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Patient and Staff Satisfaction in Public Hospitals in Maharashtra, 2003

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Maharashtra Health Systems Development Project (MHSDP),
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Executive Summary

Objectives of the study

This study has been assigned by MHSDP under the sponsorship of the World Bank. It has the following objectives:

1. To document the demographic and socio-economic profile of patients at the selected project facilities;
2. To assess the levels of satisfaction of both the indoor and outdoor patients at the project facilities with respect to different dimensions of health care;
3. To examine the differentials in the level of satisfaction by background characteristics of patients and by hospital characteristics;
4. To identify the important dimensions of satisfaction of indoor and outdoor patients;
5. To assess the patients' expectations from a health facility;
6. To examine whether the patients' expectations are filled;
7. To assess the levels of satisfaction among providers including doctors, nurses technicians, pharmacists and Class-IV employees;
8. To identify important dimensions of satisfaction for doctors and nurses;
9. To examine the role of the patients' satisfaction in the overall utilization of the hospital.

In all, 28 hospitals were selected for the study. Out of these, 6 are District Hospitals, 7 each belong to SDH-100, and SDH-50 and the remaining 8 are 30 bedded Rural Hospitals. At the request of the MHSDP authorities, ESIS Hospital at Aundh was added to the sample.

The proposed sample sizes were 75 patients each for IPD and OPD of the District Hospital, 38 and 37 for SDH (100), 25 each for SDH (50) and 12 and 13 for the rural hospitals. The total sample size was 1975 for the 28 hospitals. However, due to incomplete recommissioning process, and the seasonal factors, the sample size reduced to 1676.

In all, 407 providers were included in the study. The providers included 139 doctors, 115 nurses, 78 technicians, 26 pharmacists and 57 class IV employees.

Following tools were used for the study.

For indoor patients -- Exit interviews at discharge

-- Household interviews for indoor patients at ESIS Hospital, Aundh

For outdoor patients – Exit interviews

– Observation by field team

For Hospitals – Facility Audit.

Profile of the patients

- The background characteristics indicate that the socially weaker sections of the society, like illiterates, SC/STs or Muslims are found to utilise the IPD and OPD services in larger proportions compared to their shares in the general population.

Reason for coming to the health facility

- Free treatment is the major reason given by the patients for coming to the concerned hospital. About 60 percent of the indoor patients and 71 percent of the outdoor patients have given 'free treatment' as the main reason.

- Fourteen percent of indoor patients of District Hospitals (DH) and ten percent of indoor patients of other hospitals (OH) have come to the hospitals as referral cases, while 24 percent of the patients from DH and 15 percent of the cases in OH have been admitted as 'Emergency' cases.

- It should be noted that about 20 percent of the Indoor Patients and about 27 percent of the outdoor patients have come to the hospitals because of good past experience with the hospitals.

Sickness pattern

- Sixty-four percent of the patients of DHs and 78 percent of the indoor patients of RHs have sicknesses belonging to the group, 'Communicable, Nutritional and Maternal ailments'. Among the outdoor patients, this group accounts for 64 and 72 percent of the cases in the DH and OH respectively. Generally, the OHs seem to be catering mainly for deliveries, family planning services and routine common illnesses.

- The questionnaires for the indoor and outdoor patients included a question on the sicknesses in the family during last one-year. This question was mainly included to know about general treatment seeking behaviour. It was observed that 60 percent of the outdoor treatments and 80 percent of the indoor treatments was taken at public hospitals only. This points to a some sort of captive clientele, mainly, for IPDs of the public hospitals. By improving the quality of services, this captivity could be enhanced.

Profile of hospitals

- Through a small questionnaire, an attempt was made to know the hospital profile. The broad features examined are Physical infrastructure, Diagnostic facilities and Personnel. The achievements of the DHs and OHs respectively are 62 percent and 70 percent (physical infrastructure), 62 percent and 50 percent (diagnostic facilities) and 69 percent and 76 percent (personnel) respectively.

I. Patient Satisfaction

Dimensions of patient satisfaction

- The assessment of satisfaction of the patients was made for the following dimensions of the services provided in the hospital:
  1. Waiting time
  2. Behavior of providers
  3. Communication of providers with the patients
  4. Treatment related issues including competence of providers, availability of diagnostic facility, medicine and equipments, effectivity of treatment etc...
  5. Affordability of expenses
  6. Cleanliness
  7. Crowding
  8. Food availability
  9. Availability of other facilities such as canteen, telephone, TV, ambulance, etc...

  The measurement of the satisfaction was done on the basis of the first seven dimensions only.

Level of patient satisfaction

- For the indoor patients, the level of satisfaction was lower in OHs in all services, except 'waiting time' and 'crowding'. The level of satisfaction was particularly lower for 'Treatment related issues', 'Cleanliness' and 'Affordability of expenses'. The specific issues with severe order of dissatisfaction are ' lack of other advice for health', ' need to borrow money for treatment', 'lapses in changing bed-sheets' and 'No privacy during examination'.

- Generally, the dissatisfaction among the outdoor patients also was for 'No other advice for health' and 'No privacy during examination'.

- For the quantitative measure of satisfaction, it was decided to take into consideration only 'Full satisfaction' and a simple scoring method was used for measurement. For indoor patients, the seven dimensions mentioned earlier were taken into account, while for outdoor patients, 'Affordability' was not taken into consideration because of the low level of expenses.

- About 75 percent and 70 percent of the indoor patients, of DHs and OHs respectively seem to be 'fully satisfied' with the services provided in the selected hospitals.

- About 75 percent and 64 percent of the outdoor patients of DHs and OHs respectively, seem to be 'fully satisfied' with the outdoor services provided in the selected hospitals.

- The areas of lack of full satisfaction for the indoor patients of DHs are 'treatment related issues', and 'cleanliness', while 'communication' gets added in case of indoor patients of OHs.

- Treatment related issues and crowding are the major areas of lack of full satisfaction for the outdoor patients.

Courtesy bias

- As it is well-known, the method of 'Exit interviews' has a serious limitation that the responses are greatly affected by 'courtesy bias'. An attempt to assess the extent of this courtesy bias was made by us during this study. 'Observations' by our field team at the OPDs at the selected hospitals and 'Reinterviews of the indoor patients of E.S.I.S. Hospital, Aundh at their residences', helped us to assess the extent of 'courtesy bias' present in the responses of both the 'indoor' and 'outdoor' patients. It was observed that the bias was more in the responses of the outdoor patients than those of indoor patients. The bias was present mainly for the behavior of the providers.

Hospitals by satisfaction levels

- Among the individual DHs, the hospitals from Marathwada show better satisfaction levels, while a hospital like DH, Ratnagiri, in spite of being better equipped and efficiently run, shows a lower satisfaction score. This could be the effect of differences in patients' expectations and courtesy bias. The comparison of satisfaction scores of individual OHs is limited by small number of patients in some of the hospitals.

- In the DHs, the IPD services with better satisfaction are, 'Waiting', 'Crowding', while more dissatisfaction is found in 'Cleanliness', followed by 'Treatment'.

- Generally, the areas of satisfaction in the OHs are again 'Crowding' and 'Waiting', while the failure in satisfaction is observed in 'Treatment' and 'Communication'.

- Patients from Female Surgical Ward and Maternity Wards have particularly expressed lower levels of satisfaction.

Satisfaction levels by characteristics of patients

- There are no differentials in satisfaction levels by background characteristics like residence, sex, education, caste and standard of living index (SLI). A few cases of significant difference are found in case of borrowing among patients with different SLIs. This lack of differentials may be on account of the homogeneity among the patients, which partly could be ascribed to the sample of hospitals.

Patient's criteria for choosing a hospital

- Patient's criteria for choosing a hospital were identified through a question asking the patients to rank the first three criteria (from a given list of criteria), in order of importance. Responses were very clearly defined. 'Easy Access', 'Availability of medicines' and ' Affordable Charges', are the criteria which were given one of the first three ranks by 60 – 70 percent of the indoor patients. For the outdoor patients, 'Easy Access' and 'Availability of medicines' were the major criteria.

Patient's criteria for choosing a hospital and satisfaction in those criteria

- The preferences of the patients were compared with the satisfaction in those areas to identify the action areas. Overall, the level of dissatisfaction was below 50 percent. However, among the three criteria mentioned above, 'Affordability of Charges' turned up with high level of dissatisfaction. In this context, the data on expenditure were examined. It was found that the indoor patients of DH, on an average have to spend Rs. 466 per episode, while the same is Rs.296 for the indoor patients of OHs. Out of these, Rs. 89 and Rs. 80 respectively, are spent on medicines to be bought from outside. It is understood that the 'lack of rationality in prescription' and occasional demand from the patients leads to the need to buy medicines from outside. Whatever the reason, if rationality in prescription is observed and if adequate supply of medicine is maintained, this burden may reduce.

- The amount of dissatisfaction in the preferred criteria was comparatively lower for the outdoor patients. However, it was of a little higher order among the outdoor patients of OHs in the non preferred criteria such as behavior and communication of the providers with the patients.

Principal component analysis

- 'Principal component analysis' was another tool used to identify the 'action areas'. The analysis was applied to both 'indoor' and 'outdoor patients' of DHs and OHs separately. For the indoor patients, it was observed that the dimensions, namely, treatment, behavior and communication have higher weights as far as the first component is concerned. It should be noted that the first component explains the maximum variation. Contribution of this dimension in overall satisfaction is 77 percent for DHs and 87 percent for OHs. Thus, it is clear that, it is not only the 'Treatment' which satisfies the patient, but the behavior and communication of the providers with the patients also are equally important. For outdoor patients, the difference between the weights of different dimensions is not remarkable, implying that the short stay at the hospital might not have led them to give importance to any specific dimensions.

Level of patient satisfaction and Bed Occupancy Rate

- Based on 16 OHs, within the limitation of small number of indoor patients in some of them, it was observed that the satisfaction of indoor patients is related to the utilisation rate (bed occupancy rate) and the contribution is significant. This relationship implies that the satisfaction of patients is an important aspect as far as strengthening of the health system is concerned.

II. Staff (provider) Satisfaction

- Job security, risk in establishing private practice and opportunity to serve the people are the main reasons cited by the respondent doctors for joining the Government service.

Dimensions of provider satisfaction

- Providers' satisfaction was assessed, mainly through dimensions such as 'Work Environment', 'Work Relationship', 'Professional Satisfaction' and 'Personal Gains/Losses'.

Level of provider satisfaction

- The highest satisfaction was observed for 'Work Relationship' (70-72 percent), while the lowest satisfaction was in 'Personal Gains' (30 percent).

- According to 40 percent of the doctors, shortage of funds, equipment and personnel are the lacunae of the government hospitals.

- About half the doctors are satisfied with their present work and an equal number of them said that they could utilise their expertise in government job. The satisfaction is higher among the doctors working at DHs.

- Nearly half of the doctors said that they would have progressed better in a private set up.

- Forty two percent of the doctors opine that merit is not taken into consideration at the time of promotion/transfer.

- One-third of the doctors said that they have often experienced political interference.

- In case of 'Personal Gains', two-thirds of them are not satisfied with their salaries and three-fourths of them do not get sufficient time for family.

- Between the doctors working at the DHs, the overall satisfaction scores range from 43 percent at DH, Jalna to 58 percent in DH, Buldhana.

Provider satisfaction by hospitals

- With respect to the individual dimensions, doctors from DH, Bhandara have highest satisfaction in work environment, DH, Ratnagiri and DH, Buldhana are best in 'Work Relationship', Professional Satisfaction comes up with the best score in DH, Buldhana and DH, Buldhana also has highest score for 'Personal Gains'.

Level of satisfaction by dimensions

- In all, 106 (83 percent) doctors have given first or second rank to 'Professional satisfaction' as an important dimension of satisfaction. However, the dissatisfaction in this matter is as high as 50 percent.

- Although the doctors have not ranked 'Personal Gains' as an important dimension in satisfaction, (13 percent ranked it first or second), The dissatisfaction is observed to be highest (77 percent).

Satisfaction of Nurses

- The overall satisfaction scores for the nurses range from 46 percent for DH, Buldhana to 64 percent for DH, Beed. In comparison to the doctors the nurses are slightly more satisfied. The DHs with high nurses' satisfaction scores are DH, Jalgaon (Work Environment), DH, Beed (Work Relationship), DH, Beed (Professional Satisfaction) and DH, Jalna (Personal Gains).

Satisfaction of doctors and patients

- Although, because of the small number of doctors working in DHs, the relationship between doctors' satisfaction and patients' satisfaction could not be statistically tested, it is presumed that the providers' satisfaction definitely has a role in the patients' satisfaction and finally in the functioning of the hospital.

Satisfaction in E.S.I.S. hospital, Aundh

- The levels of satisfaction among the indoor patients of E.S.I.S. hospital are lower than their counter parts in other hospitals (61 percent for Aundh and 74 percent for DHs). They have number of complaints about treatment related issues, cleanliness, and waiting time.

CHAPTER 1

Quality of Health Care: Patient and Staff Satisfaction

Introduction

Increasing the quality of health care in public health programmes is emerging as an important objective in recent years for various compelling reasons. Given the apparent low utilisation of public health care facilities in many less developed countries (World Bank, 1993), the information on quality of health care and the relative satisfaction of clients/patients would be more useful to monitor the efficiency of the programme. Thus, an important factor to consider when analysing the quality of care provided in health facilities is the perspective of the client. In view of this, in recent years, quality of health care, a client-centred approach to providing high-quality health care as a basic human right, has emerged as a critical element of public health programmes in developing countries. Developing countries also face challenges in providing quality care due to limited resources. However, there is a general agreement that client satisfaction is an integral component of service quality and thus definitions of health service quality typically make explicit mention of patient satisfaction. The logic is that the patient satisfaction and perceived quality will influence utilisation of services (Jain, 1989; Bruce, 1990). Research conducted in many less developed countries highlights the benefits of addressing client perspectives in quality of care, since it leads to the increase in client satisfaction, continued and sustained use of services, and improved outcomes of health (Bertrand et al. 1995; Kols and Sherman 1998; Vera 1993). A focus on clients (patients) not only involves clients who come to a health facility to receive services, but also addresses the work-related needs of personnel (providers) involved in the delivery of health care. Doctors, nurses, technicians, administrative personnel, and cleaning staff are all important in achieving the overall goal of quality care.

Quality of care has been promoted by stakeholders like funding agencies, primary health care organisations, users of public health facilities and women's health organisations, and affirmed at international conferences, such as the 1994 International Conference on Population and Development held at Cairo. As a result, policy makers and managers of pubic health programmes in developing countries have begun to place assessing and improving the quality of health care as a top priority. The current research is an outcome of such thinking among the public health care managers in the Government of Maharashtra, India.

High quality health care services ensure that clients receive the care that they deserve. Also providing better services attracts more clients. In general, research finds that poor medical care dissatisfy patients, discourages them from seeking care and returning for services, and

prompts them to switch physicians. Providing good quality of care makes sense for the programme, since improving basic quality of care attract more patients, reduce per capita cost and ensure sustainability. High volume of patients, because of improved quality, enables the programme to distribute its fixed costs over a larger number of patients at lower cost. Private companies have long recognised that the consumer/client satisfaction makes good business sense because satisfied clients make repeat purchases, produce positive word of mouth and become loyal to particular brand. On the other hand, dissatisfied consumer/clients may tell about their negative experiences and are less likely to return to buy the product/service in future. Several studies in the field of reproductive health have shown that improving quality of reproductive health services in public health programmes increases contraceptive use. For example, studies in Bangladesh (Koenig et al. 1997), Peru (Mensch, 1996), Philippines (Rama Rao et al., 2003) and Tanzania (Morz et al., 1999; Speizer and Bollen, 2000) showed that women's contraceptive use was higher in areas where clients felt that they were receiving good care than it was in areas with lower-quality health facilities (for a detailed review on this aspect see Kols and Sherman, 1998).

Poor quality in public health programmes is unsafe to the patients. Poor quality leads to dissatisfaction, may cause physical harm, and finally underutilisation of the services leading to wastage of public resources. Reasons for poor quality could be several. They can be lack of resources and poor management. Unfortunately, most of the times lack of resources is cited as one of the important reasons for poor quality, but in reality, management failure is also a common and one of the more important reasons in a country like India (Mavalankar, 1999). Lack of physical infrastructure, non-availability or poor quality of equipments and supplies, lack of staff etc., may hamper any well-managed programme. Management has the responsibility to ensure quality of the health care services.

Assessing the quality of care through patient and provider satisfaction will provide essential baseline information for policy makers and programme managers. However, assessment of quality is an initial step in a larger quality improvement process, which may include providing feedback to health workers on performance, training and motivating staff to undertake quality improvements, and designing solutions to bridge quality gaps (Kols and Sherman 1998; Quality Assurance Project, 2003). The current study tries to assess the quality of care provided in the public health facilities of Government of Maharashtra.

Defining quality of care

Definitions of quality of health care tries to address how well the health programme keeps its population healthy or treats them when they are sick? In literature, we come across

various definitions for quality of health care (Blumenthal, 1996). The most comprehensive and perhaps the simplest definition of quality is inspired by the work of W. Edwards Deming (1986), a pioneer of the quality movement in industry. According to him, quality means, "doing the right thing right, right away." In health care quality means "offering a range of services that are safe and effective and that satisfy clients' needs and wants" (Kols and Sherman, 1998). From a public health perspective, quality means "offering the greatest health benefits, with the least health risks, to the greatest number of people, given the available resources" (Huber, 1994). Quality of care is how well the health programme keeps its population healthy or treats them when they are sick. Good quality health care means doing the right thing at the right time, in the right way, for the right person and getting the best possible results *(www.medicare.gov)*. Quality of care can refer to the technical quality of care, to non technical aspects of service delivery such as clients' waiting time and staff's attitude, and to programmatic elements such as policies, infrastructure, access and management (Jain 1989; Bruce, 1990; Donabedian, 1980).

In defining quality, stakeholders like clients, providers, managers, policy makers and donors all have differing but genuine perception on what constitutes good quality of care. For providers, quality means, clinical quality of care i.e., – offering technically competent, effective safe care that contributes to an individual's wellbeing (Brown et al., 1993). For programme managers it is support services like logistics, record keeping etc., are important to the quality of service delivery. For policy makers and donors, additional key elements of quality include cost, efficiency, and outcomes of populations as a whole (Hull, 1996 and Newbrander and Rosenthal, 1997). World Health Organisation's (WHO) definition of quality takes into account of the perspectives of all these important stake holder groups: "quality of health care consists of the proper performance (according to standards) of interventions that are known to be safe, that are affordable to the society in question, and that have the ability to produce an impact on mortality, morbidity, disability, and malnutrition (WHO, 1988). All the above definitions place the client at the centre of the concept of quality of care and emphasises the importance of technical standards and of increasing access to services.

The assessment of patients' satisfaction is inevitably subjective, because of educational, social, economic and linguistic differences between health professionals and their clients. The perception of quality varies from person to person according to the individual's knowledge, values, attitude and resources. For patients and their families it means correct diagnosis and satisfactory treatment that meets their perceived needs. Despite its subjectivity, no one can argue that client satisfaction is unimportant. Medical personnel attempt to apply technical criteria to improve their patients' quality of life, but such factors as the context of their work, the medical

school they attended, and their personal values also come into play. However, researchers regard that the patients' reported satisfaction with the services received is an important indicator of the quality of care received.

Dimensions of quality of care

Quality is a comprehensive and multifaceted concept. Researchers generally recognise several distinct dimensions of quality of care that vary in importance depending upon the study context and the nature of the programme. For example, dimensions of quality are different for a family planning/reproductive health programme (see Bruce and Jain, 1991) than for a comprehensive public health programme (Quality Assurance Project, 2003). Of course, there are some dimensions, which are common for all types of public health programmes. Studies on quality of care address one or more dimensions, such as access to services, interpersonal relations, effectiveness, technical competence, efficiency, mechanism to encourage continuity, safety and amenities (Quality Assurance Project, 2003). These dimensions provide a useful framework to analyse and measure the extent of quality of care provided in the health programmes. The following section briefly discusses the dimensions of quality of care.

Access to services

In many countries, governments are responsible for ensuring that everyone has access to health services. Quality of health care is very closely associated with accessibility. Sometimes quality is contrasted with access but it is difficult to draw a line between them (Kols and Sherman, 1998). Ensuring access to health services means making good quality, affordable care available where and when convenient to the public (Kols and Sherman, 1998). Access means more than the mere existence of a nearby health worker/facility. When a facility lacks properly trained staff, opens irregularly, suffers from supply shortages, charges high prices, or blocks care with unnecessary medical barriers, the community does not have adequate access to services (Bongaarts and Bruce, 1995). Not only a convenient location and prompt services are important for access but also services are reliable, affordable and without any barriers.

Hence, access means that the degree to which the healthcare services are unrestricted by geographic, economic, social, cultural, organizational, or linguistic barriers (Quality Assurance Project, 2003). **Geographic** access may be measured by modes of transportation, distance, travel time, and any other physical barriers that could keep the client from receiving care. **Economic** access refers to the affordability of products and services for clients. **Social or cultural** access relates to service acceptability within the context of the client's cultural values, beliefs, and attitudes. For example, family planning services may not be accepted if they are offered in a way

that is inconsistent with the local culture. **Organizational** access refers to the extent to which services are conveniently organized for clients, and include issues, such as clinic hours and appointment systems, waiting time, and the mode of service delivery.

Interpersonal relations

Clients need to be treated with respect and friendliness. Clients interpret courtesy, confidentiality, and privacy as signs that providers are treating them as equals. Hence, the dimension of interpersonal relations refers to the interaction between providers and clients, managers and healthcare providers, and the health team and the community. Good interpersonal relations establish trust and credibility through demonstrations of respect, confidentiality, courtesy, responsiveness, and empathy. Effective listening and communication are also important. Sound interpersonal relations contribute to effective health counselling and to a positive rapport with patients. But inadequate interpersonal relations can reduce the effectiveness of a technically competent health service (Quality Assurance Project, 2003). Some patients may not tolerate the providers who deal with them very badly. Patients who are impolitely treated may be less likely to pay attention to the healthcare provider's prescriptions or may avoid seeking care.

Technical competence

Technical competence is one of the key elements of quality. It refers to the skills, capability, and actual performance of health providers, managers, and support staff. For example, to provide technically competent services, a provider must have the skills and knowledge (capability) to carry out specific tasks and to do so consistently and accurately (actual performance). Technical competence relates to how well providers execute practice guidelines and standards in terms of dependability, accuracy, reliability, and consistency (Quality Assurance Project (2003). Consequences of poor technical competence can mean death to the client. But studies on technical competence of the staff are hard to find (Bruce, 1990). Most information is from anecdotes, hospital internal reports, special small-scale studies or newspaper reports.

Technical competence is relevant for both clinical and non-clinical services. For health providers, it includes clinical skills related to preventive care, diagnosis, treatment, and health counselling. For health managers, it includes skills in supervision, training, and problem solving. Public health programmes may have an implicit assumption that when it employs qualified staff it is offering a technically competent service. However, some aspects of technical quality may be poor not because the staff lacks competence but because they lack the necessary equipment, time, or the staff do not bother to follow the norms and management is not willing/able to do anything about it (Mavalankar, 1999). In short, technical competence refers to the degree to which the

tasks carried out by health workers and facilities meet expectations of technical quality i.e., adhere to standards (Quality Assurance Project, 2003).

Efficiency

Sometimes resources at the health centres are not fully utilised. For example, assessment of public hospitals in Maharashtra, particularly rural hospitals, shows that the lack of utilisation of sanctioned beds, infrastructure and resources provided to these hospitals increased the unit cost of health care (Chitre et al., 2001; MHSDP, 2002). Since the healthcare resources are usually limited in developing countries the efficiency of health services becomes an important dimension of quality. Public health programmes should provide the greatest benefit within the limited resources available so that the patients and the community get the optimal rather than maximum care. In this way, quality can be improved while reducing costs.

Continuity

Continuity means that "the client receives the complete range of health services that he or she needs, without interruption, cessation, or unnecessary repetition of diagnosis or treatment" (Quality Assurance Project, 2003). The client must have access to routine and preventive care provided by a health worker who knows his or her medical history. A client must also have access to timely referral for specialized services and to complete follow-up care. Continuity is sometimes achieved by ensuring that the client always sees the same primary care provider. Continuity can also be achieved by keeping accurate medical records so that a new provider knows the patient's history and can build upon and complement the diagnosis and treatment of previous providers. The absence of continuity and proper referral in the health system can affect quality and also reduce the quality of interpersonal relations.

Safety

Quality Assurance Project (2003) defines safety as "minimizing the risks of injury, infection, harmful side effects or other dangers related to service delivery". Safety involves the provider, as well as the patient. For example, safety is an important dimension of quality for blood transfusions, especially since the advent of AIDS. Patients must be protected from infection, and health workers who handle blood and needles must be protected by safety procedures. Safety is important in both clinical as well as non clinical services. For example, if a health worker does not provide proper instruction on the preparation of oral rehydration solution (ORS), a mother may administer ORS to her child with a high concentration of salt which is harmful to the child.

Amenities

Amenities refer to the features of health services that do not directly relate to clinical effectiveness but may enhance the client's satisfaction and willingness to return to the facility for subsequent healthcare needs. Amenities are also important because they may affect the client's expectations about and confidence in other aspects of the service or product. Even if the user charges are higher, amenities may enhance the client's willingness to pay for services. Amenities relate to the physical appearance of facilities, personnel, and materials as well as to comfort, cleanliness, and privacy. Other amenities may include features that make the waiting time more pleasant such as music, educational or recreational videos, and reading materials. While some amenities — clean, accessible restrooms and privacy curtains in examination rooms — are considered luxuries in most developing-country healthcare settings, they are nevertheless important for attracting and retaining clients and for ensuring continuity and coverage (Quality Assurance project, 2003).

The above dimensions of quality of health care are related to each other. For example, access must be included as a quality indicator because, along with quality, it strongly affects client satisfaction. For example, clinic hours, clinic location, fees and waiting time are related to access than quality, but all certainly influence client satisfaction. Access determines whether a client "reaches the door" of the service provider, while quality is normally thought of as the set of conditions that the client confronts one he/she is "inside the door" (Bertrand et al 1995).

Clients, Providers and Managers

The dimensions of quality discussed above constitute many aspects of health system. These dimensions come into play as clients, providers and managers. For each one of them quality of care has a unique meaning. What does quality of care mean for the clients, the providers who provide the services and the managers who mange the services? The current study tries to address the quality of health care/patient satisfaction from both **clients/patients** as well as **provider** perspective. Because, **"patient satisfaction"**, to an extent depends upon the job satisfaction of the providers. A satisfied provider is expected to provide a better care to his clients than an unsatisfied provider. Because, providers derive greater personal and professional satisfaction from their jobs when they can offer good-quality care and can feel their work is valuable (WHO, 1998). Similarly, a higher client satisfaction also leads to a **"job satisfaction"** of the provider. Clearly, the health outcome in a community depends on satisfaction of both clients and providers.

Clients

The clients and communities want services that effectively relieve symptoms, prevent illness and improve health status. The client's perspective is important because satisfied clients generally comply with treatment and continue to use health services. Thus, the dimensions of quality that relate to client satisfaction affect the health and well being of the community. Patients and communities often focus on accessibility, interpersonal relations, effectiveness of treatment, continuity, and amenities as the most important dimensions of quality. However, it is important to note that communities do not fully understand their health service needs, especially for preventive services. Health providers are better equipped to learn about health status of their community and the health service needs.

Providers

Providers focus on technical competence, effectiveness, and safety in the provision of health care. Quality Assurance Project (2003) lists the following key questions for providers: How many patients are providers expected to see per hour?; What laboratory services are available to them, and how accurate, efficient, and reliable are they?; What referral systems are in place when specialty services or higher technologies are needed?; Are the physical working conditions adequate and sanitary, ensuring the privacy of patients and a professional environment?; Does the pharmacy have a reliable supply of all the needed medicines?; and Are there opportunities for continuing medical education? Provider satisfaction is also as important as client satisfaction to improve the health outcome of the communities. Providers need effective and efficient technical, administrative, and support services to enable them to deliver good-quality care.

Managers/Administrators

Although managers are not involved in delivering direct patient care, patient care is central to everything they manage/administer. The various dimensions of quality listed above are particularly useful to the managers who tend to feel that access, effectiveness, technical competence, and efficiency are the most important dimensions of quality. Focusing on the various dimensions of quality can help to set administrative priorities for the managers. Managers must take into account the needs and demands of both providers and patients. Also, they have the responsibility to optimally utilise and distribute the resources given to them by the government. To do so, managers must address the questions about resource allocation, fee schedules, staffing patterns, and management practices.

Tools to measure quality of care

Various data collection methods have been used to measure quality in health care programmes. But each method has its own limitations. Normally quality assessment studies combine various data collection methods to overcome the problems of each method. Some of the methods used in this context are: patient exit interview; focus group discussion; mystery client method; household interviews; health worker interview; observation of service delivery (by expert observers, peers, supervisors); audit of individual patient records; etc.

Quality assessment methods are more intrusive and have an observation effect i.e., the providers will try to perform better because they are aware that their performance is being assessed. Hence, the nature of the bias introduced by the observation method is in the direction of overestimating performance. This may not be always true, since, the presence of observers might also have the effect of making health workers nervous and undermine their performance. The mystery client method, wherein trained individuals pose as clients seeking health services and observe whether the providers perform certain predetermined tasks, can help to reduce observation bias to some extent. MHSDP has taken cognitions of this method and the method is being executed with the help of consultants.

Another problem in measurement of quality is the fact that health providers' performance may vary from one patient to the another patient or from one day to another day, depending on the situational factors like total number of patients to be seen, presence/absence of other providers, availability/non-availability of drugs and supplies. In this situation, multiple measurements (exit interviews as well as observation) are needed to obtain a reliable indication of usual performance. However, using multiple measurement tools in a single study will lead to increase in the cost of the quality assessment.

The main problem with using the client exit interviews is the well-known problem of "courtesy bias", i.e., clients may be reluctant to complain about the services received, especially when they are still at the service site (Brown et al 1995; Avis et al 1997; Williams et al 2000). This difficulty is a major botheration for the researchers, as clients claim to be satisfied even when they are not. Studies have supported the hypothesis that clients in health settings are reluctant to express dissatisfaction with their service when questioned using exit interviews (Avis et al 1997; Kenny, 1995; Simmons and Elias, 1994). Nevertheless, the advantages of the client exit interviews are that they are simpler than other possible choices (such as household interviews and focus group discussions), are more practical, and less expensive to carry out and allow for most rapid feedback (Williams et al 2000). Some researchers have tried to overcome the problem

of "courtesy bias" by focussing on areas of improvement, as opposed to the absolute level of satisfaction, and by recognising the importance of even very small levels of dissatisfaction (see Williams et al 2000).

Problems associated with patient satisfaction research

The common problems related to patient satisfaction research can be summarised as follows: (a) there is a lack of consensus over a definition of 'patient satisfaction' so different dimensions have emerged, making the validity of satisfaction studies difficult to assess (Wilkin et al 1992); (b) many of the patient satisfaction measures have been developed for specific settings and patient populations (eg. family planning and reproductive health); (c) there are methodological problems such as non-response rates, poor patient recall and positive response bias (French, 1981); (d) patients tend to express high levels of satisfaction, with very few expressing dissatisfaction (Wilkin et al 1992); and (e) there are conflicting reports regarding which variables affect patient satisfaction - these variables include expectation, social class, gender, age, ethnicity, health status etc. (Collins, 1999). In spite of these problems patient satisfaction research can provide health professionals with a range of data to monitor and improve the quality of patient care.

Quality of care in India

To formulate policy approaches to improve quality of services one should understand the existing standards of India's public health programme. Only in recent years, recognition has grown among researchers and policy makers in India about the quality of care and the issue is becoming increasingly prominent. Thus, the field studies of client satisfaction with health services in India is introduced only recently (Peters et al (World Bank), 2002). The issue of quality of care in public health system should be reviewed from multiple service delivery level – outpatient care, inpatient care, rural hospitals, primary health centres, district hospitals – and from multiple perspectives – clients, providers and managers. As mentioned earlier, studies also employed different research methodologies and tools to examine the issue of quality of care – exit interviews, focus group discussions, observation of client-provider interaction, household interviews, situation analysis, etc. A detailed review incorporating all the above issues may be desirable but it goes beyond the scope of the current study. However, we provide herewith a brief review of some of the studies to understand the quality aspects in perspective of the existing literature. Unfortunately, in India, most of the available literature on quality of care is related to family planning and reproductive health services (for a detailed review on this aspect see Koenig et al., 2000). The literature on other aspects of the public health programme is less and are not well organised.

Public health facilities are generally criticised by the people for their underutilisation, low quality of service, irregular attendance of medical staff, inadequate equipment, higher inefficiency, and poor maintenance and upkeep. In its recent publication, World Bank observes that "(in India) regardless of the type of provider, quality assurance is a problem, with most care reflecting poor clinical practices and standards and inadequate staffing" (Peters et al 2002). In 1990s, two national level household surveys on health related issues, NSSO 52nd Round (NSSO, 1998) and NFHS-2 (IIPS and ORC Macro, 2000), have collected some information on utilisation of public and private health facilities and client satisfaction. Both the studies reveal that the patient satisfaction is better in private health sector than in public health sector. This difference explains the reason for higher utilisation of private health facilities than the public facilities for curative services. These two national surveys on utilisation of medical facilities also clearly indicate the rapid growth of private sector in the country during 1990s. On an average about 60 percent of the inpatient care was provided by the public sector in the country in 1986-87. By 1995-96, the share of public sector was reduced to about 45 percent. In the provision of outpatient care, the private sector is predominant in the country in 1980s as well as 1990s. It is accounted for about 70 percent of outpatient care 1980s and 80 percent during 1990s (NSSO, 1998).

NFHS-2 asked the women about the quality of care in their most recent visit to health facility in India. Public sector facilities were more consistently rated lower than private facilities and the greatest amount of dissatisfaction were related to indicators of cleanliness, politeness of staff, and privacy in the public health facilities compared to the private facilities. The results of NFHS for Maharashtra show slightly higher satisfaction than the all India level. However, the politeness of the staff, cleanliness of the facility and waiting time are the areas of concern for the state (Table 1.1).

Table 1.1 : Quality of care reported by women during their most recent visit to a health facility in the 12 months preceding the survey, by type of facility, India and Maharashtra, 1998-99

Indicator of care	India		Maharashtra	
	Public	Private	Public	Private
Staff spent enough time (%)	90.3	97.5	95.6	98.6
Staff talked nicely to them (%)	62.7	78.4	79.5	86.7
Privacy was respected (%)	68.2	83.9	90.7	95.5
Facility was clean (%)	52.1	75.3	72.1	87.6
Median waiting time (minutes)	29.3	29.0	29.1	14.5

Source: IIPS and ORC Macro, 2000.

A household level study conducted in Ahmednagar district of Maharashtra rated the government services as inferior to the private services (Table1.2). The overall score for the government services was 30 percent lower than that for the private services (Murthy, 1999). Differentials in the satisfaction with public health facilities by background characteristics revealed no systematic bias toward poor or illiterate clients. A recent study carried out in public and private hospitals of Andhra Pradesh revealed that users of private hospitals were more satisfied than were the users of public hospitals. Clients of richest quintile in private hospitals were more satisfied overall and more satisfied with waiting times than they were the poorest quintile. Public facilities failed to satisfy users from the wealthiest 60 percent of the patients (Institute of Health Systems).

Table 1.2 : Client satisfaction with government and private services: Ahmednagar District, Maharashtra, 1994

Criteria	Percentage satisfied with		
	Government	Private	Difference (%)
Tangibles			
Clinic is neat and clean	81	95	17
Medicines are available	56	82	46
Responsiveness			
Doctors pay attention	69	88	28
Don't have to wait long	74	69	-7
Reliability			
Treatment is effective	62	86	39
Patient is properly examined	68	94	38
Empathy			
Timing is convenient	68	87	28
Staff is friendly	74	90	22
Assurance			
Doctor is available when needed	64	87	36
Questions are answered	75	94	25

Source: Murthy, 1999

In a series of three recent patient satisfaction surveys, using exit interviews conducted in public hospitals in Andhra Pradesh under the World Bank's Health Systems Development Project during 1999 and 2000 reported a lower satisfaction of patients (Institute of Health Systems, Hyderabad, 2002). The overall satisfaction levels in the surveys range between 68 and 71 percent for all the three years. The significant areas of dissatisfaction were financial aspects and interpersonal aspects of care. Content analysis to the open ended question revealed that corruption appears to be very highly prevalent and was the top cause of dissatisfaction, other areas of concern were availability or supply of drugs, poor utilities like water supply, lights and fans etc., and poor maintenance of toilets and lack of cleanliness in the hospital. There were no major differences seen in satisfaction scores by age, gender, education, occupation or by socioeconomic status.

A patient satisfaction study carried out (prior to the World Bank funded health systems development project was launched) in Uttar Pradesh showed uniform level of satisfaction. Patients' dissatisfaction was highest for financial burden of health care, followed by the cleanliness of the facility. Access to facility was quite satisfactory, but satisfaction with availability of staff, perceived technical quality of care, and behaviour of doctors and nurses was considerably lower. No major difference in satisfaction was found by gender and caste. The highest difference in satisfaction was between the richest and poorest quintiles of patients regarding financial burden, availability of staff and behaviour of nurses. The disparity in satisfaction between poor and rich suggests that not only the poor in Uttar Pradesh bothered about financial burden of health care in public facilities, but also that those with higher incomes are likely to be more satisfied with the staff and services, possibly because they are able to pay for better services (cited in World Bank, 2002).

A study conducted by the in-house officials of the Maharashtra Public Health Department through exit interviews in selected public hospitals reveals a fairly higher satisfaction of the patients in various dimensions of the care (Jotkar, 1998). The study cautions that the results of the client interview should be interpreted in view of the limitations of clients to asses the provider competence accurately, his/her sense of dependency on doctors and influence of interpersonal skills. Several explanations are cited in the literature for the apparent inconsistency between service quality and actual reported satisfaction of the clients. Koenig et al (2000) lists the following: (i) courtesy bias; (ii) clients are, less educated than the service providers, especially doctors, and are therefore unwilling or unable to question their treatment; (iii) clients have less options in terms of health care, especially in rural areas, they are more likely to accept existing standards as reasonable; and (iv) clients may have low expectations in terms of services provided in the public sector in general, particularly because such services are ostensibly provided free of cost; the clients may be easily satisfied with services, even if they are of low quality. Similarly, Ramanathan et al (1999) express the view that 'because government services, often the only ones available to the rural poor, are free, clients may have low expectations and be satisfied with a low or indifferent quality of services'.

In India, consciousness about quality in general is low and it is more so in public programmes or services. Mavalankar (1999) has summarised in the following reasons for the same:

i. public services are seen as charity by the rulers to the poor people and hence question of quality does not arise;

ii. the top managers are not aware of the quality that people have to face at the tail end. Because the top managers never visit or obtain services from the peripheral institutions and if they do, the services are especially window-dressed to show the boss that everything is fine;

iii. management also does not want to know what is really happening as the blame will come on them if things are found to be poor;

iv. the management information system is also such that it gives one an idea of quantity rather than quality;

v. the clients have no systematic mechanism to protest against the public health services;

vi. there is a feeling that for clients coming from poor strata of the society any quality of services is better than no service; and

vii. most government infrastructure, however bad, is better than houses of and living conditions of, may be, half the clients and hence they may perceive the quality as acceptable.

