (50.0)	7 (21.9)	2 (6.3)	2 (6.3)	5 (15.6)	32	< 0.001
Private	6 (8.8)	1 (1.5)	11 (16.2)	11 (16.2)	39 (57.4)	68	
Courtesy:							
Public	16 (50.0)	7 (21.9)	2 (6.3)	2 (6.3)	5 (15.6)	32	< 0.001
Private	6 (8.8)	1 (1.5)	11 (16.2)	11 (16.2)	39 (57.4)	68	
Conduct of the Receptionist:							
Public	16 (50.0)	7 (21.9)	2 (6.3)	2 (6.3)	5 (15.6)	32	< 0.001
Private	6 (8.8)	1 (1.5)	11 (16.2)	11 (16.2)	39 (57.4)	68	
Cooperative Attitude:							
Public	16 (50.0)	7 (21.9)	2 (6.3)	2 (6.3)	5 (15.6)	32	< 0.001
Private	6 (8.8)	1 (1.5)	11 (16.2)	11 (16.2)	39 (57.4)	68	
Open Communication:							
Public	15 (48.4)	7 (22.6)	2 (6.5)	2 (6.5)	5 (16.1)	31	< 0.001
Private	6 (8.8)	1 (1.5)	11(16.2)	10 (14.7)	40 (58.8)	68	

4.5 Reception Services

These services were evaluated on 5 discrete activities likely to be expected from the reception section. These were gentility & sympathy, courtesy, conduct of the receptionist with patients and their attendants, cooperative attitude and open communication. On all these issues more than half (around 58%) of the private respondents commented favourably saying that the services were 'excellent', whereas

the public respondents commented on the same issues disfavourably saying that the services were 'not at all satisfactory'. The group was found to be statistically related with each of these discrete services given at the reception ($p<0.001$).

4.6 Support Services

4.6.1 Ward-boy/Aya/Cleaner Services:

Only the indoor patients had scope of evaluating this service. The discrete activities included for evaluation of this service were working skill, conduct with patients, and availability to the patients in times of emergency, and maintenance of personal hygiene and gentility (Table 11).

Table 11: Evaluation of the Services of Ward-boy/Aya/Cleaner:

Services evaluated	Level of satisfaction					Total	P-value
	Not at all satisfactory (= 1)	Somewhat satisfactory (= 2)	More or Less satisfactory (= 3)	Appreciable (= 4)	Excellent (= 5)		
Working Skill:							
Public	14(58.3)	7 (29.2)	00	2 (8.3)	1 (4.2)	24	< 0.001
Private	2 (3.0)	1 (1.5)	15 (22.7)	14 (21.2)	34(51.5)	66	
Conduct:							
Public	14(58.3)	7 (29.2)	00	2 (8.3)	1 (4.2)	24	< 0.001
Private	2 (3.0)	1 (1.5)	16 (23.9)	14 (20.9)	34(50.7)	67	
Availability:							
Public	13(54.2)	8 (33.3)	00	2 (8.3)	1 (4.2)	24	0.0001
Private	2 (3.0)	1 (1.5)	16 (23.9)	14 (20.9)	34(50.7)	67	
Personal Hygiene:							
Public	13(54.2)	8 (33.3)	00	2 (8.3)	1 (4.2)	24	< 0.001
Private	2 (3.0)	1 (1.5)	16 (23.9)	14 (20.9)	34 50.7)	67	
Gentility:							
Public	14(58.3)	7 (29.2)	00	2 (8.3)	1 (4.2)	24	< 0.001
Private	2 (3.0)	1 (1.5)	16 (23.9)	14 (20.9)	34(50.7)	67	

In this case also, as seen from the table no 11, half of the private respondents expressed their view that the services were 'excellent' and only 3% opined that the services were 'not at all satisfactory'. The others were at varying level of satisfaction. Almost opposite comment was received from the public respondents. A little more than half of this group informed that the services were 'not at all satisfactory', around 30% commented as 'somewhat satisfactory' while only 1 out of 24 viewed the same as 'excellent'. And the group was found to be individually associated with all these activities ($p < 0.001$).

4.6.2 Other Staff Services

These services were evaluated by 30 public respondents and 66 private respondents. The total services were considered, as before, under certain smaller activities such as punctuality, courtesy, working skill and gentility (Table 12). As seen from the table, about half (48.5%) of the private group passed their opinion that all these discrete services given by the staff were 'excellent', while only 4.5% expressed the opposite view and termed the services as 'not at all satisfactory'. However, the public group differed sharply from the private ones and 70% of them commented that the services were 'not at all satisfactory', while only 2 out of 30 termed the same as 'excellent'. The group was found to be individually associated with punctuality, courtesy, working-skill and gentility of the staff involved (in each case $p<0.001$).

Table 12: Evaluation of Services of other Staff:

Services evaluated	Level of satisfaction					Total	P-value
	Not at all satisfactory (= 1)	Somewhat satisfactory (= 2)	More or Less satisfactory (= 3)	Appreciable (= 4)	Excellent (= 5)		
Punctuality:							
Public	21 (70.0)	4 (13.3)	1 (3.3)	2 (6.7)	2 (6.7)	30	< 0.001
Private	3 (4.5)	1 (1.5)	15 (22.7)	15 (22.7)	32 (48.5)	66	
Courtesy:							
Public	21 (70.0)	4 (13.3)	1 (3.3)	2 (6.7)	2 (6.7)	30	< 0.001
Private	3 (4.5)	1 (1.5)	15 (22.7)	15 (22.7)	32 (48.5)	66	
Working Skill:							
Public	21 (70.0)	4 (13.3)	1 (3.3)	2 (6.7)	2 (6.7)	30	< 0.001
Private	3 (4.5)	1 (1.5)	15 (22.7)	15 (22.7)	32 (48.5)	66	
Gentility:							
Public	21 (70.0)	4 (13.3)	1 (3.3)	2 (6.7)	2 (6.7)	30	< 0.001
Private	3 (4.5)	1 (1.5)	15 (22.7)	15 (22.7)	32 (48.5)	66	

4.6.3 Laboratory Services:

In evaluating these services some discrete activities and characteristics of the laboratory were considered essential. They were: providing essential laboratory services, gentility and sympathy of the lab staff, maintaining cleanliness of the laboratory and using modern laboratory equipments etc. All the respondents except the outpatient service-users had the scope of evaluating these activities. The outpatient respondents evaluated the provision of essential laboratory services only. Of the 66 private respondents 57.6% informed that the provision of essential laboratory services were 'excellent', 4.5% told that the services

were 'not at all satisfactory' and the others were at varying level of satisfaction ranging from somewhat satisfactory to appreciable. However reverse comment was received from the public respondents. Around 60% of the public respondents opined that the services were 'not at all satisfactory' and around 12% respondents held the opposite view commenting that the services were 'excellent'. The group was found to be significantly associated with each of the discrete services described above (in each case $p < 0.001$).

Table 13: Evaluation of Laboratory Services by the Respondents:

Services evaluated	Level of Satisfaction					Total	P-value
	Not at all satisfactory (=1)	Somewhat satisfactory (=2)	More or Less satisfactory (=3)	Appreciable (=4)	Excellent (=5)		
Essential Lab. Services:							
Public	20 (62.5)	5 (15.6)	1 (3.1)	2 (2.3)	4 (12.5)	32	<0.001
Private	3 (4.5)	1 (1.5)	14 (21.2)	10 (15.2)	38 (57.6)	66	
Gentility & Sympathy:							
Public	16 (61.5)	5 (15.2)	1 (3.8)	1 (3.8)	3 (11.5)	26	<0.001
Private	3 (4.5)	1 (1.5)	15 (22.7)	10 (15.2)	37 (56.1)	66	
Cleanliness of Laboratory:							
Public	15 (57.7)	5 (19.2)	1 (3.8)	1 (3.8)	4 (15.4)	26	<0.001
Private	3 (4.5)	1 (1.5)	15 (22.7)	10 (15.2)	37 (56.1)	66	
Use of Modern Equipments:							
Public	16 (61.5)	5 (15.2)	1 (3.8)	1 (3.8)	3 (11.5)	26	<0.001
Private	3 (4.5)	1 (1.5)	15 (22.7)	10 (15.2)	37 (56.1)	66	

4.7 Hospital Environment

4.7.1 Cleanliness:

This service was again evaluated on certain discrete activities like hospital cleanliness, ward and cabin cleanliness, toilet cleanliness and OT cleanliness. Of them only those patients who underwent some sort of surgery evaluated OT cleanliness and outdoor patients commented only on hospital cleanliness. Thus the total number of respondents varied in evaluation of each discrete activities. In case of hospital cleanliness more than half (57.4%) of 31 private respondents commented that the service was 'excellent' while only 2.9% described the same as 'not at all satisfactory'. On the other hand, over three-quarter (77.4%) of the public group respondents expressed their deep concern on the same issue saying that the service was 'not at all satisfactory' and only 1 out of 31 respondents argued that the service was 'excellent'. In case of other cleanliness activities (as shown in table 14) almost similar type of comments were sought and the group was found to be significantly associated with each of these activities ($p < 0.001$).

Table 14: Evaluation of Cleanliness by the Respondents:

Services evaluated	Level of Satisfaction					Total	P-value
	Not at all satisfactory (= 1)	Somewhat satisfactory (= 2)	More or Less satisfactory (= 3)	Appreciable (= 4)	Excellent (= 5)		
Hospital Cleanliness:							
Public	24 (77.4)	4 (12.9)	00	2 (6.5)	1 (3.2)	31	< 0.001
Private	2 (2.9)	1 (1.5)	15 (22.1)	11 (16.2)	39 (57.4)	68	
Ward/Cabin Cleanliness:							
Public	17 (70.8)	5 (20.8)	00	1 (4.2)	1 (4.2)	24	< 0.001
Private	2 (2.9)	1 (1.5)	15 (22.1)	11 (16.2)	39 (57.4)	68	
Toilet Cleanliness:							
Public	19 (79.2)	4 (16.7)	00	1 (4.2)	00	24	< 0.001
Private	2 (2.9)	1 (1.5)	15 (22.1)	11 (16.2)	39 (57.4)	68	
OT Cleanliness:							
Public	00	00	00	00	00	00	< 0.001
Private	00	00	6 (26.1)	4 (17.4)	13 (56.5)	23	

4.7.2 Provision of Electricity Services:

Only the Indoor patients had the scope of evaluating this service and 66 respondents from the private group and 26 respondents from the public group took part in evaluating this service. The service was evaluated on the basis of two discrete activities, namely regular supply of electricity and provision of 24 hours' generator service to meet up the emergency need. From the table 15 it is evident that 84% of the public respondents and 72% of the private respondents were contended with the provision of electricity saying that the services were 'excellent'. Very few respondents from both groups termed the services as 'not at all satisfactory'. The group was not found to be statistically associated with either regular supply of electricity and provision of 24 hours generator service ($p = 0.769$ and $p = 0.868$ respectively).

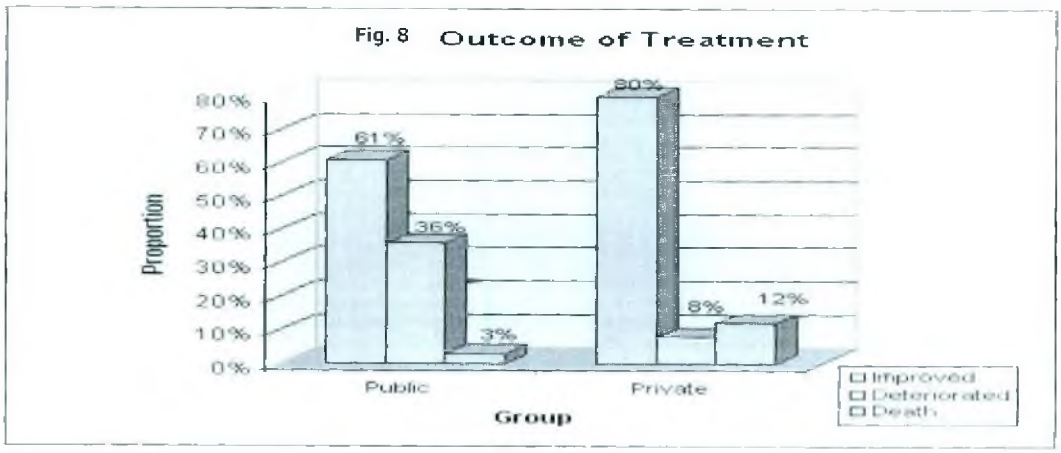
Table 15: Evaluation of provision of Electricity:

Services evaluated	Level of Satisfaction					Total	P-value
	Not at all satisfactory (=1)	Somewhat satisfactory (=2)	More or Less satisfactory (=3)	Appreciable (=4)	Excellent (=5)		
Regular supply of Electricity:							
Public	2 (7.7)	1 (3.8)	00	1 (3.8)	22 (84.6)	26	
Private	1 (1.5)	1 (1.5)	11 (16.7)	6 (9.1)	47 (71.2)	66	0.769
24 hrs. Generator:							
Public	2 (7.7)	1 (3.8)	00	1 (3.8)	22 (84.6)	26	
Private	1 (1.5)	1 (1.5)	10 (15.2)	6 (9.1)	48 (72.7)	66	0.868

Table 16: Comparing Outcome of treatment with respect to Group (N = 95):

Group	Outcome of Treatment			Total
	Improved	Deteriorated	Death	
Public	19 (61.3)	11 (35.5)	01 (3.2)	31 (32.6)
Private	51 (79.7)	05 (7.8)	08 (12.5)	64 (67.4)
Total	70 (73.3)	16 (16.8)	09 (9.5)	95

P < 0.005



4.7.3 Outcome of Treatment:

Comparing the outcome of treatment revealed that about 80% of the private respondents improved from their diseased conditions for which they attended the hospital, about 8% further deteriorated and 12.5% died of their ailments. On the contrary, 61% of the public respondents improved, more than one-third (35.5%) further deteriorated and only 1 out of 32 died of the disease. The difference of outcomes between the two groups was statistically significant ($p < 0.005$) Table 16.

Table 17: Comparing Cleanliness of Hospital with respect to Sex (N = 99):

Sex	Level of Satisfaction					Total
	Not at all satisfactory (= 1)	Somewhat satisfactory (= 2)	More or Less satisfactory (= 3)	Appreciable (= 4)	Excellent (= 5)	
Male	21 (29.6)	05 (7.0)	10 (14.1)	08 (11.3)	27 (38.0)	71 (71.7)
Female	05 (17.9)	00	05 (17.9)	05 (17.9)	13 (46.4)	28 (28.3)
Total	**26 (73.3)**	**05 (16.8)**	**15 (15.2)**	**13 (13.1)**	**40 (40.4)**	**99**

P > 0.05

Cleanliness vs. Sex: Comparing cleanliness of hospital with respect to sex did not show any significant difference (p > 0.05).

Table 18: *t-tests* to compare the Services given by the Public and Private Hospitals:

Services evaluated	Group	No. of Respondents	Mean Score ± SD	t	P-value	95% CI of Mean	
						Lower	Upper
Doctors'	Public Private	32 68	13.8 ± 8.5 25.9 ± 5.9	-8.16	<0.001	-14.96	-9.11
Nurses'	Public Private	32 68	13.1 ± 8.5 24.4 ± 7.9	-6.50	<0.001	-14.73	-7.85
Medicine Supply	Public Private	25 68	4.4 ± 2.8 8.1 ± 2.6	-6.01	<0.001	-4.99	-2.52
Reception	Public Private	31 68	11.0 ± 7.6 20.6 ± 6.3	-6.60	<0.001	-12.53	-6.74
Cleanliness	Public Private	24 68	4.2 ± 2.5 12.7 ± 3.1	-11.98	<0.001	-9.86	-7.05
Ward-Boy/ Aya/Cleaner	Public Private	24 66	8.6 ± 5.6 20.8 ± 5.2	-9.73	<0.001	-14.70	-9.71
Other Staff	Public Private	30 66	6.7 ± 5.0 16.4 ± 4.4	-9.66	<0.001	-11.70	-7.70
Elecricity	Public Private	26 66t	9.1 ± 2.4 9.0 ± 1.8	0.23	0.818	-.82	1.03
Laboratory	Public Private	26 66	7.7 ± 5.5 16.7 ± 4.4	-8.15	<0.001	-11.20	-6.81

Performing *t-tests* to compare the Services given by the Public and Private Hospitals:

In this method all the discrete activities performed under each of the services given in the public and private hospitals were evaluated combinedly. The scores given by the respondents for each of the discrete activities under a given service were added together to get a combined score for the given service. The mean scores along with Standard Deviations (SD) for both the public and private services were calculated and compared with each other. The status of significance (p-value) was determined at 5% level of significance.

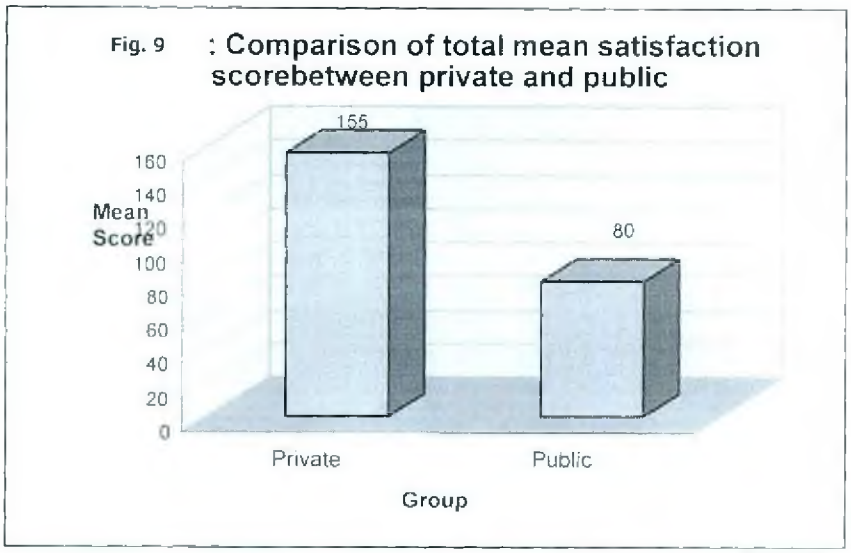


Fig. 9 is comparing total mean score between private and public respondents. Out of total 220 score for 42 questions designed for assessing level of satisfaction, the private group attained 155, which was almost double that attained by the public group.