Government health functionaries usually blame the lack of equipment, medicines, manpower and supplies for the poor quality of services. However, some observers point out that even when all the facilities were made available, clients receive poor quality of care. Because health workers show little respects for clients, especially if they were poor, illiterate, or from lower social strata (Ramasundaram, 1994). Some health workers even believe that, because government provide free of services, clients had no right to demand good quality service. Generally it is reported that the rude behaviour of the public health providers is one of the reasons for lower utilisation of services.

The current study

The current study tries to assess the patient and provider satisfaction in public hospitals in Maharashtra. For assessing the patient satisfaction we mainly choose exit interviews and observations as the tools to measure quality because they are simpler than household interviews and focus group discussions. Also they are more practical, less expensive to carry out and allow for the more rapid feedback. For assessing the provider satisfaction we use the interview method by focusing on the various dimension of job satisfaction. These dimensions include work environment, work relationship, professional satisfaction and personal loss and gains. The providers interviewed for the study are doctors, nurses, technicians and class-IV employees of the hospital. The chapter scheme of the study is as follows. The first chapter deals with the definition, dimensions, and a brief review on quality of care in India. The second chapter on methodology

presents the sample and study design. The third chapter gives the background characteristics of the patients. The fourth chapter presents the profile of the selected hospitals. The fifth chapter gives the general satisfaction levels of the patients. The sixth chapter presents the satisfaction scores in different dimensions of the health care and its differentials. The seventh chapter presents the multivariate analysis of patient satisfaction and the rank analysis of reasons for selecting a health facility to suggest action areas. The dimensions of provider satisfaction are presented in eighth (doctors) and ninth chapters (nurses, technicians, pharmacists and class-iv employees). Patient and provider satisfaction in ESIS, hospital at Aundh is provided in the tenth chapter. The summary of findings and policy recommendations are presented in the eleventh chapter.

CHAPTER 2

Objectives, Study Design and Methodology

Objectives

Studies measuring the patient satisfaction with health care are an important tool for understanding the peoples' needs and for responding correspondingly. With general objective of improving health status of the people and the need of assessment of client satisfaction, the MHSDP has assigned the present study with the following objectives.

1. To document the demographic and socio-economic profile of patients at the selected project facilities;
2. To assess the level of satisfaction of both the indoor and outdoor patients at the project facilities, with respect to different dimensions of health care;
3. To examine the differentials in the level of satisfaction by background characteristics of patients and by hospital characteristics;
4. To identify the important dimensions of satisfaction of indoor and outdoor patients;
5. To assess the patients' expectations from a health facility;
6. To examine whether the patients' expectations are filled;
7. To assess the level of satisfaction among providers including doctors, nurses technicians, pharmacists and Class-IV employees;
8. To identify important dimensions of satisfaction for doctors and nurses, and
9. To examine the role of the patients' satisfaction in the overall utilization of the hospital.

Study Design

Sample Selection

The sample of hospitals was to be selected following the guidelines given below.

1. Representation of all health-circles in Maharashtra;
2. Representation of four levels of hospitals namely, (i) district hospitals, (ii) 100 bedded sub divisional hospitals, (iii) 50 bedded sub divisional hospitals, and (iv) rural hospitals; and
3. Guidelines regarding contextual analysis on various kinds of differentials like tribal vs non-tribal and civil work completed vs not completed etc.

Taking into account the above guidelines, the officials of the MHSDP suggested the following sample design (Table 2.1). At the request of MHSDP authorities ESIS hospital at

Aundh was additionally selected. However, the hospital being of different kind is not included in the main analysis.

Table 2.1: Hospitals selected for the study by health circle and type of hospital

Health Circle	Type of Hospital			
	DH	SDH-100	SDH-50	RH-30
Thane	Ratnagiri	–	Dapoli	Wada
Nasik	Jalgaon	Chopada	Chandwad	Sakri
Pune	–	–	Indapur Karmala	Sangola
Kolhapur	–	Sawantwadi Kankavali	–	Atpadi
Latur	Beed	Parli Vaijnath	–	Majalgoan
Aurangabad	Jalna	–	Ambad	Mantha
Akola	Buldhana	Murtizapur	Dharni	Akot
Nagpur	Bhandara	Tumsar BGW Gondia	Mul	Rajura
Total	6	7	7	8

Taking into account the earlier findings about the satisfaction levels of the indoor and outdoor patient at district hospitals, it was estimated that a sample of 275-300 patients (inclusive of both indoor and outdoor patients) would be adequate to represent all kinds of hospitals. Consulting the project officials, we decided about the following sample size. Appendix 2.1 gives the details about the determination of the sample size.

Table 2.2 : Sample size of patients: Indoor and Outdoor Patients

Type of hospital	No. of hospitals selected	Number of patients interviewed in each hospital		
		IPD	OPD	Total
District Hospital	6	75	75	150
SDH-100	7	38	37	75
SDH-50	7	25	25	50
Rural Hospital	8	12	13	25
Total	28	150	150	300

All the hospitals under SDH-100, SDH-50 and 30 bedded rural hospitals are considered as "Other Hospitals" for the analysis.

Thus, the total sample size comes out to be 1975. The sample size of ESIS hospital at Aundh, Pune was kept same as that of the district hospital i.e., 150 patients (75 OPD patients and 75 IPD patients).

Sample Size of Providers

In order to understand the perception or views of all those, who have a role in providing the services, we decided upon the following sample size for various categories of providers at different kinds of hospitals.

Table 2.3 : Sample size of providers

Type of hospital	Number of providers
District Hospital	30
SDH-100/50	8
Rural Hospitals	4

Table 2.3 (contd.) : The break-up of providers to be interviewed in each type of hospital

Type of hospital	Doctors	Nurses	Technicians	Pharmacists	Admn. Officer	Class-IV	Total
District Hospital	14	9	3	1	1	2	30
SDH-100/50	2	3	1	1	--	1	8
Rural Hospitals	2	1	1		--	--	4

Thus the total providers would be 324 for the selected 28 hospitals. The above extracts give the planned sample size and composition of patients and providers. However, after going to the field, number of changes had to be made in the sample sizes of indoor patients and providers. The sample size of indoor patients had to be reduced on account of two reasons:

1. The designated status like SDH-100/50 as classified by MHSDP authorities did not exist either in number of beds or in staff facilities. This happened more in case of SDH-100 hospitals; and
2. The period of our field-work was January-March 2003, probably the slack season for the hospitals. Therefore the discharge rate was so low that there used to be only one/two indoor patients for exit-interviews. Hence, the sample size had to be reduced.

Table 2.4 gives the details of these changes, and Table 2.5 the final sample size for patients. There were no difficulties in getting the planned number of providers. In fact, our team carried out interviews of 407 providers instead of planned 324. Table 2.6 gives the details.

Table 2.4 : Changes in the number of Indoor patients for Other Hospitals

Type of hospital	Planned Number	Actual Number	Changes in the status
SDH – 100			
Chopada	38	8*	Treated as 50 bedded
Sawantwadi	38	12*	Treated as 50 bedded
Kankavali	38	12*	Treated as 50 bedded
Parali Vaijanath	38	13	Treated as 50 bedded
Murtizapur	38	38	As per MHSDP classification
Tumsar	38	40	As per MHSDP classification
Gondia	38	38	As per MHSDP classification
SDH – 50			
Dapoli	25	13*	As per MHSDP classification
Chandwad	12	7*	Treated as 30 bedded
Indapur	25	13*	As per MHSDP classification
Karmala	25	13*	As per MHSDP classification
Ambad	25	7*	Treated as 30 bedded
Dharni	25	13*	As per MHSDP classification
Mul	25	13*	As per MHSDP classification
CHCPI			
Wada	12	7*	
Sakri	12	7*	
Sangola	12	10*	
Atpadi	17	7*	
Ahmedpur	12	7*	
Akot	12	7*	
Rajura	12	7*	
Mantha	12	7*	

(*: Because of less discharge rate, the IPD number got changed from 25 to 12)

Table 2.5 : Proposed sample size and actual number of patients interviewed

Type of hospital	No. of hospitals selected	Number of patients to be selected			Total number of patients interviewed in each type hospital		
		IPD	OPD	Total	IPD	OPD	Total
District Hospital	6	75	75	150	456	458	914
SDH-100	7	38	37	75	116	106	222
SDH-50	7	25	25	50	110	226	336
Rural Hospital	8	12	13	25	73	131	204
Total	28	150	150	300	755	921	1676

All the hospitals under SDH-100, SDH-50 and 30 bedded rural hospitals are considered as rural hospitals for the analysis.

Table 2.6 : Number of providers interviewed

Type of hospital	No. of providers interviewed in each hospital	Number of providers					
		Doctors	Nurses	Technicians	Pharmacists	Class IV	Total no. of providers interviewed
District Hospital	30	71	51	21	6	19	168
SDH-100/50	8	34	37	34	10	19	134
Rural Hospitals	4	26	27	23	10	19	105
Total	--	131	115	78	26	57	407

All the hospitals under SDH-100, SDH-50 and 30 bedded rural hospitals are considered as rural hospitals for the analysis.

Tools used for the study

As per the guidelines of the MHSDP, the patient's interviews were to be exit interviews i.e. the interview taken at the time of discharge of the indoor patient or at the time of exit of the outdoor patient. The available literature on client satisfaction in developing countries and our earlier experience suggested that the patients' interviews revealed appreciable order of satisfaction with the government health services, while the household surveys for health seeking behavior revealed clear preference for private services on account of poor services at government hospitals. This inconsistency probably was due to the method of exit interviews taken in the premises of the hospital. The patients, even at the time of exit, are under great relief of cure of the sickness and hence report high order of satisfaction with almost every dimension of health care. This bias is termed as 'Courtesy Bias' in the literature. Thus it is clear that the method of exit interviews would give the findings affected by courtesy bias. However, the alternative of carrying out interviews of patients at their residences was not feasible, particularly for sample size as big as 2000 patients. Hence, besides the main survey through exit interviews, we suggested the following methods on sample basis:

1. Residential interviews for indoor patients of one hospital of (ESIS, Aundh) where the patients interviewed in the hospital would be re-interviewed after one month;
2. Observation of the entire process of getting health care, at the outdoor patients departments at all the selected Hospitals. It was decided to have 10 observations in each of the District Hospitals and 5 observations in each of the Rural Hospitals. Thus, giving a total of 170 observations.
3. In addition, it was also intended to have focus group discussions with a few vocal patients at the district hospitals.

Taking into consideration the role of the adequacy of hospital infrastructure, personnel, equipment etc it was also intended to collect information about the hospital profile.
Thus, in brief, following are the tools used for the study.

For Indoor Patients

1. Exit interviews at the discharge through a structured questionnaire
2. Residential interviews for indoor patients of E.S.I.S hospital at Aundh.
3. Focus Group Discussions

For Outdoor Patients

1. Exit Interviews at the time of exit through a structured questionnaire
2. Observations by the field team

For Hospitals

1. Facility Audit.

Questionnaires

Separate questionnaires were framed for indoor and outdoor patients. Similarly, separate questionnaires were framed for the providers of different kind. Appendix-2.2 contains all these.

Questionnaire for the Indoor and Outdoor Patients

This structural questionnaire for indoor patients contains the following major sections: (i) identification; (ii) living condition; (iii) admission to the hospital; (iv) ailment; (v) treatment history and expenses (treatment, transport and relatives stay); (vi) waiting time; (vii) staff behavior and communication; (viii) treatment effectivity and adequacy of equipment and medicines; (ix) affordability and borrowings; (x) cleanliness; (xi) crowding; (xii) food availability; (xiii) other facilities provided by the hospital; (xiv) continuity of treatment; (xv) preferred characteristics of the services; and (xvi) gender dimension in satisfaction with the services.

In addition to the above questions, which deal with the current utilization of the hospital services, one additional piece of information was sought through a section on the sickness in the patient's family, during preceding one year. Here the purpose was to know about the general health seeking behavior of the patient's family. Since the present study deals with patients, who

have opted to visit the public hospital, there was no question in the main questionnaire, regarding the choice of public/private hospital. In view of this, the last section was inserted.

The main structure of the questionnaire for the outdoor patients is similar to that for the indoor patients. Only some questions about the wards and visits of the providers etc. get excluded.

While preparing the questionnaires, information was collected from the available literature. Although, most of the studies were related to the satisfaction among acceptors of family planning services, there were some studies, which helped us in framing the questions. The list of ailments was taken from the questionnaire used for the morbidity survey carried out by N.S.S.O. in its 52nd round.

Questionnaire for the Providers

The questionnaire for the providers has the following sections: (i) training and work experience; (ii) work environment; (iii) work relationship; (iv) professional satisfaction; (v) personal gains and losses; (vi) satisfaction with the hospital services; (vii) satisfaction with the health system; (viii) gender dimension in provision of services. There were minor changes made in the questionnaire for nurses. The questionnaire for technicians, pharmacists were short and dealt mainly with their departments. The questionnaire for the administrative officer sought information mainly about the administrative issues and suggestions regarding them. To frame the questionnaire on dimensions of provider satisfaction, the recent book published by the World Bank was helpful (Peters et al., 2002).

Difficulties in data collection

The method of data collection, being exit interviews to be taken at the discharge (IPD patients) and at the time of leaving the hospital (OPD patients), there were some problems in data collection. The interviews of indoor patients totally depended upon the discharge rate. The period of data collection being a healthy season, the IPD admissions were very few in some cases, particularly in Rural Hospitals, and hence the discharge rate also was low. Outdoor patients, particularly, those who had come from outside, invariably used to be in hurry and somehow had to made to stay for the interviews.

The type of ailments and the expenses for treatment were the difficult questions. In case of both of these, help was taken from the staff nurse of the corresponding ward. However, in spite

of this, problems arose in specifying the ailment. Only symptoms were reported. In such cases, help was taken from a booklet prepared by the Vital Statistics Division of Maharashtra for Survey on Causes of Death. This booklet has established a correspondence between symptoms and specific cause of death. Again, in some cases, this also was not useful, since, it dealt with only causes of death and not sickness. This introduced a little subjective judgement about the specification of the ailment. Similarly, the question on ranking the different criteria for choosing a health facility was also found difficult to respond. We have prepared suitable pictures for the different criteria. Lot of probing and the pictures helped us in getting the patients' genuine responses. In short, all possible efforts were made to get genuine information about patients' satisfaction.

CHAPTER 3

Background characteristics of the patients, sickness pattern and general health seeking behaviour

Selected background characteristics of the patients are given in Table 3.1. IPDs of the government hospitals generally serve for the rural patients. For the IPD treatment in both, District hospitals (DH) and other hospitals (OH), 70 percent of the patients come from rural areas. The residential pattern of the patients is different for OPD treatment. Fifty-six percent of the OPD patients of the DHs come from urban areas. Even in other hospitals, half of the OPD patients come from urban areas. The residential pattern of the OPD patients indicates the easy accessibility of the public hospitals for the urban residents. The Sub-divisional and Rural Hospitals in Maharashtra are generally located in small towns. For the people in these towns the rural/sub-divisional hospitals are easily accessible. For the patients from the far away villages OPDs of these OHs and DHs are costlier as they have to travel either in private or public vehicles.

Sex composition of the IPD and OPD patients in DHs shows an equal distribution of male and female patients. In contrast, IPDs of the OHs are mainly utilized by the female patients: two-thirds of the patients are females. Even the percentage of the female patients in OPDs of the rural/sub-divisional hospitals is higher than the male patients.

Age composition of the patients in the hospital shows that the majority of the IPD patients come from the age group 15-44: 61 percent from DHs and nearly 70 percent from OHs. OPDs of the DHs and OHs treat more number of older (age 45 and above) patients than the IPDs.

More than one third of the patients (32-39 percent) are illiterates. The percentage of illiterate patients is more in the IPDs of the DHs (39 percent) than in the IPDs of the OHs (32 percent). Illiteracy level is higher among the patients than the illiteracy level of the general population of Maharashtra in 2001 (23 percent).

Percentage of Muslim patients is higher than the percentage of Muslim population of Maharashtra (9.7 percent in 1991 census). Similarly, the percentage of patients from SC and ST populations are much higher than their actual share of the total population of the state. In IPDs and OPDs of both DHs and OHs, the shares of the SC and ST patients are higher than the share of their actual population in the state (20 percent SC+ST as per 1991 Census).

Table 3.1 : Percent distribution of patients by selected background characteristics according to type of treatment and hospital, Maharashtra, 2003

Background Characteristics	IPD		OPD	
	District Hospitals	Other Hospitals	District Hospitals	Other Hospitals
Number	**456**	**299**	**458**	**463**
Total Percent	**100.0**	**100.0**	**100.0**	**100.0**
Residence				
Rural	70.0	69.6	43.7	50.8
Urban	30.0	30.4	56.3	49.2
Sex				
Male	48.5	34.4	46.1	43.4
Female	51.5	65.6	53.9	56.6
Age				
0 – 14	15.8	12.4	21.4	19.2
15 – 29	37.5	48.2	23.6	27.9
30 – 44	23.5	21.1	27.1	21.2
45 – 60	13.4	11.7	17.9	19.9
60 +	9.9	6.7	10.0	11.9
Education				
Illiterate	38.8	32.4	35.4	36.5
1 – 4	13.8	14.4	17.0	17.5
5 – 7	15.8	16.7	18.8	15.8
8 – 10	22.8	24.1	18.3	17.3
11 +	8.8	12.4	10.5	12.5
NG	--	--	--	0.4
Religion				
Hindu	71.3	77.6	67.7	76.0
Buddhist/Neo Buddhist	14.3	14.0	12.7	11.0
Muslim	12.9	6.0	19.0	12.5
Christian	0.9	0.7	0.7	0.4
Sikh	--	0.3	--	--
Jain	0.4	0.7	--	--
Others	0.2	0.7	--	--
Caste				
Scheduled caste*	20.0	22.4	17.2	19.4
Scheduled tribe	7.9	10.7	7.9	8.0
Other Castes	57.7	58.5	55.2	59.6
Other religions**	14.5	8.4	19.7	13.0
Standard of Living Index (SLI)#				
Low	66.4	61.5	52.8	52.1
Medium	21.9	27.4	29.0	27.2
High	11.6	11.0	18.1	20.7

* Scheduled caste includes Buddhists/Neo Buddhists

** Other religions includes Muslim, Christian, Sikh, Jain and Others

#. Appendix 3.1 gives the method of construction of SLI

Generally, BPL status is taken as the indicator of poverty. However, Standard of Living Index (SLI) is a much better indicator of poverty than the BPL status. Appendix 3.1 gives the method of construction of SLI. Data show that 62-66 percent of the IPD patients come from the low SLI group. Similarly, more than half of the OPD patients (52-53 percent) come from low SLI group.

The socially weaker sections of the society like illiterates, Muslims and Scheduled caste and Scheduled tribes are found to utilize the IPD and OPD services more than their actual proportions in the total population of the state. Similarly, the economically weaker sections (low SLI families) of the society are also found to utilize the government facilities more than their counterparts. According to National Family Health Survey – II (1998-99), the percentages of households with low, medium and high SLI for rural Maharashtra are 48.5, 41.5 and 10.00 respectively. The profile of the patients clearly indicates the pro-poor nature of the government health services in general and particularly for IPD services.

In comparison with the population proportion of 48 percent, more users of low SLI group seek inpatient care and also outpatient care in both District and Rural Hospitals. The high SLI group users tend to clog the benefits of outpatient care at both District and Rural Hospitals. However, the thin representation of medium SLI group in inpatient care and also outpatient care in both District and Rural Hospitals is worth noting. It indicates that the first referral level hospitals need to attract these clientele too and paid wards in all levels of project hospitals could be intervention in this context which is addressed by the MHSDP. Besides, maximising the use of referral level hospitals, this intervention will also yield some revenue to cross subsidise the poor.

Reasons for patients' choice of hospital by type of hospital and treatment

The patients were asked to give the reasons for selecting the specific hospital for treatment. Fourteen percent of patients came to the IPD of the DHs directly through referral (Table 3.2). The percentage of referral for the IPD of the OHs is 10 percent. Majority of these referral patients were referred by the public doctors or public health functionaries. One fourth of the IPD patients of the DHs and 15 percent of the IPD patients of the OHs said that they have come to the hospital due to emergency. Thus the referrals and emergency (including MLCs) together are responsible for 38 percent of the IPD patients in DHs and 25 percent of the IPD patients in OHs to go to the government hospital.

Free treatment is the major reason for selecting the hospital by the patients. Of the total number of 1,676 patients interviewed for the study in DHs and OHs, 66 percent mentioned that

free treatment is one of the reasons for selecting the hospital. In DHs more than half of the IPD patients (54 percent) and 73 percent of OPD patients mentioned that they have come to the hospital mainly because of the free treatment. Free treatment is the reason given by 70 percent of the patients in OHs.

Easy accessibility is another major reason given by the patients in DHs (22 percent in IPD and 26 percent in OPD). Reputation of the hospital has made 17 percent of the IPD patients and 25 percent of the OPD patients to select the DHs. The important reasons for patients' choice of other hospitals are free of charge, accessibility and reputation of the hospital. Five percent of the patients selected the hospitals because they had good acquaintance with the hospital staff. The major reasons for the patients' choice of government hospital are free treatment, easy accessibility and reputation of the hospital. Of course, the referrals and emergency are also the other important reasons.

Table 3.2 : Reasons for the patients' choice of hospital.

Reasons for patients' choice of hospital	District Hospitals			
	IPD		OPD	
	No.	%	No.	%
Referral by public doctor	37	8.1	–	–
Referral by private doctor	19	4.2	–	–
Referral by health functionaries	8	1.8	–	–
Easily accessible (Closeness to home)	99	21.7	121	26.4
Free of charge (Cost)	246	53.9	334	72.9
Good past experience (Reputation of the hospital)	77	16.9	116	25.3
On others' advice (family and friends)	95	20.8	37	8.1
Good acquaintance with the hospital staff	27	5.9	23	5.0
Emergency	108	23.7	–	–
Other reasons (MLCs, Camp etc.)	13	2.9	21	4.6
Total	456	***	458	***

Table 3.2 (contd.) : Reasons for the patients' choice of hospital.

Reasons for patients' choice of hospital	Other Hospitals			
	IPD		OPD	
	No.	%	No.	%
Referral by public doctor	7	2.3	–	–
Referral by private doctor	7	2.3	–	–
Referral by health functionaries	15	5.0	–	–
Easily accessible (Closeness to home)	136	45.5	175	37.8
Free of charge (Cost)	211	70.6	320	69.1
Good past experience (Reputation of the hospital)	77	25.8	130	28.1
On others' advice (family and friends)	49	16.4	47	10.2
Good acquaintance with the hospital staff	16	5.4	5	1.1
Emergency	45	15.1	–	–
Other reasons (MLCs, Camp etc.)	9	3.0	7	1.5
Total	299	***	463	***

Disease pattern of the indoor patients (DHs and OHs)

Table 3.3 gives the data on the disease pattern. Since this disease pattern relates to the patients who were discharged during the short duration of fieldwork, it may not reveal the general disease pattern in the sample hospitals. However, particularly, for the district hospitals, the sample size was big enough even for each hospital (75), and hence some idea could be obtained about the general disease pattern. For the other hospitals pregnancy related problems, deliveries and family planning operations account for more than 40 percent of the total patients, while communicable diseases, digestive disorders, cough, cold & fever and accidents account for another 40 percent of the patients. For the district hospitals also pregnancy/delivery related problems and family planning operations account for about 25 percent of the cases, while accidents and digestive disorders account for another 30 percent of the cases. As expected, the proportion of patients suffering from heart trouble, blood pressure, paralysis, arthritis, etc. is much higher in the sample of patients from the district hospitals, in comparison to those from other hospitals.

From the pattern of sicknesses in other hospitals, it appears that the staff at these hospitals would be able to manage them without difficulties and hence the patients also should be fairly satisfied. On the other hand, as expected the district hospitals get slightly more complicated cases, but they also have adequately qualified staff to treat them. From the point of view of providers, mainly doctors, the work at other hospitals may not be challenging and hence could add to the frustration of staying away from the contemporary work in their profession and of staying in places with limited amenities. This dissatisfaction could reflect in their behaviour with the patients leading to patients' dissatisfaction. Comparatively, the doctors at the district hospitals are senior, and have opportunities to utilise their expertise and hence should be better satisfied compared to their rural counterparts. These presumptions will be tested when the data on patients' satisfaction and providers' satisfaction are analysed

Disease pattern of the outdoor patients (DH and OH)

Table 3.4 gives the relevant data. It is observed that for the other hospitals, cough, cold and fever account for the largest number (27 percent) of cases, followed by accident, anaemia and related problems and digestive disorders, together accounting for another 34 percent of the cases. The composition of the sicknesses for district hospitals is slightly different. The cases of anaemia are relatively more in District Hospitals, while the situation is exactly reverse in case of patients with cough, cold and fever. Another difference worth noting is about the communicable diseases. Nine percent of the cases in other Hospitals are due to communicable diseases, with nearly half of them of Tuberculosis; while in District Hospitals, only two percent of the sicknesses are due to

communicable diseases. Another notable difference is in the proportion of cases with oral disorders. It is higher among the patients in District Hospitals. Some of the cases under these are of problems due to the chewing of 'Gutkha'.

Table 3.3 : Disease pattern of the indoor patients (IPD)

No.	Name of the Disease	DH		OH	
		No. of patients	% out of total	No. of Patients	% out of total
I	Communicable diseases, maternal, perinatal & nutritional deficiencies				
	1. Maternal Diseases				
	1.1 Delivery and related problems	87	19.1	57	19.0
	1.2 Pregnancy and related problems	24	5.3	20	6.7
	1.3 Family Planning Operation	13	2.9	48	16.1
	2. Perinatal Diseases				
	2.1 Congenital Deformities	1	0.2	-	-
	2.2 Paediatrics Problems	6	1.3	-	-
	3. Communicable Diseases and Nutritional Deficiencies				
	3.1 Communicable diseases (TB, malaria, jaundice, typhoid, chicken pox, etc.)	33	7.2	26	8.7
	3.2 Digestive Disorders	65	14.3	46	15.4
	3.3 Cough, Cold, Fever	24	5.3	19	6.4
	3.4 ENT Problem	2	0.4	1	0.3
	3.5 Anaemia	13	2.9	5	1.7
	3.6 Boil, Cyst, swelling, infections in skin	12	2.6	8	2.7
	3.7 Respiratory Problems	11	2.4	3	1.0
II	Non-Communicable Diseases				
	1 Heart disease, Blood Pressure	31	6.8	11	3.7
	2 Diabetes	1	0.2	-	-
	3 Kidney problems (including Hydrocil)	24	5.3	15	5.0
	4 Eye Problem	12	2.6	7	2.3
	5 Paralysis, Epilepsy	9	2.0	1	0.3
	6 Arthritis	4	0.9	-	-
	7 Heat, sunstroke, etc.	-	-	2	0.7
III	Injuries				
	1 Unintentional Accidents/Injuries	74	16.2	27	9.0
	2 Intentional Injuries	6	1.3	3	1.0
	Not specified	4	0.8	-	-
	Total	456	--	299	--

Although, there are no cases of attempts of suicide, interviewed in our survey, according to the report of our field-team and our discussion with the doctors, such cases among young people are increasing over time. The hospital authorities must also have observed this trend. Such cases should be handled with the help of a counsellor or a medical social worker attached to the hospital, rather than just treating him clinically. As will be seen later, the doctors appear to be treating the patient only for his ailment, like repairing a machine. Reportedly, they do not give any other advice for prevention of the ailment. In many cases, patient needs something more than the medicine, which seems to be lacking nowadays.

Table 3.4: Disease pattern of the outdoor patients (OPD)

No.	Name of the disease	DH		OH	
		No. of Patients	(%) out of total	No. of Patient	(%) out of total
I	Communicable Diseases, Maternal, Perinatal & Nutritional Deficiencies				
	1. Maternal Diseases				
	1.1 Pregnancy and related problems	9	2.0	20	4.3
	2. Perinatal Diseases				
	2.1 Paediatric problems	1	0.2	2	0.4
	3. Communicable Diseases & Nutritional Deficiencies				
	3.1 Communicable diseases (TB, Malaria, Filaria, Jaundice, Typhoid, Chicken-Pox, etc.)	10	2.2	42	9.1
	3.2 Digestive Disorders	44	9.6	42	9.1
	3.3 ENT Problems	20	4.4	8	1.7
	3.4 Anaemia, All body pains	79	17.2	51	11.0
	3.5 Cyst, swelling, skin diseases	35	7.6	31	6.7
	3.6 Respiratory problems	10	2.2	12	2.6
II	Non-Communicable Diseases				
	1 Tumour	-	-	3	0.6
	2 Cancer and other Tumour	6	1.3	-	-
	3 Heart Disease, Blood Pressure	14	3.1	18	3.9
	4 Diabetes	1	0.2	2	0.4
	5 Cough, Cold & Fever, Headaches	84	18.4	124	26.9
	6 Kidney Problems	5	1.1	7	1.5
	7 Eye Problems	33	7.2	13	2.8
	8 Paralysis, Epilepsy	-	-	2	0.4
	9 Arthritis, Parkinson, Spondilosis	15	3.3	16	3.5
	10 Heat, sunstroke	1	0.2	-	-
	11 Oral Disorders	24	5.2	2	0.4
	12 Mental Disorder	2	0.4	1	0.2
III	Injuries				
	1 Accident/Injury	61	13.3	64	13.9
	2 Intentional Injury	-	-	1	0.2
	Not Given	4	0.9	2	0.4
	Total	458	--	463	--

Treatment Seeking Behaviour (General)

The main objective of this study was to measure the patient and staff satisfaction in public hospitals. It is expected that the areas of failure would be identified on the basis of the study and the satisfaction levels could be enhanced. However, this may not ensure about getting more patients, unless the preferences of the people are known. A number of studies (Client Satisfaction Surveys (PRC Pune, 1995-97; NFHS–II 1998-99; RCH-RHS 1998; N.S.S. 1995-96) show that about 65-70 percent of the households prefer a private facility for health care. This proportion would differ a little bit for IPD and OPD and also for rural and urban residents. Still, the preference for private hospitals/dispensaries is clearly observed in all the studies mentioned above. In view of this, the authorities of the health department need to know the reasons behind

such preferences. Some of the above mentioned studies come out with reasons such as 'Bad quality of services', 'Long waiting queues'... etc. for not availing government services.

While planning the survey and while framing the questionnaire for this study, it was thought that a few questions could be included about the general treatment seeking behaviour of the households to which the patients belonged. This would have given us the information about the latest situation. However, there were problems in getting this information. They were:

1. The patients may not have detailed information about the sickness in the household, and
2. Since this question was put at the end of the questionnaire, the patient by then would be somewhat tired and hence was reluctant to recall the information. This happened more in the case of the outdoor patients, who were interviewed at the time they left the hospital and hence used to be in a hurry.

Because of the above reasons, we could get the information about only 643 sicknesses, while we had interviewed about 1700 patients. Nevertheless, this number also is not a small number and hence we give simple frequencies in Table 3.5

About 69 percent of the sicknesses were treated in public hospitals and the main reasons for visiting the concerned facility were 'Easy Access' and 'Affordable Charges', accounting for 60 percent of the cases. 'Good past experience' also account for a substantial number of cases (16 percent). The sicknesses were equally divided between indoor and outdoor care.

Against the general finding that people prefer private health facilities, it was surprising to find that 69 percent of the sicknesses were treated in public hospitals. For indoor treatment this percentage was 80, while for the outdoor treatment it was 60.This lack of consistency was mainly due to fact that the households about whom we got the data are not a representative sample of the general population. It further means that the respondent (indoor or outdoor patient) and also his family are mainly utilising the public health services. The main reasons are access and free treatment but 16 percent of them also give 'good past experience' as the reason. All these observations mean that the public hospitals have a 'captive clientele' mainly coming from the low socio-economic stratum, who cannot afford private health care. Whatever the reasons, if a particular group of the society is definitely opting for government health services, this opportunity should be utilised for giving quality health services, so that in future, the people will not visit the government hospitals only because of free treatment but also for good treatment. This will definitely increase the utilisation of the hospitals, cut down the unit costs and will make the hospitals financially sustainable.

Table 3.5 : Treatment Seeking Behaviour (General)

Total number of sicknesses reported		**643**	**100**
1	**Type of care**		
	Hospitalised (IPD care)	252	39.2
	OPD care	262	40.7
	Not reported	99	20.1
2	**Median duration of sickness**	5 days	
3	**Place of Treatment**		
	Public	443	68.9
	Private	173	26.9
	Not reported	27	4.2
4	**Reason for visiting the Facility**		
	Easily accessible	260	40.4
	Free of charge	124	19.3
	Good past experience	99	15.4
	On others' advice	14	2.2
	Emergency	31	4.8
	Good Facility	13	2.0
	Not given	102	15.9

CHAPTER 4

Hospital Profile

In this chapter, it is intended to examine the profile of our selected hospitals. We have two kinds of information, which will be used for this examination. One is based on the questionnaire used for the hospitals in our survey and another is the compiled information for 1999-2002 for Project facilities, which has been recently released by the MHSDP. This compilation will be mainly used to assess the trends in the utilisation of the hospitals and in the indicators of client satisfaction (Percent Left against Medical Advice or LAMA).

Let us begin with the analysis of the data collected through questionnaires for hospitals. The questionnaire for hospital profile has been framed mainly using the questionnaire used for Facility Survey under the Reproductive Child Health Survey (IIPS, 2001). It broadly contains questions on physical infrastructure, diagnostic facilities and equipment, vehicles and staff position. A simple method of scoring was used to get the quantified assessment of the different dimensions of the hospitals. Scoring method is given in Appendix 4.1. The total score of the hospital is calculated by having a simple sum of scores, which is compared against the sum total of maximum scores and is expressed in terms of 10 (maximum). Table 4.1 gives the data on these indicators. The following extract gives the information in a summary form.

Type of hospital	Physical Infrastructure	Diagnostic Facilities	Personnel
District Hospitals	6.18	6.21	6.88
SDH (100)	6.33	4.86	7.71
SDH (50)	7.11	4.61	7.34
Rural Hospitals (30)	7.44	5.54	7.65

It is generally observed that for DHs and OHs the achievement in the three dimensions is 62 percent and 70 percent for physical infrastructure, 62 percent and 50 percent for diagnostic facilities and 69 percent and 76 percent in personnel.

The variations are not significant for the availability of personnel, while they are substantial for the diagnostic facilities. The DHs rank first in diagnostic facilities, while in case of physical infrastructure and personnel they come up with low scores. Among the OHs, RH (30) are comparatively better in all the indicators. Among the DHs, DH Ratnagiri fares well in all the respects, while DH Bhandara and DH Jalgaon have a low score for personnel, DH Beed, DH Buldhana have a low score for physical infrastructure and DH Jalna comes up with a poor score on facilities and equipment.

Among the SDH (100), BGW, Gondia has all the three indicators of higher order, while GH, Tumsar, except personnel indicator does not do well in infrastructure and facilities. Hospital at Sawantwadi has bad physical conditions.

Among 50 bedded hospitals, hospital at Kankavli has good scores in all three dimensions. Hospitals at Dapoli and Ambad have low scores in physical infrastructure, while hospitals at Ambad and Mul have low scores on diagnostic facility.

Among the 30 bedded hospitals, the hospital at Sakri has all indicators of high order, followed closely by RH, Ahmedpur and RH, Akot. Hospitals at Wada and Rajura have low facility scores.

So far as the completion of civil works is concerned, out of 22 rural/sub-divisional hospitals, the work was completed and shifting had taken place in 10 hospitals and work was going on in 7 hospitals and in the remaining 5 hospitals, the work was completed but the shifting has not taken place. It was found during the fieldwork that, because of this process of completion of civil work and shifting in the rural/sub-divisional hospitals, the whole management of the hospital is disturbed, patients have only limited space and in the process, utilisation has got hampered. It is suggested that the work gets completed soon and that the hospitals start functioning with full-fledged infrastructure.

Trend in utilisation and client satisfaction in the sample hospitals

Maharashtra Health Systems Development Project has been functioning since 1999. The main objective of this project is to strengthen the health system. Various activities have been undertaken under this project. MHSDP has been releasing data on hospital activities of project hospitals (136 in number) every year since its inception. Recently they have come up with a volume giving the information for the last four years. This enabled us to examine the trends in the indicators of utilisation and client satisfaction for the selected hospitals.

Bed Occupancy Rate (BOR) and LAMA are the two indicators which are available and which are useful for our present analysis. The hospital activity information gives the data for five types of hospitals; district hospital, sub-divisional hospitals (100 bedded), sub-divisional hospitals (50 bedded), rural hospitals (30 bedded) and other hospitals. We give below the BOR and LAMA for the project facilities of the five kinds mentioned above.

Type of hospital	BOR (percent)			
	1999	2000	2001	2002
District Hospitals	84.72	89.94	89.51	87.29
SDH (100)	84.02	78.08	78.65	72.22
SDH (50)	65.96	60.55	62.65	56.41
Rural Hospitals (30)	55.31	54.28	54.88	53.45
Other Hospitals	89.63	121.37	118.68	85.75

Type of hospital	LAMA (percent)			
	1999	2000	2001	2002
District Hospitals	4.0	5.0	8.0	8.0
SDH (100)	1.0	13.0	10.0	9.0
SDH (50)	9.0	10.0	8.0	7.0
RH (30)	15.0	10.0	10.0	10.0
Other Hospitals	5.0	6.0	7.0	4.0

The above abstract reveals that there is no significant change in the utilisation levels. Slight increases or decreases are observed but they are not statistically significant. The changes in the LAMA are significant. The client dissatisfaction levels as expressed by LAMA have increased for district hospitals and SDH (100), while the same have declined for the other hospitals but still are quite high. How does one interpret these findings? The MHSDP has invested substantial amounts for improvements in the hospitals. Then, could it be that a period of four years is insufficient to expect any changes or are the investments not giving any returns? There could also be some external factors, which are affecting the utilisation of the public hospitals. Competition from the private providers is one such prominent factor. Getting answers to these questions is not within the scope of the present study. Hence, we proceed to assess the trend in the utilisation and client satisfaction at the selected hospitals against the backdrop at the state level. We give below the relevant information.

Type of hospital	BOR (%) - Sample Hospitals			
	1999	2000	2001	2002
District Hospital	96.97	85.36	89.67	86.4
SDH (100)	108.39	94.42	93.25	94.40
SDH (50)	55.21	52.03	50.85	54.65
Rural Hospital (30)	46.82	59.18	53.80	59.92

Type of hospital	LAMA (%)			
	1999	2000	2001	2002
District Hospital	4.37	3.68	5.23	6.66
SDH (100)	6.24	11.88	8.75	4.59
SDH (50)	11.92	19.25	14.13	10.12
Rural Hospital (30)	16.40	15.63	13.63	11.5

The original figures used for the above averages are given in Table 4.2. If one compares the averages for the sample hospitals with those for the state, one finds that as far as utilisation indicator is concerned, except the SDH (100), the other hospitals are representative of the state hospitals. Among SDH (100), the selected sample hospitals have a higher utilisation levels. The exceptionally high levels of utilisation in BGW Womens' hospital at Gondia and SDH at Parli-Vaijnath have given rise to high levels of utilisation. In fact, a careful look at the data in Table 4.2 leads to many surprises. Some of them are mentioned below.

1. The BOR at Parli-Vaijnath suddenly rises from 78 percent (2001) to 136 percent (2002).
2. The BOR at Indapur rises from 21.91 percent (2001) to 67 percent (2002).