Table 19. Association between age of the respondents and service evaluation scores given by them:

Age (yrs)	Evaluation Scores for Different Services (Mean ± SD)									
	Doctors Service (N = 100)	Nurses Service (N = 100)	Medicine Supply (N = 93)	Services at Reception (N = 99)	Ward Boy/ Aya/ Cleaner (N = 90)	Staff Service (N = 96)	Electricity Supply (N = 92)	Laboratory Service (N = 92)	Total Cleanliness (N = 92)	Satisfaction Score (Total) (N = 85)
< 20	22 ± 9.2	22 ± 9.2	7.3 ± 3.1	18.3 ± 7.7	16.7 ± 10.4	13.3 ± 8.3	9.3 ± 1.5	13.3 ± 8.3	10.0 ± 6.2	132.3 ± 62.0
20-30	20 ± 10.2	18 ± 10.7	6.9 ± 3.6	15.6 ± 9.5	15.9 ± 9.1	11.5 ± 7.6	9.9 ± 0.5	13.1 ± 7.1	9.5 ± 5.5	125.0 ± 60.3
30-40	20.8 ± 10.6	19.4 ± 12.0	7.6 ± 3.6	17.3 ± 10.1	17.3 ± 9.3	12.7 ± 7.9	9.6 ± 1.2	14.9 ± 7.4	10.1 ± 5.9	140.3 ± 59.7
40-50	22.5 ± 6.7	22.5 ± 6.7	7.1 ± 2.5	18.7 ± 5.6	18.5 ± 5.8	13.7 ± 5.2	8.6 ± 2.1	13.9 ± 4.9	10.6 ± 3.8	137.7 ± 38.2
≥ 50	22.9 ± 8.9	20.9 ± 9.8	7.0 ± 3.2	17.8 ± 8.1	17.8 ± 7.2	14.0 ± 6.0	8.7 ± 2.3	14.4 ± 6.3	10.9 ± 4.7	139.9 ± 50.4
p-values	0.814	0.817	0.984	0.844	0.904	0.744	0.247	0.954	0.903	0.923

Table 19 shows the association between age group of the respondents and evaluation scores given by them for different services. The test statistics used in this analysis was ANOVA and values were presented as mean ± SD. No age group was found to have any influence on any of the evaluation scores ($p > 0.05$ for each case).

Table 20. Association between *sex* of the respondents and *service evaluation scores* given by them:

Sex	Evaluation Scores for Different Services (Mean ± SD)									
	Doctors Service (N = 100)	Nurses Service (N = 100)	Medicine Supply (N = 93)	Services at Reception (N = 99)	Ward Boy/ Aya/ Cleaner (N = 90)	Staff Service (N = 96)	Electricity Supply (N = 92)	Laboratory Service (N = 92)	Total Cleanliness (N = 92)	Satisfaction Score (Total) (N = 85)
Male	21.5 ± 9.1	20.1 ± 9.8	6.7 ± 3.3	16.9 ± 8.3	16.3 ± 7.8	12.6 ± 6.5	8.8 ± 2.2	13.2 ± 6.6	9.8 ± 5.0	129.0 ± 52.7
Female	23.1 ± 8.4	22.5 ± 9.0	8.4 ± 2.1	19.2 ± 7.2	21.3 ± 5.3	15.0 ± 6.0	9.5 ± 0.8	16.9 ± 4.2	12.6 ± 3.2	158.7 ± 37.0
p-values	0.425	0.257	0.017	0.208	0.005	0.102	0.155	0.011	0.010	0.015

Table 20 describes the association between sex of the respondents and evaluation scores given by them for different services. The test statistics used in this analysis was ANOVA and the values were expressed as mean ± SD. Female were found to be in a higher level of satisfaction with medicine supply, services of ward boy/aya/cleaners, essential laboratory services and cleanliness compared to their male counterpart (p-values 0.017, 0.005, 0.011 and 0.010 respectively, while with other services both sex were equal ($p > 0.05$ for each case). As the sex was compared with the total satisfaction score females again occupied the higher level of satisfaction in comparison to the male ones ($p < 0.05$).

Table 21: Association between social class of the respondents and service evaluation scores given by them:

Social Class	Evaluation Scores for Different Services (Mean ± SD)									
	Doctors Service (N = 100)	Nurses Service (N = 100)	Medicine Supply (N = 93)	Services at Reception (N = 99)	Ward Boy/ Aya/ Cleaner (N = 90)	Staff Service (N = 96)	Electricity Supply (N = 92)	Laboratory Service (N = 92)	Total cleanliness (N = 92)	Satisfaction Score (Total) (N = 65)
Rich	30.0 ± 0.0	30.0 ± 0.0	10.0 ± 0.0	25.0 ± 0.0	25.0 ± 0.0	20.0 ± 0.0	10.0 ± 0.0	20.0 ± 0.0	15.0 ± 0.0	185 ± 0.0
Middle Class	24.8 ± 7.1	23.0 ± 8.8	7.8 ± 2.9	19.3 ± 7.5	19.9 ± 6.1	15.1 ± 5.5	9.2 ± 1.6	15.9 ± 5.3	12.2 ± 3.7	151.1 ± 41.5
Poor	15.0 ± 9.9	13.7 ± 10.0	4.9 ± 3.3	12.3 ± 8.9	8.8 ± 6.5	6.6 ± 5.5	9.5 ± 2.1	8.3 ± 6.5	4.0 ± 2.3	86.4 ± 47.3
p-values	0.000	0.000	0.002	0.002	0.000	0.000	0.698	0.000	0.000	0.000

Table 21 compares the social class of the respondents and evaluation scores given by them for different services using ANOVA statistics. From the table it is seen that higher the social class the greater is the level of satisfaction for all the services except management of electricity supply (p-values $p < 0.005$). In case electricity supply all class were found to equally satisfied ($p > 0.05$).

Table 22: Association between marital status of the respondents and service evaluation scores given by them:

Marital Status	Evaluation Scores for Different Services (Mean ± SD)									
	Doctors Service (N = 95)	Nurses Service (N = 95)	Medicine Supply (N = 88)	Services at Reception (N = 94)	Ward Boy/ Aya/ Cleaner (N = 85)	Staff Service (N = 91)	Electricity Supply (N = 87)	Laboratory Service (N = 87)	Cleanliness Service (N = 87)	Satisfaction Score (Total) (N = 80)
Married	23.0 ± 8.5	21.7 ± 9.4	7.4 ± 3.1	18.5 ± 7.7	18.6 ± 6.9	14.2 ± 5.9	9.1 ± 1.9	14.8 ± 9.5	11.1 ± 4.5	143.5 ± 47.0
Unmarried	15.6 ± 9.0	14.0 ± 8.9	5.1 ± 3.3	11.0 ± 8.1	8.5 ± 6.9	7.3 ± 6.4	10.0 ± 0.0	8.9 ± 6.9	5.0 ± 4.2	90.6 ± 51.1
p-values	0.008	0.012	0.055	0.005	0.000	0.001	0.134	0.006	0.000	0.004

Table 22 compares the marital status of the respondents and evaluation scores given by them for different services using ANOVA statistics. From the table it is seen that married were better satisfied with all the services but medicine and electricity supply (p-values $p < 0.05$). In case of medicine and electricity supply all respondents were found to almost equally satisfied ($p > 0.05$).

Table 23: Comparison of Total Satisfaction Score between the Groups:

Group	N	Total Satisfaction Score (Mean ± SD)	95% CI of Mean		P-value
			Lower	Upper	
Public	21	79.81 ± 41.68	60.84	98.78	< 0.0001
Private	64	155.78 ± 37.44	146.43	165.13	

Table 23 interprets the comparison of total satisfaction score between the groups using ANOVA statistics. As mean total satisfaction scores attained by the private and public groups were compared, it was found that the private group attained score (155.78 ± 37.44), almost double that attained by the public group (79.81 ± 41.68). The difference between the two groups with respect to mean total score was found statistically significant ($p<0.0001$).

Table 24: Outcome of treatment with respects Socio-demographic variables (N = 95):

	Improved	Deteriorated	Death		
Age (N = 95)					
< 20 yrs	02 (66.7)*	01 (33.3)	00	03	
20 – 30 yrs	12 (80.0)	03 (20.0)	00	15	
30 – 40 yrs	08 (61.5)	04 (30.8)	01 (7.7)	13	0.409
40 – 50 yrs	15 (83.3)	02 (11.1)	01 (5.6)	18	
≥ 50 yrs	33 (71.7)	06 (13.0)	07 (15.2)	46	
Sex (N = 95)					
Male	45 (66.2)	14 (20.6)	09 (13.2)	68	0.007
Female	25 (92.6)	02 (7.4)	00	27	
Social Class (N = 74)					
Rich	02 (3.5)	00	00	02	0.020
Middle Class	46 (83.6)	07 (12.7)	02 (3.6)	55	
Poor	09 (52.9)	07 (41.2)	01 (5.9)	17	
Marital Status (N = 91)					
Married	61 (75.3)	11 (13.6)	09 (11.1)	81	0.849
Unmarried	06 (60.0)	04 (40.0)	00	10	

* The values in the parentheses indicate corresponding percentages

Table. 24 show the association between socio-demographic variables and outcome of treatment. From the table it is evident that age and marital status were not associated with the outcome of treatment ($p = 0.409$ and $p = 0.849$ respectively). On the other hand sex and social class were associated with the outcome of treatment with females and richer social classes had comparatively better outcome ($p = 0.007$ and $p = 0.020$ respectively).

CHAPTER –5

INTER-INDIVIDUAL PRECEPTUAL VARIATIONS REGARDING SATISFACTION

This cross-sectional study was conducted with the aim of determining level of satisfaction of patients with regard to different aspects of hospitals care of two hospitals. Factors having association of statistical significance with levels of satisfaction and predictors were searched for. In the light of the findings of the research and available literature on this topic an effort has been made to analyze the situation of patient satisfaction in the selected hospitals in Bangladesh.

In this time of rapid development of science, technology and management, expectations of service recipients are increasing day by day. The quality of care that satisfied patients yesterday may not satisfy them tomorrow. Moreover, satisfaction and utilization of service go hand in hand, which is the rational behind thousands of satisfaction research being published in the developed world per year. Satisfaction was categorized into five levels- not at all satisfied, somewhat satisfied, more or less satisfied, appreciable, and excellent.

5.1 Socio-Demographic Aspects and Level of Satisfaction

5.1.1 Age - The mean age of the public group was 37 ± 9.5 years and that of private group was 50 ± 16 years respectively. Though, the age was not found to

bear any association with any of the satisfaction scores given to the doctor's services, nurses' services, provision of medicine supply, services given at the reception, word-boy/aya/cleaners' services, services of other staffs, management of electricity, laboratory services and maintenance of cleanliness etc. ($p > 0.05$) in each case. (John G Fox and Storms: 1981) reported age to be a consistent predictor of satisfaction. (Williams and Calnan: 1991) found older people to be a more satisfied with most aspects of their hospital care than younger or middle aged people. (Nasreen: 2000) in her study at Mitford Hospital found that lower the age (below or equal to 30 years), more was the dissatisfaction. Findings of present study are consistent with the above-mentioned studies.

5.1.2 Sex - The sex was found to be associated with some of the above services like provision of medicine supply, word- boy/aya/cleaners services and laboratory services. In these cases the females were found more satisfied than their male counterparts. (Hall and Dorman: 1990) in a meta-analysis of 211 studies on satisfaction mentioned that patient's gender does not affect satisfaction values. Although some authors insist that sex like age is a predictor of satisfaction. In evaluating the service, provision of medicine supply, the mean score attained by the female respondents was 8.4 ± 21 and that attained by their male counterparts was 6.6 ± 3.3 ($p < 0.05$). In evaluating the ward-boys/ayas/cleaners' services, the females were also found to score higher than their male counter parts (the mean score for females was 21.3 ± 5.2 and that of males was 16.2 ± 7.8) and the association was found statistically significant ($p < 0.05$). Similarly, the female sex

was found to attain higher score than the male ones on justifying the laboratory services. The mean score for female was 16.9 ± 4.1 and that of males was 13.2 ± 6.6 and the association was statistically significant ($p < 0.05$).