The data on LAMA show that the DHs and SDHs (100) in our sample have slightly lower LAMA index, while for the other two groups of hospitals, the direction is reversed. However, the figures for LAMA as reported in the Hospital Activity Information do not show any trend at all and hence are little doubtful. One observation that could be easily made is that except 1999, for years, LAMA is always in integers. It is not possible to have it in integers every time. Thus it means that some rounded figure has been reported as LAMA. Further, its fluctuations are so wide that one starts doubting them. Some very odd trends are mentioned below.

1. LAMA for Dapoli for 2000, 2001 and 2002 is 54 percent, 31 percent and 6 percent respectively.
2. LAMA for Kankavali rises from 6 percent in 2000 to 26 percent in 2001.
3. For Sakri, LAMA was 0.48 percent in 1999 and rose suddenly to 48 percent in 2001.

As per the MHSDP officials, LAMA does not measure the client dissatisfaction in precise ways and hence its trends may not be worth a serious interpretation.

Table 4.1 : Indicators of physical infrastructure, personnel, diagnostic facilities, and equipments.

Sr. no	Type	Name of Hospital	Beds	Physical condi-tion	Diagnostic Facilities	Post Filled	Tribal/ Non-tribal	Civil work complete	Well conn-ected, with main road	Access-ible Within the town	Other Problems
1	DH	Ratnagiri	186	7.41	6.15	7.50	NT	Yes, Shifted	Yes	Yes	No problem
2		Jalgaon	306	6.30	6.23	6.25	NT	Yes, Shifted	Yes	Yes	No problem
3		Jalna	115	6.54	4.54	7.50	NT	Yes, Shifted	Yes	No	No problem
4		Beed	320	5.93	6.85	7.50	NT	Yes, Shifted	Yes	Yes	No problem
5		Buldhana	306	4.62	7.08	7.50	NT	Yes, Shifted	Yes	Yes	No problem
6		Bhandara	384	6.25	6.38	5.00	NT	In process	Yes	Yes	No problem
7	SDH (100)	Chopada	100	7.08	5.53	5.00	NT	Yes, not shifted	Yes	Yes	Water, Toilet
8		Sawant-wadi	100	5.19	7.44	6.25	NT	In process	Yes	Yes	No specific problem
9		Parli Vaijanath	100	7.41	4.23	7.50	NT	Yes, not shifted	Yes	Yes	No specific problem
10		Murtiza-pur	100	6.00	3.62	10.00	NT	In process	Yes	Yes	No problem
11		Tumsar	100	4.81	1.85	10.00	NT	No	Yes	Yes	Water, Electricity
12		Gondia (BGW)	100	7.50	6.48	7.50	NT	Yes, shifted	Yes	Yes	No problem
13	SDH (50)	Dapoli	50	5.19	5.77	7.50	NT	In process	Yes	Yes	
14		Chandwad	50	7.04	4.19	7.50	NT	Yes, not shifted	Yes	Yes	Water, Electricity
15		Indapur	50	6.30	4.57	5.00	NT	Yes, not shifted	Yes	Yes	No specific problem
16		Karmala	50	8.52	4.15	7.50	NT	Yes, shifted	Yes	Yes	No specific problem
17		Kankavali	50	8.85	5.00	8.75	NT	Yes, not shifted	Yes	Yes	Doctor problem
18		Ambad	50	5.60	2.56	7.50	NT	In process	Yes	Yes	No specific problem
19		Dharni	50	6.15	6.71	7.50	Tr.	In process	No	Yes	No problem
20		Mul	50	9.26	3.92	7.50	Tr.	Yes, Shifted	Yes	No	Water
21	RH (30)	Wada	30	6.67	4.74	6.25	Tr.		Yes	Yes	No specific problem
22		Sakri	30	7.41	7.82	8.75	NT	Yes, Shifted	Yes	Yes	No specific problem
23		Sangola	30	8.50	4.59	7.50	NT	Yes, Shifted	Yes	Yes	No problem
24		Atpadi	30	8.46	6.45	5.00	NT	Yes, Shifted	Yes	No	No specific problem
25		Mantha	30	6.40	5.12	10.00	NT	Yes, Shifted	Yes	Yes	No specific problem
26		Ahmedpur	30	7.69	6.48	10.00	NT	Yes, Shifted	Yes	Yes	No problem
27		Akot	30	7.41	5.95	7.50	NT	Yes, Shifted	Yes	No	No problem
28		Rajura	30	7.04	3.42	6.25	Tr.	In process	Yes	Yes	No specific problem

Table 4.2 : BOR and LAMA for Sample Hospitals

Hospitals	Beds	BOR				LAMA			
		1999	2000	2001	2002	1999	2000	2001	2002
District Hospitals									
Ratnagiri	186	96.53	77.81	97.30	105.20	6.85	3.06	3.00	4.00
Jalgaon	306	114.50	103.12	104.14	95.80	1.62	2.00	9.00	13.00
Jalna	115	101.40	87.07	101.51	90.95	3.96	3.00	3.00	3.00
Beed	320	72.92	71.99	78.83	80.07	4.61	5.00	7.00	8.00
Buldhana	306	115.79	95.75	97.20	92.40	5.98	8.00	8.0	9.00
Bhandara	384	86.95	77.23	73.93	68.81	4.05	1.00	0.29	1.00
Other Hospitals									
Chopada	46	45.90	45.93	30.24	47.29	3.71	14.00	21.00	12.00
Sawantwadi	50	109.67	96.63	83.96	73.93	2.45	1.00	1.00	2.00
Parli Vaijnath	30	83.71	84.18	77.83	136.43	0.58	0.00	0.00	1.00
Murtizapur	72	141.19	104.44	103.21	95.96	22.74	53.00	29.00	10.00
Tumsar	90	81.12	69.00	65.46	57.79	2.04	1.00	2.00	2.00
BGW Gondia	97	151.90	146.62	158.68	155.28	3.0	0.0	1.0	2.0
Dapoli	30	21.85	20.97	33.83	44.81	37.08	54.00	31.00	6.00
Chandwad	30	28.14	23.06	8.67	17.43	2.42	3.00	2.00	5.00
Indapur	30	24.04	26.32	21.91	66.86	19.58	1.00	4.00	4.00
Karmala	30	55.22	27.78	24.85	25.84	5.74	6.00	4.00	11.00
Kankavli	30	120.76	103.05	97.12	79.27	3.94	6.00	26.00	6.00
Ambad	30	58.33	64.67	68.82	69.59	5.59	2.00	3.00	3.00
Dharni	30	72.54	81.08	85.93	70.27	17.0	75.0	39.0	41.0
Mul	30	59.76	69.38	65.70	63.04	4.00	7.00	4.00	5.00
Wada	30	31.52	33.12	36.26	41.14	51.35	11.00	18.0	57.0
Sakri	30	30.90	32.76	43.22	57.54	0.48	48.0	20.0	4.0
Sangola	30	31.51	29.75	27.77	31.05	1.41	1.0	2.0	1.0
Atpadi	30	37.01	50.59	42.77	42.20	1.29	1.0	2.0	1.0
Mantha	30	85.36	86.72	83.04	79.25	40.40	2.0	1.0	0.0
Ahmedpur	30	74.33	76.37	76.33	70.55	11.24	8.0	10.0	6.0
Akot	30	37.70	68.23	57.07	75.71	24.0	45.0	42.0	19.0
Rajwa	30	46.21	95.86	63.95	81.95	1.0	9.0	14.0	4.0
Goniya	97	151.90	146.62	158.68	155.28	3.0	0.0	1.0	2.0

State * up to Aug 2002

CHAPTER 5

Satisfaction with different dimensions of health services in selected Hospitals.

Before proceeding to measure the satisfaction levels in terms of scores, let us first examine the proportions of patients satisfied or otherwise for different aspects of health services. We have chosen seven dimensions for indoor patients and six for the outdoor patients.

Table 5.1 gives the relevant data for Indoor and outdoor patients of District and Other Hospitals. Taking into consideration the norm of 5 percent dissatisfaction, let us examine the ranges for the different dimensions of health services.

Table 5.2: Range in extent of dissatisfaction (percent) - (IPD)

Dimensions of dissatisfaction	DH	OH
Waiting Time	7.2 - 20.6	5.6 - 11.5
Behaviour of Providers	0.2 - 7.7	0.3 - 8.1
Communication of Providers	1.5 - 11.6	2.3 - 18.7
Treatment related issues	0.9 - 38.6	0.3 - 40.1
Affordability of Expenses	3.6 - 36.0	4.4 - 25.4
Cleanliness	5.9 - 20.0	5.7 - 30.1
Crowding	2.4 - 41.2	2.0 - 35.1

The first comment on the above figures is that in none of the dimensions, the maximum is below 5 percent, indicating that in each of the dimension, there is at least one type of service, which needs serious concern. Among the services directly related to treatment (Behaviour, Communication, Treatment and Affordability) the lowest dissatisfaction is in the behaviour of providers while the maximum dissatisfaction is regarding the treatment provided. Among the other services, the general dissatisfaction levels are high and the highest among them is for crowding. Except waiting time, crowding and affordability, the dissatisfaction in the other hospitals is of a higher order in comparison to the district hospitals. Let us now identify the specific services under each dimension that show high level of dissatisfaction.

It is observed that the satisfaction regarding the treatment related issues is of a lower order and is lacking in matters like 'Other' advice for health, privacy at examination and adequacy of time spent (Table 5.3). Privacy at examination is easily manageable with some temporary partition, while the other two aspects could be tackled, if the doctors are really keen in treating the patient. Although, an overcrowded IPD could leave the doctor with inadequate time, one of the other important reasons is the doctor's lack of interest. Almost every doctor has a private

consulting room and hence is not interested in the government hospital job. Next in line is the lack of affordability of charges. In this context, let us examine the actual expenditure incurred by the IPD patients. We give below in Table 5.4 the relevant figures.

Table 5.3: Identification of the specific services, where the dissatisfaction is of higher order - IPD

Dimensions of dissatisfaction	District Hospitals	% dissatisfied	Other Hospitals	% dissatisfied
Waiting Time	Doctor's Examination	20.6	Registration	11.5
	Getting Discharge	17.0	Doctor's Call	8.2
Behaviour of Providers	Behaviour of ward boys	7.7	Behaviour of ward boys	8.1
	Behaviour of Ayahs	5.0	Behaviour of Ayahs	8.0
Communication	Discussion about recovery	11.6	Discussion about recovery	18.7
	Discussion about ailment	9.0	Discussion about ailment	16.4
Treatment	'Other' advice for health	38.6	'Other' advice for health	40.1
	Privacy for Examination	23.2	Privacy for Examination	30.1
	Adequacy of time spent	13.8	Adequacy of time spent	14.0
Affordability	Borrowing of money	36.0	Borrowing of money	25.4
	Affordability	26.5	Affordability	15.7
Cleanliness	Bed Sheet change	20.0	Bed Sheet change	30.1
	Patient's Uniform	8.6	Floor Cleaning	17.4
Crowding	Noise in the Ward	41.2	Noise in the Ward	35.1
			Space in OPD	13.0

Table 5.4 : Expenditure (in Rs.) Incurred per Episode – IPD

Hospital	Total	Treatment (including. User fees)	Medicines	Treatment/ Total (%)	Medicines/ Treatment (%)
District Hospital	466	210	89	42.4	42.4
Other Hospital	296	160	79	56.1	49.4

How do we judge whether the above expenses are really unaffordable? A comparison with the N.S.S.O.- 52nd round results reveals that the above mentioned figures are underreported, since the N.S.S.O. estimate for Maharashtra is Rs. 1529 per episode (reference period being one year). Whatever the reason, our estimate appears more reasonable than the N.S.S.O. estimates. The question then arises as to, is this meagre amount also not affordable? It appears so, as 36 percent of the in-door patients had to borrow money for payment for the hospital charges. In fact, the treatment charges are only 40-55 percent, but the charges on medicine are substantial i.e.

42/49 percent. Thus, if the hospital has adequate supply of medicines, the expenditure on bringing the medicines from outside could be saved. Similarly, if the network of the public hospitals is evenly spread, the 'Other' expenditure on food, transport/fare for the patients and relatives could be saved.

Waiting time, cleanliness and other factors follow in line. Shortage of bed sheets seems to be a serious problem for both district and other hospitals, while even floor cleaning is not done satisfactorily in other hospitals. Waiting time for district hospitals and lack of communication for the other hospitals come up with 15- 20 percent dissatisfaction. Here again lack of efforts on the part of doctors particularly in the other hospitals in communicating with the patients is reflected.

In the forthcoming section, we present the data on the satisfaction level at the OPD. Table 5.5 gives the relevant information. As could be observed, there are a number of questions, where the category of ' Not applicable/ not given' is quite large and hence we excluded them from our comments. We give below the figures on specific aspects, where the dissatisfaction level was found to be very high.

Table 5.5: Identification of specific services, where the dissatisfaction is of higher order – OPD

Dimensions of dissatisfaction	DH	% dissatisfied	OH	% dissatisfied
Waiting Time	Examination Time Registration Time	22.3 14.6	Examination Time Registration Time	14.5 12.3
Behaviour	Not mentioned because of very low level of dissatisfaction	-	Not mentioned because of very low level of dissatisfaction	-
Waiting time	Discussion about ailment Discussion about recovery	25.3 24.9	Discussion about ailment Discussion about recovery	27.6 27.9
Treatment, competence of providers etc	'Other' advice for health. Privacy for examination	53.3 27.9	'Other' advice for health Privacy for examination	49.2 38.0
Cleanliness	Not mentioned	-	Not mentioned	-
Crowding	OPD Space	12.0	OPD Space Examination Room Dispensary	12.1 11.1 9.9

It is observed that the issues relating to 'Treatment' top the list with highest level of dissatisfaction and 'other' advice for health and 'privacy of examination' are specific issues under serious concern both at district and other hospitals. It should be noted that in this respect, this dissatisfaction is higher than that found for the indoor patients. Next in line are waiting time and

communication for district hospitals and communication aspects for other hospitals. Discussion about the ailment or its recovery seems to be 'Not Satisfactory' in the OPDs of both district and other hospitals. In comparison with the IPD, crowding does not appear to be a serious problem for the OPD.

Table 5.1a

A. Satisfaction levels (percent) - IPD

I. Waiting Time/ Time Spent

Waiting Time/ Time Spent	DH				OH			
	Satis-fied	Partially satisfied	Not Satis-fied	NG/NA/ Cant say other	Satis-fied	Partially satisfied	Not Satis-fied	NG/NA/ Cant say other
Registration	88.7	-	9.0	2.3	87.7	-	11.5	0.7
Doctor's call	84.9	-	10.5	4.7	88.5	-	8.2	3.3
Doctor's Examination	75.6	-	20.6	3.9	90.3	-	7.8	1.9
Admission to ward	85.7	-	12.3	2.1	90.3	-	5.6	4.0
Getting services	90.0	-	7.2	2.8	90.7	-	6.7	2.6
Getting discharge	59.9	-	17.0	23.1	59.5	-	5.9	34.6

II. Behaviour

Behaviour	DH				OH			
	Satis-fied	Partially Satisfied	Not satisfied	Other	Satis-fied	Partially Satisfied	Not satisfied	Other
Greeting Friendly	77.9	20.6	1.5	-	61.5	37.8	0.7	-
General behaviour (Doctors)	97.4	1.8	0.9	-	91.3	5.7	2.7	0.3
General behaviour (Nurses)	92.9	3.9	3.1	-	74.6	23.1	2.4	-
General behaviour (Technician)	70.6	1.3	0.2	27.8	67.9	1.7	0.3	30.1
General behaviour (Ayahs)	91.2	2.0	5.0	1.8	79.9	2.0	8.0	10.1
General behaviour (Ward Boys)	89.5	2.6	7.7	0.2	88.3	2.7	8.1	1.0
General behaviour (Counter Clerk)	94.5	1.1	3.0	1.3	92.3	1.3	5.4	1.0

III. Communication

Communication	DH				OH			
	Satisfied	Partially Satisfied	Not satisfied	Other	Satisfied	Partially Satisfied	Not satisfied	Other
Listening Complaints	75.7	21.9	1.5	0.9	60.9	36.1	2.3	0.3
Lets ask question	63.2	26.5	6.8	3.5	43.1	44.1	11.4	1.4
Respond to question	62.7	25.4	7.0	4.8	42.8	45.5	10.4	1.4
Discussion about ailment	88.8	-	9.0	2.2	81.9	-	16.4	1.7
Discussion about recovery	84.6	-	11.6	3.7	79.6	-	18.7	1.7

IV. Competence of Personnel, Equipment and Treatment

Competence of Personnel, Equipment and Treatment	DH				OH			
	Satis-fied	Partially Satisfied	Not satisfied	Other	Satis-fied	Partially Satisfied	Not satisfied	Other
Competent Doctor	68.0	21.9	8.8	1.3	64.2	27.1	6.0	2.6
Competent Nurses	63.6	25.2	7.7	3.5	56.9	27.8	5.0	10.3
Privacy at Examination	27.6	48.9	23.2	0.2	26.1	43.8	30.1	-
Instruction for medicines	90.4	-	6.8	2.9	88.0	-	11.7	0.3
'Other advice' for health	60.3	-	38.6	-	57.9	-	40.1	2.0
Daily visits of doctors	83.5	16.4	-	-	81.6	17.7	0.3	0.3
Adequacy of time spent	86.0	-	13.8	0.2	86.0	-	14.0	-
Confidence in Doctor	65.1	33.1	0.9	0.9	64.9	33.1	0.7	1.3
Visits as per Schedule	75.9	22.8	1.1	0.2	63.2	35.8	0.3	0.7
Nurses available in need	78.7	19.1	1.8	0.4	61.9	33.8	2.7	1.7
Nurses attend calls immediately	95.4	-	2.9	1.7	94.6	-	2.3	3.0
Medicines available	61.2	30.7	5.9	2.2	60.5	32.8	4.3	2.3
Hospital well equipped	58.8	35.1	6.1		50.2	47.2	2.0	0.7
Ailment Cured	40.6	43.4	15.4	0.7	37.8	55.5	6.0	0.7

V. Affordability of the Expenses

Affordability of the Expenses	DH				OH			
	Satis-fied	Partially Satisfied	Not satisfied	Other	Satis-fied	Partially Satisfied	Not satisfied	Other
Affordability	56.1	17.1	26.5	0.2	66.9	15.7	17.4	-
Borrowed money	58.6	-	36.0	5.3	72.2	-	25.4	2.3
Amount Borrowed	28.2	4.4	3.6	63.8	16.7	3.6	4.4	75.3

VI. Cleanliness

Cleanliness	DH				OH			
	Satis-fied	Partially Satisfied	Not satisfied	Other	Satis-fied	Partially Satisfied	Not satisfied	Other
Floor Cleaning	57.9	35.3	5.9	0.8	51.5	30.8	17.4	0.3
Toilet/ Bathroom	54.6	36.0	8.6	0.8	44.8	35.1	12.7	5.4
Patients Uniform	15.6	9.2	8.6	66.6	10.7	8.4	5.7	75.2
Bed sheet Change	50.0	24.6	20.0	5.5	36.1	21.4	30.1	12.3

VII. Crowding

Crowding	DH				OH			
	Satis-fied	Partially Satisfied	Not satisfied	Other	Satis-fied	Partially Satisfied	Not satisfied	Other
Getting cot immediately.	72.8	24.1	2.4	0.7	79.3	18.7	2.0	-
Adequate ward space	92.3	-	6.6	1.1	88.6	-	11.0	0.3
Satisfactory ward arrangement	95.8	-	3.1	1.1	89.0	-	9.4	1.7
Noise in Ward	57.9	-	41.2	0.9	64.2	-	35.1	0.6
Space in OPD	77.4	-	6.1	16.5	71.9	-	13.0	15.0

Table 5.1b

B. Satisfaction Levels (percent) - OPD

I. Waiting Time / Time Spent

Waiting Time/ Time Spent	DH				OH			
	Satis-fied	Partially Satisfied	Not satisfied	Other	Satis-fied	Partially Satisfied	Not satisfied	Other
Registration Time	84.5		14.6	0.7	86.6		12.3	1.1
Doctor's call	89.8		9.2	0.4	88.9		9.9	1.0
Examination Time	75.8		22.3	1.9	84.1		14.5	1.5
Injection Time	32.9		2.0	65.0	41.0		2.2	56.8
Waiting for Medicines	80.1		10.3	9.6	78.8		4.8	16.4
Waiting for Dressing	6.6		0	93.4	7.7		0.4	91.8
Waiting for paying bills	3.9		0.2	95.8	0.8			99.1
Waiting for X-ray	0.9			99.1	2.1		0.2	97.4
Lab test & Other	1.3		0.4	98.2	6.9		0.6	92.3

II. Behaviour

Behaviour	DH				OH			
	Satis-fied	Partially Satisfied	Not satisfied	Other	Satis-fied	Partially Satisfied	Not satisfied	Other
Greeting Friendly (Doctor)	86.2	10.0	3.3	0.4	66.1	32.6	1.3	-
Behaviour (Doctor)	87.1	8.7	3.7	0.4	81.5	17.5	0.6	0.4
Behaviour (Nurses)	78.1	12.2	4.0	5.7	66.3	24.8	2.3	6.5
Behaviour (Dispenser)	91.1	5.5	3.1	0.4	87.1	11.2	0.9	0.8
Behaviour (Technician)	21.4	0.7	0.4	77.5	17.9	5.4		76.7

III. Communication

Communication	DH				OH			
	Satis-fied	Partially Satisfied	Not satisfied	Other	Satis-fied	Partially Satisfied	Not satisfied	Other
Listen to Complaints	87.6	7.4	3.9	1.1	66.5	29.8	3.7	-
Lets you ask question	76.0	10.9	11.6	1.5	57.0	24.8	18.1	-
Responds to you	77.1	12.4	9.0	1.5	56.4	26.3	16.6	0.6
Discussion Ailment	73.6	-	25.3	1.1	71.5	-	27.6	0.9
Discussion recovery	71.6	-	24.9	3.5	67.6	-	27.9	4.5

IV. Treatment

Treatment	DH				OH			
	Satis-fied	Partially Satisfied	Not satisfied	Other	Satis-fied	Partially Satisfied	Not satisfied	Other
Privacy at Examination	24.9	43.2	27.9	3.9	23.8	37.8	38.0	0.4
Instruction properly given	20.7		13.8	65.5	24.0		12.1	63.9
Adequacy of Doctor's time	75.8		24.0	0.2	70.6		27.9	1.5
Other advice	45.0		53.3	1.7	45.6		49.2	5.2
Medicine availability	83.6	12.7	3.7		81.4	15.6	3.0	-
Ailment cured	5.2	22.9	34.5	37.4	3.7	25.1	9.7	61.3

V. Cleanliness

Cleanliness	DH				OH			
	Satis-fied	Partially Satisfied	Not satisfied	Other	Satis-fied	Partially Satisfied	Not satisfied	Other
OPD	74.9	21.6	3.5	-	59.8	33.9	4.8	1.4
Exam Room	77.5	18.6	2.4	1.5	65.7	28.5	4.5	1.3
Dispenser	69.9	17.5	2.2	10.4	65.2	23.3	4.1	7.4
Laboratory	9.4	2.2	-	88.4	13.0	4.5	0.6	81.9
Injection Room	23.8	4.6	0.2	71.4	24.4	13.6	0.6	61.4
Dressing Room	4.8	0.7	-	94.5	5.2	2.2	0.2	92.4

VI. Crowding

Crowding	DH				OH			
	Satis-fied	Partially Satisfied	Not satisfied	Other	Satis-fied	Partially Satisfied	Not satisfied	Other
OPD space	60.7	27.1	12.0	0.2	33.0	54.4	12.1	0.4
Exam Room	59.8	33.4	4.8	2.0	34.1	54.2	11.0	0.6
Dispensary	60.5	26.9	4.1	8.5	36.9	47.3	9.9	5.8
Laboratory	6.8	5.5	0.4	87.3	5.2	12.5	1.1	81.2
Injection	16.4	11.1	1.1	71.3	16.0	22.2	3.2	58.5
Dressing	3.3	2.6	0.2	93.9	3.2	5.4	0.2	91.1

CHAPTER 6

Measurement of Patient's Satisfaction and Differentials in Satisfaction Scores

In order to assess the patient's satisfaction with the services provided by the hospital, an attempt was made to include maximum possible dimensions of health care and other allied services. Further, to have a clear assessment of each dimension, number of questions were asked to the patient. Following are the different dimension of health care and other services and the number of questions, through which the satisfaction level could be assessed.

Dimensions of health care or other services	IPD : No. of questions	OPD : No. of questions
Waiting time/ time spent	6	10
Staff behaviour	7	5
Communication with the patient	5	5
Competence of personnel, equipment & quality of treatment	19	6
Cleanliness	4	6
Crowding	5	6
Affordability of expenses	3	-

Since, the expenses incurred by an average outdoor patient was only 21 rupees, the dimension of affordability was not considered. Besides the above-mentioned questions, other questions also were asked about the other services like food, availability of ambulance, telephone, canteen...etc. However, since all the respondents did not utilise these services, the measurement of the satisfaction is mainly done on the basis of the above mentioned questions.

As mentioned above, we have made an attempt to assess the patient's satisfaction regarding the treatment related issues and behaviour/communication of the providers among other dimensions. Assessment of satisfaction has some limitations in these cases because of different reasons. For instance, the satisfaction about provider's competence, adequacy of medicine / equipment etc. gets reported only as the gut feeling, while his opinion about provider's behaviour is affected by courtesy bias. Similarly, his/her responses regarding the non-clinical services like cleanliness, crowding or waiting are also conditioned by his/her own living conditions. If he/she comes from very low socio-economic stratum with very poor living conditions, he/she may get quite satisfied with the hospital premises, which otherwise appear unclean / congested. Similar is the case with waiting time. Many a times, with no wristwatch at hand and with no serious objection for waiting, the patient's response about waiting is also biased. Therefore, we tried to come as close as possible to the real unbiased response through different ways. One, by asking a number of questions, which would reflect different dimensions and another is through queries on actual practice and also the satisfaction. For example, questions were asked on both the duration

of waiting time and his/her response, whether he/she found it too long or appropriate. Similarly, there were questions on both the frequency of cleaning and his/her satisfaction regarding the same. In these cases, the norms could be compared with the practice and thus the efficiency could be independently judged. Satisfaction about crowding is one such aspect, which is affected not only by the patients' expectations but also by the utilisation of the hospital. Thus, a high satisfaction about crowding may sometimes be an indicator of spaciousness of the hospital, but at some other times, it could be an indicator of low utilisation also.

These are the limitations in the assessment of the satisfaction levels. In case of Indoor-patients, a better judgement about the satisfaction regarding cleanliness can be obtained by looking at his/her response about the observance of cleaning norms, rather than asking about his/her satisfaction level, which are unrealistic. But this cannot be done in case of out door patients, since they cannot report about the observance of these norms and hence we have to satisfy ourselves with their responses about satisfaction regarding cleanliness. On the whole, the responses of the outdoor patients have to be interpreted cautiously as they are based on an experience of short duration and about limited space in the hospital. At the same time, they are important to the providers, since it is the entry point of the patient to the hospital. Thus, if he/she is really satisfied in the first visit, in case of need, he will opt for the hospital for OPD visit or for IPD admission. In usually used terms, the front door management has a significant role.

For the provider characteristics such as behaviour and communication, no norms could be applied and hence apparently, no way to get the unbiased responses about satisfaction was available. To have at least some idea about the courtesy bias in patients' responses about behaviour, the use of observation guide (independent observation by field investigators) was made for the out door patients. On the basis of these observations, it may not be possible to adjust the satisfaction scores but at least it would give a broad idea about the extent of courtesy bias. In case of indoor patients, this method could not be used. But a different procedure was used in this case. In case of Aundh Hospital, the sample IPD patients were visited again at their residences and the responses in the hospital and responses at the residence were compared. It is presumed that the bias would be more among the outdoor patients, since their responses are based on the short experience and are about limited services. On the other hand, the responses of the indoor patients would be more genuine.

Method of Scoring

A simple method of scoring was followed. Each question had two / three / four responses depending upon the nature of the question. Wherever there were two responses, namely satisfied

or not, the score ' 1' or '0' were given. In case of three or more responses, the responses were categorised as 'fully satisfied', partially satisfied' and 'not satisfied' and score were '2', '1' and '0' respectively. For all questions relating to one dimension, say, waiting time, the patient's responses in terms of scores for full satisfaction were added. If it was partial/no satisfaction, the score was '0' Appendix 6.1 gives the method of scoring. Taking into account the available literature and the vagueness in the category - 'Partially Satisfied', it was decided to take into account only the score for 'full satisfaction'. For the same questions, sum of scores of 'full satisfaction' was obtained. This indicated the maximum score. Against this maximum score the patients score was assessed as his level of satisfaction. For a hospital the sum of all patients' scores as a ratio to the sum of maximum scores gives the level of satisfaction for the particular dimension for that particular hospital. This simple method of scoring of scoring has to be modified in case of responses such as 'Not given, can't say or not applicable'. If the patients' response is one of these categories, no satisfaction score can be given. In fact, that question for that patient has to be deleted both from his response and from the maximum score of full satisfaction. If this category accounts for a small amount, say, about 10 percent, the satisfaction scores will not be affected on account of not deleting the question from the maximum response. However, if this category accounts for large proportion, then this adjustment becomes essential. As Table 5.1 shows, the responses of the indoor patients have very few such cases (4) but the responses of the outdoor patients have many such cases. In some cases, the proportion of 'not applicable' cases has gone beyond 90 percent. In this process of adjustment, the number of questions for scoring has reduced to very small numbers. Thus it should be noted that in some cases, the satisfaction scores depend on a small number of questions and hence less reliable.

Estimated Satisfaction Levels for DHs and OHs

Using the procedure described earlier, the satisfaction scores were estimated. Appendix Tables 6.2 and 6.3 give the scores for individual hospitals for IPD and OPD. Table 6.1 gives them in a summery form. The following are the observations based on these tables.

Table 6.1: Satisfaction Scores (percent)

Satisfaction	IPD		OPD		IPD			OPD		
	DH	OH	DH	OH	SDH (100)	SDH (50)	RH (30)	SDH (100)	SDH (50)	RH (30)
Treatment	65.9	61.2	49.0	47.4	58.1	70.4	65.3	49.0	50.9	41.3
Behaviour	82.1	75.4	87.3	76.55	77.4	79.1	73.7	78.0	79.9	73.1
Cleanliness	53.8	45.8	79.9	68.3	47.1	39.9	58.8	56.7	69.1	83.5
Communication	72.9	57.6	79.4	62.9	57.3	67.3	57.1	63.6	70.9	57.0
Waiting Time	86.1	90.6	90.6	92.1	84.4	94.5	91.8	86.7	91.5	91.2
Crowding	89.1	87.5	62.9	36.3	81.6	92.9	90.7	39.2	38.7	38.9
Borrowing	71.2	78.6	–	–	71.0	82.3	76.7	–	–	–
Average	74.4	70.9	74.8	63.9	68.1	75.2	73.4	62.2	66.8	64.2

1. About 75 percent and 70 percent of the indoor patients of the DHs and OHs respectively are fully satisfied with the services provided by the selected government hospitals.
2. The indoor patients of DHs seem to be relatively more dissatisfied with cleanliness and treatment, while those of OHs have more complaints about treatment, cleanliness and communication.
3. About 75 percent and 64 percent of the outdoor patients of the DHs and OHs respectively are satisfied with the outdoor care provided by the selected government hospitals.
4. Treatment and crowding seem to be the areas of dissatisfaction for the outdoor patients of both DHs and OHs.
5. As far as the comparison of the satisfaction levels of indoor patients of DHs and OHs is concerned, it is observed that the satisfaction is lower in the OHs. The widest gap is in the satisfaction scores for communication.
6. The comparison of the satisfaction levels of the outdoor patients in OHs and DHs shows that that the DH-OH gap is wider for outdoor patients (75 percent and 64 percent). The gap is particularly wider in communication and crowding.
7. Among the OHs, the indoor patients from SDH(50), have expressed higher levels of satisfaction in comparison to the patients from the other two categories, namely, the RH (30 bedded) and SDH (100 bedded)
8. As far as the satisfaction levels for outdoor patients are concerned, there is no significant difference between the three groups of OH.
9. The low scores of satisfaction for indoor patients of SDH (100) are mainly in 'Treatment' and 'Borrowing' followed by 'Waiting Time' and 'Communication'.
10. For the outdoor patients' low satisfaction in SDH (100), cleanliness seems to be responsible.

At this stage, now, one need to assess whether these satisfaction levels, compare with generally observed / expected levels of satisfaction. Since, there is no such study for Maharashtra, which could be compared exactly with the present study, valid comparison cannot be made. As mentioned in the chapter on 'Introduction', one study in Ahmednagar district comes up with about 69 percent of satisfaction, while another study on Andhra Pradesh has come up with about 70 percent satisfaction. Interestingly, the study for Andhra Pradesh (Institute of Health Systems, Hyderabad) comes up with findings, which are similar to those for our study. Having observed that the estimated levels of satisfaction for Public Hospitals in Maharashtra demonstrate adequate satisfaction, let us now examine the extent of courtesy bias in the reporting for outdoor patients based on the 170 observations and courtesy bias in the reporting for indoor patients, based on the exercise at Aundh Hospital. Table 6.2 & 6.3 give the relevant information, based on observations and Table 6.4 gives the results of Aundh exercise.

Table 6.2: Time taken for OPD Services (Minutes): Reported by patients and as per Observations.

Type of Service	Patients' Reporting		Observation	
	DH	OH	DH	OH
Registration	10.21	7.55	9.60	8.43
Doctor's Call	9.35	8.62	13.71	8.30
Doctor's Examination	5.09	4.98	6.71	5.84
Injection	6.65	5.88	8.13	7.00
Medicine	9.71	8.38	11.41	8.77
Dressing	7.49	8.53	9.66	5.2
X – ray	41.20	18.13	--	--
Laboratory	19.61	19.09	--	--
Paying Bill	5.73	6.58	--	--
Total time taken for OPD service	38.05	32.89	52.82	42.32
Number of Patients	**458**	**463**	**56**	**111**

Table 6.3: Courtesy Bias in Satisfaction (percent): Reported by patients and as per Observations.

Indicators	Patients' reporting Satisfaction (%)		Observation Satisfaction (%)	
	DH	OH	DH	OH
Doctor greeted the patient in a friendly manner	86.2	66.1	21.4	22.5
Doctor listened to the complaints patiently	87.6	66.5	37.5	27.9
Doctor allowed the patient to ask questions	76.0	57.0	60.7	58.6
Doctor given convincing response to the patient	77.1	56.4	25.0	21.6
Privacy during Examination	24.9	23.8	32.4	27.9
Sitting arrangement in the OPD was proper	27.1	54.4	71.4	67.6
Behaviour of doctor was very good	87.1	81.5	26.8	26.3
Behaviour of Nurse was very courteous	78.1	66.3	9.1	11.0
Behaviour of technician was very courteous	95.0	76.8	20.0	11.0
Behaviour of dispenser was very courteous	91.1	87.1	11.5	10.5
Number of OPD patients	**458**	**463**	**51**	**111**

Table 6.2 shows the comparison of times spent as reported by the patients and as observed by our field team. It is observed that the patients have under-reported the time spent by about 25 percent. It is seen that the patient has to spend about 53 minutes in District Hospital and 43 minutes in Other Hospital. Interestingly, the examination time is the shortest among all the time-slots (5-7 minutes). In fact, waiting for doctor's call, registration and waiting for medicines account for nearly 2/3 of the time spent. With adequate staff provision and assured presence of the doctors, this time-margin could be reduced substantially.

Table 6.3 gives the information on the communication and behavioural aspects of the providers, as reported by the patients and as observed by our team. It is surprising to observe the tremendous gaps between the two sources of information. Even if the over-reporting on the part of the patients (courtesy bias) is taken into account along with the probable biases of our field team, the gaps are so wide that we have to believe that the behaviour of the providers is not

courteous. It could be noticed that the gaps are too wide for the paramedical staff, not forgetting that the opinion about doctors' behaviour also is not too favourable. Interestingly, the responses regarding privacy for examination did not differ much between the two sources (about 25-30 percent) it shows that there was no courtesy bias reflected, further indicating the severity of lacuna. To sum up, if the satisfaction of the patients is to be valued, there is an urgent need for betterment of communication and behaviour of the providers.

The exercise of comparing the responses of patients (ESIS, Aundh, Pune) in the hospital premises and at residence gives the following findings.

Table 6.4: Patient Satisfaction levels in exit interview and household interview (n=60), ESIS, Aundh, Pune.

Satisfaction	Exit Interview	Household Interview
Good Behaviour of Nurses	57	2
Indifferent Behaviour of Nurses	2	46
Good Behaviour of *Ayah*	58	40
Good Behaviour of Ward-boy	57	37
Good Behaviour of Technical Staff	57	40
Good Behaviour of Counter-Clerk	58	47
No. of patients interviewed*	61*	61

*Out of 75 patients interviewed in Exit Interviews we could contact only 61 patients for the Household Interview. This table gives the results of those 61 patients interviewed for exit and household interviews.

This result clearly indicates the "courtesy bias" of the patients when they were interviewed in the hospital premises. This bias was greatly reflected in the responses of the patients to questions relating to behaviour of the doctors and the supporting staff. Following are a few cases where the discrepancy was significant.

From the above analysis, it is observed that the courtesy bias is stronger among the outdoor patients, compared to the indoor patients. As mentioned earlier, the satisfaction levels of the outdoor and indoor patients cannot be recalculated on the basis of the above results, but one could definitely conclude that the reported levels of satisfaction have to be discounted and the discounting has to be more in case of outdoor patients. Since the exercises were based on small numbers, they should be only treated as exercises showing the non-negligible extent of courtesy bias and not otherwise. Further analysis is of course based on the reported satisfaction levels.

Satisfaction Levels (IPD) – DHs

Since the sample of indoor and outdoor patients in individual district hospitals was big enough, (75 each), it is possible to examine the hospital differentials. Appendix tables 6.2 and 6.3 give the same. For reference it is reproduced here.

Name	Treat-ment Score	Beha-viour Score	Clean-liness Score	Commu-nication Score	Waiting time score	Crowd-ing Score	Borrow-ing Score	All Average
Ratnagiri	71.8	72.7	79.8	64.3	80.9	61.9	89.6	74.4
Jalgaon	64.4	78.6	47.4	69.9	80.7	59.2	84.1	69.2
Jalna	82.3	88.1	55.3	88.7	94.9	77.1	90.4	82.4
Beed	64.7	84.8	62.4	85.0	89.6	88.6	90.6	80.8
Buldhana	65.4	89.7	43.9	77.0	84.7	64.2	86.0	73.0
Bhandara	46.7	78.3	34.1	51.7	85.9	76.0	94.0	66.7

Interestingly, it is observed that the hospitals from an otherwise backward area, namely, Marathwada, have come up with high levels of satisfaction (80 – 83 percent for Jalna and Beed Hospitals), while the hospital at Ratnagiri, known for its efficiency, scores a little low; both for indoor and outdoor patients. Hospital at Bhandara comes up with the lowest level of patients' satisfaction (67 percent).

Following are the dimensions of indoor services, which are efficient and deficient in different hospitals:

District Hospitals	Efficient Services	Deficient Services
Ratnagiri	Crowding Cleanliness	Communication Borrowing
Jalgaon	Crowding Waiting Time	Treatment Cleanliness
Jalna	Waiting Time Crowding Communication	Cleanliness
Beed	Waiting Time Crowding Borrowing	Treatment Cleanliness
Buldhana	Behaviour Crowding Waiting Time	Cleanliness Borrowing Treatment
Bhandara	Waiting Time Crowding	Cleanliness Treatment Communication

Generally, it appears that the selected hospitals have managed to satisfy the indoor patients in 'waiting time' and 'crowding', while the satisfaction seems to be the least in cleanliness, followed by treatment. It could be noticed that 'treatment' has not appeared as an efficient service in any of the hospitals. Although, the patients' responses regarding treatment

(competence of providers, etc.) have to be interpreted a little carefully, the indication is enough that the patients are not satisfied with it. It should be specifically noted that the hospital at Ratnagiri comes up with cleanliness as the most efficient service, which otherwise is the most deficient service in other hospitals. At the other end are the hospitals at Buldhana and Bhandara, where services as many as cleanliness, treatment, communication, and borrowing have come up as deficient, needing serious attention. One more observation/ presumption regarding satisfaction levels of patients in Ratnagiri hospital is worth noting. Generally, the patients at Ratnagiri would be more educated and more aware about their demands and hence, would have higher expectations. Thus going by the simple equation, namely, satisfaction = outcome – expectations, the satisfaction levels at Ratnagiri would be comparatively lower. Exactly reverse would be the situation at Jalna/Beed. The amount of courtesy bias also is expected to be lower among the patients at Ratnagiri hospital, while it is expected to be higher in other hospitals.

The above discussion deals with only conjectures regarding expectations and outcomes. No concrete adjustments can be made for valid comparisons. However, there is one aspect, about which standardisation could be used for making valid comparisons. The satisfaction scores depend on two factors; first, the satisfaction of patients from different wards and second, the composition of patients chosen for the interview. Table 6.5 gives the composition of patients.

Table 6.5. Composition of patients interviewed in different District Hospitals

Name of the Ward	Ratna-giri	Jalgaon	Jalna	Beed	Bul-dhana	Bhan-dara	Total
Male Surgical	25	23	21	7	29	21	126
Female Surgical	18	13	23	4	10	6	74
Ophthalmic	5	0	4	0	0	0	9
T.B.	1	0	0	0	0	0	1
Paediatrics	15	3	1	7	14	10	50
Maternity & Gyn.	10	27	0	13	23	17	90
Orthopaedic	0	2	0	0	0	6	8
Emergency	0	0	0	2	0	0	2
Male Medical	0	0	17	18	0	6	41
Female Medical	0	0	8	8	0	3	19
Male Burns	0	0	0	0	1	1	2
Female Burns	0	0	2	0	0	0	2
P. N. C. Ward	0	0	0	5	0	5	10
Male Isolation	0	4	0	0	0	0	4
Female Isolation	0	3	0	13	0	0	16
Total	74	75	76	77	77	75	454

There are some differences in it. Taking this into consideration, we take the composition of the indoor patients of all hospitals together as standard and recalculate the satisfaction scores. Table 6.6 gives the standardised score.

Table 6.6 Standardised Scores of Satisfaction (IPD) at District Hospital

District Hospital	Treat-ment	Beha-viour	Clean-liness	Commu nication	Waiting Time	Crow-ding	Borrow -ings	Ave-rage
Ratnagiri	72.5	72.4	79.9	66.0	79.3	89.9	61.3	74.4
Jalgaon	66.6	81.8	52.2	71.9	80.1	85.4	63.1	71.6
Jalna	81.9	85.5	61.3	87.1	91.0	89.1	73.9	81.4
Beed	64.5	85.3	57.5	84.4	89.5	87.9	89.1	79.7
Buldhana	65.4	89.1	44.8	76.5	88.0	85.0	63.2	73.1
Bhandara	49.5	78.9	35.5	51.7	86.2	95.1	76.0	67.6

Compared with the non-standardised scores, it appears that the adjustment has not made much impact, implying that it is the satisfaction levels of the patients from different wards that mainly determine the satisfaction scores. In Table 6.7 we give the satisfaction scores for different wards for different hospitals. A few observations on this summary are given below.

Table 6.7. Satisfaction Scores of Different Wards (IPD) at District Hospital

District Hospital	Male Surgical	Female Surgical	Pediat-rics	Mater-nity	Male Medical	Female Medical	Isolation
Ratnagiri	77.3	68.7	76.4	74.6	-	-	-
Jalgaon	73.0	65.2	-	62.5	-	-	-
Jalna	83.4	80.0	-	-	84.6	-	-
Beed	-	-	-	77.4	79.3	85.4	-
Buldhana	73.7	67.9	75.7	72.2	-	-	-
Bhandara	63.3	-	67.7	66.5	-	-	-

1. Generally, the satisfaction scores for Male Surgical and Pediatric Wards are found to be better (except Bhandara).
2. Generally, the satisfaction levels for Female Surgical and Maternity Wards are found to be lower.
3. It is satisfying to note that the satisfaction score of the patients in Isolation Ward is of a high order.

On one hand, it is a pleasure to note that the Male Surgical Ward and Pediatric Ward, where the skill of the providers is tested are showing high scores, but on the other hand, it is distressing to note that in the Female Surgical Ward, the satisfaction is lower and in the Maternity Ward, which may not require intensive post-operative care, the satisfaction is lower. One reason could be the lack of cleanliness generally observed in Maternity wards or is also may be due to the fact, that women cannot talk to the Surgeons/Doctors (mainly men) that openly and hence are dissatisfied. Infact, we had put a question to the patients in this respect and the response suggested that about 30 percent of the adult female respondent were not comfortable with male

doctors, while 50 percent of them opined that lady doctors are more responsive to problems of female patients.

Satisfaction Levels (IPD) – Other Hospitals

Among the SDH (100), hospitals at Parli-Vaijnath and BGW-Gondia have lowest satisfaction scores, while the hospital at Tumsar has the highest satisfaction score. Among the SDH (50), Indapur comes up with lowest satisfaction, while Mul comes up with highest satisfaction. Among the 30 bedded hospitals, Sangola and Wada are at the least and highest satisfaction levels. The dimensions responsible for low/high levels of satisfaction for the above mentioned hospitals are given below.

Hospital	Satisfaction Level	Dimension of Services
SDH - 100		
Parali Vaijanath	Low	Cleanliness, Treatment
BGW Gondia	Low	Communication, Treatment
Tumsar	High	Crowding, Waiting Time
SDH - 50		
Indapur	Low	Cleanliness, Communication
Mul	High	Crowding, Waiting Time
RH (30)		
Sangola	Low	Cleanliness, Communication
Wada	High	Behaviour, Crowding

The above extract shows that lack of cleanliness and communication are leading mainly to dissatisfaction, while crowding and waiting time are the dimensions which lead to better satisfaction. It is once again observed that 'treatment' does not appear as a satisfying service for good performing hospitals.

Satisfaction Levels - OPD (District Hospitals)

Appendix Table 6.3 gives the data. For reference, it is reproduced here.

Name	Treat-ment Score	Beha-viour Score	Clean-liness Score	Commun i-cation Score	Waiting Time Score	Crowd-ing Score	All Average
Ratnagiri	52.7	83.0	75.2	75.4	77.5	4.4	61.4
Jalgaon	43.2	83.6	57.0	78.3	78.2	53.1	65.6
Jalna	47.8	84.7	95.9	83.8	95.4	90.8	83.1
Beed	50.2	91.1	95.8	76.4	91.3	90.3	82.5
Buldhana	46.0	94.6	61.7	82.0	88.0	57.1	71.5
Bhandara	53.8	86.3	81.1	80.5	83.3	81.6	77.8

It is observed that the lowest satisfaction is for DH, Ratnagiri, while highest satisfaction score is again for the hospitals in Marathwada. In fact, the low score for DH, Ratnagiri is on account of very low score for crowding. In fact, if the crowding score is excluded, the hospital

differences narrow down. Generally, the treatment score is the lowest and the gap between 'treatment' score and scores of other dimension is quite wide. Of course, it should be noted that the experience of outdoor patients is not necessarily after complete treatment and hence the low scores have to be interpreted cautiously. Cleanliness and crowding are the two dimensions, which need attention.

Satisfaction Levels (OPD) - Other Hospitals:

Among the SDH (100), Tumsar turns out to be with lowest satisfaction level and Chopada has the highest satisfaction level. Among the SDH (50), Karmala is the worst while Ambad is the best as far as the satisfaction levels are concerned. Among the 30 bedded hospitals, Atpadi turns out to be with the lowest score and Mantha/Sakri/Wada are with the highest or close to highest satisfaction scores. Let us now examine the dimensions of services mainly responsible for these successes/ failures.

Hospital	Satisfaction Level	Dimension of Services
SDH 100		
Tumsar	Low	Crowding, Cleanliness, Communication
Chopada	High	Crowding, Cleanliness, Communication
SDH 50		
Karmala	Low	Crowding, Treatment, Cleanliness, Communication
Ambad	High	Cleanliness, Crowding, Waiting Time
RH (30)		
Atpadi	Low	Crowding, Treatment
Mantha	High	Waiting Time, Communication
Sakri	High	Waiting Time, Communication
Wada	High	Waiting Time, Cleanliness, Behaviour

It is easily observed that cleanliness, crowding and communication are the dimensions mainly responsible for the success/failure of the hospitals in satisfying the outdoor patients. From both of these extracts, one common factor comes out very clearly and that is communication. A good communication satisfies both the patients, while lack of it leads to dissatisfaction.

Differentials in satisfaction by background characteristics

After examining the levels of satisfaction of the indoor and outdoor patients by type of hospital, let us now turn to examine, whether the differentials in the background characteristics such as residence, sex, caste, education and living conditions contribute to the differences in satisfaction levels. Broadly, it is anticipated that a person from urban areas, from advanced castes, better educated and coming from good living conditions would have higher expectations, lower courtesy bias and hence ultimately will turn up with lower satisfaction. However, as mentioned earlier, the sample for this study is more or less homogenous, with more than two-thirds of the

respondents coming from low socio-economic stratum and hence we may not find any role of the background characteristics. Nevertheless, we examined the full satisfaction scores for both indoor and outdoor patients for all dimensions for different background characteristics. Tables 6.8a and 6.8b give the relevant data. The differences in the satisfaction scores were tested with the help of a statistical test. We give below only those where the difference was found statistically significant at 1 percent or 5 percent level of significance.

Background characteristics and the specific dimensions of services, where the differences were statistically significant

Type of Hospital	Dimension of services	Background Characteristics	Level of significance
IPD			
DH	Borrowing	Education	.05
DH	Borrowing	Standard of Living Index	.01
OH	Borrowing	Standard of Living Index	.01
OPD			
DH	Crowding	Education	.05
DH	Crowding	Standard of Living Index	.05
OH	Communication	Residence	.01
OH	Cleanliness	Caste	.05
OH	Cleanliness	Sex	.05

Compared to the number of comparisons (128, to be exact) of the scores of satisfaction with different dimensions of services by background characteristics, the ones, which have turned out to be significant is so low (8), that one is tempted to conclude that the satisfaction levels do not change by background characteristics. As expressed earlier, the homogeneity of the sample probably has led to the lack of association.

Differentials in levels of satisfaction by type of hospital

As we have examined the differentials by the background characteristics, we also could examine the differentials in patient satisfaction by type of hospital. The guidelines of MHSDP and our observations enabled us to decide on the different classifications. Tribal-non-tribal, completion of civil work, condition of the building, availability of specialist doctors and diagnostic facilities and distance from civil hospital are the classificatory criteria. It should be noted that this exercise was done only for other hospitals. It was observed during our fieldwork that the rural/sub-divisional hospitals nearer to civil hospitals are under utilised leading to functional lethargy. This led us to examine the differentials in the satisfaction levels by the distance from civil hospital. Table 6.9 gives the comparisons. In fact, the numbers are so small that no firm conclusions could be drawn on their basis. However, some trends might get revealed.

It is observed that it is only the availability of doctors, diagnostic facilities and distance from civil hospital that is probably making some impact. However, as argued earlier, one should not conclude on the basis of such a small number of observations.

Table 6.9. Context of hospital and patient satisfaction

Context of the hospital	Percent Satisfied	
	IPD	OPD
Tribal/non-tribal		
Tribal hospital (4)	78.4	69.3
Non tribal hospital (18)	71.3	63.6
Status of civil work		
Civil work completed (9)	72.1	62.4
Completed but not shifted (5)	72.1	69.9
Civil work in progress (8)	73.5	63.8
No. of specialist doctors		
One specialist doctor (7)	71.2	63.9
Two or Three specialist doctors (13)	72.6	63.6
Distance from civil hospital		
0-40 km. (6)	69.8	66.3
Above 40 km. (16)	73.6	64.0
Diagnostic facility		
Score less than 5 (11)	71.8	62.8
Score above 5 (11)	73.4	66.4
Condition of building		
Score less than 5 (15)	73.2	66.9
Score above 5 (7)	71.3	59.8

Figures in parentheses are number of rural/sub-divisional hospitals

Table 6.8a : Satisfaction scores for indoor patients by background characteristics

Characteristics	Behaviour		Communicatin		Treatment		Cleanliness		Crowding		Waiting Time		Borrowing	
	DHs	OHs	DHs	OHs	DHs	OHs	DHs	OHs	DHs	OHs	DHs	OHs	DHs	OHs
Residence														
Rural	82.7	76.9	74.1	59.5	66.8	63.6	52.6	49.2	90.0	86.4	86.6	90.0	69.2	76.1
Urban	80.6	71.8	70.1	53.2	63.8	55.7	56.4	37.9	86.9	90.2	85.1	92.1	75.6	82.2
Sex														
Male	83.2	78.9	75.0	63.6	67.9	61.9	54.6	45.6	89.4	88.1	86.1	94.4	71.8	81.9
Female	81.0	73.5	70.9	54.4	64.1	60.9	53.0	45.9	88.8	87.3	86.1	88.6	70.5	75.9
Education														
Illiterate	84.7	74.8	76.0	56.6	66.2	63.8	56.7	46.7	88.9	86.3	86.1	88.2	75.1	76.4
1-7 years	79.4	74.6	71.3	60.2	66.9	59.8	43.0	37.9	89.6	87.1	86.6	90.3	64.7	75.3
8 + years	81.5	76.5	70.5	56.2	64.7	60.2	50.1	49.5	88.9	89.0	85.8	93.1	72.4	81.7
Caste														
SC and ST	83.6	78.0	73.5	58.8	65.7	61.6	44.0	51.1	87.6	85.7	85.3	91.1	66.8	78.0
Others	81.5	74.1	72.6	57.0	66.0	58.6	57.6	43.2	89.7	88.5	86.5	90.4	72.9	78.0
SLI														
Low	82.4	76.3	73.5	58.7	65.4	62.6	51.2	46.6	89.1	85.1	86.0	91.5	67.7	73.4
Medium	83.5	70.2	73.3	56.1	69.4	57.6	60.4	39.4	88.5	90.1	84.5	87.8	74.6	82.7
High	75.4	82.8	68.1	55.2	62.4	62.7	56.3	57.1	90.2	94.8	89.7	92.6	84.9	92.1
Total	**82.1**	**75.1**	**72.9**	**57.6**	**65.9**	**61.2**	**53.8**	**45.8**	**89.1**	**87.5**	**90.6**	**86.1**	**71.2**	**78.0**

Table 6.8b : Satisfaction scores for outdoor patients by background characteristics

Characteristics	Behaviour		Communicatin		Treatment		Cleanliness		Crowding		Waiting Time	
	DHs	OHs	DHs	OHs	DHs	OHs	DHs	OHs	DHs	OHs	DHs	OHs
Residence												
Rural	89.9	79.0	81.6	68.9	49.1	49.2	79.2	63.1	63.5	32.1	88.2	90.3
Urban	85.2	73.9	77.6	56.8	48.9	45.5	76.7	67.8	62.5	40.6	83.6	88.2
Sex												
Male	86.4	78.6	80.5	64.6	49.3	47.0	77.5	60.0	61.1	32.5	86.0	90.0
Female	88.0	74.9	78.4	61.7	48.7	47.7	78.8	69.6	64.4	39.2	85.3	88.7
Education												
Illiterate	90.5	75.3	78.6	61.9	48.9	45.8	78.1	60.9	69.3	32.3	89.4	88.2
1-7 years	85.9	77.0	78.0	63.3	49.6	48.3	78.1	66.9	57.7	40.5	85.2	92.1
8 + years	84.5	77.4	82.0	63.9	48.2	48.5	77.2	69.3	61.5	36.7	81.5	87.2
Caste												
SC and ST	90.8	77.9	82.3	63.8	49.5	45.2	78.4	56.3	64.8	31.8	85.9	88.6
Others	86.1	76.0	78.4	62.6	48.8	48.2	77.6	68.9	62.3	38.8	85.5	89.5
SLI												
Low	88.7	77.5	77.9	63.9	47.9	47.5	75.7	63.1	62.8	38.5	87.5	90.4
Medium	87.6	73.6	80.1	59.0	50.4	47.1	78.3	61.6	57.8	29.9	83.9	89.0
High	82.6	77.8	82.5	65.9	49.9	47.5	83.1	75.0	71.5	39.2	83.0	86.8
Total	**87.3**	**76.5**	**79.4**	**62.9**	**49.0**	**47.4**	**77.8**	**65.4**	**62.9**	**36.2**	**85.6**	**89.3**

Table 6.8a : Satisfaction scores for indoor patients by background characteristics

Characteristics	Behaviour		Communicatin		Treatment		Cleanliness		Crowding		Waiting Time		Borrowing	
	DHs	OHs	DHs	OHs	DHs	OHs	DHs	OHs	DHs	OHs	DHs	OHs	DHs	OHs
Residence														
Rural	82.7	76.9	74.1	59.5	66.8	63.6	52.6	49.2	90.0	86.4	86.6	90.0	69.2	76.1
Urban	80.6	71.8	70.1	53.2	63.8	55.7	56.4	37.9	86.9	90.2	85.1	92.1	75.6	82.2
Sex														
Male	83.2	78.9	75.0	63.6	67.9	61.9	54.6	45.6	89.4	88.1	86.1	94.4	71.8	81.9
Female	81.0	73.5	70.9	54.4	64.1	60.9	53.0	45.9	88.8	87.3	86.1	88.6	70.5	75.9
Education														
Illiterate	84.7	74.8	76.0	56.6	66.2	63.8	56.7	46.7	88.9	86.3	86.1	88.2	75.1	76.4
1-7 years	79.4	74.6	71.3	60.2	66.9	59.8	43.0	37.9	89.6	87.1	86.6	90.3	64.7	75.3
8 + years	81.5	76.5	70.5	56.2	64.7	60.2	50.1	49.5	88.9	89.0	85.8	93.1	72.4	81.7
Caste														
SC and ST	83.6	78.0	73.5	58.8	65.7	61.6	44.0	51.1	87.6	85.7	85.3	91.1	66.8	78.0
Others	81.5	74.1	72.6	57.0	66.0	58.6	57.6	43.2	89.7	88.5	86.5	90.4	72.9	78.0
SLI														
Low	82.4	76.3	73.5	58.7	65.4	62.6	51.2	46.6	89.1	85.1	86.0	91.5	67.7	73.4
Medium	83.5	70.2	73.3	56.1	69.4	57.6	60.4	39.4	88.5	90.1	84.5	87.8	74.6	82.7
High	75.4	82.8	68.1	55.2	62.4	62.7	56.3	57.1	90.2	94.8	89.7	92.6	84.9	92.1
Total	**82.1**	**75.1**	**72.9**	**57.6**	**65.9**	**61.2**	**53.8**	**45.8**	**89.1**	**87.5**	**90.6**	**86.1**	**71.2**	**78.0**

Table 6.8b : Satisfaction scores for outdoor patients by background characteristics

Characteristics	Behaviour		Communicatin		Treatment		Cleanliness		Crowding		Waiting Time	
	DHs	OHs	DHs	OHs	DHs	OHs	DHs	OHs	DHs	OHs	DHs	OHs
Residence												
Rural	89.9	79.0	81.6	68.9	49.1	49.2	79.2	63.1	63.5	32.1	88.2	90.3
Urban	85.2	73.9	77.6	56.8	48.9	45.5	76.7	67.8	62.5	40.6	83.6	88.2
Sex												
Male	86.4	78.6	80.5	64.6	49.3	47.0	77.5	60.0	61.1	32.5	86.0	90.0
Female	88.0	74.9	78.4	61.7	48.7	47.7	78.8	69.6	64.4	39.2	85.3	88.7
Education												
Illiterate	90.5	75.3	78.6	61.9	48.9	45.8	78.1	60.9	69.3	32.3	89.4	88.2
1-7 years	85.9	77.0	78.0	63.3	49.6	48.3	78.1	66.9	57.7	40.5	85.2	92.1
8 + years	84.5	77.4	82.0	63.9	48.2	48.5	77.2	69.3	61.5	36.7	81.5	87.2
Caste												
SC and ST	90.8	77.9	82.3	63.8	49.5	45.2	78.4	56.3	64.8	31.8	85.9	88.6
Others	86.1	76.0	78.4	62.6	48.8	48.2	77.6	68.9	62.3	38.8	85.5	89.5
SLI												
Low	88.7	77.5	77.9	63.9	47.9	47.5	75.7	63.1	62.8	38.5	87.5	90.4
Medium	87.6	73.6	80.1	59.0	50.4	47.1	78.3	61.6	57.8	29.9	83.9	89.0
High	82.6	77.8	82.5	65.9	49.9	47.5	83.1	75.0	71.5	39.2	83.0	86.8
Total	**87.3**	**76.5**	**79.4**	**62.9**	**49.0**	**47.4**	**77.8**	**65.4**	**62.9**	**36.2**	**85.6**	**89.3**

CHAPTER 7

Rank Analysis and Principal Component Analysis

Introduction

In this chapter, it is intended to analyse the data on levels of satisfaction with the following purposes in mind:

1. To examine whether the priority expectations of patients (while choosing a hospital) from a hospital are fulfilled and if not, which are the areas, those fail in fulfilling the expectations;
2. To identify the areas that mainly contributes to the satisfaction of the patient; and
3. To examine the relationship between the satisfaction of the patients and utilisation of the hospital.

Rank Analysis

While taking patients' interviews, the level of their satisfaction regarding different dimensions of health care was assessed with the help of different questions. However, this information could only be used to know the patients' satisfaction about different services provided by the hospital. Thus, if some changes are be made in the hospital services, with some priorities, the information collected so far was of no use. Therefore, at the end of the questionnaire, one additional question was included. Here, all the criteria for a hospital with good services were listed and the patients were asked to choose the first three criteria in order of their importance. The criteria were 'easy access, less waiting time, competent doctors, cordial behaviour, availability of medicines, well-equipped hospital, effective treatment, affordability of charges and good communication. It was rather difficult to get quick response to this question, as the respondents were not able to decide the ranking. This difficulty was solved, to an extent, with the help of pictures depicting the different criteria. The use of pictures and lot of probing helped the investigators to get the responses to this question. Tables 7.1 and 7.2 give for both, District Hospital and Other Hospital and also for both in-door and out-door patients the distribution of the respondents giving first three ranks by criteria for good hospital.

It could be easily noticed that Easy access, Affordable charges and Availability of medicines are the three criteria reported by majority of patients. Following points emerge from this table.

1) Easy access, availability of medicines and affordable charges are the criteria for a good hospital reported by majority of in-door and easy access and availability of medicines are reported as priorities by outdoor patient. The difference between the percentage of

Table 7.1. Number of patients giving ranks (1,2,3) to different criteria by actual performance – IPD.

Criterion	Number ranking 1,2 or 3	Percent to total patients	Number not satisfied	Percent dissatisfied to number Ranking (1,2,3)
District Hospitals				
Easy Access	270	59.2	75	27.8
Less Waiting Time	88	19.3	38	43.2
Competent Doctors	55	12.1	7	12.7
Cordial Behaviour	84	18.4	22	26.2
Availability of Medicines	287	62.9	97	33.8
Hospital Well-equipped	120	26.3	56	46.6
Effective Treatment.	74	16.2	43	58.1
Affordable Charges	292	64.0	130	44.5
Good communication	86	18.9	34	40.5

Table 7.1. Number of patients giving ranks (1,2,3) to different criteria by actual performance – IPD.

Criterion	Number ranking 1,2 or 3	Percent to total patients	Number not satisfied	Percent dissatisfied to number Ranking (1,2,3)
Other Hospitals				
Easy Access	201	67.2	71	35.3
Less Waiting Time.	31	10.4	6	19.4
Competent Doctors	46	15.4	12	26.1
Cordial Behaviour	39	13.0	12	30.8
Availability of Medicines	198	66.2	74	37.4
Hospital Well-equipped	71	23.7	33	46.5
Effective Treatment	39	13.0	23	59.0
Affordable Charges	190	63.5	63	33.2
Good communication	60	20.1	30	50.0

Table 7.2. Number of patients giving ranks (1,2,3) to different criteria by actual performance-OPD.

Criterion	Number ranking 1,2 or 3.	Percent to total patients	Number not satisfied	Percent dissatisfied to number Ranking (1,2,3)
District Hospitals				
Easy Access	293	64.0	77	26.3
Less Waiting Time	111	24.2	55	49.5
Cordial Behaviour	70	15.3	24	34.3
Availability of Medicine.	312	68.1	41	13.1
Effective Treatment	87	18.9	24	27.6
Good communication	116	25.3	44	37.9
Other Hospitals				
Easy Access	273	58.9	52	19.0
Less Waiting Time	119	25.7	33	27.7
Cordial Behaviour	55	11.9	26	47.3
Availability of Medicine	327	70.6	50	15.3
Effective Treatment	77	16.6	43	55.8
Good communication	89	19.2	45	50.6

respondents choosing these criteria and the percentage of respondents choosing other criteria is so wide that no doubt could be raised about the genuinity of the patients' response. The preference remains the same, be it be a district hospital or other hospital and be the patient an indoor or an outdoor patient.

2) Among the indoor patients, those from District Hospitals have given preferences for other criteria in larger proportions, as compared to those of Other Hospitals. For example, less waiting time and cordial behaviour seem to be fairly important for the patients of the District Hospital, while the same is less significant for the Other Hospitals.
3) Between the indoor and outdoor patients, the outdoor patients seem to be generally slightly more bothered about availability of medicines, waiting time and communication. In fact, although it is necessary to be more careful about the indoor patients clinically, it is equally essential to take care of the outdoor patients, because that is the entry point of the hospital. Since majority of IPD admissions are through the OPD, the OPD services should be so provided that the patient should gain confidence about treatment in the hospital. Hence, the dissatisfaction of the outdoor patients about waiting time, communication, etc. should not be ignored.

Having discussed about the patients' priorities/criteria, it would be interesting to examine, whether the patients are satisfied in those respect. We take the average score of satisfaction as the cut-off point and calculate the proportion of satisfied patients for the more preferred and less preferred criteria.

After doing this, we cross-classify the different criteria according to preference and level of satisfaction. This enables us to identify the action areas as those, which are highly preferred by the patients but the same time patients are not satisfied with the performance. Tables 7.3 and 7.4 give this classification for in-door and out-door patients for district hospital and other hospital.

It is easy to notice that for the district hospital among highly preferred criteria, (namely, easy access, availability of medicines and affordability of charges) affordability of charges turns out to be the factor with high order preference and low satisfaction for Indoor patients of DHs. The other two criteria, namely, easy access and availability of medicines also turn out to be failures in satisfying the patients, although the level of satisfaction is slightly better. On the other hand, the patient seems to be quite satisfied with competence of doctors. There is low level of satisfaction in case of supply of equipment's, effectivity of treatment, waiting time and good communication. Although, these are not among preferred criteria and the responses regarding effectivity of treatment and supply of equipments should be interpreted with caution, the fact

Table 7.3 : Classification of the priorities of the patients according to satisfaction level – IPD

DH - IPD		Performance (Satisfaction Level)		
		High	**Medium**	**Low**
Preference	**High** (Majority ranked 1,2,3)		Easy Access. Availability of Medicines **Second priority**	Affordable Charges **First priority**
	Low (Few ranked 1,2,3)	Competent Staff	Cordial Behaviour **Fourth priority**	Wait Time Well-equipped Hospital Effective Treatment Good Communication **Third priority**
OH - IPD		**High**	**Medium**	**Low**
Preference	**High** (Majority ranked 1,2,3)		Easy Access Affordability of Medicines Affordable Charges **First priority**	
	Low (Few ranked 1,2,3)	Wait Time	Competent Doctors Cordial Behaviour **Third priority**	Well-equipped Hospital Effective Treatment Good Communication **Second priority**

Table 7.4 : Classification of the priorities of the patients according to satisfaction level – OPD

DH - OPD		Performance (Satisfaction Level)		
		High	**Medium**	**Low**
Preference	**High** (Majority ranked 1,2,3)	Availability of medicines	Easy Access **First priority**	
	Low (Few ranked 1,2,3)		Cordial Behaviour Wait Time Effective Treatment Good Communication **Second priority**	
OH - OPD		**High**	**Medium**	**Low**
Preference	**High** (Majority ranked 1,2,3)	Easy Access Availability of Medicines		
	Low (Few ranked 1,2,3)		Wait time **Second priority**	Cordial Behaviour Effective Treatment Good Communication **First priority**

remains that the providers have failed in having cordial behaviour and good communication. As far as the waiting time is concerned, it should be noted that the general satisfaction level is so high (86 percent) that even if the level of satisfaction is low the overall satisfaction should be interpreted as high.

For the Other Hospitals, the priorities are the same. Waiting time appears in the panel for high satisfaction. At the same time it also should be noted that in the panel of 'low satisfaction', none of the preferred criteria has appeared. The priorities and the performance as reported by the outdoor patients are slightly different. Easy access and availability of medicines are the characteristics highly preferred. For the district hospital none of these appears in the low satisfaction panel. Since, generally, outdoor patients come from close-by areas and availability of medicines may not be that serious problem, there is higher satisfaction for preferred services. However, the lack of satisfaction about communication and waiting time seems to be of a higher order. For the other hospital also, near about similar findings emerge. The waiting time, behaviour and communication of the providers at the first outdoor visit of the patient are the factors that probably would determine the continuity of treatment and hence, the administrator should make efforts to bring about improvements in these matters.

The analysis presented in this section leads to the following main conclusions:

i) Affordability of charges is the criterion highly preferred but with lower order satisfaction for the indoor patient, particularly of the district hospitals, while for the other hospitals, all these criteria, namely, easy access, availability of medicines and affordable charges come up with high preference and medium level of satisfaction.

ii) For both district hospitals and other hospitals, behaviour and communication of the providers, although preferred by few patients are the services with low to moderate satisfaction.

iii) For the outdoor patients of district hospital, the preferred criteria namely easy access and availability of medicines, seem to be linked with moderate to high order satisfaction, while again, communication and behaviour come up with moderate order satisfaction.

iv) For the outdoor patients of other hospitals, there is high order satisfaction in case of the preferred criteria while in case of waiting time there is medium order satisfaction.

These findings have to be examined from the point of view of the providers, as the findings of this study are going to be used for making improvements in the hospital services. Dissatisfaction regarding access may appear as not leading to any action on the part of providers, since the locations of the exiting hospitals cannot be changed. However, it should be noted that the fact that the patients are coming from far off places to the District Hospital/Other Hospital implies that the either the network of the other hospitals or PHCs is not evenly spread or the services available at these facilities are not adequate. The authorities of the health department should plan the future activities in such a way that the other hospitals and PHCs should be able to provide adequate health services.

Availability of medicines is another criterion, where there is dissatisfaction of moderate order. This finding has a direct implication in terms of supply of medicines. It is recalled that about 40 percent of the Indoor patients of District Hospitals and OH Hospitals had complaints about the availability of medicines.

Affordability of charges is a very critical issue as far as the patients' satisfaction is concerned. Apparently, from the point view of the provider, very little could be done to satisfy the patients in this matter, as the changes are really minimum. In this connection, let us examine the actual expenses incurred by the indoor patients of District Hospitals and Other Hospitals. Table 7.5 gives the relevant data.

Table 7.5 : Expenses per episode per patient (DH & OH)

Description	DH	OH
Surgery	31	20
Bed Charges	38	22
Test Expense	42	28
Medicine brought from outside	89	79
Saline	3	7
Blood Transfusion	8	4
Food charges (Hospital)	3	0.23
Food Charges (Outside)	26	18
Relatives (stay, transport, food)	134	71
Fare	92	47
Average expense	466	296

It is observed that for an indoor patient of a District hospital, the average expenditure is Rs. 466 per episode, while the same for the patient from other hospital is Rs. 296. These amounts are not exorbitant. Out of these amounts, 42 percent in District Hospital and 50 percent in other hospitals is for the treatment. Remaining expenses are on transport and relatives stay. It is definitely true that when the user changes are so nominal, one cannot think of further reducing

them. Then the question arises as to how to reduce the patient's burden. Probably, the answer could be found out, if we look at the expenses on medicines brought from outside. For district hospitals, it is 42 percent of the expenses on treatment, while it is 49 percent for the other hospitals. In short, they are spending substantial amounts on medicines. If the hospital authorities manage to keep the drug supply adequate throughout the year, this burden also could be reduced and could satisfy the patients.

Principal Component Analysis

In the last chapter, we have arrived at satisfaction scores for different aspects of services provided at the selected hospitals. However, if one wishes to talk about the satisfaction levels in terms of one/two indicators, it is not possible. Thus, some kind of average is necessary. A simple average was used with an assumption that all the dimensions of health care are equally important for the patient. But the reality may not allow us to make this assumption. For instance, crowding may not at all be as important as the treatment. Thus, it is necessary to have some weights for the different dimensions of health care. Principal component analysis helps us in this matter. Appendix-7.1 gives some details about the Principal Component Analysis.

This technique was applied to satisfaction scores for 456 and 299 indoor patients from district and other hospitals and 458 and 463 outdoor patients from district and other hospitals. Table 7.6 gives the weights for the first principal component for the four data sets.

Table 7.6: Weights for the First Principal Component (Principal Component Analysis)

Quality Indicator	IPD		OPD	
	DH	OH	DH	OH
Treatment	.518	.550	.376	.407
Behaviour	.476	.530	.491	.518
Communication	.527	.536	.528	.495
Cleanliness	.185	.174	.334	.380
Waiting time	.322	.163	.299	.157
Crowding	.147	.157	.372	.389
Borrowing	.263	.220	-	-
R^2 Explained	28.5	30.5	31.6	32.7

The sign and the value of the weight indicate the direction and magnitude of the contribution of different dimensions of satisfaction. It is observed that the variance explained by the first component is about 29 to 33 percent. It is not a very significant percentage. However, viewed from the point of number of observations, this percentage may not appear low. Further, it also has been observed that if there is high amount of correlation between the different variables, the R^2 (explained) also is large. However, in the present case, the correlation between scores of

satisfaction regarding different dimensions are not of high order and hence a low value of R^2. The weights of different dimensions of satisfaction of indoor patients of district and other hospitals indicate that the satisfaction regarding treatment, behaviour and communication with the provider is a prominent factor as captured by the first principal component, which account for maximum variation. In simple words, patient gives priority to above-mentioned dimensions of health care. As against these, cleanliness, waiting time, crowding and borrowing are less important. Logically speaking, this finding seems to be a genuine reflection of the patient's psychology, particularly of the patients from the lower stratum of society. Cleanliness, crowding etc are not the dimensions, which bother him seriously.

The weights of first principal component for outdoor patient have different patterns. Since outdoor patient stays in the hospital for short time, his satisfaction may not necessarily depend upon the factors same as those for the indoor patient. It could be observed that for patients of the District hospitals, there is not much difference between weights for different dimensions. Thus, we could term it as overall satisfaction about all dimensions. For the outdoor patients of other hospitals there is some difference in the weights, with higher weights for treatment, behaviour and communication. Broadly speaking, the overall satisfaction of the outdoor patients depends on satisfaction about different aspects of health, with no special emphasis on any particular aspect. This is in expected direction, since the outdoor patient's visit is for short time and hence no one/two dimensions have special importance in his response. On the other hand in-door patient stays there for a long time and hence his satisfaction has dimensions of varying importance. Table 7.7 gives the percentage contributions of different factors towards the overall satisfaction levels.

Table 7.7: Percentage contribution of different dimensions in Satisfaction

	IPD		OPD	
	DH	OH	DH	OH
Treatment	26.8	30.2	14.1	16.6
Behaviour	22.6	28.1	24.1	26.8
Communication	27.8	28.7	27.9	24.5
Cleanliness	3.4	3.0	11.2	14.4
Waiting time	10.4	2.7	8.9	2.5
Crowding	2.1	2.5	13.8	15.1
Borrowing	6.9	4.8	-	-

It is observed that the percentage contribution of dimensions such as Treatment, Behaviour and Communication is 77 percent for DHs and 87 percent for OHs. For OPD, these percentages are 66 percent and 68 percent for DHs and OHs. These observations support the

above mentioned conclusions regarding the importance of different dimensions to indoor and outdoor patients.

To sum up, besides treatment, which is the king-pin of hospital services, the communication and behaviour of the providers are important dimensions of patient's satisfaction. However, if the outdoor patient's first visit is taken as entry point of the potential client, the other dimensions like waiting time, cleanliness, and crowding also become very important.

Relationship between the patients' satisfaction and utilisation of the hospital

The whole rationale behind the present study was to assess the patients' satisfaction levels, to understand the lacuna and to use the findings for increasing the utilisation of the hospitals. It is assumed, justifiably, that the utilisation of the hospital depends upon the satisfaction of the patients. It was intended to examine the relationship statistically. However, there were some limitations for such an exercise.

1. For the measurement of OPD utilisation, no indicator is available.
2. The satisfaction for some (9) other hospitals is based only on 7 indoor patients.
3. The district hospitals and other hospitals could not be combined together as there is tremendous difference between their structures, facilities, personnel, etc.
4. The number of district hospitals being only six, no separate analysis could be done for them.
5. There were some outliers in our sample in terms of utilisation rates. Some of them exceeding 80 percent utilisation and some below 25 percent.

We finally decided to do the exercise only for the IPDs of Other Hospitals and excluding the six outliers. BOR was taken as the dependent variable and indoor patients satisfaction as independent variable. However, instead of taking a simple average of the satisfaction scores for different dimensions, we used the weights of the first principal component to get a weighted linear combination. Table 7.8 gives the data on this weighted index and the BORs of selected hospitals.

Graph 7.1 shows the scatter and fitted exponential curve. The equation fitted is:

$$BOR = 38.38 * 43.15^{x} \qquad R^2 = 23.2\%$$

Where x is 'SATSCORE'. It could be noted that R^2 is statistically significant. This exercise led us to two conclusions:

1. Patients' satisfaction has a definite contribution in determining the utilisation.
2. Utilisation of the hospital does not increase linearly with increase in satisfaction. It has a convergence point.