5.1.3 Marital status - The data presented in table 3 shows that married were more likely to be satisfied than the unmarried ones (74.4 % versus 73%). Similarly percentage of "not satisfied" unmarried was more than that of married respondents (12 % versus 11.5%). But the association was not statistically significant. Findings of this study support findings of (Cathy Charles et al: 1994) that more problems are associated with non-married patients. These study findings are contradictory to the findings of (Nasreen: 2000) where 79.3% unmarried and 76% married were satisfied. Marital status was not a consistent determinant of satisfaction across studies.

5.1.4 Occupation - The occupations of all the respondents were not found (table 4). Only sixty-seven respondents expressed their occupations. Forty respondents from private group and twenty seven respondents from public group. From the recorded data it was found that the service holders were better satisfied than the other categories of occupations like businessman, students or farmers etc.

Similarly to see the influence of socioeconomic status on patient satisfaction mean satisfaction scores of the rich, the middle class and the poor respondents were compared using ANOVA statistics. (Cathy Charles et al: 1994) found significant association between mean number of problems and patient characteristics of poorer health status, lower age, female sex, higher education and non-married status. The

result showed that the rich social class got significantly higher scores than the middle class and the poor for evaluation of doctors services, nurses' services, provision of medicine supply, services given at the reception, ward-boy/aya/clearness services and laboratory services ($p < 0.001$, < 0.001, 0.01, <0.01 < 0.001 and < 0.001 respectively). The findings derived so far regarding associations between socio-demographic characteristics of the respondents like age, sex, occupation, social class and marital status with satisfaction scores obtained for different services bear both consistencies as well as inconsistencies with the findings of (Hall and Dorman: 1988). In this study it was found that more satisfied patients tended to be older, male, of higher social class and married. (Fox and storms: 1981) argue that socio-demographic variables are weak determinants of satisfaction and findings across studies are not consistent. Contrary to these, the present study showed that no age group was exceptionally satisfied and females were more satisfied than the males sharply contrasting the findings of Hall and Dorman regarding these two variables. However, the study found that the rich and the married respondents were better-satisfied bearing consistencies with the study of (Hall and Dorman: 1990).

5.2 Electricity Aspects and Level of Satisfaction

Of the nine kind of services evaluated in the present study, only the supply of electricity including provision of twenty four hours generator service was evaluated as 'excellently satisfactory' by both public and private respondents. In

case of other services like doctors' services, nurses' services, provision of medicine supply, services given at the reception, ward-boy/aya/cleaners' services, services of other staffs, laboratory services and maintenance of cleanliness, majority of the public respondents held the view that they were 'not at all satisfactory'. On the contrary, majority of the private respondents, commenting on the same services given at the private setting expressed that the services were 'excellent'. (Katz M et al: 1997) in an attempt to derive the predictors of satisfaction for Medical Care among HIV-infected Men that men who received care in a public clinic, hospital or HMO-based clinic were significantly less satisfied with their access to care and in terms of time spent with the provider than those who received the care in a private office.

5.3 Care Aspects and Level of Satisfaction

Duration of illness, length of stay in the hospital and diagnosis - These factors were not found to be associated statistically with satisfaction. Patients suffering from gastrointestinal diseases including liver diseases were more dissatisfied than respondents with diseases of other systems. Probably prognosis and outcome of treatment act as confounding factors when the relation between diagnosis and level of satisfaction is sought. Patients suffering from diseases of the same body system may have different levels of satisfaction. When the prognosis is better and outcome of treatment is better, the level of satisfaction will be higher.

Doctors' qualities - Respondents satisfied with doctors' qualities were more likely to be satisfied overall (table 7) and the association was statistically significant. Taking "satisfied" and "highly satisfied" together 71.30% respondents were satisfied with doctors' qualities. (Azizul: 1998) found 59.62% respondents satisfied with doctors' behaviour. (Khaleda: 1992) in a study at DMCH found 7.78% describing doctors' services as inappreciable. Differences between findings of different studies might be due to differences in the study designs. (Zahid: 1995) in a study at Gonoshasthya Kendra hospital, Savar, Bangladesh found 98.9% respondents satisfied with regard to doctors' behaviour. Findings of present study are consistent with those of the mentioned one. (Das A. M. and Shahidullah M. et al: 1988) conducted a study in Dhaka Medical College Hospital among 800 admitted patients to assess their perception of medical care. They showed that 60%. patients rated doctors' behavior as good and 38% had some sorts of disliking for doctors' behaviors.

Nurses' qualities - The more were satisfied with nurses' qualities, the more were satisfied overall (table 8). The association between satisfaction with nurses' qualities and level of satisfaction was statistically significant. It was also identified as a predictor of satisfaction for patients of all ages, sexes, and education status.

Outcome of treatment – It is seen that in (Table 16) cure rate is comparatively higher in case of private treatment group (almost 80%) than that in public group (61%), although death rate is much higher in private group (12.5%) than that in public group (3.2%). The reason of such a higher death rate in private group might

be that nearly one quarter (22.05%) of the private patients underwent operative treatment, which carries a higher risk of mortality in comparison to conservative treatment. On the other hand, none of the public group received the same treatment and probably that might have been the reason of negligible death rate in Public group. With these discussions conclusions and recommendations can be drawn for undertaking further measures.

CHAPTER –6

CONCLUSIONS AND RECOMMEDATIONS

In the present study, it is seen that majority of the private respondents evaluated the services given at the private hospital as 'excellent', while the majority of the public respondents viewed the same given at the pubic hospital as 'not at all satisfactory'. Of the nine kind of services evaluated in the present study, only the supply of electricity service was evaluated as 'excellently satisfactory' by both public and private respondents. In case of other services like doctors' services, nurses' services, provision of medicine supply, services given at the reception, ward-boy/aya/cleaners' services, services of other staffs, laboratory services and maintenance of cleanliness, majority of the public respondents held the view that they were 'not at all satisfactory'. On the contrary, majority of the private respondents, commenting on the same services given at the private setting, expressed that the services were 'excellent'.