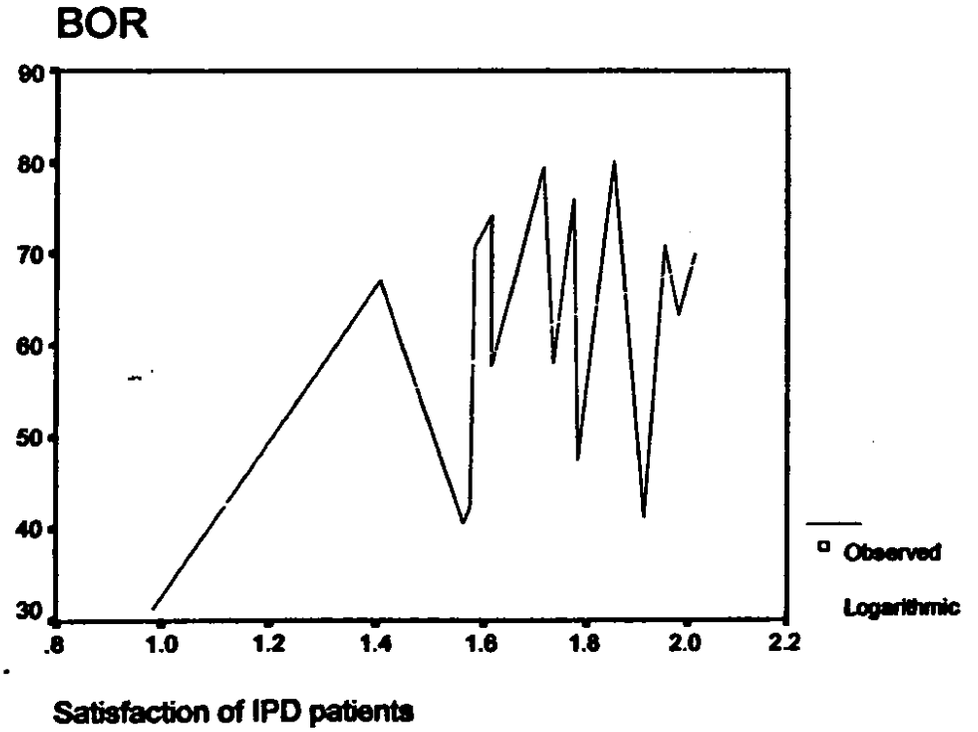
Table 7.8: Utilisation of and Satisfaction of In-door Patients (OH)

Type of Hospital	Satisfaction Index	BOR
SDH (100)		
Chopada	1.88	47.3
Sawantwadi	1.61	73.9
Tumsar	1.73	57.8
SDH (50)		
Dapoli	1.56	40.4
Indapur	1.40	66.9
Kankavali	1.85	79.8
Ambad	2.01	69.6
Dharni	1.58	70.3
Mul	1.98	63.0
RH (30)		
Wada	1.91	41.0
Sakri	1.61	57.5
Sangola	0.98	31.0
Atpadi	0.57	42.2
Mantha	1.71	79.3
Ahmedpur	1.95	70.6
Akot	1.77	75.7

Graph 7.1 : Utilisation of Rural/Sub-divisional Hospitals and Satisfaction of In-door Patients

Independent Variable: Satisfaction of IPD Patients

Dependent	Mth	Rsq	d.f.	F	Sigf	b0	b1
BOR	LOG	.232	14	4.24	.059	38.3808	43.1459



CHAPTER 8

Provider Satisfaction: Doctors

Introduction

Although providers are important component of the health care service provision, their perspectives have received little attention compared to the clients' perspectives. In order to have a successful programme that serves clients well, we need a better understanding of the provider perspectives. Providers' workload, infrastructure available to them, patient flow, their working environment, their needs, motivations, personal gains and losses are the important dimensions in the provision of the services. A wide variety of staff can be considered "providers" – from the clerk who first welcomes the client in the front desk of a hospital to the surgeon performing specialised operation. Thus, providers are health workers who work at various levels of the health care hierarchy, such as managers, doctors, nurses, technicians, clerks, and the lower level employees of the system.

Providers play a major role in identifying and meeting clients' health care needs. Their service to the clients depends on providers' technical and interpersonal skills, infrastructure, and client perception about quality. When the providers' services and behaviour fail to meet the clients' expected standards, clients will simply switch the provider. But as in many less developed countries' contexts clients may not have an alternative, and hence are forced to accept low quality of care, because they are poor or there are no other providers available. In some contexts providers may not volunteer to take steps that would increase the quality, fearing that would increase their workload. Various factors can affect the providers' ability to deliver quality health services. Common factors such as, changes in the health care system, strengths or deficiencies within systems or individual facilities, availability and of supplies and equipment, regulatory constraints and providers' level of competence (Paine et al. 1998).

The general working condition of the providers can affect their performance. For example, in a study in Uttar Pradesh the medical officers (doctors) pointed out that the inadequacies in the clinic infrastructure such as clinic equipment, supplies, and medicines (Khan et al. 1995) affect their performance. In the same study ANMs reported that they were not able to visit all of the villages in their work areas, due to lack of proper transportation and meagre travel allowances.

Providers also often complain about poorly equipped facilities, long working hours, low salary, and little recognition. Lack of supervision can also affect the quality. An evaluation of the

eight national family planning programmes found weaknesses in supervisory mechanism (United Nations Population Fund, 1994) as one of the reasons for low quality of services. Poor supervisions often involve superficial inspections and window dressed performance in India's public health programmes (Mavalankar, 1999).

Some providers lack necessary technical and interpersonal communication skills to provide good quality of care. In a study in Uttar Pradesh ANMs could not define quality services or suggest how family planning services could be improved (Khan et al., 1995). Status difference between clients and providers can influence quality of care. A study in public hospitals in Maharashtra found that providers were more likely to behave nicely if clients were from rich classes (Taleem, 2002). The above brief review suggests that providers need appropriate knowledge, skills, supplies, clinical environment and motivation to provide good quality of care.

As mentioned above salaries and incentives; equipment, medicines and supplies; management and supervision; and staff training and development are important issues for the provision of better quality of care. In a heath system quality can be affected by poor motivation caused by inadequate salaries, or by technical systems, such as lack of supplies resulting from poor logistics. Inadequacies in technical system frustrate providers' efforts to do a good job and reduce their motivation. Even the most conscious employees cannot do a good job if the systems they depend on are deficient – for example, if employees lack training, equipment, supervision, or a clear idea of their responsibilities (Kols and Sherman, 1998).

Provider characteristics

In order to ascertain the perception of the providers and their satisfaction we have collected information from 131 doctors, 115 nurses, 78 technicians, 26 pharmacists, and 57 class IV employees of the hospitals. In all 407 providers were interviewed for the study. The following table gives the break-up of providers, interviewed for the study, by district and other hospitals. We give below the findings of our interviews of the providers.

Number of providers interviewed for the study

Type of provider	Type of Hospital		
	District Hospital	Other Hospital	All Hospitals
Doctors	71	60	131
Nurses	51	64	115
Technicians	21	57	78
Pharmacists	6	20	26
.Class-IV	19	38	57
Total	**168**	**238**	**407**

Doctors

Age distribution of the doctors shows that the maximum number of doctors (46 percent) fall in the age category of 40-49 years and the same is observed for both district and other hospitals (Table 8.1). Generally more experienced doctors are posted in DHs. Doctors in DHs are older than their counterparts in OHs – 72 percent of the doctors in DHs are aged above 40 years whereas only 52 percent of the doctors fall in this age range in OHs. The mean age of the doctors in DHs and OHs is 43 years and 38.7 years respectively. Similarly, only one third of the doctors in OHs are Class-I medical officers whereas half of the doctors in DHs are Class-I officers.

In India, generally, public service is less preferred by the female doctors due to transferable nature of job and long working hours (like emergency call, on call duty, round the clock need etc.). Only 17 percent of the doctors in our sample are females. More are less similar pattern is observed for both OHs and DHs. Of the total 131 doctors interviewed only 11 percent of the doctors are unmarried. Very few doctors are unmarried in DHs (4 percent) compared to OHs (18 percent).

One fourth of our doctors belong to the scheduled caste category and four percent belong to scheduled tribe. In all, 29 percent of the doctors are from the socio-economically weaker sections of the state's population. The representation of the doctors from the socio-economically weaker sections in the public health service means that there is a better cultural access in the hospitals to the patients from weaker section of the society as they may feel that someone who speaks the same language as them and belongs to the same caste as theirs.

Reasons for coming to the government services

We have asked the doctors about the reasons for coming to the government services. Many doctors gave more than one reason (Table 8.2). Among the reasons given, job security (47 percent), regular income (24 percent) and retirement benefits (19 percent) are related to monetary/personal benefits and security in the job. These reasons are cited more often by the doctors in OHs than in DHs. It makes clear that the monetary benefits coupled with the job security were the major reasons for choosing the government services by the doctors. Opportunity to serve people was the answer given by majority of the doctors (71 percent). Difficulty in establishing private practice and risk associated with the private practice were made 19 percent of the doctors to choose government services. Leave benefits and fixed timings together made ten percent of the doctors to choose government service. The personal benefits outweigh the other reasons as for as reasons for joining government service is concerned.

Reason for coming to the government services (%)	DH	OH	Total
Job security	35.2	60.0	46.6
Regular income	19.7	28.3	23.7
Retirement benefits	8.5	31.7	19.1
Leave benefits	2.8	10.0	6.1
Opportunity to serve people	62.0	83.3	71.2
Establishing private practice is difficult	5.6	18.3	11.5
Private practice risky	5.6	8.3	6.9
Fixed timings	5.6	5.0	5.3
Other reasons	19.1	8.3	11.5
Number of doctors	**71**	**60**	**131**

Opinion of doctors about the public hospitals

Quality of care is associated with the infrastructure available to the doctors, adequacy of medical personnel, better management of the public health programme, regular/adequate supply of medicines, better provider satisfaction etc.. To understand the functioning of the government hospitals we have asked the doctors to give their opinion about the government hospitals (Table 8.3). Since they are the 'internal clients' of the system their opinion will reflect the functioning of the system in a better way.

Opinion of doctors about the government hospitals (%)	DH	OH	Total
No lacunae	1.4	8.3	4.6
Staff shortage	25.4	50.0	36.6
Medicine shortage	40.8	40.0	40.5
Shortage of funds	35.2	45.0	39.7
Shortage of equipment	36.6	55.0	45.0
Lack of facilities (BB, x-ray etc.)	16.9	31.7	23.7
Political interference	35.2	68.3	50.4
Improper location	15.5	31.7	22.9
Payment inadequate	16.9	20.0	18.3
Heavy workload	11.3	25.0	17.6
Pressure of superiors	11.3	20.0	15.3
Too many restrictions	8.5	18.3	13.0
Lack of coopn from staff	2.8	18.3	9.9
Others	7.0	10.0	8.4
Number of doctors	**71**	**60**	**131**

Only five percent of the doctors said that there is no lacuna in the government hospitals and the remaining 95 percent of doctors listed many problems, which are directly related to patient and provider satisfaction. Shortage of equipment, medicines, funds and staffs are reported by 37 to 45 percent of the doctors and lack of diagnostic facilities is reported by one fourth of the doctors. It means that the doctors are working under the system with lot of inadequacies to fully satisfy the patients. The problems which are directly related to the doctors like inadequate salary, heavy workload, pressure of seniors, too many restrictions are given by 13 to 18 percent of the

doctors. Improper location of the government hospitals is given by 23 percent of doctors. The biggest problem of government hospitals given by the doctors is political interference as half of the doctors cited this reason.

Doctors in OHs reported the presence of all these reasons more often than the doctors in DHs. It means that, relatively, the constraints for providing quality of care are more for OHs than for DHs. If we see the political interference separately for OHs and DHs, the problem is more acute in the former (68 percent) than the latter (35 percent).

Assessment of facilities available in their own hospitals

Besides the general question about the government hospitals, we have specifically asked the doctors about the adequacy of the facilities (personnel, equipment, medicines, diagnostic facilities, transport, and space) available in their own hospitals where they are currently working (Table 8.4). Only about one-third of the doctors said that personnel, equipment and medicine norms are 'totally fulfilled' in their hospital the remaining doctors said that these are either 'somewhat fulfilled' or 'not fulfilled'. The percentage of doctors said that the personnel, equipment and medicine norms are 'not fulfilled' in their hospital are 21 percent, 12 percent, and 18 percent respectively. The percentage of doctors reported that the personnel norms not fulfilled are higher in DHs (25 percent) than in OHs (17 percent) whereas more doctors in OHs (22 percent) reported that the medicine norms are not fulfilled than in DHs (14 percent).

The fulfilment of diagnostic facilities (lab and X-ray in case of OHs; lab, X-ray, Blood Bank and Sonography in case of DHs) and support services like transport and food (in case of DHs), cleaning, communication and space are relatively better than the personnel, equipment and medicines. These support services are relatively better fulfilled in DHs than in OHs.

Facilities totally fulfilled in the hospital according to the assessment of doctors (%)	**DH**	**OH**	**Total**
Personnel	31.0	35.0	32.8
Equipment	28.3	33.3	30.5
Medicines	39.4	25.0	32.8
Diagnostic facilities (lab, x-ray, BB, Sonography)	67.6	58.3	63.4
Support services (transport, commn., cleaning, food)	66.2	41.7	55.0
Space	69.0	48.3	59.5
Number of doctors	**71**	**60**	**131**

Dimensions of Provider Satisfaction

We assess the satisfaction of providers under four major dimensions, which covers fairly the different aspects related to their job satisfaction. These are: (i) work environment; (ii) work relationship; (iii) professional satisfaction; and (iv) personal gains and losses. First, doctors were

asked to give their opinion/satisfaction regarding different aspects of the above four dimensions and again they were asked to rank the ideal dimensions in provider satisfaction.

Dimensions of work environment

Under this dimension the satisfaction regarding timetable, nature of work, time spent with the patients, interference from politicians, promotion/transfers on merit are assessed (Table 8.5). Two-thirds of the doctors are satisfied with the time table of their work and the remaining one-third are not satisfied with it. There is no difference in the doctors' satisfaction of time table between OHs and DHs. Regarding the nature of work, 71 percent of the doctors are satisfied with it and the satisfaction being slightly higher among the doctors in OHs (75 percent) compared to the DHs (68 percent). Dissatisfaction about the nature of work is slightly higher among the doctors in DHs (31 percent) compared to the doctors in OHs (22 percent).

Eighty-two percent of the doctors take two or more rounds daily in the IPD ward, which is normally expected from them. Fifteen percent of the doctors take only one round. There is no difference in the number of daily rounds taken between the doctors in OHs and DHs. On an average the doctors spend about 10 minutes per patient in IPD and 6.2 minutes per patient in OPD. While time spent by the doctors with the IPD patients is same in OHs and DHs the time spent by the doctors with the OPD patients is slightly higher in OHs (6.4 minutes) than in the DHs (5.9 minutes). This may due to the higher OPD patient turnover in DHs. Satisfaction with the time spent per patient by the doctors shows that only 56 percent are satisfied with it in IPD and 40 percent in OPD. Hence the dissatisfaction among the doctors for the time spent is higher for OPD than for IPD in OHs and DHs.

In the earlier section when we asked the doctors about their opinion regarding the government hospitals half of the doctors mentioned 'political interference' as one of the problems. To understand this issue further we have asked the doctors whether they have faced any such interference from politicians. One-third of the doctors said that they themselves have 'often experienced' the political interference. Only one-fifth of the doctors said that they have never experienced political interference. Doctors who have reported that they have never experienced political interference are slightly more in OHs (23 percent) compared to the DHs (16 percent). This is possible because the doctors in OHs are younger and some of them have completed only few years of service. As they grow up in service and grade they might have to face the political interference often as their senior colleagues in DHs if this problem goes unchecked.

To understand how merit is valued in the public health department we have asked a question to the doctors whether promotions and transfers are done according to merit or not. In response to this question, 42 percent of the doctors said that merit is not at all taken into account for promotion or transfer. Only 18 percent of the doctors said that the promotions and transfers are done by merit only. The doctors' response reflects the level of corruption and mismanagement of promotions and transfers in the public health department. This will have very serious implications for the quality of health care as the provider satisfaction is an important component of the client satisfaction.

Dimensions in work environment (%)	DH	OH	Total
Satisfied with the time table	67.8	65.0	66.4
Satisfied with the nature of work	67.6	75.0	71.0
Satisfied with the time spent per patient in IPD	54.2	58.3	56.3
Satisfied with the time spent per patient in OPD	38.9	41.7	40.3
Often experienced interference from politicians	36.6	31.7	34.4
Merit not taken into account for promotions/transfers	40.8	43.3	42.0
Number of doctors	**71**	**60**	**131**

Ideal dimensions of work environment

The doctors were asked to rank the top three ideal dimensions of following work environment: (i) good physical working condition; (ii) knowing what you are expected to do and achieve at work; (iii) freedom from political interference in decision making; and (iv) not needing to pay bribes to get what you want (eg. promotion and transfer) (Table 8.6). Doctors' ranking of ideal dimensions reveals that half of the doctors ranked 'good physical working condition' (with all infrastructures and personnel available to them) as rank-1 for their ideal work environment. Forty one percent of the doctors ranked 'knowing what you are expected to do and achieve at work' as rank-2 and the same percentage of doctors ranked 'freedom from political interference in decision making' as rank-3. The ranking of the four ideal dimensions clearly reveals that good physical infrastructure is most important for the doctors followed by their personal motivation to do work and freedom from political interference. If these work environments are ensured for the doctors, bribes/corruption does not come into picture. Because the reduction in political interference itself will take care of bribes/corruption associated with the promotions/transfers.

How far these ideal dimensions exist in their present job? If we look at the answer for this question we can see that these ideal conditions are not fully met in their current job. The doctors are working with: (a) inadequate physical infrastructure (infrastructures and personnel); (b) an environment where political interference is too much; and (c) where merit is not always valued for promotion.

Dimensions of Work Relationship

Under this dimension the issues like working relationship with colleagues (juniors, colleagues and seniors); appreciation from superiors; independence from interference by superiors; and respect and trust from clients are covered (Table 8.7). Many a time same patient is looked after by more than one doctor in hospitals. Hence, team work for the doctors is always necessary, in their daily duty in hospitals, particularly for operations. Nearly seventy percent of the doctors said that such team work always exists among them. If we go by their other responses for this question, it appears that team work in general is better in both district and other hospitals. Doctors don't have any hesitation in contacting their other colleagues as 83 percent of them are fully comfortable in contacting other doctors. Similarly 80 percent of the doctors exchange ideas and information between themselves. It appears that team work and work relationships are better among doctors in both district and other hospitals.

To understand the work culture among the junior staff we have asked a question to the doctors (since we have mainly interviewed the senior doctors), whether your junior staff work according to the norm. Only half of the doctors said that the junior staffs work according to the norm and another 37 percent felt that they work only partially according to the norm. Though half of the doctors said that junior staffs work according to the norm, three-fourth of them are satisfied with the assistance offered by the junior staff. Twenty-one percent of the doctors were not satisfied with the assistance offered by their junior doctors. These doctors were further asked for the reason for their dissatisfaction with the assistance of junior staff. Majority of these doctors said that the junior doctors were not interested in work and eleven percent said that they are not competent to work.

To understand the doctors' relationship with their senior colleagues (CS and RMO) we have asked the doctors whether they have talked to the CS and RMO regarding the hospital matters. Eighty-four percent of the doctors said that they have talked to their seniors regarding the hospital matters. The percent of doctors talked to their seniors are higher in DHs than in OHs. Most of these doctors feel that the seniors respond positively when they talked to them.

Another dimension with the work relationship is the doctor-patient relationship. To understand this relationship we have first asked the doctors whether patients have respect and trust in you. Eighty-eight percent of the doctors said yes and this percent is more in DHs (92 percent) compared to the OHs (83 percent). We further asked the doctors: have you ever experienced strong/fighting reaction from the patients? Sixteen percent of the doctors said that they had very often experienced the fighting reaction from patients and another 38 percent said

that they had occasionally experienced. We have further asked the doctors whether this fighting attitude is frequent these days. One-fourth of doctors said that it is increasing these days and two-third said that it is not.

When the doctors do a good work or perform well, an appreciation from superiors is always necessary to recognise such good performance. To understand this we have asked the doctors whether the superiors appreciate their good work or not. In response, 44 percent of the doctors said that the superiors always appreciate the good work done by them and another 31 percent said that they appreciate only some times.

Dimensions of Work Relationship (%)	DH	OH	Total
Presence of team work always	69.0	68.3	68.7
Fully comfortable in contacting other doctors	85.9	78.3	82.4
Junior staff work according to the norm	46.3	58.3	51.9
Satisfaction with the assistance of junior staff	74.6	75.0	74.8
Attitude of colleagues encouraging	74.6	68.3	71.8
CS/RMO responds positively for issues	87.5	87.0	87.3
Patients have respect and trust in doctor	91.5	83.3	87.8
Often experienced fighting reaction from patients	16.9	15.0	16.0
Fighting attitude frequent these days	19.7	26.3	23.7
Always superiors appreciate good work	40.8	48.3	44.3
Total number of doctors	**71**	**60**	**131**

Ideal dimensions of work relationship

Ranking of the ideal dimensions of work relationship reveals that good working relationship with colleagues, appreciation from superiors and better doctor-patient relationship are ranked as 1, 2, and 3 respectively by the doctors (Table 8.8). The existence of the ideal dimensions in their current job shows that interpersonal relationship among colleagues are better compared to the appreciation from superiors and doctor-patient relationship. Hence efforts are necessary to recognise and appreciate the good work of doctors and to improve the doctor-patient relationship.

Dimensions of Professional Satisfaction

To understand the professional satisfaction among the doctors, its dimensions like training opportunities, utilisation of expertise in the job, opportunities to career advancement in job, and satisfaction with the accomplishment are covered (Table 8.9).

Nearly 80 percent of the doctors were deputed for on job training programmes of various durations and the remaining 20 percent were not deputed for any programmes. Among the doctors 55 percent are satisfied with their present work, 36 percent are somewhat satisfied and 10

percent are totally not satisfied with the present work. Though the level of dissatisfaction with the job is only 10 percent, even this level of dissatisfaction is a matter of concern for the management. The level of satisfaction with the present work is higher in DHs (62 percent) compared to the OHs (47 percent). Regarding the utilisation of their expertise, nearly half (47 percent) of the doctors said that they are able to utilise their expertise in the job to the fullest extent, 45 percent said that they are able to utilise to some extent and 6 percent very rarely. More doctors in DHs (55 percent) than in OHs (38 percent) said that they are able to utilise their expertise to the fullest extent. This reveals the non availability of infrastructure to utilise the expertise of the doctors to the fullest extent, particularly in OHs.

In general, timely promotion is an important matter for job satisfaction among the employees. Percentage of doctors who said that they are satisfied to a large extent in their accomplishment so far is 42 percent. Satisfaction with the accomplishment so far is higher among the doctors in DHs (48 percent) than in OHs (35 percent). Only a small percentage (2 percent) said that they are not at all satisfied with the accomplishments. One fourth of the doctors said that government service does not have a good scope for career advancement whereas one-fifth of the doctors said that government service does have a good scope for career advancement for all.

There is a general impression that the doctors doing private practice earn more and progress better. To know, how the government doctors react to this issue we added a question: do you think that you would have progressed better in a private practice? Forty six percent of the doctors said that they would have progressed better in a private practice and 36 percent said that they 'can't say'. Those who said that they would have progressed better in a private practice is more in DHs (51 percent) than in OHs (40 percent). It appears that nearly half of the doctors have the opinion that they would have progressed better in a private practice.

Dimensions of Professional Satisfaction (%)	DH	OH	Total
Deputed for on-job training programmes	77.5	76.7	77.1
Satisfied with the present work	62.0	46.7	55.0
Fully able to utilise the expertise in the job	54.9	38.3	47.3
Fully satisfied with the accomplishments so far	47.9	35.0	42.0
Progressed better in a private set practice	50.7	40.0	45.8
Govt. service has a good scope for career advancement	16.9	25.0	20.6
Total number of doctors	**71**	**60**	**131**

Ideal dimensions of professional satisfaction

The ranking given for the ideal dimensions in professional satisfaction reveals that training opportunities to improve skills, service to poor people and job satisfaction are important dimensions in professional satisfaction in the descending order (Table 8.10). The presence of

ideal dimensions of professional satisfaction in their actual job reveals that training opportunities are available to the doctors as 77 percent of them had some form of on-job training. Job satisfaction is ranked as one of the important dimension but only 55 percent of the doctors are satisfied fully with their present job.

Personal Losses and Gains

Staying arrangement, family problems (eg., education of children, working spouse, time for family) and pay package are the issues addressed under personal gains and losses (Table 8.11). Little more than half of the doctors (53 percent) are living in staff quarters provided by the administration within the hospital premises. The percent of doctors staying in staff quarters is more in OHs (60 percent) than in DHs (47 percent). Among those living in staff quarters 35 percent are not satisfied with the condition of the quarters. Dissatisfaction with the condition of the quarters is more in DHs (39 percent) than in OHs (31 percent).

Those who are not staying in staff quarters were asked about their staying arrangement. Among those who are not staying in the staff quarters, half of them stay in their own houses and the remaining half stay in rented accommodations. On the whole, 75 percent of the doctors either live in staff quarters or live in their own houses. This percentage is higher for the doctors in OHs (82 percent) compared to the doctors in DHs (69 percent). It appears that the residential accommodation is not major problem for the doctors as only 15 percent in OHs and 28 percent in DHs stay in rented houses even this may be due to their convenience for private practice.

Doctors who are not staying in the quarters were asked about the distance of the residence from the hospital. The distance from the hospital reveals that most of these doctors reside very close to hospital (70 percent within two kms). Among those who are not residing in staff quarters 82 percent use their own private vehicles to commute to the hospital. Since the accommodation does not appear to be a major problem for the doctors, the issues like better maintenance of the quarters should be given importance by the management as many of the doctors are not happy with the maintenance of the quarters.

Since the doctors' job is transferable, they face problems like education of their children and the job of the spouse. We have asked a question: do you face any such problems? Three-fourth of the doctors said that yes, they face such problems. Doctors facing such problems are more in DHs (79 percent) compared to the OHs (70 percent). For many doctors the jobs are assigned round the clock in the hospitals. Due to this nature of the job they don't get sufficient time for the family/personal work. In all, forty-four percent of the doctors said that they don't get

time for family/personal work. This problem is more severe for the doctors in DHs (56 percent) than in OHs (30 percent). It seems that the doctors working in DHs are relatively facing more family problems (children's' education, job of spouse and lack of time for personal work) than their counterparts in OHs.

By being in the government services, the doctors can easily avail the health services for their family members. This is one of the important personal benefits for the doctors. Sixty-two percent of the doctors said that their government service leads to an easy access to health services for the family. Slightly more doctors in DHs (66 percent) compared to OHs (57 percent) agreed to this personal benefit.

Dimensions of Personal Loss and Gains (%)	DH	OH	Total
Live in staff quarters	46.5	60.0	52.7
Satisfied with the condition of the staff quarters	30.3	16.7	23.2
Easy access to health services for the family	66.2	56.7	61.8
Face family problems (education., spouse working)	78.9	70.0	74.8
Not getting sufficient time for family	56.3	30.0	44.0
Pay package is adequate	29.6	28.3	29.0
Total number of doctors	**71**	**60**	**131**

Salary is an important component of personal gains for the doctors. Two-third of the doctors said that their pay package is not adequate and the percentages are similar for the doctors in OHs and DHs. The dissatisfaction level among the doctors about their salary is more and should be looked into. When tested statistically, the only dimension with significant difference between DH and OH was ' Not getting sufficient time for family'.

Ideal dimensions in personal losses and gains

Ranking of the ideal dimensions of personal gains shows that job security is the most important ideal dimension of personal gain as 44 percent of the doctors ranked job security as rank-1 (Table 8.12). In both OHs and DHs more doctors ranked job security as Rank-1. Job security is followed by good employment benefits (pension and housing) and sufficient time for personal/family life as ideal dimensions for their personal gains. It appears that the job security in the government service is one of the important attractions for the doctors.

When we look at the presence of ideal dimensions in the job it reveals that the doctors don't get sufficient time for family/personal work, particularly in DHs. Doctors ranked good employment benefit as second most important factor but two-third are not happy with their pay package.

Ranking of the major dimensions of satisfaction

After ascertaining the satisfaction of the doctors under the four major dimensions (work environment, work relationship, professional satisfaction and personal gains and losses) they were also asked to rank the top three dimensions among the four (Table 8.13). The rankings reveal that among the four major dimensions 'professional satisfaction' is ranked as top most by two third of the doctors in both OHs and DHs. 'Work relationship' and 'work environment' are ranked after 'professional satisfaction' by 31 to 39 percent of the doctors. Surprisingly, the doctors in their top three important dimensions did not rank the 'personal gains' as very important. Only 6-18 percent of the doctors ranked 'personal gains' as rank 1, 2 or 3. In the earlier section on 'personal gains and losses' we have seen that the doctors are more dissatisfied with the 'personal gains', but the ranking of the major dimensions has not revealed that.

Dimensions (%)	Rank 1	Rank 2	Rank 3
Work environment	17.3	36.2	34.6
Work relationship	11.0	38.5	30.7
Professional satisfaction	66.1	17.3	15.5
Personal gains	5.5	7.8	18.8
Number of doctors	**127**	**127**	**127**

Just as the rank analysis was done for patients, a similar analysis was done for doctors. The data on rank given by them to various dimensions of satisfaction are available to us. On the basis of them, we got the number of doctors, who ranked the dimension as either first or second. Using the scores of satisfaction as a cut-off point, we got the number of doctors, who had given the preference but had below average satisfaction score. The last column of the table gives the percentage dissatisfied among those who had given preferences. It is observed that the level of dissatisfaction is on the whole quite high, the highest being for personal gains, which is preferred by the smallest number of doctors.

Dimensions of satisfaction	Ranked as 1 or 2	Number dissatisfied	Percent dissatisfied
Work environment	68	33	48.5
Work relationship	63	30	47.6
Professional satisfaction	106	53	50.0
Personal gains	17	13	76.5

Satisfaction scores for doctors

For each dimension of satisfaction (work environment, work relationship, professional satisfaction and personal gains and losses) we have calculated the satisfaction scores for doctors. The scoring procedure is given in Appendix 8.1. For each dimension the satisfaction score ranges from a minimum of 0 to a maximum of 100. In addition to the above dimensions we have

calculated a score for political interference and the importance given to merit for promotions/ transfers. We give below the satisfaction levels of doctors by each dimension and also for the doctors in each DHs hospital. We are not giving the satisfaction scores of the doctors separately for each OHs as the number of doctors interviewed in each hospital is only two to three.

Satisfaction of doctors by dimensions

In general the satisfaction regarding various dimensions of the work is low among the doctors in OHs and DHs. Among the dimensions the maximum satisfaction is with the work relationship and the lowest satisfaction is with the political interference and merit not taken into account for promotions/transfers. The satisfaction regarding the work relationship is similar in OHs and DHs at 70.4 and 72.3 respectively. In both the OHs and DHs the satisfaction regarding the work environment is low at 44.2 and 45.3 respectively. Doctors in DHs are relatively better-satisfied (50.6) in professional satisfaction than the doctors in OHs (42.1). The satisfaction in terms of personal gains is very low and almost similar across district and other hospitals (31.0 and 29.9 respectively). The dissatisfaction regarding the political interference is highest in the hospitals as the scores are very low in DHs and OHs (18.7 and 23.8 respectively).

Satisfaction scores of doctors by different dimensions

Maximum score = 100

Dimensions of satisfaction	Satisfaction Scores			
	District Hospitals		Other Hospitals	
	Number	Score	Number	Score
Work environment	71	44.2	60	45.3
Work relationship	71	70.4	60	72.3
Professional satisfaction	71	50.6	60	42.1
Personal gains and losses	71	29.9	60	31.0
Political interference & merit not considered	71	18.7	60	23.8

Satisfaction scores of doctors by hospital

The satisfaction score (weighted) of the doctors range from a lower score of 43.3 in Jalna to a maximum score of 57.8 in DH, Buldhana. The remaining four hospitals fall in between this range. The weighted satisfaction scores show that the doctors from Buldhana, Ratnagiri, and Bhandara are relatively more satisfied (score range 51 to 58) than the doctors from Jalgaon, Jalna and Beed (score range 43 to 47). The satisfaction levels do not indicate a higher level of satisfaction among the doctors in the selected hospitals and in fact the levels are very low. Generally, it is observed that the hospitals, which have higher weighted scores, also have higher scores in 'professional satisfaction' and 'work environment'. These scores should be interpreted cautiously as they are based on a small number of (8 to 12) doctors in each hospital. In all the

hospitals the work relationship scores are relatively better than the scores of the other dimensions. The personal gains scores are least and very low (below 42) for all the hospitals.

Satisfaction scores of the district hospital doctors by different dimensions

Maximum score = 100

Dimensions of satisfaction	Satisfaction Scores					
	Ratnagiri	Jalgaon	Jalna	Beed	Buldhana	Bhandara
Work environment	45.7	45.8	3.33	37.6	49.4	56.3
Work relationship	77.8	70.0	5.49	74.0	77.8	72.2
Professional satisfaction	56.6	46.7	4.54	48.7	59.7	48.6
Personal gains and losses	25.0	20.2	3.78	18.3	41.6	38.0
Weighted scores	**53.8**	**46.9**	**4.33**	**46.2**	**57.8**	**51.0**

Satisfaction of the doctors with the facilities available in the hospital

The doctors were specifically asked about the satisfactory services and the services, which need strengthening in their hospital (Table 8.14). The services mentioned to them are personnel, equipment, medicines, diagnostic facilities, support services and space. According to the responses none of the above services are totally satisfactory in their hospitals. The satisfaction with the services ranges from the lower level of 35 percent for equipment to maximum level of 60 percent for space. The satisfaction with the remaining four services falls in between this range. Satisfaction with the availability of medicines is better in DHs (52 percent) compared to the OHs (40 percent). Satisfaction with the services reveals that many of these services need strengthening in the hospitals.

Satisfactory services in the hospital (%)	DH	OH	Total
Personnel	36.6	43.3	39.7
Equipment	35.2	35.0	35.1
Medicines	52.1	40.0	46.6
Diagnostic facilities	59.2	56.7	58.0
Support services	50.7	50.0	50.4
Space	66.2	51.7	59.5
Total number of doctors	**71**	**60**	**131**

Recommendation to improve government hospitals

The doctors were also asked to give their recommendation to improve the government hospitals (Table 8.15). The responses show that their major recommendation is to improve the general administration of the hospitals (85 percent). One-fifth of the doctors suggested the improvement in work environment (availability of personnel, equipment, medicines and diagnostic services), eight percent suggested improvement in work relation (with colleagues, seniors and juniors) and another nine percent suggested reduction in political interference. Increase in doctors' salary and professional satisfaction together was suggested by 30 percent of the doctors.

Strengths and weaknesses of the government hospitals

When we specifically asked the doctors to give their recommendations to improve the hospitals not all of them have given their recommendations, as one need some time to give concrete recommendations. To overcome this, we have asked the doctors to list the weaknesses of the government hospitals. To this question, most of the doctors have given their answers. The answer for the above two question (recommendation to improve the government hospitals and weaknesses of the government hospitals) together gives the common problems prevailing in the government hospitals. The same reasons given as recommendations to improve the government hospitals are also given as weaknesses of the government hospitals (Table 8.16). For instance, 70 percent of the doctors say that improper administration is a weakness of the hospitals and this percentage is higher in DHs (80 percent) compared to OHs (57 percent). Lack of medicines and equipment are seen as weakness by 64 percent of the doctors. Generally, doctors from DHs listed the weaknesses more often than the doctors from OHs.

Provider Perspective: Doctors

Provider Characteristics

Table 8.1: Percent distribution of doctors by background characteristics, according to type of hospital.

Background characteristics	District Hospitals		Other Hospitals		All Hospitals	
	No.	Percent	No.	Percent	No.	Percent
Age						
Below 30 years	5	7.0	9	15.0	14	10.7
30-39 years	15	21.1	20	33.3	35	26.7
40-49 years	33	46.5	27	45.0	60	45.8
50-58 years	18	25.4	4	6.7	22	16.8
Sex						
Male	61	85.9	48	80.0	109	83.2
Female	10	14.1	12	20.0	22	16.8
Marital status						
Unmarried	3	4.2	11	18.3	14	10.7
Married	68	95.8	49	81.7	117	89.3
Caste						
Scheduled caste	19	26.8	14	23.3	33	25.2
Scheduled tribe	1	1.4	4	6.7	5	3.8
NT	--	--	2	3.3	2	1.5
Others	51	71.8	40	66.7	91	69.5
Religion						
Hindu	61	85.9	52	86.7	113	86.3
Muslim	1	1.4	2	3.3	3	2.3
Buddhist/Neo Buddhist	8	11.3	4	6.7	12	9.2
Others (Christian, Jain)	1	1.4	2	3.3	3	2.3
Education						
17 years	6	8.5	13	21.7	19	14.5
18-19 years	38	53.5	32	53.3	70	53.4
20 years	20	28.2	11	18.3	31	23.7
21 years & above	7	9.9	4	6.7	11	8.4
Designation						
Medical Officer: Class I	37	52.1	20	33.3	57	43.5
Medical Officer: Class 2	34	47.9	40	66.7	74	56.5
Total	**71**	**100.0**	**60**	**100.0**	**131**	**100.0**

Table 8.2: Distribution of doctors by the reasons for coming to the government services by type of hospital.

Reason for coming to the government services	District Hospitals		Other Hospitals		All Hospitals	
	No.	Percent	No.	Percent	No.	Percent
Job security	25	35.2	36	60.0	61	46.6
Regular income	14	19.7	17	28.3	31	23.7
Retirement benefits	6	8.5	19	31.7	25	19.1
Leave benefits	2	2.8	6	10.0	8	6.1
Opportunity to serve people	44	62.0	50	83.3	94	71.2
Estg pvt practice is difficult	4	5.6	11	18.3	15	11.5
Private practice risky	4	5.6	5	8.3	9	6.9
Fixed timings	4	5.6	3	5.0	7	5.3
Other reasons	10	19.1	5	8.3	15	11.5
Total	**71**	**100.0**	**60**	**100.0**	**131**	**100.0**

Note: Total will not add to 100 as answers are multiple

Table 8.3: Distribution of doctors by their opinion about the public hospitals by type of hospital.

Opinion about the govt hospitals	District Hospitals		Other Hospitals		All Hospitals	
	No.	Percent	No.	Percent	No.	Percent
No lacunae	1	1.4	5	8.3	6	4.6
Staff shortage	18	25.4	30	50.0	48	36.6
Medicine shortage	29	40.8	24	40.0	53	40.5
Shortage of funds	25	35.2	27	45.0	52	39.7
Shortage of equipment	26	36.6	33	55.0	59	45.0
Lack of facilities (BB, xray etc.)	12	16.9	19	31.7	31	23.7
Political interference	25	35.2	41	68.3	66	50.4
Improper location	11	15.5	19	31.7	30	22.9
Payment inadequate	12	16.9	12	20.0	24	18.3
Heavy workload	8	11.3	15	25.0	23	17.6
Pressure of superiors	8	11.3	12	20.0	20	15.3
Too many restrictions	6	8.5	11	18.3	17	13.0
Lack of coopn from staff	2	2.8	11	18.3	13	9.9
Others	5	7.0	6	10.0	11	8.4
Total	**71**	**100.0**	**60**	**100.0**	**131**	**100.0**

Note: Total will not add to 100 as answers are multiple

Table 8.4 : Assessment of doctors about the facilities available in their hospital according to type of hospital.

Assessment of facilities available	District Hospitals		Other Hospitals		All Hospitals	
	No.	Percent	No.	Percent	No.	Percent
Personnel						
Not fulfilled	18	25.4	10	16.7	28	21.4
Somewhat fulfilled	31	43.7	28	46.7	59	45.0
Totally fulfilled	22	31.0	21	35.0	43	32.8
Not Given	–	–	1	1.7	1	0.8
Equipment						
Not fulfilled	8	11.3	8	13.3	16	12.2
Somewhat fulfilled	43	60.6	31	51.7	74	56.5
Totally fulfilled	20	28.2	20	33.3	40	30.5
Not Given	–	–	1	1.7	1	0.8
Medicines						
Not fulfilled	10	14.1	13	21.7	23	17.6
Somewhat fulfilled	32	45.1	31	51.7	63	48.1
Totally fulfilled	28	39.4	15	25.0	43	32.8
Not Given	1	1.4	1	1.7	2	1.5
Transport, food, cleaning, communication						
Not fulfilled	4	5.6	6	10.0	10	7.6
Somewhat fulfilled	20	28.2	28	46.7	48	36.6
Totally fulfilled	47	66.2	25	41.7	72	55.0
Not Given	–	–	1	1.7	1	0.8
Lab, Xray, BB, Sonography						
Not fulfilled	2	2.8	4	6.7	6	4.6
Somewhat fulfilled	20	28.2	20	33.3	40	30.5
Totally fulfilled	48	67.6	35	58.3	83	63.4
Not Given	1	1.4	1	1.7	2	1.5
Space						
Not fulfilled	7	9.9	13	21.7	20	15.3
Somewhat fulfilled	14	19.7	14	23.3	28	21.4
Totally fulfilled	49	69.0	29	48.3	78	59.5
Surplus	1	1.4	2	3.3	3	2.3
Not Given	–	–	2	3.3	2	1.5
Total	**71**	**100.0**	**60**	**100.0**	**131**	**100.0**

Table 8.5: Doctors' satisfaction regarding the time table and nature of work by type of hospital.

Satisfaction regarding time table and nature of work	District Hospitals		Other Hospitals		All Hospitals	
	No.	Percent	No.	Percent	No.	Percent
Satisfied with the time table						
Yes	48	67.6	39	65.0	87	66.4
No	22	31.0	20	33.3	42	32.1
Cant say	–	–	1	1.7	1	0.8
Not given	1	1.4	–	–	1	0.8
Satisfied with the nature of work						
Yes	48	67.6	45	75.0	93	71.0
No	22	31.0	13	21.7	35	26.7
Cant say	–	–	1	1.7	1	0.8
Not given	1	1.4	1	1.7	2	1.5
Total	**71**	**100.0**	**60**	**100.0**	**131**	**100.0**

Table contd...

Table 8.5: Time spent by the doctors in IPD and OPD and their satisfaction by type of hospital.

Time spent in IPD and OPD and satisfaction	District Hospitals		Other Hospitals		All Hospitals	
	No.	Percent	No.	Percent	No.	Percent
Number of rounds taken per day in the IPD wards						
One round	9	15.3	9	15.0	18	15.1
Two rounds	45	76.3	40	66.7	85	71.4
Three and above rounds	3	5.1	10	16.7	13	10.9
Not given	2	3.4	1	1.7	3	2.5
Average time spent per patient in IPD						
1-4 minutes	8	13.5	4	6.7	12	10.08
5 minutes	19	32.2	14	23.3	33	27.7
6-10 minutes	18	30.5	22	36.7	40	33.6
Above 10 minutes	11	18.6	17	28.3	28	23.5
Cant say	3	5.1	3	5.0	6	5.0
Average time spent (min.)	–	**10.13**	–	**9.89**	–	**10.01**
Average time spent per patient in OPD						
1-4 minutes	16	27.1	16	26.7	32	26.8
5 minutes	26	44.0	26	43.3	52	43.6
6-10 minutes	8	13.5	14	23.3	22	18.4
Above 10 minutes	5	8.5	2	3.3	7	5.9
Cant say	4	6.8	2	3.3	6	5.0
Average time spent (min.)	–	**5.94**	–	**6.39**	–	**6.18**
Satisfaction with the time spent per IPD patient						
Yes	32	54.2	35	58.3	67	56.3
No	13	22.0	10	16.7	23	19.3
To an extent	11	18.6	10	16.7	21	17.6
Cant say	–	–	1	1.7	1	0.8
Not given	3	5.1	4	6.7	7	5.9
Satisfaction with the time spent per OPD patient						
Yes	23	38.9	25	41.7	48	40.3
No	19	32.2	17	28.3	36	30.3
To an extent	13	22.0	14	23.3	27	22.6
Cant say	–	–	1	1.7	1	0.8
Not given	4	6.8	3	5.0	7	5.9
Total	**59**	**100.0**	**60**	**100.0**	**119**	**100.0**

* For the district hospital, the responses from only 59 doctors are elicited, as for the remaining 12 doctors (radiologist and pathologist – two from each hospital) the question is not applicable.

Table contd...

Table 8.5: Work environment of the doctors by type of hospital

Work Environment	District Hospitals		Other Hospitals		All Hospitals	
	No.	Percent	No.	Percent	No.	Percent
Experienced interference from political leaders						
Never	11	15.5	14	23.3	25	19.1
Rarely/Occasionally	34	47.9	26	43.3	60	45.8
Often	26	36.6	19	31.7	45	34.4
Cant say	–	–	1	1.7	1	.8
Whether Promotion / transfer are done by merit						
Merit not taken into account	29	40.8	26	43.3	55	42.0
Not only merit	25	35.2	17	28.3	42	32.1
Only on merit	11	15.5	12	20.0	23	17.6
By seniority not by merit	3	4.2	2	3.3	5	3.8
Cant say	–	–	1	1.7	1	0.8
Not given	3	4.2	2	3.3	5	3.8
Total	**71**	**100.0**	**60**	**100.0**	**131**	**100.0**

Table 8.6: Ideal dimensions of work environment by type of hospital.

Ideal dimensions of work environment	Rank 1		Rank 2		Rank 3	
	Number	Percent	Number	Percent	Number	Percent
			District Hospital			
Good physical working condition	39	54.9	17	23.9	9	12.7
Knowing what you are expected to do and achieve at work	14	19.7	32	45.1	16	22.5
Freedom from political interference in decision making	10	14.1	14	19.7	30	42.3
Not needing to pay bribes to get what you want	8	11.3	8	11.3	16	22.5
Total	**71**	**100.0**	**71**	**100.0**	**71**	**100.0**
			Other Hospitals			
Good physical working condition	28	46.7	17	28.3	11	18.3
Knowing what you are expected to do and achieve at work	17	28.3	22	36.7	14	23.3
Freedom from political interference in decision making	11	18.3	17	28.3	24	40.0
Not needing to pay bribes to get what you want	4	6.7	4	6.7	11	18.3
Total	**60**	**100.0**	**60**	**100.0**	**60**	**100.0**
			All Hospitals			
Good physical working condition	67	51.1	34	26.0	20	15.3
Knowing what you are expected to do and achieve at work	31	23.7	54	41.2	30	22.9
Freedom from political interference in decision making	21	16.0	31	23.7	54	41.2
Not needing to pay bribes to get what you want	12	9.2	12	9.2	27	20.6
Total	**131**	**100.0**	**131**	**100.0**	**131**	**100.0**

Dimensions of Work Relationship

Table 8.7: Dimensions of work relationship of the doctors by type of hospital.

Dimensions of Work Relationship	District Hospitals		Other Hospitals		All Hospitals	
	No.	Percent	No.	Percent	No.	Percent
Presence of team work						
No	1	1.4	2	3.3	3	2.3
Not in all departments	6	8.5	2	3.3	8	6.1
Not in all activities	2	2.8	5	8.3	7	5.3
Yes, always	49	69.0	41	68.3	90	68.7
Yes, sometimes	13	18.3	10	16.7	23	17.6
Comfortable in contacting other doctors						
Not comfortable	3	4.2	2	3.3	5	3.8
Somewhat comfortable	7	9.9	8	13.3	15	11.5
Fully comfortable	61	85.9	47	78.3	108	82.4
Cannot say	–	–	3	5.0	3	2.3
Exchange of ideas and information between doctors						
No	2	2.8	1	1.7	3	2.3
To an extent	13	18.3	9	15.0	22	16.8
Yes	56	78.9	48	80.0	104	79.4
Cant say	–	–	2	3.3	2	1.5
Junior staff work according to the norm						
No	7	9.9	3	5.0	10	7.6
Partially according to norm	27	38.0	22	36.7	49	37.4
Yes	33	46.5	35	58.3	68	51.9
Not given	4	5.6	–	–	4	3.1
Satisfaction with the assistance of junior staff						
No	16	22.5	12	20.0	28	21.4
Yes	53	74.6	45	75.0	98	74.8
Somewhat satisfied	–	–	2	3.3	2	1.5
Not given	2	2.6	1	1.7	3	2.3
Reason for no satisfaction (n = 28)						
Staff not interested in work	10	62.5	8	66.7	18	64.3
Over burdened	4	25.0	3	25.0	7	25.0
Not competent	2	12.5	1	8.3	3	10.7
Is the attitude of your colleagues encouraging						
No	6	8.5	5	8.3	11	8.4
To an extent	11	14.1	10	16.7	21	16.0
Yes	53	74.6	41	68.3	94	71.8
Not given	1	1.4	4	6.7	5	3.8
Total	**71**	**100.0**	**60**	**100.0**	**131**	**100.0**

Table contd...

Table 8.7: Dimensions of work relationship of the doctors by type of hospital.

Dimensions of Work Relationship	District Hospitals		Other Hospitals		All Hospitals	
	No.	Percent	No.	Percent	No.	Percent
Talked to CS/RMO/Matron						
No	2	2.8	4	6.7	6	4.6
To an extent	5	7.0	7	11.7	12	9.2
Yes	64	90.1	46	76.7	110	84.0
Not given	–	–	3	5.0	3	2.3
If yes, how do they respond? (n=110)						
Do not respond positively	6	9.4	6	13.0	12	10.9
Respond positively	56	87.5	40	87.0	96	87.3
Cant say	2	3.1	–	–	2	1.8
If no, reasons (n = 6)						
Matter not seriously viewed	1	–	–	–	1	–
Interpersonal relations invol	–	–	1	–	1	–
Problems beyond their limit	1	–	3	–	4	–
Patients have respect & trust in you						
No	–	–	4	6.7	1	3.1
Yes	65	91.5	50	83.3	115	87.8
Cant say	6	8.5	5	8.3	11	8.4
Yes sometimes	–	–	1	1.7	1	.8
Experienced strong reaction from patients						
Yes, often	12	16.9	9	15.0	21	16.0
Yes, occasionally	25	35.2	25	41.7	50	38.2
Yes, very rarely	17	23.9	12	20.0	29	22.1
Not at all	17	23.9	13	21.7	30	22.9
Not given	–	–	1	1.7	1	.8
Is this attitude is frequent these days						
Yes	14	19.7	17	26.3	31	23.7
No	51	71.8	36	60.0	87	66.4
Cant say	6	8.5	7	11.7	13	9.9
Superiors appreciate good work						
No	5	7.0	4	6.7	9	6.9
Rarely	8	11.3	5	8.3	13	9.9
Sometimes	26	36.6	14	23.3	40	30.5
Always	29	40.8	29	48.3	58	44.3
Can't say	3	4.2	8	13.3	11	8.4
Total	**71**	**100.0**	**60**	**100.0**	**131**	**100.0**

Table 8.8: Ideal dimensions of work relationship by the type of hospital.

Dimensions of work relationship	Rank 1		Rank 2		Rank 3	
	Number	Percent	Number	Percent	Number	Percent
			District Hospital			
Good working relationship with colleagues	33	46.5	20	28.2	12	16.9
Superior recognises good work	12	16.9	29	40.8	21	29.6
Respected and trusted by clients	21	29.6	19	26.8	24	33.8
Independence from interference by superiors	5	7.0	3	4.2	14	19.7
Total	**71**	**100.0**	**71**	**100.0**	**71**	**100.0**
			Other Hospitals			
Good working relationship with colleagues	25	41.7	21	35.0	11	18.3
Superior recognises good work	2	3.3	13	21.7	27	45.0
Respected and trusted by clients	26	43.3	16	26.7	12	20.0
Independence from interference by superiors	7	11.7	10	16.7	10	16.7
Total	**60**	**100.0**	**60.0**	**100.0**	**60**	**100.0**
			All Hospital			
Good working relationship with colleagues	58	44.3	41	31.3	23	17.6
Superior recognises good work	14	10.7	42	32.1	48	36.6
Respected and trusted by clients	47	35.9	35	26.7	36	27.5
Independence from interference by superiors	12	9.2	13	9.9	24	18.3
Total	**131**	**100.0**	**131**	**100.0**	**131**	**100.0**

Dimensions of professional satisfaction

Table 8.9: Dimensions of professional satisfaction by type of hospital.

Dimensions of Professional Satisfaction	District Hospitals		Other Hospitals		All Hospitals	
	No.	Percent	No.	Percent	No.	Percent
Deputed for on job training programes						
No	15	21.1	12	20.0	27	20.6
Yes	55	77.5	46	76.7	101	77.1
Training distantly related	1	1.4	–	–	1	0.8
Not given	–	–	2	3.3	2	1.5
Satisfied with the present work						
No	7	9.9	5	8.3	12	9.2
Somewhat satisfied	20	28.2	27	45.0	47	35.9
Yes	44	62.0	28	46.7	72	55.0
Able to utilise the expertise in the job						
Very rarely	3	4.2	5	8.3	8	6.1
To some extent	28	39.4	31	51.7	59	45.0
Fullest extent	39	54.9	23	38.3	62	47.3
Not given	1	1.4	1	1.7	2	1.5
Satisfied with the accomplishment so far						
Not at all	1	1.4	1	1.7	2	1.5
Some extent	35	49.3	37	61.7	72	55.0
To a large extent	34	47.9	21	35.0	55	42.0
Not given	1	1.4	1	1.7	2	1.5
Progressed better in a private practice						
No	11	15.5	12	20.0	23	17.6
Yes	36	50.7	24	40.0	60	45.8
Cant say	23	32.4	24	40.0	47	35.9
Not given	1	1.4	–	–	1	0.8
Govt service has a good scope for career advamnt						
No	22	31.0	9	15.0	31	23.7
Yes, for some	34	47.9	36	60.0	70	53.4
Yes, for all	12	16.9	15	25.0	27	20.6
Not given	3	4.2	–	–	3	2.3
Govt service leads to loss of contact with contemporaries in the field outside						
No	42	59.2	34	56.7	76	58.0
Yes	29	40.8	22	36.7	51	38.9
Not given	–	–	4	6.7	4	3.1
Total	**71**	**100.0**	**60**	**100.0**	**131**	**100.0**

Table contd...

Table 8.9: Percent distribution of doctors by their opinion regarding the professional advantages of working in a government hospital.

Professional advantages of working in a government hospital	District Hospitals		Other Hospitals		All Hospitals	
	No.	Percent	No.	Percent	No.	Percent
Variety of patients can be seen	28	39.4	36	60.0	64	48.8
Good experience	15	21.1	14	23.3	29	22.1
Good public relationship	10	14.1	7	11.7	17	13.0
Job security	8	11.3	9	15.0	17	13.0
Exposed to all national progms	2	2.8	2	3.3	4	3.1
No interference from superiors	–	–	2	3.3	2	1.5
Prestige in public	1	1.4	3	5.0	4	3.1
Government service	2	2.8	2	3.3	4	3.1
Opportunity to work for poor	3	4.2	2	3.3	5	3.8
Team work	1	1.4	4	6.7	5	3.8
Good infrastructure	5	7.0	1	1.7	6	4.6
Training opportunities	3	4.2	–	–	3	2.3
Total	**71**	**100**	**60**	**100.0**	**131**	**100.0**

Note: Total will not add to 100 as answers are multiple

Table contnd.....

Table 8.9: Percent distribution of doctors by their opinion regarding the professional disadvantages of working in a government hospital.

Professional disadvantages of working in a government hospital	District Hospitals		Other Hospitals		All Hospitals	
	No.	Percent	No.	Percent	No.	Percent
No professional disadvantages	10	14.1	14	28.3	24	18.3
Lots of restrictions	7	9.9	8	13.3	15	11.4
Political interference	5	7.0	9	15.0	14	10.6
Salary inadequate	7	9.9	6	10.0	13	9.9
Frequent transfers	5	7.0	8	13.3	13	9.9
Lack of facilities	1	1.4	5	8.3	6	4.5
No recognition in the society	1	1.4	3	5.0	4	3.1
Difficult to satisfy all patients	3	4.2	3	5.0	6	4.5
Difficulties in updating recent devts	–	–	3	5.0	3	2.3
Lack of career advancement	1	1.4	3	5.0	4	3.1
No scope to utilise your potentials	2	2.8	4	6.6	6	4.5
Cannot do private practice	1	1.4	5	8.3	6	4.5
Takes longer time for promotion	1	1.4	2	3.3	3	2.3
Living away from family	1	1.4	2	3.3	3	2.3
Lack of funds	2	2.8	–	–	2	1.5
Secured job leads to laziness	1	1.4	–	–	1	0.8
Poor quality of work	2	2.8	–	–	2	1.5
Lack of advanced training	1	1.4	–	–	1	0.8
No evaluation of work	–	–	1	1.7	1	0.8
Risk of contagious diseases	–	–	1	1.7	1	0.8
Seniors do not respect	1	1.4	–	–	1	0.8
Heavy work	2	2.8	–	–	2	1.5
Cant say	1	1.4	–	–	1	0.8
NG	7	9.6	2	3.3	9	6.9
Total	**71**	**100**	**60**	**100.0**	**131**	**100.0**

Note: Total will not add to 100 as answers are multiple

Table 8.10 : Ideal dimensions of professional satisfaction by the type of hospital.

Dimensions of professional satisfaction	Rank 1		Rank 2		Rank 3	
	Number	Percent	Number	Percent	Number	Percent
			District Hospital			
Training opportunities to improve skills	31	44.3	13	18.6	12	17.1
Job satisfaction	12	17.1	20	28.6	16	22.9
Carrier devt (good opportunities to advance to a better job)	1	1.4	14	20.0	8	11.4
Challenging work that offers a sense of accomplishment	2	2.9	12	17.1	21	30.0
Service to poor people	24	34.3	11	15.7	13	18.6
Total	**70**	**100.0**	**70**	**100.0**	**70**	**100.0**
			Other Hospitals			
Training opportunities to improve skills	18	30.5	22	37.3	9	15.3
Job satisfaction	13	22.0	16	27.1	10	16.9
Career devt. (good opportunities to advance to a better job	2	3.4	9	15.3	13	22.0
Challenging work that offers a sense of accomplishment	5	8.5	8	13.6	15	25.4
Service to poor people	21	35.6	4	6.8	12	20.3
Total	**59**	**100.0**	**59**	**100.0**	**59**	**100.0**
			All Hospitals			
Training opportunities to improve skills	49	38.0	35	27.1	21	16.3
Job satisfaction	25	19.4	36	27.9	26	20.2
Carrier devt (good opportunities to advance to a better job)	3	2.3	23	17.8	21	16.3
Challenging Work that offers a sense of accomplishment	7	5.4	20	15.5	36	27.9
Service to poor people	45	34.9	15	11.6	25	19.4
Total	**129**	**100.0**	**129**	**100.0**	**129**	**100.0**

Personal Losses and Gains

Table 8.11: Percent distribution of doctors by their personal loses and gains by type of hospital.

Personal losses and gains	District Hospitals		Other Hospitals		All Hospitals	
	No.	Percent	No.	Percent	No.	Percent
Live in staff quarters						
No	38	53.5	24	40.0	62	47.3
Yes	33	46.5	36	60.0	69	52.7
Total	**71**	**100.0**	**60**	**100.0**	**131**	**100.0**
If living in staff quarters: condition of the quarters (n=69)						
Not satisfied	13	39.4	11	30.6	24	34.8
Satisfied to an extent	10	30.3	19	52.8	29	42.0
Satisfied	10	30.3	6	16.7	16	23.2
Total	**33**	**100.0**	**36**	**100.0**	**69**	**100.0**
If not staying in quarters, type of arrangement (n=62)						
Own	16	42.1	13	54.2	29	46.8
Rented	20	52.6	9	37.5	29	46.8
Other arrangement	2	5.3	2	8.3	4	6.5
If not staying in quarters, distance from the hospital (n=62)						
0 – 1.00 km	9	23.7	16	66.7	25	40.3
1.01 – 2.00 km	14	36.8	4	16.7	18	29.0
2.01 – 3.00 km	7	18.4	1	4.2	8	12.9
3.01 – 6.00 km	8	21.1	3	12.5	11	17.7
If not staying in quarters, mode of transport (n=62)						
Walking	1	2.6	5	20.8	6	9.6
Motorcycle	14	36.8	9	37.5	23	37.1
Auto rickshaw	1	2.6	1	4.2	2	3.2
Private car	21	55.3	7	29.2	28	45.2
Bus	1	2.6	2	8.3	3	4.8
Total	**38**	**100.0**	**24**	**100.0**	**62**	**100.0**

Table contd...

Table 8.11: Percent distribution of doctors by their personal loses and gains by type of hospital.

Personal losses and gains	District Hospitals		Other Hospitals		All Hospitals	
	No.	Percent	No.	Percent	No.	Percent
Easy access to health services for the family						
No	21	29.6	25	41.7	46	35.1
Yes	47	66.2	34	56.7	81	61.8
Cant say	3	4.2	1	1.7	4	3.1
Face family problems like education of children and spouse working						
No	4	5.6	1	1.7	5	3.8
To an extent	4	5.6	13	21.7	17	13.0
Yes	56	78.9	42	70.0	98	74.8
Cant say	7	9.9	4	6.7	11	8.4
Get sufficient time for the family and personal work						
No	40	56.3	18	30.0	58	44.3
Sometimes	13	18.3	22	36.7	35	26.7
Yes	17	23.9	19	31.7	36	27.5
Not given	1	1.4	1	1.7	2	1.5
Pay package						
Adequate	21	29.6	17	28.3	38	29.0
Not adequate	49	69.0	41	68.3	90	68.7
Not given	1	1.4	2	3.3	3	2.3
Total	**71**	**100.0**	**60**	**100.0**	**131**	**100.0**

Table 8.12: Ideal dimensions of personal gains by type of hospital.

Dimensions of personal gains and losses	Rank 1		Rank 2		Rank 3	
	Number	Percent	Number	Percent	Number	Percent
			District Hospital			
Being based in a desirable location (eg. with good schools)	14	20.3	11	15.9	13	18.8
Sufficient time for personal or family life	9	13.0	9	13.0	15	21.7
Good employment benefits (eg. Pension, housing)	13	18.8	24	34.8	13	18.8
Good income	8	11.6	15	21.7	10	14.5
Job security	25	36.2	10	14.5	18	26.1
Total	**69**	**100.0**	**69**	**100.0**	**69**	**100.0**
			Other Hospitals			
Being based in a desirable location (eg. with good schools)	10	17.2	11	19.0	14	24.3
Sufficient time for personal or family life	6	10.3	9	15.5	13	22.4
Good employment benefits (eg. Pension, housing)	7	12.1	23	39.7	11	19.0
Good income	4	6.9	9	15.5	8	13.8
Job security	31	53.4	5	8.6	10	17.2
Total	**58**	**100.0**	**58**	**100.0**	**58**	**100.0**
			All Hospitals			
Being based in a desirable location (eg. with good schools)	24	18.9	22	17.3	27	21.3
Sufficient time for personal or family life	15	11.8	18	14.2	28	22.0
Good employment benefits (eg. Pension, housing)	20	15.7	47	37.0	24	18.9
Good income	12	9.4	24	18.9	18	14.2
Job security	56	44.1	15	11.8	28	22.0
Total	**127**	**100.0**	**127**	**100.0**	**127**	**100.0**

Table 8.13: Dimensions of ideal job characteristics ranked by the doctors

Dimensions of ideal job characteristics	Rank 1		Rank 2		Rank 3	
	Number	Percent	Number	Percent	Number	Percent
			District Hospital			
Work Environment	13	18.8	26	37.6	24	34.7
Work Relationship	5	7.2	24	34.7	20	28.9
Professional Satisfaction	46	66.6	12	17.3	9	13.0
Personal Gains	5	7.2	7	10.1	16	23.1
Total	**69**	**100.0**	**69**	**100.0**	**69**	**100.0**
			Other Hospitals			
Work Environment	9	15.5	20	34.4	20	34.4
Work Relationship	9	15.5	25	43.1	19	32.7
Professional Satisfaction	38	65.5	10	17.2	11	18.9
Personal Gains	2	3.4	3	5.1	8	13.7
Total	**58**	**100.0**	**58**	**100.0**	**58**	**100.0**
			All Hospitals			
Work Environment	22	17.3	46	36.2	44	34.6
Work Relationship	14	11.0	49	38.5	39	30.7
Professional Satisfaction	84	66.1	22	17.3	20	15.5
Personal Gains	7	5.5	10	7.8	24	18.8
Total	**127**	**100.0**	**127**	**100.0**	**127**	**100.0**

Satisfaction with the facilities available with the hospital

Table 8.14 : Assessment of doctors regarding the services which are satisfactory in the hospital by type of hospital.

Satisfactory services in the hospital	District Hospitals		Other Hospitals		All Hospitals	
	No.	Percent	No.	Percent	No.	Percent
Personnel	26	36.6	26	43.3	52	39.7
Equipment	25	35.2	21	35.0	46	35.1
Medicines	37	52.1	24	40.0	61	46.6
Diagnostic facilities	42	59.2	34	56.7	76	58.0
Support services	36	50.7	30	50.0	66	50.4
Space	47	66.2	31	51.7	78	59.5
Total	**71**	**100**	**60**	**100**	**131**	**100**

Note: Total not adds to 100 as answers are multiple

Table 8.14 : Assessment of doctors regarding the services which need strengthening in the hospital by type of hospital.

Services which need streagthening in the hospital	District Hospitals		Other Hospitals		All Hospitals	
	No.	Percent	No.	Percent	No.	Percent
Personnel	45	63.4	34	56.7	79	60.3
Equipment	46	64.8	39	65.0	85	64.9
Medicines	34	47.9	36	60.0	70	53.4
Diagnostic facilities	29	40.8	26	43.3	55	42.0
Support services	35	49.3	30	50.0	65	49.6
Space	24	33.8	29	48.3	53	40.5
Total	**71**	**100**	**60**	**100**	**131**	**100**

Note: Total not adds to 100 as answers are multiple

Table 8.15: Recommendations to improve the government hospitals reported by the doctors by type of hospital.

Recommendations	District Hospital		Other Hospitals		All Hospitals	
	No.	Percent	No.	Percent	No.	Percent
Improvement in administration	57	80.3	54	90.0	111	84.7
Improvement in work environment	16	22.5	12	20.0	28	21.4
Improvement in work relation	5	7.0	5	8.3	10	7.6
Reduction in political interference	9	12.3	3	5.0	12	9.2
Increase in personal gains (salary)	12	16.9	12	20.0	24	18.3
Improvement in professional satisfaction	7	9.9	8	13.3	15	11.5
Other	–	–	1	1.7	1	0.8
Total	**71**	**100**	**60**	**100**	**131**	**100**

Note: Total not adds to 100 as answers are multiple

Table 8.16: Weakness of the government health system/hospitals reported by the doctors by type of hospital.

Weaknesses of the government hospitals	District Hospital		Other Hospitals		All Hospitals	
	No.	Percent	No.	Percent	No.	Percent
Improper administration	57	80.3	34	56.7	91	69.5
Lack of medicines and equipments	43	60.6	41	68.3	84	64.1
Lack of personal gains	12	16.9	12	20.0	24	18.3
Political interference	16	22.5	7	11.7	23	17.6
No professional satisfaction	10	14.1	9	15.0	19	14.5
Lack of employment benefits	9	12.7	3	5.0	12	9.2
Lack of work relationship	5	7.0	7	11.7	12	9.2
Bad work environment	9	12.7	1	1.7	10	7.6
Lack of training	4	5.6	4	6.7	8	6.1
Corruption	2	2.8	3	5.0	5	3.8
Other	3	4.2	1	1.7	4	3.1
Total	**71**	**100**	**60**	**100**	**131**	**100**

Note: Total not adds to 100 as answers are multiple

CHAPTER 9

Provider Satisfaction: Nurses, Technicians, Pharmacists and Class-IV Employees

Provider Satisfaction: Nurses

Besides the doctors, nurses are one of the important components of the health care delivery system. They take care of the patients round the clock, particularly in IPDs. Since the nurses interact with the patients more often than the doctors, their care and courtesy are even more crucial in patient care. In the following section we provide the job satisfaction levels of nurses.

Background Characteristics

For the interview, we have purposively selected the senior nurses in the hospitals i.e., all in-charge nurses and senior ones among the staff nurses. We thought that being in the government service for a long-time, senior nurses may be able tell their views more clearly than their junior counterparts who have put less years of service. Since we have interviewed the senior nurses, their age distribution clearly reflects this (Table 9.1). In total, nearly three-fourth of the nurses is of age above 40. The nurses aged above 40 interviewed in DHs and OHs are 88 percent and 63 percent respectively.

Nearly one-fourth of the nurses belongs to the scheduled caste category and another four percent scheduled tribes. Together, 28 percent of the nurses in the senior category belong to the scheduled categories. Though our selection of nurses is purposive in the senior categories the representation from scheduled categories is more than their share in the state's population.

As expected, the senior nurses from DHs have already put more years of service than the nurses from OHs. For example, 69 percent of the nurses in DHs are with the service range of 26-35 years compared to 20 percent of nurses from OHs. Years of service in the current place reveals that 60 percent of the nurses in DHs are working for more than 10 years in the same place compared to 30 percent in OHs. It appears that the nurses are not frequently transferred in DHs. Hence the family problems of the nurses in DHs must be lower than the nurses in OHs.

Dimensions of satisfaction of Nurses

Work Environment

Work environment of the nurses reveals severe shortages of personnel and other physical inputs available to them in the hospitals (Table 9.2). For example, only 44 percent of the nurses said that they have adequate staff nurses. Shortage of staff nurses appear to be more acute in DHs

compared to the OHs as only 35 percent of the nurses from DHs said that they have adequate staff nurses compared to half of the nurses from OHs. Similarly adequacy of supporting staff for nurses (*ayas* and ward boys) is also in severe shortage, particularly in DHs according to the nurses. The problems of medicines are faced by the nurses more directly than the doctors since nurses have to distribute the medicines to the patients. Only 29 percent of the nurses said that the hospital has no shortage of medicines. Adequacy of equipments is somewhat better than the adequacy of medicines in the hospitals as half of the nurses said that they have adequate supply of equipments. Only 31 percent of the nurses said that the promotions/transfers are done on merit. Considerably large number of nurses from DHs agreed that the promotions/transfers are done on merit in DHs (43 percent) compared to the nurses from OHs (22 percent). This is possible as most of the nurses working in DHs are gone there on promotions from OHs.

Dimensions of work environment	DH	OH	Total
Adequacy of staff nurses	35.3	50.0	43.5
Adequacy of *ayas*	17.6	23.4	20.9
Adequacy of ward boys	21.6	43.8	33.9
Adequacy of supply of medicines	31.4	26.6	28.7
Adequacy of supply of equipments	54.9	50.0	52.2
Promotions/transfers are done only on merit	43.1	21.9	31.3
Number of Nurses	**51**	**64**	**115**

Ideal dimensions in work environment

Nurses have also ranked the ideal dimensions in work environment similar to the doctors (Table 9.3). 'Good physical working condition' is ranked as the top most (62 percent) important ideal dimension of work environment by the nurses followed by 'knowing what you are expected to do and achieve at work' and 'freedom from political interference'. It is clear that the expectation of the nurses i.e., 'good physical working condition' is not met by the hospitals as most of them have reported the severe shortages of personnel (nurses, *ayas* and ward boys), medicines and equipments. In addition to the shortage of the physical inputs they have to face the political interference while discharging their duties. Hence provision of physical inputs and reduction in political interference will help them to achieve their ideal expectation at their work.

Work Relationship

For the nurses work relationship with the seniors, colleagues, juniors and patients is important in hospitals to co-ordinate the patient care activities. Appreciation from the seniors for the good work done by the nurses is also an important part of the work relationship as it increases the morale of the nurses to perform better. Ninety three percent of the nurses said that the staff nurses work according to the norm (Table 9.4). Four-fifth of the nurses are also satisfied with the assistance offered by the staff nurses. Satisfaction with the assistance of staff nurses is more or

less similar in DHs and OHs. It appears that the work relationship among the nurses is by and large good. The better work culture between them is helpful for the nursing care which ultimately benefits the patients. Regarding the work of *ayas* and ward boys, 74-83 percent of the nurses said that *ayas* and ward boys work according to the norm. Among the nurses who said that the *ayas* and ward boys work according to the norm, 59-64 percent of them are satisfied with the assistance offered by them. Dissatisfaction with the assistance offered by the *ayas* and ward boys shows that the dissatisfaction is relatively higher for *ayas* (16 percent) than for ward boys (9 percent). Though the amount of dissatisfaction with the assistance offered by the *ayas* and ward boys appears to be small it should be looked into by the hospital management.

Dimensions of Work Relationship	DH	OH	Total
Staff Nurses work according to the norm	94.1	91.8	92.9
Fully satisfied with the assistance of Staff Nurses	80.0	75.5	77.8
Ayas work according to the norm	60.0	84.3	73.6
Ward boys work according to the norm	68.2	93.4	82.9
Have frequent discussion with senior colleagues	66.7	59.4	62.6
Seniors' attitude encouraging	76.5	81.3	79.1
Patients have trust in nurses	94.1	96.9	95.7
Often experienced fighting reaction from pts.	9.8	4.7	7.0
Patients' fighting reaction is increasing	64.7	56.3	60.0
Superiors always appreciate the good work	43.1	32.8	37.4
Number of Nurses	**51**	**64**	**115**

Almost all the nurses discuss with their colleagues regarding the issues of the hospitals and 63 percent of them discuss the issues very often. Nearly 80 percent of the nurses reported that the attitude of their colleagues is encouraging when they discuss the issues of the hospital. Similarly, almost all the nurses talk to their senior colleagues (Matron, RMO and Civil Surgeon) about the improvement needed in their hospital and 90 percent of the nurses reported that the seniors always respond positively. The work relationship of the nurses by and large indicates the better work culture between seniors and juniors. But the appreciation of the seniors for the good work done by the nurses is not universal as only 37 percent of the nurses said that their seniors always appreciate them when they do a good work.

Regarding the nurse-patient relationship, 96 percent of the nurses feel that the patients have respect and trust for nurses. However, seven percent of the nurses (and 16 percent of the doctors) said that they had experienced strong reaction from patients very often. The responses to the question on experience of strong reaction (often, occasionally and rarely) from patients reveal that three-fourth of the nurses (also the same percentage of doctors) have experienced strong reaction from patients at varying degrees at some point of time in their career. Sixty percent of the nurses reported that the fighting attitude of the patients is increasing these days. This is much

higher than the percentage reported by the doctors (24 percent). From the responses of the doctors and nurses it is clear that the 'strong reaction' of the patients is increasing these days. On the one side, though this attitude of the patients may indicate the demand for better health services, the other side it indicates the deteriorating provider patient relationship. Hence, the efforts should be taken to improve the client-provider relationship.

Client-provider relationship (%)	Doctors			Nurses		
	DH	OH	Total	DH	OH	Total
Patients have respect and trust in you	91.5	83.3	87.8	94.1	96.9	95.7
Often experienced strong reaction from patients	16.9	15.0	16.0	9.8	4.7	7.0
Ever experienced strong reaction from patients	76.0	76.7	76.3	80.4	73.5	76.6
Patients' strong reaction is frequent these days	19.7	26.3	23.7	64.7	56.3	60.0
Number of doctors/nurses	**71**	**60**	**131**	**51**	**64**	**115**

Ideal dimensions in work relationship

For an ideal work environment nurses have ranked 'good working relationship with colleagues' as most important followed by 'appreciation by seniors' and 'respect from clients' (Table 9.5). If we look at the existence of these ideal dimensions in their actual work, we can say that the work relationship with the colleagues (seniors, juniors and other assistants) is by and large present but the appreciation from the seniors is not up to the expectation of the nurses.

Professional satisfaction

Similar to the doctors, 81 percent of the nurses were deputed for the on job training programme sometime during their career (Table 9.6). Except 10 percent of the nurses, the remaining (89 percent) are satisfied with the present time table that they are working. But their assessment regarding the workload assigned to them gives a mixed picture. More than half of the nurses (55 percent) feel that they are overburdened with the workload. The proportion nurses who said that they are overburdened is much higher in DHs (67 percent) compared to the nurses in OHs (45 percent). Further, we have asked their opinion regarding the nature of work. Forty percent of the nurses feel that their nature of work is properly designed and the remaining 60 percent said that the nature of work needs improvement. Those who said that the nature of work needs improvement are much higher in DHs (75 percent) than in OHs (47 percent). The responses to the questions on 'workload' and 'nature of work' reveal that the nurses are generally overburdened with the work particularly in DHs. We have further asked the nurses whether they have any suggestion regarding their workload. As expected more nurses from DHs (80 percent) than from OHs (58 percent) said that they have suggestion regarding the workload. Various suggestions were given by the nurses (table not shown as the list is long). The most important

among them are appointment of adequate number of staff nurses (49 percent) and class IV employees (12 percent). Since they feel that they are overburdened with the work it is natural for them to ask for the appointment of staff nurses and class IV employees adequately.

Dimensions of Professional Satisfaction	DH	OH	Total
Deputed for training programmes	84.3	78.1	80.9
Satisfied with current time schedule	92.2	85.9	88.7
Workload overburdened	66.7	45.3	54.8
Nature of work needs improvement	74.5	46.9	59.1
Doctors get credit for curing patients than nurses	62.7	42.2	51.3
Totally fulfilled the desires of joining nursing cadre	78.4	62.5	69.6
Number of Nurses	**51**	**64**	**115**

Nurses take care of the patients round the clock, particularly in IPDs. It means that the interaction and care by the nurses with the patients is more than the doctors'. To know from the nurses that their contribution to the patient care is recognized by the patients or not we have a given a statement to the nurses that doctors get credit for curing the patients than nurses. The response shows that half of the nurses agreed to the statement that the credit goes for the doctor than the nurses and the remaining half did not agree to this statement. The percentage agreed to the statement is more in DHs (63 percent) than in OHs (42 percent). Since the doctors in DHs are generally seniors and specialists it is natural that patients attach more credit to the doctors than to the nurses. For the question on fulfilment of desires of joining in nursing cadre 70 percent of the nurses said that their desire of joining in the nursing cadre has been totally fulfilled, 27 percent said that it is partially fulfilled and only 3 percent said that it is not fulfilled.

Ideal dimensions of professional satisfaction

Nurses have also ranked the ideal dimensions of professional satisfaction similar to doctors (Table 9.7). They have ranked the 'training opportunities to improve skills', 'service to poor people' and 'job satisfaction' in the descending order. The presence of ideal dimensions of professional satisfaction in their actual job reveals that the on job training opportunities were made available to 81 percent of the nurses. Though job satisfaction is ranked as third ideal dimension, 70 percent of the nurses currently feel that they have totally fulfilled the desires of joining the nursing cadre. It indirectly indicates somewhat better job satisfaction among the nurses.

Personal gains and losses

Among the nurses 40 percent are living in staff quarters and the remaining live outside (Table 9.8). As expected, the percentage of nurses living in staff quarters is much higher in OHs (58 percent) compared to DHs (18 percent). It appears that for the nurses working in DHs housing

is not a major problem as 59 percent of them staying in their own residences, 18 percent in quarters and 22 percent in rented accommodations. Among the nurses who are living in staff quarters 15 percent are not satisfied with the condition of the staff quarters. This is considerably lower than the doctors' dissatisfaction with the condition of the quarters (35 percent). Among those who reside outside the quarters nearly 80 percent of them reside within the distance of three kilometres from the hospital. As expected, those who reside very close to hospital are very high in OHs compared to the DHs: 56 percent of nurses from OHs stay within a kilometre distance of hospital compared to 33 percent from DHs. Due to the closeness to the hospital 59 percent of the nurses from OHs walk down to the hospital compared to 36 percent from DHs. The nurses using public transport vehicle (ST bus) to reach the hospital are only 9 percent.