Majority of the private respondents evaluated the services given at the private hospital as 'excellent' while the majority of the public respondents viewed the same given at the public hospital as 'not at all satisfactory'. Most of the people of Bangladesh are of poor socio-economic status and they have to avail the services from public sector. But it is frustrating that the evaluation of the services by patient is not at all satisfactory. It is devastating for the health system of the country. Till now public sector is the only active system at the doorstep level of the population. Most of the people cannot buy the health services. So there is no

way for them. So it is the urgent need to identify the loopholes of the public sector. The same doctors, nurses are working in the public and private sector. But in one sector consumer is highly satisfied while in another consumer is not at all satisfied. So accountability of the service provider must be ensured in the public sector. Cleanliness is the burning issue in the hospital management. But it is excellent in private sector in this study. On the contrary which is not at all satisfactory in public sector. Here it is strongly recommended to privatise the cleaning system in the public hospital. Regarding the supply of medicine here, also services at the private sector is satisfactory. It is astonishing that all the medicines in private sector is bought by the patient himself. Even after that they are satisfied. Probably attitude of the patient and availability of medicine influenced the respondents. The service provider in the public hospital is not at all receptive. Attitude in the reception of public hospital must be changed for the patient. Service provided by the aya and ward-boy in emergency situation in the public hospital is not at all satisfactory. It necessitates the proper motivational training have to be taken by the authorities. Laboratory services in the private hospital is satisfactory. The factors making the private sector satisfied are empathy, gentility, cleanliness. One stop service along with improvement of sympathy, gentility and cleanliness will make the patient satisfied in future in public sector. Evaluation of patient satisfaction is a continuous process. The level of satisfaction of patients was higher in Crescent Gastro Liver General and Hospital Ltd. than in Dhaka Medical College Hospital and the difference was statistically significant.

To improve the hospital management up to the standard level there may be a separate department for continuous evaluation of patient satisfaction and this department may be organised by non-government organisation (NGO).

In the light of findings of the present study and analysis thereof, undertaking further study is recommended to find out:

1. The reasons of public services being inefficient in the same place where the private services are efficiently running?
2. What incentives do play the motivating role for the private service providers to deliver the services in most satisfactory manner?
3. What factors do influence the public service providers to be complacent to their noble profession of serving the suffering humanity?

In this age of rapid development of science, technology and management expectations of service recipients are increasing day by day. The quality of care that satisfied patients yesterday may not satisfy them tomorrow. Moreover, satisfaction and utilization of service go hand in hand. Therefore, to increase the rate of the utilization of public services a concerted effort to be put to reveal why the public service users are not satisfied as it is expected to be. Faced with the above fact, a large-scale study should be undertaken to find out the reason of dissatisfaction of the users of public hospital services. The findings generated thus may help the planners and policy-makers to formulate a right strategy to improve the present situation of public hospital management.

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Appendix –A

Questionnaire / Data Collection Sheet

Faculty of Management
(University of Dhaka)

Study Title:

Comparative evaluation of the services given at Public and Private Hospitals in Dhaka City.

Sl. No.....

1. Name of the patient.....
2. Address.....

   .....
3. Bed / Cabin No.....Date of Admission.....
4. Type of Hospital: 1 = Public 2 = Private

   /_____/
5. Age.....in yrs.

   /_____/
6. Sex: 1 = Male 2 = Female

   /_____/
7. Marital status: 1 = Married 2 = Unmarried

   /_____/

8. Occupation: 1 = Service 2 = Student

/_____/

3 = Business 4 = Farming

5 = Others

9. Socioeconomic Condition: 1 = Poor 2 = Middle Class

/_____/

3 = Rich

10. Type of treatment given: 1 = Operative 2 = Conservative

/_____/

11. Outcome of treatment: 1 = Cured 2 = Improved

/_____/

3 = Deteriorated 4 = Death

Instruction to fill in the following questions:

Some vital questions concerning the services/care given to you are furnished below. Five probable answers, each carrying a particular score based on ualitative judgement by the user of the services, to each question is also given against the question. The scores assigned ranges from 1 for 'Not at all satisfactory' to 5 for 'Excellent' with 'Somewhat satisfactory', More or less satisfactory' and 'Appreciable' in between them. You are cordially requested to answer those questions depending upon the level of your satisfaction derived from the services/care given to you.

Your responsible answer will help me a lot to carry out the research and thereby to formulate a policy for further improvement of the hospital services.

APPENDIX-B

Work Schedule

Sl. No	Activities	Time schedule											
		2003						2004					
		July	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
01	Conceptualization of the research problems, writing study proposal and submission of protocol.												
	Approval of Protocol												
02													
03	Literature review												
04	Development of research instrument and pre-testing												
05	Date collection & processing												
06	Date analysis												
07	Report writing												
08	Producing final version of Thesis												
09	Submission												

APPENDIX-C

নিচে আপনার সেবার সাথে জড়িত প্রশ্ন দেয়া হলো. এই প্রশ্নের উত্তর দেয়ার জন্য আপনাকে আহবান করা হলোঃ

প্রত্যেকটি প্রশ্নের ডানে প্রদত্ত ১ (সর্বনিম্ন) থেকে ৫ (সর্বোচ্চ) পর্যন্ত বিস্তৃত মাপকের জন্য একটি সংখ্যা টিক (✓) চিহ্ন দিয়ে প্রশ্নের উত্তর দেওয়ার জন্য আপনাকে অনুরোধ করা হলো। মাত্রাসমূহ নিম্নরূপঃ

অত্যন্ত সন্তোষজনক	ঃ	৫
বেশ সন্তোষজনক	ঃ	৪
মোটামুটি সন্তোষজনক	ঃ	৩
কিছুটা সন্তোষজনক	ঃ	২
মোটেই সন্তোষজনক নয়	ঃ	১