More nurses (80 percent) than the doctors (62 percent) said that working in the government hospital leads to an easy access to health services for the family members. But 79 percent of the nurses said that they face family problems (education of children and husbands job) on account of their work in the government hospital. The percentage of doctors who said so was 75 percent. It appears that the majority of the doctors and nurses (75-79 percent) face the family problems.

Dimensions of Personal Gains	DH	OH	Total
Staying in staff quarters	17.6	57.8	40.0
Not satisfied with the condition of staff quarters	33.3*	10.8	15.2
Residence within a km (if not staying in quarters)	33.3	55.6	42.0
Easy access to health services for family	80.4	79.7	80.0
Face family problems due to transfer	78.4	79.7	79.1
Get sufficient time for family/personal work	47.1	42.2	44.3
Don't getting sufficient time for family/personal work	21.6	21.9	21.7
Pay package adequate	54.9	89.1	73.9
Number of Nurses	**51**	**64**	**115**

* based on 3 cases as only 9 nurses from DHs are living in quarters

One-fifth of the nurses (22 percent) said that they don't get sufficient time for their personal and family work. More doctors (44 percent) than nurses said that they don't get sufficient time for family and personal work. In all, three-fourth of the nurses said that their pay package is adequate and the remaining one fourth feels that the pay is not adequate. But there is a vast variation between the nurses in OHs and DHs regarding the opinion on their pay package: 89 percent of the nurses from OHs feel that their salary is adequate whereas only 54 percent of the nurses from DHs feel so. When we compare the satisfaction of doctors and nurses with their salary we find that the doctors are more dissatisfied with their salary than the nurses: only 29 percent of the doctors whereas 74 percent of the nurses felt that their salary is adequate. Doctors normally compare their salary with the higher earnings of the doctors who practice privately and

feel that the salary given by the government is lower. But nurses cannot compare their salary with the salary of the nurses working in private hospitals as the salary paid to the government nurses is much higher than the salary paid in the private hospitals.

Ideal dimensions in personal gains and losses:

Four ideal dimensions were given to the nurses to rank top three. 'Good employment benefits (pension and housing)', 'sufficient time for family and personal work' and 'being based in a desirable location' are considered as ideal for the personal gains by the nurses in the descending order (Table 9.9). 'Good employment benefits' is ranked as 1, 2, or 3 by 105 out of 114 nurses. Since most of the nurses are happy with their pay package, they expect the additional benefits associated with the government job like housing and pension as important ideal dimension.

Personal gains and losses	Doctors			Nurses		
	DH	OH	Total	DH	OH	Total
Staying in staff quarters	53.5	40.0	47.3	17.6	57.8	40.0
Not satisfied with the condition of staff quartrs	39.4	30.6	34.8	33.3	10.8	15.2
Residence within a km (if not staying in quatrs)	23.7	66.7	40.3	33.3	55.6	42.0
Easy access to health services for family	66.2	56.7	61.8	80.4	79.7	80.0
Face family problems due to transfer	78.9	70.0	74.8	78.4	79.7	79.1
Don't get sufficient time for personal work	56.3	30.0	44.3	21.6	21.9	21.7
Pay package adequate	29.6	28.3	29.0	54.9	89.1	73.9
Number of doctors/nurses	**71**	**60**	**131**	**51**	**64**	**115**

Nurses were also asked to rank the four major dimensions. Nurses have also ranked the dimensions almost similar to the doctors' (Table 9.10). 'Professional satisfaction', 'work relationship' and 'work environment' are ranked in the descending order of importance. Personal gains is ranked as 1,2, or 3 by only very few nurses (one to two percent).

Satisfaction scores for Nurses

The satisfaction scores for the nurses were computed as we have done for the doctors. The scoring procedure is given in Appendix 9.1. Satisfaction scores in general, are lower for the nurses and the satisfaction levels are more or less similar in both OHs and DHs. In personal gains and losses, nurses in OHs are relatively better satisfied than their counterparts in DHs. In both the OHs and DHs, satisfaction score for work relationship is higher than for the other dimensions. Nurses are more dissatisfied with their work environment compared to the other dimensions as the scores are less than 40.

Satisfaction scores of nurses by different dimensions

Maximum score = 100

Dimensions of satisfaction	Satisfaction Scores			
	District Hospitals		Other Hospitals	
	Number	Score	Number	Score
Work environment	51	38.9	64	37.4
Work relationship	51	64.0	64	65.4
Professional satisfaction	51	55.5	64	54.6
Personal gains and losses	51	39.1	64	47.3

Satisfaction scores of nurses by hospital

The satisfaction scores (weighted) of the nurses range from a lower score of 45.7 in DH, Buldhana to a maximum score of 64.2 in DH, Beed. The remaining four hospitals fall in between this range. Except DH, Buldhana, in all the remaining five hospitals the satisfaction scores of the nurses is above 52. The hospitals which, have better overall scores, are better either in job satisfaction or in work environment. Again these scores should be interpreted cautiously as they are based on a small number of nurses from each hospital. Nurses are relatively better satisfied with the work relationship and professional satisfaction compared to the work environment and personal gains and losses. The variations in the satisfaction between the hospitals are also more for work.

Satisfaction scores of the district hospital nurses by different dimensions

Maximum score = 100

Dimensions of satisfaction	Satisfaction Scores					
	Ratnagiri	Jalgaon	Jalna	Beed	Buldhana	Bhandara
Work environment	45.6	57.2	33.3	45.3	35.6	15.3
Work relationship	58.8	71.8	78.6	84.4	49.3	55.2
Professional satisfaction	57.5	50.0	58.9	62.5	48.5	60.4
Personal gains and losses	34.3	44.1	46.5	39.3	41.1	28.6
Weighted scores	**54.9**	**57.3**	**58.3**	**64.2**	**45.7**	**52.1**

environment and work relationship. Interestingly, on the broad level, it is observed that the hospitals, which are good for doctors' satisfaction, are not good for nurses' satisfaction. Further, this discrepancy is mainly due to the gap between the doctors' and nurses' professional satisfaction scores. We might not be able to give specific reasons but it would be worth exploring.

Provider satisfaction: Technicians

Out of 78 technicians interviewed for the study, 57 are from OHs and the remaining 21 are from DHs (Tbale 9.11). Three fourth of the technicians interviewed is aged between 31-50 years and 94 percent of them are males. Eighty-three percent of the technicians are Hindus. Those who are from the scheduled caste and tribe category are 15 percent. Three-fifth of them have put more than 10 years of service as technicians. The designation of the technicians shows that one-

third are x-ray technicians, another one-third are lab technicians, two-fifths are ophthalmic technicians and the remaining (14 percent) are pathology, EGG, and BB technicians.

For the better diagnosis of the diseases by the doctors the hospitals should have adequate number of technicians. Any shortage in the technicians will hamper the process of diagnosis and ultimately patients are put in a disadvantaged position. In all, 37 percent of the technicians said that the hospital do not have adequate number of technicians. The shortage of technicians is acute in DHs as 14 out of 21 technicians said that their hospital does not have adequate number of technicians.

Dimensions of satisfaction of technicians	DH	OH	Total
Hospital has adequate number of technicians	33.3	73.7	62.8
Have adequate supply of materials	57.1	38.6	43.6
Have adequate equipments	66.7	63.2	64.1
Have adequate space	57.1	50.9	52.6
Face difficulties in doing the work	61.9	57.1	59.0
Talked to seniors about difficulties in the work	100.0	81.8	87.0
Superiors always appreciate good work	57.1	59.6	59.0
Satisfied with the work	90.5	93.0	92.3
Face pressure at work	38.1	33.3	34.6
Workload overburdened	66.7	24.6	35.9
Number of technicians	21	57	78

Forty four percent of the technicians do not face any shortage of supply of materials required for their work. But more technicians face the shortage of supply in materials in OHs than in DHs. It appears that DHs face more shortage of technicians whereas OHs face less adequate supply of materials. Nearly two-third of the technicians in OHs and DHs said that they don't face any shortage of equipments. One-fourth of the technicians feel that space given to their work is not adequate. Shortage of space for the technicians is slightly more in OHs (28 percent) than in DHs (19 percent). Three-fifth of the technicians said that they face difficulties in doing their work. When we asked the technicians to specify the nature of difficulties faced by them they have mainly listed the shortage of staff, materials, equipment, and medicines and heavy workload. Among those with difficulties in their work, 87 percent have talked to the superiors about the same. When they talk to the seniors 60 percent of them feel that the seniors' response was positive.

Appreciation by the superiors for the good work done by the technicians is not universal as only 59 percent said that their superiors always appreciate the good work. The technicians who said that their superiors never appreciate the good work are 15 percent. Almost every technician (72 out of 78) is satisfied with his/her work. One third of the technicians feel that they face

pressure at work. Technicians who feel that they are overburdened with the workload are much higher in DHs (67 percent) compared to OHs (25 percent).

Interview of technicians mainly reveals that there are shortages of staff, supply of equipment and materials, space and heavy workload. Due to the shortages of the technicians they feel that they are overburdened, particularly in DHs.

Provider satisfaction: Class IV Employees

We have interviewed 57 class-IV employees of the hospitals (38 from OHs and 19 from DHs) to understand about their perception. These employees are lowest in the hierarchy of the hospital administration. Most of these class-IV employees work as ward boys (60 percent), sweepers (21 percent) and attendants in various departments of the hospital (office, lab, x-ray etc). Most of these employees are males (75 percent), married (91 percent), educated above 8 years of schooling (70 percent), aged above 31 years (84 percent), and with more than 10 years of service (56 percent). Forty-two percent of these employees belong to scheduled cast and scheduled tribe category.

Opinion of Class IV Employees	Percent
No problem in their work	54.4
Work is routine	84.2
Salary on time	91.2
Satisfied with the remuneration	71.9
Opportunity of upward mobility	59.6
Talked to seniors about the problems	86.0
Seniors attitude encouraging	79.6
Patients always recognize them	45.6
Colleagues always recognize them	45.6
No recognition from patients	5.3
No recognition from colleagues	7.0
Number of Class-IV Employees	**57**

When we asked them about the problems faced in their work, 54 percent of the class IV employees said that they don't face any problem, and the remaining stated the problems of shortage of supply of materials, heavy workload and work not related to their job. Majority of these employees (84 percent) feel that they do the routine work and only 6 of them said that their work is challenging. Nine out of 10 said that they receive their salary on time and three-fourth is satisfied with the pay remuneration. Even 60 percent of the employees see an opportunity for upward mobility in their career. Since most of these employees are with the schooling level of more than 8 years, it is natural for them to expect an upward mobility in their job. Majority of these employees talk to their superiors about the problems they face in their duties and they also feel that the attitude of the seniors is encouraging. About half of these employees feel that the

patients and colleagues always recognize their work. Only a very small percent of the employees feel that their work is not recognized by the patients and colleagues. The opinions of the class IV employees reveal that the job satisfaction among them is somewhat better as most of them are happy with the salary and its timeliness; they see the opportunity for upward mobility; more than half of them don't see any problems in their work; and most of them are happy with the attitude of seniors. Even though they are doing the menial job in the hospitals their contribution is more crucial for the patient care. Hence their contribution should be recognized and appreciated properly by the colleagues.

Assessment of pharmacists regarding supply of medicines

Interviews of the doctors, nurses and patients have revealed that there is a shortage of supply of medicines in the hospitals. Pharmacist of the hospitals who distribute the medicines to the different wards on a daily basis can assess the situation better. We have interviewed one pharmacist from each of hospital selected for the study mainly to know the availability of medicines. In all we have interviewed 26 pharmacists (table not shown) as two pharmacists were on leave during our fieldwork. Out of 26 pharmacists interviewed only 10 of them (38.5 percent) said that they get adequate supply of medicines and the remaining 16 (61.5 percent) said that the medicine supply is not adequate. It means that nearly 6 out of 10 hospitals face the shortage of medicines according to the assessment of pharmacists. The interviews of patients as well as well as different types of providers confirm the shortage of supply of medicines in the hospitals. The assessment of providers about the adequacy of medicines falls in the range of 25 to 40 percent whereas 61 percent of the patients are totally satisfied with the availability of medicines. It should be noted that rationale prescriptive behaviour is being assessed under MHSDP through an external agency this will come up with the analysis of genuinity in prescription and then its non-availability. Out of 26 pharmacists 21 said that whenever they face a shortage of medicines they report to the superiors. Job satisfaction among pharmacist is fairly good as 22 out of 26 (85 percent) said that they are satisfied with their work.

Shortage of medicines as reported by clients and providers	Percent
Patients	
DHs-IPD patients: totally satisfied with the availability of medicines	61.2
OHs-IPD patients: totally satisfied with the availability of medicines	60.5
Doctors	
OHs- Doctors: Medicines supply totally fulfilled in the hospital	25.0
DHs.-Doctors: Medicines supply totally fulfilled in the hospital	39.4
Nurses	
OHs-Nurses: Medicines supply totally fulfilled	26.6
DHs. Nurses: Medicines supply totally fulfilled	31.4
Pharmacist	
All hospitals: No shortage of supply of medicines	38.5

Provider Characteristics

Table 9.1 : Percent distribution of Nurses by background characteristics according to type of hospital.

Background characteristics	District Hospitals		Other Hospitals		All Hospitals	
	No.	Percent	No.	Percent	No.	Percent
Age						
Below 30 Years	1	2.0	18	28.1	19	16.5
31-40 Years	5	9.8	6	9.4	11	9.6
41-50 Years	20	39.2	25	39.1	45	39.1
51-60 Years	25	49.0	15	23.4	40	34.8
Marital status						
Married	41	80.4	54	84.4	95	82.6
Unmarried	8	15.7	8	12.5	16	13.9
Widowed	2	3.1	2	3.9	4	3.5
Caste						
Scheduled caste	12	23.5	15	23.4	27	23.5
Scheduled tribe	2	3.9	3	4.7	5	4.3
Others	37	72.5	46	71.8	83	72.2
Religion						
Hindu	39	76.5	50	78.1	89	77.4
Muslim	1	2.0	3	4.7	4	3.5
Christian	8	15.7	4	6.3	12	10.4
Buddhist/Neo Buddhist	3	5.9	7	10.9	10	8.7
Years of Service (Total Years)						
Below 15 Years	3	5.9	22	34.4	25	21.7
16-25 Years	13	25.5	29	45.3	42	36.5
26-35 Years	35	68.6	13	20.3	48	41.7
Years of Service (in the Present Place)						
Below 5 Years	12	23.5	35	54.7	47	40.9
6-10 Years	8	15.7	10	15.6	18	15.7
11-20 Years	11	21.6	13	20.3	24	20.9
21-35 years	20	39.2	6	9.4	26	22.6
Designation of Nurses						
In-charge Nurses	42	82.3	24	37.5	66	57.4
Staff Nurses	9	17.7	40	62.5	49	42.6
Total	**51**	**100**	**64**	**100**	**115**	**100**

Dimensions of Work Environment

Table 9.2 : Assessment of Nurses about the facilities available in their hospital according to type of hospital.

Dimensions of Work Environment	District Hospitals		Other Hospitals		All Hospitals	
	No.	Percent	No.	Percent	No.	Percent
Hospital has adequate staff Nurses						
Yes	18	35.3	32	50.0	50	43.5
No	33	64.7	32	50.0	65	56.5
Hospital has adequate Ayahs						
Yes	9	17.6	15	23.4	24	20.9
No	31	60.8	36	56.3	67	58.3
No Ayhas at all	2	3.9	8	12.5	10	8.7
Not applicable	9	17.6	5	7.8	14	12.2
Hospital has adequate Ward boys						
Yes	11	21.6	28	43.8	39	33.9
No	33	64.7	32	50.0	65	56.5
Not Given	–	–	1	1.6	1	0.9
Not applicable	7	13.7	3	4.7	10	8.7
Hospital has adequate supply of medicines						
Shortage in all	1	2.0	5	7.8	6	5.2
Shortage in some	32	62.7	42	65.6	74	64.3
No shortage	16	31.4	17	26.6	33	28.7
Not given	2	3.9	–	–	2	1.7
Hospital has adequate supply of equipments						
Shortage in all	2	3.9	4	6.3	6	5.2
Shortage in some	20	39.2	28	43.8	48	41.7
No shortage	28	54.9	32	50.0	60	52.2
Not given	1	2.0	–	–	1	0.9
Promotion/transfers are done on merit						
Not at all on Merit	8	15.7	16	25.0	24	20.9
Not only Merit	19	37.3	28	43.8	47	40.9
Only on Merit	22	43.1	14	21.9	36	31.3
Can't say	1	2.0	2	3.1	3	2.6
Not Given	1	2.0	4	6.3	5	4.3
Total	51	100	64	100	115	100

Table 9.3 : Ideal dimensions of work environment ranked by the Nurses by type of hospital.

Ideal dimensions of work environment	Rank 1		Rank 2		Rank 3	
	Number	Percent	Number	Percent	Number	Percent
			District Hospital			
Good physical working condition	29	56.9	9	17.6	11	21.6
Knowing what you are expected to do and achieve at work	13	25.5	23	45.1	12	23.5
Freedom from political interference in decision making	8	15.7	18	35.3	22	43.1
Not needing to pay bribes to get what you want	--	--	--	--	5	9.8
Not Given	1	2.0	1	2.0	1	2.0
Total	**51**	**100**	**51**	**100**	**51**	**100**
			Other Hospital			
Good physical working condition	42	65.6	8	12.5	13	20.3
Knowing what you are expected to do and achieve at work	14	21.9	18	28.1	24	37.5
Freedom from political interference in decision making	7	10.9	27	42.2	18	28.1
Not needing to pay bribes to get what you want	1	1.6	11	17.2	9	14.1
Total	**64**	**100**	**64**	**100**	**64**	**100**
			All Hospitals			
Good physical working condition	71	61.7	17	14.8	24	20.9
Knowing what you are expected to do and achieve at work	27	23.5	41	35.7	36	31.3
Freedom from political interference in decision making	15	13.0	45	39.1	40	34.8
Not needing to pay bribes to get what you want	1	0.9	11	9.6	14	12.2
Not Given	1	0.9	1	0.9	1	0.9
Total	**115**	**100**	**115**	**100**	**115**	**100**

Dimensions of Work Relationship

Table 9.4 : Dimensions of work relationship of the Nurses by type of hospital

Dimensions of Work Relationship	District Hospitals		Other Hospitals		All Hospitals	
	No.	Percent	No.	Percent	No.	Percent
Staff Nurses work according to the norms (n =112)						
Yes	48	94.1	56	91.8	104	92.9
Yes partially	3	5.9	4	6.6	7	6.3
No	–	–	1	1.6	1	0.9
Satisfied with the assistance of staff nurses (n = 99)						
Yes, fully satisfied	40	80.0	37	75.5	77	77.8
Yes, partially satisfied	10	20.0	10	20.4	20	20.2
Not satisfied	–	–	2	4.1	2	2.0
Ayahs work according to the norms (n =91)						
No	16	40.0	5	9.8	21	23.1
Yes	24	60.0	43	84.3	67	73.6
Not given	–	–	3	5.9	3	3.3
Not applicable						
Satisfied with assistance offered by Ayahs (n=91)						
Yes, fully satisfied	19	47.5	33	68.8	52	59.1
Yes, partially satisfied	12	30.0	10	20.8	22	25.0
Not satisfied	9	22.5	5	10.4	14	15.9
Not satisfied, reason (n=14)						
Staff not interested in Work	2	22.2	3	60.0	5	35.7
Over burdened	3	33.3	1	20.0	4	28.6
Can't say		0.0	1	20.0	1	7.1
Not given	4	44.4	–	–	4	28.6
Total	**51**	**100**	**64**	**100**	**115**	**100**

Table contnd.....

Table 9.4 : Dimensions of work relationship of the Nurses by type of hospital

Dimensions of Work Relationship	District Hospitals		Other Hospitals		All Hospitals	
	No.	Percent	No.	Percent	No.	Percent
Ward boys work according to norms (n = 105)						
Yes	30	68.2	57	93.4	87	82.9
No	13	29.5	4	6.6	17	16.2
Not Given	1	2.3	–	–	1	1.0
Satisfied with assistance of ward boys (n = 105)						
Yes, fully satisfied	25	56.8	42	68.9	67	63.8
Yes, partially satisfied	13	29.5	13	21.3	26	24.8
Not satisfied	5	11.4	4	6.6	9	8.6
Not given	1	2.3	2	3.3	3	2.9
Not applicable						
If not, reason (n=9)						
Staff not interested in work	2	40.0	4	100.0	6	66.7
Over burdened	1	20.0	–	–	1	11.1
Not competent	1	20.0	–	–	1	11.1
Not given	1	20.0	–	–	1	11.1
Have frequent discussion with colleagues						
Yes, frequently	34	66.7	38	59.4	72	62.6
Yes, sometimes	12	23.5	22	34.4	34	29.6
Not frequently	5	9.8	1	1.6	6	5.2
No	–	–	3	4.7	3	2.6
Is their attitude encouraging						
Yes	39	76.5	52	81.3	91	79.1
To an extent	6	11.8	8	12.5	14	12.2
No	6	11.8	1	1.6	7	6.1
Not applicable	–	–	3	4.7	3	2.6
Total	**51**	**100**	**64**	**100**	**115**	**100**

Table contnd.....

Table 9.4: Dimensions of work relationship of the Nurses by type of hospital.

Dimensions of Work Relationship	District Hospitals		Other Hospitals		All Hospitals	
	No.	Percent	No.	Percent	No.	Percent
Talked to CS/RMO/Metron about improvement needed						
Yes	47	92.2	55	85.9	102	88.7
To an extent	4	7.8	7	10.9	11	9.6
No	–	–	2	3.1	2	1.7
If yes, how do they respond (n =113)						
Doesn't respond positively	4	7.8	5	8.1	9	8.0
Respond positively	47	92.2	55	88.7	102	90.3
Depends on his mood	–	–	1	1.6	1	0.9
Not Given	–	–	1	1.6	1	0.9
Patients have respect & trust in you						
Yes	48	94.1	62	96.9	110	95.7
No	–	–	1	1.6	1	0.9
Can't say	3	5.9	1	1.6	4	3.5
Ever experienced strong reaction from patients						
Yes, often	5	9.8	3	4.7	8	7.0
Yes, Occasionally	24	47.1	17	26.6	41	35.7
Yes, Very rarely	12	23.5	27	42.2	39	33.9
Not at all	8	15.7	16	25.0	24	20.9
Not Given	2	3.9	1	1.6	3	2.6
Is this attitude frequent these days						
Yes	33	64.7	36	56.3	69	60.0
No	12	23.5	23	35.9	35	30.4
Can't say	5	9.8	4	6.3	9	7.8
Not Given	1	1.6	1	2.0	2	1.7
Superiors appreciate your good work						
No	8	15.7	8	12.5	16	13.9
Rarely	10	19.6	5	7.8	15	13.0
Sometimes	11	21.6	30	46.9	41	35.7
Always	22	43.1	21	32.8	43	37.4
Total	**51**	**100**	**64**	**100**	**115**	**100**

Table 9.5 : Ideal dimensions of the work relationship reported by the Nurses by type of hospital

Dimensions of work relationship	Rank 1		Rank 2		Rank 3	
	Number	Percent	Number	Percent	Number	Percent
			District Hospital			
Good working relationship with colleagues	27	52.9	5	9.8	18	35.3
Superior recognises good work	12	23.5	23	45.1	14	27.5
Respected and trusted by clients	10	19.6	20	39.2	17	33.3
Independence from interference by superiors	1	2.0	2	3.9	1	2.0
Not given	1	2.0	1	2.0	1	2.0
Total	**51**	**100**	**51**	**100**	**51**	**100**
			Other Hospital			
Good working relationship with colleagues	36	56.3	16	25.0	8	12.5
Superior recognises good work	15	23.4	17	26.6	24	37.5
Respected and trusted by clients	12	18.8	22	34.4	21	32.8
Independence from interference by superiors	1	1.6	9	14.1	11	17.2
Total	**64**	**100**	**64**	**100**	**64**	**100**
			All Hospitals			
Good working relationship with colleagues	63	54.8	21	18.3	26	22.6
Superior recognises good work	27	23.5	40	34.8	38	33.0
Respected and trusted by clients	22	19.1	42	36.5	38	33.0
Independence from interference by superiors	2	1.7	11	9.6	12	10.4
Not given	1	0.9	1	0.9	1	0.9
Total	**115**	**100**	**115**	**100**	**115**	**100**

Dimensions of Professional Satisfaction

Table 9.6: Dimensions of professional satisfaction by type of hospital

Dimensions of Professional Satisfaction	District Hospitals		Other Hospitals		All Hospitals	
	No.	Percent	No.	Percent	No.	Percent
Deputed for on job training programmes						
Yes	43	84.3	50	78.1	93	80.9
No	7	13.7	14	21.9	21	18.3
Training distantly related	1	2.0	–	–	1	0.9
Satisfied with the present time table						
Yes	47	92.2	55	85.9	102	88.7
No	3	5.9	9	14.1	12	10.4
Not given	1	2.0	–	–	1	0.9
If not satisfied, reason (n = 12)						
Staff should be adequate	2	66.7	3	33.3	5	41.7
Duties not distribd properly	1	33.3	3	33.3	4	33.3
Timings not followed	–	–	2	22.2	2	16.7
Not given	–	–	1	11.1	1	8.3
Opinion about workload						
Less than adequate	–	–	5	7.8	5	4.3
Appropriate	17	33.3	30	46.9	47	40.9
Overburdened	34	66.7	29	45.3	63	54.8
Opinion about nature of work						
Properly designed	13	25.5	33	51.6	46	40.0
Needs improvement	38	74.5	30	46.9	68	59.1
Not given	–	–	1	1.6	1	0.9
Suggestion regarding the workload						
No	10	19.6	26	40.6	36	31.3
Yes	41	80.4	37	57.8	78	67.8
Not given	–	–	1	1.6	1	0.9
Doctors get credit for curing patients than nurses						
Do not agree	18	35.3	37	57.8	55	47.8
Agree	32	62.7	27	42.2	59	51.3
Not given	1	2.0	–	–	1	0.9
Fulfilled the desires of joining nursing cadre						
Not fulfilled	1	2.0	2	3.1	3	2.6
Partially	10	19.6	21	32.8	31	27.0
Totally	40	78.4	40	62.5	80	69.6
Not given	–	–	1	1.6	1	0.9
Total	**51**	**100**	**64**	**100**	**115**	**100**

Table 9.7: Ideal dimensions of professional satisfaction reported by the Nurses by type of hospital

Dimensions of professional satisfaction	Rank 1		Rank 2		Rank 3	
	Number	Percent	Number	Percent	Number	Percent
			District Hospital			
Training opportunities	30	58.8	5	9.8	16	31.4
Job satisfaction	11	21.6	21	41.2	19	37.3
Service to poor people	10	19.6	25	49.0	16	31.4
Total	**51**	**100**	**51**	**100**	**51**	**100**
			Other Hospital			
Training opportunities	35	54.7	16	25.0	13	20.3
Job satisfaction	3	4.7	23	35.9	38	59.4
Service to poor people	26	40.6	25	39.1	13	20.3
Total	**64**	**100**	**64**	**100**	**64**	**100**
			All Hospitals			
Training opportunities	65	56.5	21	18.3	29	25.2
Job satisfaction	14	12.2	44	38.3	57	49.6
Service to poor people	36	31.3	50	43.5	29	25.2
Total	**115**	**100**	**115**	**100**	**115**	**100**

Personal Gains and Losses

Table 9.8 : Personal gains and loses by type pf hospital

Personal loses and gains	District Hospitals		Other Hospitals		All Hospitals	
	No.	Percent	No.	Percent	No.	Percent
Live in staff quarters						
Yes	9	17.6	37	57.8	46	40.0
No	42	82.4	27	42.2	69	60.0
If living in staff quarters: condition of the quarters (n=46)						
Not satisfied	3	33.3	4	10.8	7	15.2
Satisfied to an extent	3	33.3	12	32.4	15	32.6
Satisfied	2	22.2	20	54.1	22	47.8
Not given	1	11.1	1	2.7	2	4.3
If not staying in quarters, type of arrangement (n=69)						
Own	30	71.4	15	55.6	45	65.2
Rented	11	26.2	12	44.4	23	33.3
Not given	1	2.4	–	–	1	1.5
If not staying in quarters, distance from the hospital (n=69)						
Less than 1 km	14	33.3	15	55.6	29	42.0
2 - 3 km	16	38.1	9	33.3	25	36.2
More than 3 km	9	21.4	3	11.1	12	17.4
Not given	3	7.1	–	–	3	4.3
If not staying in quarters, mode of transport (n=69)						
Walking	9	21.4	16	59.3	25	36.2
Bicycle	1	2.4	3	11.1	4	5.8
Auto rickshaw	16	38.1	5	18.5	21	30.4
ST bus	4	9.5	2	7.4	6	8.7
Private car	10	23.8	1	3.7	11	15.9
Not given	2	4.8	–	–	2	2.9
Easy access to health services for the family						
Yes	41	80.4	51	79.7	92	80.0
No	9	17.6	13	20.3	22	19.1
Cant say	1	2.0	–	–	1	0.9
Total	51	100	64	100	115	100

Table contd....

Table 9.8 : Personal gains and loses by type pf hospital

Personal loses and gains	District Hospitals		Other Hospitals		All Hospitals	
	No.	Percent	No.	Percent	No.	Percent
Face family problems like education of children & spouse working						
No	4	7.8	6	9.4	10	8.7
To an extent	1	2.0	6	9.4	7	6.1
Yes	40	78.4	51	79.7	91	79.1
Not Given	4	7.8	–	–	4	3.5
Cant say	2	3.9	1	1.6	3	2.6
Get sufficient time for the family and personal work						
No	11	21.6	14	21.9	25	21.7
Sometimes	15	29.4	23	35.9	38	33.0
Yes	24	47.1	27	42.2	51	44.3
Not given	1	2.0	–	–	1	0.9
Pay package						
Adequate	28	54.9	57	89.1	85	73.9
Not adequate	22	43.1	7	10.9	29	25.2
Not given	1	2.0	–	–	–	0.9
Total	**51**	**100**	**64**	**100**	**115**	**100**

Table 9.9 : Ideal dimensions of personal gains reported by the Nurses by type of hospital.

Dimensions of professional satisfaction	Rank 1		Rank 2		Rank 3	
	Number	Percent	Number	Percent	Number	Percent
			District Hospitals			
Being based in a desirable location (eg. with good schools)	21	41.2	11	21.6	15	29.4
Sufficient time for personal or family life	12	23.5	23	45.1	13	25.5
Good employment benefits (eg. Pension, housing)	14	27.5	13	25.5	20	39.2
Good income job security	3	5.9	3	5.9	2	3.9
Not given	1	2.0	1	2.0	1	2.0
Total	**51**	**100**	**51**	**100**	**51**	**100**
			Other Hospital			
Being based in a desirable location (eg. with good schools)	18	28.1	10	15.6	15	23.4
Sufficient time for personal or family life	8	12.5	17	26.6	19	29.7
Good employment benefits (eg. Pension, housing)	11	17.2	28	43.8	19	29.7
Good income job security	27	42.2	9	14.1	11	17.2
Total	**64**	**100**	**64**	**100**	**64**	**100**
			All Hospitals			
Being based in a desirable location (eg. with good schools)	39	33.9	21	18.3	30	26.1
Sufficient time for personal or family life	20	17.4	40	34.8	32	27.8
Good employment benefits (eg. Pension, housing)	25	21.7	41	35.7	39	33.9
Good income job security	30	26.1	12	10.4	13	11.3
Not given	1	0.9	1	0.9	1	0.9
Total	**131**	**100**	**131**	**100**	**131**	**100**

Table 9.10: Ranking the four ideal dimensions by the Nurses by type of hospital.

Ranking of the four ideal dimensions	Rank 1		Rank 2		Rank 3	
	Number	Percent	Number	Percent	Number	Percent
			District Hospital			
Work Environment	11	21.6	12	23.5	27	52.9
Work Relationship	15	29.4	26	51.0	9	17.6
Professional Satisfaction	24	47.1	12	23.5	13	25.5
Personal Gains	–	–	–	–	1	2.0
Not Given	1	2.0	1	2.0	1	2.0
Total	**51**	**100**	**51**	**100**	**51**	**100**
			Other Hospital			
Work Environment	14	21.9	19	29.7	24	37.5
Work Relationship	15	23.4	29	45.3	15	23.4
Professional Satisfaction	33	51.6	13	20.3	17	26.6
Personal Gains	1	1.6	2	3.1	7	10.9
Not Given	1	1.6	1	1.6	1	1.6
Total	**64**	**100**	**64**	**100**	**64**	**100**
			All Hospitals			
Work Environment	25	21.7	31	27.0	51	44.3
Work Relationship	30	26.1	55	47.8	24	20.9
Professional Satisfaction	57	49.6	25	21.7	30	26.1
Personal Gains	1	0.9	2	1.7	8	7.0
Not Given	2	1.7	2	1.7	2	1.7
Total	**131**	**100**	**131**	**100**	**131**	**100**

Technicians

Table 9.11: Percent distribution of technicians by background characteristics and their perspectives according to type of hospital.

Background characteristics	District Hospitals		Other Hospitals		All Hospitals	
	No.	Percent	No.	Percent	No.	Percent
Age						
21-30 Years	5	23.8	7	12.3	12	15.4
31-40 Years	6	28.6	28	49.1	34	43.6
41-50 Years	6	28.6	18	31.6	24	30.8
51-60 Years	4	19.0	3	5.3	7	9.0
Not given	–	–	1	1.8	1	1.3
Sex						
Male	18	85.7	55	96.5	73	93.6
Female	3	14.3	2	3.5	5	6.4
Marital status						
Married	18	85.7	52	91.2	70	89.7
Unmarried	2	9.5	4	7.0	7	7.7
Widowed	1	4.8			1	1.3
Not Given	–	–	1	1.8	1	1.3
Caste						
Scheduled caste	2	9.5	6	10.5	8	10.3
Scheduled tribe	1	4.8	3	5.3	4	5.1
Others	18	85.7	48	84.2	66	84.6
Religion						
Hindu	17	81.0	48	84.2	65	83.3
Muslim	2	9.5	4	7.0	6	7.7
Others	2	9.5	5	8.9	7	9.0
Years of Service (Total Years)						
Below 10 Years	8	38.1	24	42.1	32	41.0
11-20 Years	7	33.3	30	52.6	37	47.5
21-40 Years	6	28.6	3	5.3	9	11.5
Total	**21**	**100.0**	**57**	**100.0**	**78**	**100.0**

Table contnd.....

Table 9.11: Percent distribution of technicians by background characteristics and their perspectives according to type of hospital.

Perspectives of technicians	District Hospitals		Other Hospitals		All Hospitals	
	No.	Percent	No.	Percent	No.	Percent
Years of Service (in the present place)						
Below 10 Years	15	71.4	48	84.2	63	80.8
11-20 Years	4	19.0	8	14.0	12	15.4
21-30 Years	2	9.5	–	–	2	2.6
Not Given	–	–	1	1.8	1	1.3
Designation						
X Ray Tech	6	28.6	20	35.1	26	33.3
Ophthalmic Tech	2	9.5	13	22.8	15	19.2
Lab Tech	7	33.3	19	33.3	26	33.3
Pathology Tech	2	9.5	3	5.3	5	6.4
ECG Tech	2	9.5	–	–	2	2.6
BB Tech	2	9.5	2	3.5	4	5.1
Have adequate no of technicians						
No	14	66.7	15	26.3	29	37.2
Yes	7	33.3	42	73.7	49	62.8
Adequate supply of material						
Shortage of all supply	1	4.8	3	5.3	4	5.1
Shortage of some supply	8	38.1	32	56.1	40	51.3
No Shortage	12	57.1	22	38.6	34	43.6
Have adequate equipment						
Shortage of all Equipment	–	–	3	5.3	3	3.8
Shortage of some Equipment	7	33.3	18	31.6	25	32.1
No Shortage	14	66.7	36	63.2	50	64.1
Have adequate space						
Not according to the Norm	4	19.0	16	28.1	20	25.6
Yes, Partially	5	23.8	12	21.1	17	21.8
Yes, Fully	12	57.1	29	50.9	41	52.6
Face any difficulties in doing this work						
No	8	38.1	24	42.1	32	41.0
Yes	13	61.9	33	57.9	46	59.0
If yes, talked to your superiors (n =46)						
No	-	-	6	18.2	6	13.0
Yes	13	100.0	27	81.8	40	87.0
What was his/her response (n = 40)						
Positive	7	53.8	17	63.0	24	60.0
Negative	-	-	2	7.4	2	5.0
Not Given	6	46.2	8	29.6	14	35.0
Total	**21**	**100.0**	**57**	**100.0**	**78**	**100.0**

Table 9.11: Percent distribution of technicians by background characteristics and their perspectives according to type of hospital.

Perspectives of technicians	District Hospitals		Other Hospitals		All Hospitals	
	No.	Percent	No.	Percent	No.	Percent
Does Superiors appreciate your good work						
No	3	14.3	9	15.8	12	15.4
Rarely	–	–	2	3.5	2	2.6
Sometimes	6	28.6	11	19.3	17	21.8
Always	12	57.1	34	59.6	46	59.0
Can't Say	–	–	1	1.8	1	1.3
Satisfied with your work						
No	2	9.5	4	7.0	6	7.7
Yes, somewhat	19	90.5	53	93.0	72	92.3
Have any pressure at work						
No	13	61.9	38	66.7	51	65.4
Yes	8	38.1	19	33.3	27	34.6
What do you think about your workload						
Less than Adequate	–	–	6	10.5	6	7.7
Appropriate	7	33.3	36	63.2	43	55.1
Overburdened	14	66.7	14	24.6	28	35.9
Can't say	–	–	1	1.8	1	1.3
Have suggestion regarding the workload						
No	5	23.8	35	61.4	40	51.3
Yes	16	76.2	22	38.6	38	48.7
Total	**21**	**100.0**	**57**	**100.0**	**78**	**100.0**

CHAPTER 10

Patient Satisfaction at E.S.I.S. Hospital, Aundh

At the request of the authorities of MHSDP, this hospital was included in the study. However, since it has a different nature, it was not included in the main analysis and hence this separate chapter is added.

The E.S.I.S. Hospital, Aundh, is a 300 bedded hospital meant only for industrial workers. The Insurance scheme provides health services to the workers (enrollees) who have registered under the scheme. There are some private doctors (insurance medical practitioner) who also participate in this scheme and provide outdoor services or refer the cases to Aundh hospital. A certain amount is deducted from the worker's salary as a premium. Thus, this hospital is different from other hospitals in the following respects:

1. Patients do not have to decide upon the hospital.
2. All the indoor patients are referrals.
3. None other than those registered under the scheme can get admitted.
4. All patients are either industrial workers or their family members.
5. Patients do not have to pay any charges.

These differences will naturally reflect in patients' responses regarding satisfaction. The socio-economic conditions of the patients also are expected to be different from those in other hospitals. This also would influence their expectations and hence the satisfaction levels. Let us examine the background characteristics of the patients in the next section.

Background characteristics of the patients

Table 10.1 gives the relevant data. As expected all of the patients are adults (i.e. aged 15+). Nearly 80 percent of the patients are literate and educated. Among the indoor patients, 13 percent are educated above S.S.C, while this proportion is 20 percent for the outdoor patients. In short, compared to patients in other hospitals, the patients of ESIS are better educated.