ডাক্তার সম্পর্কে রোগীর মূল্যায়ন

ক্রমিক নং	বিবরণ	মোটেই সন্তোষজনক নয়	কিছুটা সন্তোষজনক	মোটামুটি সন্তোষজনক	বেশ সন্তোষজনক	অত্যন্ত সন্তোষজনক
ক)	আপনি যে সেবা পান					
খ)	প্রয়োজন মাত্র উপস্থিতি					
গ)	উপস্থিত সমস্যার ক্ষেত্রে সহযোগিতা					
ঘ)	আপনার রোগ সংক্রান্ত ফলাফল সম্পর্কে তথ্য প্রাপ্তির সুযোগ					
ঙ)	উন্নত সেবার মানের ব্যাপারে অত্যন্ত সতর্ক					
চ)	নিয়মিত রোগী দেখা					

সেবিকাদের সম্পর্কে রোগীর মূল্যায়ন

ক্রমিক নং	বিবরণ	মোটেই সন্তোষজনক নয়	কিছুটা সন্তোষজনক	মোটামুটি সন্তোষজনক	বেশ সন্তোষজনক	অত্যন্ত সন্তোষজনক
ক)	আপনি যে সেবা পান					
খ)	প্রয়োজন মাত্র উপস্থিতি					
গ)	ঔষধ প্রয়োগে সময়ানুবর্তিতা					
ঘ)	ভদ্রতা ও সহানুভূতি					
ঙ)	নিয়মানুবর্তিতা					
চ)	পরিষ্কার-পরিচ্ছন্নতা					

ঔষধ সরবরাহ

ক্রমিক নং	বিবরণ	মোটেই সন্তোষজনক নয়	কিছুটা সন্তোষজনক	মোটামুটি সন্তোষজনক	বেশ সন্তোষজনক	অত্যন্ত সন্তোষজনক
ক)	ঔষধ প্রয়োগে সময়ানুবর্তিতা					
খ)	প্রয়োজন মাফিক ঔষধ সরবরাহ					
গ)	আচরণ					
ঘ)	সততা					

রিসিপশন

ক্রমিক নং	বিবরণ	মোটেই সন্তোষজনক নয়	কিছুটা সন্তোষজনক	মোটামুটি সন্তোষজনক	বেশ সন্তোষজনক	অত্যন্ত সন্তোষজনক
ক)	ভদ্রতা ও সহানুভূতি					
খ)	সৌজন্য ও সহমর্মিতা					
গ)	আচরণ					
ঘ)	উপস্থিত সমস্যার ক্ষেত্রে সহযোগিতা					
ঙ)	উন্মুক্ত যোগাযোগ					

হিসাব বিভাগ

ক্রমিক নং	বিবরণ	মোটেই সন্তোষজনক নয়	কিছুটা সন্তোষজনক	মোটামুটি সন্তোষজনক	বেশ সন্তোষজনক	অত্যন্ত সন্তোষজনক
ক)	সময়ানুবর্তিতা					
খ)	দক্ষতা					
গ)	আচরণ					
ঘ)	সততা					
ঙ)	কম্পিউটারের মাধ্যমে নিভূল হিসাব উপস্থাপন					

পরিষ্কার-পরিচ্ছন্নতা

ক্রমিক নং	বিবরণ	মোটেই সন্তোষজনক নয়	কিছুটা সন্তোষজনক	মোটামুটি সন্তোষজনক	বেশ সন্তোষজনক	অত্যন্ত সন্তোষজনক
ক)	হাসপাতালের পরিষ্কার-পরিচ্ছন্নতা					
খ)	কেবিন/ওয়ার্ড পরিষ্কার-পরিচ্ছন্নতা					
গ)	টয়লেট পরিষ্কার-পরিচ্ছন্নতা					
ঘ)	ও এ পরিষ্কার-পরিচ্ছন্নতা					

ওয়ার্ডবয়/ক্লিনার/আয়া

ক্রমিক নং	বিবরণ	মোটেই সন্তোষজনক নয়	কিছুটা সন্তোষজনক	মোটামুটি সন্তোষজনক	বেশ সন্তোষজনক	অত্যন্ত সন্তোষজনক
ক)	দক্ষতা					
খ)	আচরণ					
গ)	প্রয়োজন মাত্র উপস্থিত					
ঘ)	পরিষ্কার-পরিচ্ছন্নতা					
ঙ)	ভদ্রতা					

অন্যান্য কর্মচারী

ক্রমিক নং	বিবরণ	মোটেই সন্তোষজনক নয়	কিছুটা সন্তোষজনক	মোটামুটি সন্তোষজনক	বেশ সন্তোষজনক	অত্যন্ত সন্তোষজনক
ক)	সময়ানুবর্তিতা					
খ)	সৌজন্য					
গ)	দক্ষতা					
ঘ)	ভদ্রতা					

এ্যাম্বুলেন্স

ক্রমিক নং	বিবরণ	মোটেই সন্তোষজনক নয়	কিছুটা সন্তোষজনক	মোটামুটি সন্তোষজনক	বেশ সন্তোষজনক	অত্যন্ত সন্তোষজনক
ক)	প্রয়োজন মাত্র সরবরাহ					
খ)	দক্ষতা (ড্রাইভার)					
গ)	সাশ্রয়ী					
ঘ)	আচরণ					

বিদ্যুৎ সরবরাহ

ক্রমিক নং	বিবরণ	মোটেই সন্তোষজনক নয়	কিছুটা সন্তোষজনক	মোটামুটি সন্তোষজনক	বেশ সন্তোষজনক	অত্যন্ত সন্তোষজনক
ক)	প্রয়োজন মাত্র সরবরাহ					
খ)	২৪ ঘন্টা জেনারেটরের ব্যবস্থা					

ল্যাবরেটরী

ক্রমিক নং	বিবরণ	মোটেই সন্তোষজনক নয়	কিছুটা সন্তোষজনক	মোটামুটি সন্তোষজনক	বেশ সন্তোষজনক	অত্যন্ত সন্তোষজনক
ক)	জরুরী সেবা প্রদান					
খ)	ভদ্রতা ও সহানুভূতি					
গ)	পরিষ্কার-পরিচ্ছন্নতা					
ঘ)	পরীক্ষা-নিরীক্ষায় আধুনিক সরঞ্জাম ব্যবহার					