The proportion of patients belonging to SC/ST is 21 percent for indoor patients and 28 percent for outdoor patients. However, as expected, there are no tribal patients. As far as the standard of living is concerned, it is observed that 62-64 percent come from the category of high SLI, while only 5 percent of indoor patients and 15 percent of outdoor patients come from the lower stratum. To recall, for the patients from other hospitals, the percentage from low SLI

category was about 65 percent. Clearly, the patients are from better socio-economic stratum. This should reflect in the responses regarding satisfaction, as the expectations will be higher.

As was observed in case of other hospitals,the geographic coverage of IPD is wider than that of OPD About 9 percent of the indoor patients have come from distances as far as 60-70 kms. On the other hand, 77 percent of the outdoor patients have come from a distance less than 20 kms. Infact, the hospital is located at a far off place compared to the location of many of the industrial units in Pune. This was one of the main complaints of the patients.

Satisfaction with different services – IPD and OPD

Tables 10.2 and 10.3 gives the data on the extent of satisfaction with different dimensions of services. We give below the ranges in the levels of dissatisfaction, with different kinds of services.

Dimensions of satisfaction	IPD (percent)	OPD (percent)
Waiting Time	4.3 - 18.0	17.6 - 54.1
Communication	0.0 - 13.0	2.7 - 15.7
Treatment	1.3 - 62.7	1.3 - 90.6
Behaviour	1.3 - 2.6	1.3 - 5.3
Cleanliness	3.9 - 33.8	0.0 - 1.3
Crowding	No case of dissatisfaction	1.3

It is observed, broadly, that the levels of dissatisfaction are particularly higher for waiting time for outdoor patients, while in case of cleanliness, the dissatisfaction among the indoor patients is higher. As far as the treatment related issues are concerned, the dissatisfaction seems to be extremely high. Regarding the behaviour and crowding aspects, there is no dissatisfaction worth commenting. Let us now identify the individual dimensions with severe amount of dissatisfaction

Dimensions of satisfaction			Percent
Waiting Time	IPD	Getting discharge	18.0
	OPD	Doctor's call	54.1
Communication	IPD	Discussion about recovery	13.0
	OPD	Discussion about ailment	15.7
Treatment	IPD	No other advice for health	62.7
	OPD	No other advice for health	90.6
Behaviour	IPD	No severe dissatisfaction	–
	OPD	No severe dissatisfaction	–
Cleanliness	IPD	Bedsheet change	33.8
	OPD	No dissatisfaction	–
Crowding	IPD	No severe dissatisfaction	
	OPD	No severe dissatisfaction	

The above extract in brief points out to the specific aspects with which the patients are dissatisfied. However, it should be noted that there are other aspects also, where the dissatisfaction is substantial. For instance, the dissatisfaction about nurses' competence is of a higher order. Similarly, there are complaints about washing of the patients' uniform in the IPD. The outdoor patients, 31 percent of them, have complaints about the doctors' examination time. About 47 percent of them complain about the inadequacy of the time spent by the doctors.

If compared with the patients of the district hospitals, it is observed that, the issues of dissatisfaction are more or less similar.

Table 10.1: Background Characteristics – ESIS, Aundh

Background characteristics	IPD		OPD	
	Number	Percent	Number	Percent
Total No. of Patients	**77**	**100**	**75**	**100**
Age (in years)				
0 – 14	2	2.6	2	2.7
15 – 29	19	24.7	20	26.7
30 – 44	20	26.0	16	21.3
45 – 59	27	35.1	27	36.0
60 +	9	11.7	10	13.3
Education				
Illiterate	17	22.1	15	20.0
1 – 4 years	9	11.7	11	14.7
5 – 7 years	18	23.4	12	16.0
8 – 10 years	23	29.9	22	29.3
10 + years	10	13.0	15	20.0
Caste				
SC	15	19.5	21	28.0
ST	1	1.3	-	-
Other	56	72.7	46	61.3
N.A.	5	6.5	8	10.7
Standard of Living Index				
Low	4	5.2	11	14.7
Medium	25	32.5	31	41.3
High	48	62.3	33	64.0
Distance from Residence (kms)				
0 - 10	24	31.2	44	58.7
11 - 20	26	33.8	14	18.7
21 - 30	19	24.7	13	17.3
31 - 40	1	1.3	1	1.3
41 - 50	-	-	2	2.7
51 - 60	-	-	1	1.3
61 - 70	1	1.3	-	-
70 +	6	7.6	-	-
Total	**77**	**100**	**75**	**100**

Table 10.2: Satisfaction Levels (percent) – IPD

Satisfaction Levels	Fully Satisfied	Partially Satisfied	Not Satisfied	Not Applicable/ Not given / Can't say
Waiting Time				
Registration	77.8	–	8.7	14.5
Doctor's call	69.6	–	13.9	14.5
Doctor's Examination	82.6	–	4.3	13.0
Admission to Ward	79.7	–	7.2	13.0
Getting Services	36.0	–	18.0	46.0
Communication				
Listen to complaints	63.6	36.4	–	–
Allowed questions	48.1	49.4	2.6	–
Responds to question	53.2	44.2	2.6	–
Discusses about ailment	93.5	–	5.2	1.3
Discusses about recovery	94.8	–	5.2	–
Has confidence in doctors	57.1	42.9	–	–
Treatment				
Privacy at examination	32.5	63.6	3.9	–
Doctors visit on schedule time	84.4	13.0	1.3	–
Adequate time spent	89.6	–	10.4	–
Doctors visits	55.7	44.3	–	–
Instruction for Medicine	94.8	–	5.2	–
'Other' advice for health	37.8	–	62.7	–
Nurses available in need	11.7	87.0	1.3	–
Competence of Nurses	5.2	62.3	27.3	5.2
Competence of Doctors	33.8	62.3	1.3	2.6
Ailment Cured	35.1	55.8	9.1	–
Medicines from Hospital	94.8	5.2	–	–
Hospital Well-equipped	50.0	50.0	–	–
Behaviour				
Greeting Friendly	72.7	27.3	–	–
Doctor's Behaviour	96.1	3.9	–	–
Nurses Behaviour	94.8	2.6	2.6	–
Ayahs Behaviour	97.4	1.3	1.3	–
Ward boys Behaviour	97.4	1.3	1.3	–
Counter Clerk Behaviour	100.0	–	–	–
Technician's Behaviour	97.3	1.3	1.3	–
Cleanliness				
Floor Cleaning	37.7	44.2	3.9	14.3
Toilet/Bathroom Cleaning	36.4	48.1	3.9	11.7
Washing of patients Uniform	13.0	42.9	32.5	11.7
Bed-sheet Change	13.0	41.6	33.8	11.7
Crowding				
Ward Space	98.7	1.3	–	–
Ward Arrangement	97.3	2.7	–	–
OPD Space	97.2	2.8	–	–
Noise in Ward	76.3	23.7	–	–

Table 10.3: Satisfaction Levels (percent) - OPD

Satisfaction Levels	Fully Satisfied	Partially Satisfied	Not Satisfied	Not Applicable/ Not given / Can't say
Waiting Time	81.1	–	17.6	1.4
Registration	43.3	–	54.1	2.7
Doctor's call	66.6	–	30.7	2.7
Doctor's Examination	53.5	–	45.2	1.4
Getting Services				
Communication				
Listen to complaints	78.4	17.6	4.1	–
Allowed questions	75.7	18.9	5.4	–
Responds to question	67.6	26.8	5.6	–
Discusses about ailment	57.3	–	10.7	32.0
Discusses about recovery	66.7	–	5.3	28.0
Treatment				
Privacy at examination	77.3	21.3	1.3	–
Adequate time spent	53.3	–	46.7	–
Proper Instruction for Medicine	87.5	–	12.5	–
'Other' advice for health	9.4	–	90.6	–
All Medicines from Hospital	96.0	1.3	2.7	–
Ailment Cured	97.2	1.4	1.4	–
Behaviour				
Greeting Friendly	85.3	12.0	2.7	–
Doctor's Behaviour	93.3	1.3	5.3	–
Nurses Behaviour	97.3	1.3	1.3	–
Dispenser's Behaviour	89.5	–	10.5	–
Cleanliness				
OPD	94.7	2.7	1.3	1.3
Examination Room	97.3	–	1.3	1.3
Dispensary	94.7	2.7	1.3	1.3
Crowding				
OPD	96.0	2.7	1.3	–
Examination Room	97.3	1.3	1.3	–
Dispensary	96.0	1.3	1.3	1.3

Satisfaction Scores

Using the same procedure used for measuring the patient's satisfaction, the scores for different dimensions of health services were arrived at. Table 10.4 gives the same. It is observed that the scores for cleanliness is the lowest among the all IPD while 'treatment score' is the lowest for OPD. Overall, the IPD scores is much lower than OPD scores. Only 61 percent of the indoor patients are satisfied with IPD services, while as large as 82 percent are satisfied with the outdoor services. The differential is mainly due to the low scores for cleanliness, followed by scores for crowding and behaviour. In fact, when this fieldwork was done, the utilisation was very low i.e about 50 per cent. Thus, there was no excuse for lapses in providing the services. What could then be the reason for such low scores? One probable reason could explain this low satisfaction partially and that is, the better socio-economic background of the patients. Being

better educated, their expectation are higher and hence the satisfaction is lower. As explained earlier, the outdoor patient stays in the hospital only for a while and hence the satisfaction scores could be higher. The OPD premises of this hospital are quite spacious and clean and hence on these counts there is no reason to complain.

Table 10.4: Satisfaction Scores, E.S.I.S, Aundh

Satisfaction Scores	IPD	OPD
Treatment Scores	71.0	58.9
Cleanliness Scores	25.0	99.1
Communication Scores	81.6	74.2
Waiting Time Scores	60.8	66.6
Crowding Scores	60.5	96.9
Behaviour Scores	66.2	93.2
Average	**60.9**	**81.5**

Since the number of observation is only 75, no attempt was made to examine the differentials by background characteristics

Assessment of Courtesy Bias

As mention earlier, the exit interviews have a major limitation that the responses are affected by courtesy bias. There is no easy/obvious alternative to get rid of the same. However, to have an idea about the same, we carried out an exercise in ESIS hospital. We have carried out interviews of 75 indoor patients in the hospital premises. We decided to interview the same patients again at their residences, after a lapse of one month. Out of 75, we could trace only 61, as 10 patients were from outside the city and 4 addresses could not be traced. We give below the behavioural dimensions for which we got significant differences in the satisfaction levels.

Table 10.5: Assessment of Courtesy Bias

Dimensions	Exit Interviews	Household Interviews
Good behaviour of nurses	57	2
Indifferent behaviour of nurses	2	46
Good behaviour of Ayahs	58	40
Good behaviour of ward boys	57	37
Good behaviour of technical staff	57	40
Good behaviour of counter clerk	58	47
Total number of patients	**61**	**61**

It is observed that the transition from full satisfaction to partial satisfaction has occurred in case of nurses in a significant manner. It is a pleasure of note that there were negligible biases in case of doctor's behaviour and hence is not mentioned here. In case of behaviour of other staff, the bias ranges from 20 to 33 per cent. Since this assessment is based on a small number, nothing

can be said in exact terms. Nevertheless, the non-negligible nature of courtesy bias is reflected clearly.

To sum up:

i) The patients of ESIS, Aundh come from a relatively better socio-economic stratum;

ii) The dimension with significant dissatisfaction are cleanliness and treatment for IPD and waiting time and treatment for OPD;

iii) The overall Satisfaction is 61 percent and 82 percent respectively for IPD and OPD. The gap is too wide;

iv) Main contributor to low IPD Score is Cleanliness; and

v) The courtesy bias in behaviour satisfaction is about 20-33 percent for indoor patients.

CHAPTER 11

Summary Findings and Suggestions for Improvement

I. Summary Findings

Following are the summary findings of the study.

1. IPDs of both DHs and OHs are mainly used by the rural patients and OPDs are utilised by both urban and rural patients equally, indicating the competition from other health care providers for the OPD.
2. IPDs of OHs are mainly used by female patients for maternities or family planning services.
3. Socio-economically weaker sections of the population are found to utilise the government services more than their actual proportion in the states' population, indicating the pro-poor nature of the government health services.
4. Major reasons cited for patients' choice of hospital are free treatment, easy accessibility and reputation of the hospital.
5. The disease pattern of the indoor patients at the DHs and OHs is mainly inclined towards communicable diseases, nutritional deficiencies and maternal ailments. There appears an increasing trend in suicide' cases.
6. The outdoor patients have large number of patients suffering due to cold, cough and fever, anaemic condition and accidents.
7. The work, mainly, at the other hospitals does not appear challenging for the doctors, which could reflect in their frustration.
8. The data on the general treatment seeking behaviour suggested that the government hospitals have a captive clientele, who cannot afford private hospitals. If quality services are provided, in future, people will visit the government hospitals not only on account of free treatment but also for good treatment.
9. The selected sample of hospitals is representative of the project facilities, except SDH (100)
10. The OHs lack diagnostic facilities, while the DHs suffer due to shortage of adequate number of personnel. Efforts are being made by MHSDP in this direction.
11. As per the response of indoor patients about treatment related services, maximum dissatisfaction is for 'behaviour'.
12. Among other services, dissatisfaction is generally high and highest for 'crowding'.
13. Dissatisfaction in OHs is of a higher order in 'treatment' and 'communication'.

14. Indoor patients generally have complaints about 'no privacy during examination', 'inadequate time spent by providers' and no other advice for health to improve patient compliance.
15. Cleanliness is lacking in both, District and Other Hospitals, particularly, bed-sheets are not changed with required frequency.
16. 'Noise in the ward' is a complaint expressed by 35 percent of the patients in both the hospitals.
17. About one-third among indoor patients of the DHs and one-fourth among indoor patients of OHs had to borrow for paying the hospital charges.
18. The expenditure on 'medicines brought from outside' form a substantial (42 percent for DHs and 49 percent for OHs) proportion of the total expenditure on treatment which is Rs. 210 for DHs and Rs.160 for OHs.
19. Outdoor patients have also expressed unhappiness about 'no privacy' and 'no other advice'.
20. 'Inadequate examination time' and 'no discussion about ailment/recovery' are the other issues, regarding which, the outdoor patients have expressed dissatisfaction.
21. Using a simple method of scoring, the scores of satisfaction were arrived at. The scores for IPD are 75 percent for DHs and 71 percent for OHs, while those for OPD are 75 percent for DHs and 64 percent for OHs. Among IPD and OPD of OHs, SDH (100) have the lowest scores. The low scores for OHs could be due to incomplete and ongoing recommissioning.
22. The method of exit interviews used in this study has inherent 'courtesy bias'. By way of independent observations at OPD and residential interviews at Aundh Hospital, an attempt was made to assess the courtesy bias. The bias was found more for the outdoor patients, as expected. It was the highest in case of the behaviour of the nursing and other supporting staff. The bias in the reporting of indoor patients was more for nurses. MHSDP has piloted a study to address the Providers behaviour.
23. The satisfaction scores for individual district hospitals indicated that hospitals from comparatively backward area of Marathwada fared well. However, these differentials have to be interpreted taking into consideration the differentials in expectations.
24. Interestingly, most efficient services in the DHs were mainly non-clinical services like waiting time, crowding, while treatment was mainly the deficient service in most of the DHs.
25. Scores standardised for composition of indoor patients of district hospitals did not differ from the unstandardised scores, implying that the differences in overall satisfaction for different DHs are not at all due to sampling differences.

26. Among the different wards, 'Male Surgical' and 'Paediatrics' are found with better satisfaction scores.
27. Generally, 'Female Surgical' and 'Maternity' wards have lower satisfaction scores, probably due to lack of communication with male doctors and uncleanliness and crowding in the wards.
28. Among the OHs, hospitals at Parli-Vaijnath, BGW-Gondia, Indapur and Sangola have low satisfaction levels (IPD) and the reasons are lack of cleanliness, treatment and communication.
29. High satisfaction levels were observed for hospitals at Tumsar, Mul and Wada. Reasons mainly were satisfaction about waiting time and crowding.
30. As far as the satisfaction of outdoor patients is concerned, the reasons for low scores mainly were crowding, lack of cleanliness, treatment and communication, while the dimension responsible for high score were waiting time, cleanliness and communication
31. Patients' priorities were assessed through a question asking them to rank the first three services, which in their opinion are the criteria for choosing the hospital. The priorities expressed by the patients were very specifically and distinctly mentioned. They are 'Easy Access', 'Availability of Medicines' and 'Affordable Charges'.
32. The preferences of the indoor patients were compared against the satisfaction levels and it was found that 'Affordability of Charges' comes up as an area, which is preferred criterion but satisfaction is low. Among the less preferred areas, the areas of dissatisfaction were adequacy of equipments, effectivity of treatment and communication.
33. The level of dissatisfaction regarding affordability and other preferred areas in Other hospitals was moderate. Among the non-preferred areas, a little more dissatisfaction was observed for 'competence of doctors'.
34. The level of dissatisfaction among the outdoor patients for preferred areas was of moderate order in both DHs and OHs. However in the OHs, the dissatisfaction was of higher order in the non-preferred areas.
35. Data on expenses incurred on 'medicines' by the patients suggest that if the hospitals have adequate supply of medicines, 'rationality of prescription' is followed by the doctors and if patients do not make unnecessary demands for particular medicines, the financial burden of the patients could be reduced.
36. The Principal Component Analysis suggests that 'Treatment', 'Behaviour' and 'Communication' are the dimensions, which are important for an Indoor Patients' Satisfaction. However, for an outdoor patient, no such distinct difference between the

weights for different dimensions was observed, indicating that the outdoor patient judges the hospital in all the dimensions equally.

37. Based on data on other hospitals, with a limitation on account of small number of indoor patients, it is observed that there is a relationship between satisfaction of the patients and BOR (indicator of utilisation), implying the importance of patients' satisfaction.
38. Job security, risk in establishing private practice and opportunity to serve the people, are the main reasons for doctors joining the government sector.
39. Shortage of funds, equipment and personnel are the lacuna of the government hospitals, according to about 40 percent of the respondent doctors.
40. Among the dimensions of provider satisfaction, namely, 'Work Environment', 'Work relationship', 'Professional Satisfaction' and 'Personal Gains', the highest satisfaction (70–72 percent) is observed for 'Work relationship', while the lowest satisfaction is in 'Personal Gains' (30 percent).
41. One-third of the doctors said that they have often experienced political interference.
42. Forty-two percent of the doctors opine that merit is not taken into consideration at the time of transfer/promotion.
43. About half of the doctors are satisfied with their present work and an equal number of them said that they could utilise their expertise in the government job. The satisfaction in these respects is more among DH doctors.
44. Nearly half the doctors viewed that they could have progressed more in a private set-up.
45. On-job training, job satisfaction and opportunity to serve poor people are expressed as ideal dimensions of 'Professional Satisfaction'. However, there was some amount of dissatisfaction with the present job.
46. Good Employment benefits, sufficient time for family and adequate salary are the ideal dimensions of satisfaction in 'Personal Gains'. However, two-thirds of them are not satisfied with their salary and three-fourths of them do not get sufficient time for the family.
47. The overall satisfaction scores of the doctors range from 43 percent in DH Jalna to 58 percent in DH, Buldhana.
48. With respect to individual dimensions, Doctors from DH, Bhandara have highest satisfaction in work environment, DH, Ratnagiri and DH, Buldhana are the best in Work Relationship, Professional Satisfaction comes up with the best score in DH, Buldhana and DH, Buldhana also has the highest score for 'Personal Gains'. The role of doctors' expectations also has to be understood to interprete these differentials.

49. In all, 106 (83 percent) doctors have given 1st or 2nd rank to 'Professional Satisfaction' as an important dimension of satisfaction. However the dissatisfaction in this matter is as high as 50 percent.
50. Although, the doctors have not ranked 'Personal Gains' as important dimension (only 13 percent), the dissatisfaction is observed to be highest (77 percent).
51. The overall satisfaction score for nurses ranges from 46 percent for DH, Buldhana to 64 percent for DH, Beed. In comparison to the doctors, the nurses seem to be slightly more satisfied. The DHs with high satisfaction scores for different dimensions are DH, Jalgaon (Work Environment), DH, Beed (Professional Satisfaction) and DH, Jalna (Personal Gains).

II. Suggestions for improvement

1. Accessibility of the Health Facility

The government hospitals are facing increasing competition from private practitioners. As per the 52nd round of the N.S.S.O, (1998), in the Maharashtra (Rural) the proportion of sicknesses treated in private facilities is 31 percent for hospitalised cases and 84 percent for non-hospitalised cases. It is clear that the private dispensaries are the competitors to OPD and not the private hospitals, particularly for the rural areas. A study carried out by NCAER (NCAER, 1996) also points out to the same conclusion. The data released by the Census of India, 2001 also indicate that private practitioners are going to the villages in increasing numbers. Thus, this is competition between private services available at the doorstep and the OPDs of the Other Hospital / District Hospital, which are not easily accessible. A basic difference in the provision of health care by public and private sector lies in the mode of provision. Public sector always gives the services through a hospital set up while the emphasis of the private sector is reaching people mainly through dispensaries. This enables them to go close to the people, while OPDs of the public hospitals, although probably better equipped than the private dispensaries remain underutilised. From the point of view of the patients also, easy access is one of the important criteria they apply for choosing health facility. We have a few suggestions in this respect

i) The doctors at the other hospitals, which are severely underutilised, could be given the outreach activities.
ii) Villages (under the jurisdiction of the other hospitals) which do not have any facility within 5 kms could be identified.
iii) Like the immunisation programme, days for doctor's visit could be fixed for each village.

iv) Taking into account the conditions regarding non-availability of any facility, it is estimated that every other hospital would have on an average 25 such villages. Thus, four doctors with six working days in a week would be able to manage one monthly visit to all such villages, or monthly two visits, if they spend two days in a week for outreach activity.

v) The doctors should be allowed to take some consulting charges (nominal, less than those charged by the private practitioners)

vi) Doctors should be provided with a vehicle

These suggestions, if implemented, would not only use the idle capacity of the doctors, but also would give the benefit of the services to the people residing in remote areas and save their financial burden. This also will help in increasing the referral cases. This could be tried in one hospital, on experimental basis and then, if useful, could be replicated elsewhere.

It has been observed that reaching the doorsteps of the community has made our immunisation programme tremendously successful. If we use the same approach here, equally successful will be our curative services.

2. Availability of Medicines

The patients have referred to 'Availability of Medicines' as one of their priorities while choosing a health facility. Not only the patients but, even the doctors, nurses, in-charge of drug stores have expressed shortage of medicines as a serious handicap. The data on expenditures also shows that quite an amount of expenditure is incurred on 'medicine brought from outside'. One associated fact also should be borne in mind. Sometimes patients make unnecessary demands for particular type of treatment as injection, saline etc.. During the fieldwork for this study, it was observed that in one of the rural hospitals (Akot), people used to make demands for saline and hence had to spend on the same because of shortage of saline bottles in the hospital. However, leaving such stray incidences, one does not get any strong evidence supporting the statement that patients often make unnecessary demands. In fact, one explanation has come forward in terms of 'rationality of prescription'. It is suggested that sometimes doctors also prescribe drugs unnecessarily and hence, in case of shortage of the supply, the patients have to bear the cost. It has also been observed that the doctors prescribed medicines according to the spending capacity of the patient rather than the need of the patient, perhaps. We come back again to the rationality of prescription. It is suggested that this should be examined and the adequacy of supply of medicine also should be ensured.

3. Lower Satisfaction at the Other Hospitals

It has been observed that the level of satisfaction of the patients of the OHs is lower than that at the DHs, although the difference is not too wide. The lower utilisation rates of the OHs also point out to the fact that some serious efforts are needed to improve the OHs. In fact, MHSDP is looking into it and the work has started with completion of new buildings or renovations in many of the hospitals and subsequent recommissioning. But hospitals have not been shifted to new buildings in many cases. Some existing wards in the hospital have been closed and hence the utilisation has been very low. It is hoped that once the civil work is complete and proper shifting takes place, equipments are installed and additional staff are available, the utilisation may improve. However, it was found out that this is not only due to the temporary transition phase. There are many other problems like water scarcity, electricity failures, no toilets, in addition no specialised doctors, their disinterest, lack of diagnostic facilities etc.. In fact, it has been observed that the patients' satisfaction is very closely associated with the number of doctors, their competence, the diagnostic facilities and not necessarily the condition of the building. The fulfilment of the staff has to be seriously looked into, since even one vacancy could create problems, as the actual norms regarding number of doctors is only 3-4 in 30-bedded rural hospitals. Similarly, the adequacy of equipment also has to be assured. A proper combination of availability of doctors, skill of the doctors and the equipment would lead to better utilisation. In addition, the increasing interest of the doctors in their private practice has led to disinterest towards the public hospital. Sometimes, rule allowed for private practice also have been violated. By rule only consultation is allowed. In some cases, there were independent hospitals, privately run by the doctors working in public hospitals. (A non-practising allowance instead of allowance of private practice may be a better alternative). If the doctor is senior, he generally does not stay at the headquarters, while if he is too junior, he has no interest. Some rules may be framed for residence at the headquarters.

It was generally observed that the patients rarely have a rural/SDH hospital for their choice (except deliveries and family planning operations). Either they go to the local providers or directly to the district hospital. Unless, the people are assured of quality services at other hospital, they will always remain underutilised. Let us hope that due to the efforts of MHSDP, the other hospitals will be strengthened and the utilisation will be enhanced. MHSDP has been seriously looking into the issues of material and human resources.

4. Lack of Communication of Providers with the Patients

It has been found from the analysis done in this study that behaviour and communication of the providers with the patients are important characteristics determining the satisfaction of the

patient. Particularly, when a patient from low socio-economic stratum, ignorant about the urban atmosphere, enters a district hospital, he get confused, does not know whom to approach and what does he get in return, a rude behaviour of the ward boys/attendant. Some earlier studies (Institute of Health Systems, 2002) also come up with a finding that interpersonal aspects of care are very important in determining the satisfaction levels. The behaviour of *Ayahs* and ward boys is found to be more rude in comparison to doctors and nurses. From the doctors' side, there is lack of friendly greeting. It is observed that particularly the staffs in other hospitals are more rude and arrogant despite comparatively low volume of cases. Similarly, it is also observed that as the cadre goes down, the behaviour deteriorates. In case of communication the doctors fail in responding patients' queries and complaints. This failure is more serious in other hospitals. Training the providers in inter-personal communication is urgently needed. In fact, looking at the way, the providers, mainly, doctors (mainly doctors at other hospital) are carrying out their job, one feels like suggesting a course, which will remind them of their noble profession, the oath to serve people, the special respect they get from people and the social responsibility. Of course, one must also assess the providers' opinion and expectations from his job. This has been done in this study and a few suggestions also have been given. In the area of 'Consumer-Provider Interaction', MHSDP has been organising workshops.

5. Clean or Unclean?

The conditions regarding cleanliness in the public hospitals are universally adverse. It is the dimension with lowest satisfaction score. Although for patients it is not in the priority list, this is an area, where one should not only go by the patients' priorities. Since it is so closely associated with the chance of infection causing damage to the health of the patient, there has to be a system, which will ensure total cleanliness. If the contract system has shown good results, it should be replicated in other places also. Otherwise, in spite of having other aspects at fairly good level, patients may not opt for the hospital because of its dirty surroundings.

6. Privacy during Examination

'No privacy during examination' was one of the main reasons for dissatisfaction expressed by both 'indoor' and 'outdoor' patients of the both the 'district hospitals' and of 'other hospitals'. The proportion dissatisfied on this account ranged from 23 percent to 38 percent. Between the hospitals, district hospitals are found better, while between patients, the complaints came more from the outdoor patients. If the patients make unrealistic demands, the hospital authorities find it difficult to fulfil, even if the dissatisfaction expressed is considerable. But here, just putting a temporary partition could fulfil the demand regarding 'privacy during examination'. When this is not being done, it is only 'lack of concern for the patients' that comes up as the

reason and there appears no other reason for not being able to provide 'privacy during examination'. This is a very easily providable facility that could satisfy the patient.

7. No 'Other Advice for Health'

This is another complaint with about 40-50 percent of the patients not satisfied on account of not being given any other advice for health other than the medicines. Although, medicines and some other treatment form the major component of health care in the hospital, some other advice relating to the ailment also is necessary. For example, for a patient with acidity, advice regarding the food habits is necessary or for a patient with T.B. of lungs, advice regarding smoking or tobacco is necessary. Repeatedly such advice is not given in a substantial number of cases.

8. More Female Doctors Needed

It was generally observed that patients from Female Surgical Ward and Maternity Ward had slightly higher levels of dissatisfaction. It is found that maternity wards are crowded and are not looked after properly and hence dirt and stink are the commonly observed features. However, this is not expected for surgical ward. In fact, Male surgical wards have come up with highest levels of satisfaction. In such cases, why the patients from female surgical wards have expressed higher dissatisfaction? Could it be because women could not communicate properly with doctors or surgeons, who generally are men. We had put a few questions, in this respect, to the female patients. Thirty percent of the adult female patients said that they were not comfortable with male doctors, while 50 percent of them thought that lady doctors are more responsive to problems of female patients. As per the composition of doctors in the hospitals selected for this study, only 17 percent of the doctors are women. Probably if there are more women doctors, female patients would be more satisfied. Irrespective of the suggestions from this study, we think that a higher proportion of women doctors may lead to a better functioning of the hospital.

9. Crowding in the Wards

About 35-40 percent of the indoor patients have complained about the noise in the wards. This could be due to overcrowding in the wards. Overall lack of space could be one reason but it could be more due to improper allocation of space to different wards. One of our earlier studies (Chitre et al., 2001) had contained a comparative analysis of the available space and needed space for different wards in selected hospitals. Such comparative analysis could lead to directions for reallocation of space. In case of overall lack of space, creation of new space is the only alternative. In short, sometimes just by reallocation and some other times by creating new space 'noise in the ward' could be reduced.

10. Doctors' Professional Satisfaction

The analysis on satisfaction of doctors revealed that among the four dimensions of satisfaction, namely, Work Environment, Work Relationship, Professional Satisfaction and Personal Gains/Losses, the doctors have given a top rank to Professional Satisfaction and level of dissatisfaction is of a high order in the same. Among the various dimensions of professional satisfaction, the highest dissatisfaction is found with respect to lack of scope for career advancement followed by the lack of satisfaction with their accomplishments. In this respect, we would like to give a suggestion. In academics, there is a provision of study leave of one year after a certain number of years of service. During that period, a person can go to any university/institution of his choice and carry out studies in the field of his choice. In similar way, a provision could be made for medical professionals also. After completing, say 10 years of service, the doctors could be allowed to take one years' off from the government service and work in any hospital of their choice, learn new techniques, be a little fresh and come back. We think that this may give the doctors an opportunity to study the recent invention/happenings in their field, and to work in a different atmosphere. Depending upon the availability of the number of doctors, the number of such allowable study leave could be fixed. Some exceptional candidates could even be sent abroad to study the practices, which will be beneficial for our health system. Such study leave should be sanctioned only with some undertaking from the doctor, for serving in the public hospitals.

Lack of recognition of merit, is an issue, which is serious and has to be considered with top priority. As it is, the comparison with the private sector, the family problems, the supposedly inadequate salary are making doctors unhappy. Added to these, if the merit is not recognised, the frustration will increase and the doctors may not be attracted to government service just for 'job security'. Efforts have to be made to be judicious in making decisions about promotions/transfers.

11. Doctors' Satisfaction in Personal Benefits

Although the doctors have not given preference for 'personal gains' as important dimension, the level of dissatisfaction is highest for the same. The most disturbing factor is the inadequate salary. It is followed by political interference and no recognition of merit in case of promotion/transfer. Genuinely, the starting salary of a doctor is very low (basic salary of Rs. 6,500). It should be made equivalent to atleast, that of a newly appointed lecturer (a basic salary of Rs. 8,000). Of course, this reason is not valid for a senior doctor, who is earning sufficiently in private practice. However, taking into consideration their private sector counterpart and the

impact of their frustration on the provision of services to the patients, we intend to give some suggestions for doctors with atleast 10 years of service.

1. Some part of the total salary should be kept as fixed salary for all types of doctors. This proportion could be say, 75 percent.
2. The remaining 25 percent should be linked with performance. For example, for a surgeon, he may be paid some amount of incentive per surgery, while for other doctors like physicians, the IPD admission or OPD examination could be used as yardstick to measure the performance.

This could be some kind of blend of job security of a government service and flexibility of earnings in the private sector.

12. Political Interference

Although, no suggestions could be given in this matter in specific terms, the issue is enlisted here on account of its importance. As mentioned earlier, this is a serious issue to be taken into consideration. During our fieldwork, it was observed that people are so convinced about the influence of the political leaders that even for a very routine work also, they bring recommendation from some local leader. Doctors have also complained about the political interference.

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Appendix 2.1

A brief note on the fixation of the sample size for patients and providers

In an earlier study (although based on a small sample), it was observed that 84 percent of the indoor patients and 67 percent of the outdoor patients were satisfied with the services provided by public hospitals in Maharashtra. These findings were used only for deciding upon the sample size for patients. Taking the average satisfaction level at 0.75 (75 percent), the sample size is calculated using the formula for the standard error of the proportion, the satisfaction level, in this case. The formula

$$\text{S.E.(p)}=\sqrt{pq/n}$$

Where S.E.(p) is pre fixed

p = proportion satisfied $\quad q = 1 - p$

and n = sample size. Assuming the standard error of 0.025, the estimated size turned out to be 300, for any unit such as district for which the estimates could be obtained. Just as a leeway the range was given as 275-300.

The sample size for providers was not based on any sampling formula as there was no estimate for providers' satisfaction available with us. This number was decided, taking into account the actual numbers of providers in the hospitals of different kinds.

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Population Research Centre
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Annual Patient and Staff Satisfaction Study, 2002-2003

QUESTIONNAIRE FOR THE HOSPITAL

Name of the Hospital

HOSPITAL

RH - I _____

SDH(50)- II _____

SDH(100)- III _____

Dist. Hosp.- IV _____

Other Hosp.- V _____

DISTRICT - ☐☐

INTERVIEW DATE

DAY	MONTH	YEAR
☐☐	☐☐	☐☐☐☐

SIGNATURE OF THE INTERVIEWER- _____

CHECKED BY - _____

1. INFRASTRUCTURE

1.1	Compound Wall/Fencing	All around——1 Partial——2 None——3
1.2	Water Supply a) Source:	Piped——1 Bore Well/H. pump/Tube Well——2 Well——3 Other (Specify)——4
	b) Whether overhead tank and pump exist	No——1 Yes——2
	if yes, i) Whether overhead tank capacity is adequate?	No——1 Yes——2
	ii) Is the pump in working condition?	No——1 Yes——2
1.3	Electricity a) Is there electric line in all parts of the hospitals? b) Regularity of Supply	In all parts——1 In some parts——2 None——3 Power supply continuous——1 Power supply fails occasionally——2 Power cut in summer only——3 Regular power cuts——4 No power supply——5
	c) Alternative arrangement 1. Disel Generator	No——1 Yes——2
	2. Solar System	No——1 Yes——2
1.4	Sewerage	Soak Pit——1 Connected to Municipal Sewerage——2
1.5	Whether source segregation is practiced?	No——1 Yes——2
1.6	Whether hazard reduction is ensured through use of needle syringe destroyer and disinfectant spray?	No——1 Yes——2
1.7	Whether protective cloths are used by waste handlers?	No——1 Yes——2
1.8	Whether deep burial pit / other technology like incinerator or autoclave is available for waste disposal?	No——1 Yes——2
1.9	Building a) Ownership	Own——1 Rented——2
	b) Maintenance i) Condition of painting/white washing	Good——1 Fair——2 Poor——3
	ii) Frequency of painting/white washing	Once in a year——1 Once in three years——2 Once in more than three years——3

	c) Condition of plaster on walls	Well plastered with plaster intact every where—1 Plaster coming off in some places——2 Plaster coming off in many places or no plaster—3
	d) Condition of Floor	Floor in good condition——1 Floor coming off in some places——2 Floor coming off in many places or no proper flooring——3
1.10	Is there an animal trap/cattle trap available in the hospital premises?	No——1 Yes——2

1.11	Whether the cleanliness of -	Good	Fair	Poor
	OPD	1	2	3
	OT	1	2	3
	Rooms	1	2	3
	Wards	1	2	3
	Toilets	1	2	3
	Premises (Compound)	1	2	3

1.12	Are any of the following close to the hospital? (Observe)	No	Yes
	a) Garbage dump	1	2
	b) Cattle Shed	1	2
	c) Stagnant pool	1	2
	d) Pollution from Industry	1	2

1.13	Staff Quarters -	Available		Occupied by Same groups		Occupied by Others	
		No	Yes	No	Yes	No	Yes
	1) Doctors						
	a) In-charge	1	2	1	2	1	2
	b) Obstetrician/Gynaecologist	1	2	1	2	1	2
	c) Pediatrician	1	2	1	2	1	2
	d) Duty doctor(RMO)	1	2	1	2	1	2
	e) Anesthesiologists	1	2	1	2	1	2
	f) Others	1	2	1	2	1	2
	2) Paramedical						
	a) Pharmacist	1	2	1	2	1	2
	b) X-ray technician	1	2	1	2	1	2
	c) Laboratory technician	1	2	1	2	1	2
	3) Class IV						
	a) Ambulance Driver	1	2	1	2	1	2
	b) Attendant	1	2	1	2	1	2

1.14	Communication facilities	No	Yes
	a) Telephone	1	2
	b) Fax	1	2
	c) Personnel computer	1	2
	d) NIC terminal	1	2
	e) Email	1	2
	f) Is hospital accessible by:		
	a) Rail	1	2
	b) Road	1	2
	c) Others – specify_____	1	2

2. VEHICLES

Type of Vehicles	Number of vehicles			If vehicle is not running			
	Sanctioned	Available	On Road	Since when? (in months)	Reason		
					Driver not available	Money for POL not available	Money for repairs not available
Ambulance							
Jeep							
Car							

3. STAFF AND TRAINING

3.1 Staff

	Number of posts				
	Sanctioned	Filled	If Vacant, since when (in months)		
			I	II	III
1. G. Surgeon					
2. Ob. Gy.					
3. G. Physician					
4. Paediatrician					
5. Anesthetist					
6. Orthopedic					
7. Ophthalmologist					
8. Dentist					
9. Radiologist					
10. Pathologist					
11. Psychiatrist					
12. Skin & VD					
13. TB & Chest					
14. ENT					

FOR SDH(100) HOSPITALS					
1. G. Surgeon					
2. Ob. Gy.					
3. G. Physician					
4. Paediatrician					
5. Anesthetist					

3.2 Training of MOs during previous (Full) year

Availed training in	Number MOs trained
F. P.	
RTI / STI	
AIDS	
IPC	
EOC	
Others	

4. AVAILABILITY OF FACILITIES FOR OUT PATENTS DEPARTMENTS

		No	Yes
1	Boards/Pictorial signage to guide the clients	1	2
2	Adequate working space	1	2
3	Privacy during examination	1	2
4	Facility for counseling	1	2
5	Separate toilet with running water	1	2
6	Facilities for sterilizing instruments	1	2
7	Male specialist	1	2
8	Female specialist	1	2

5. LABORATORY

		No	Yes
5.1	Are adequate Equipment and chemicals available?	1	2
5.2	Is laboratory maintained in orderly manner?(observe)	1	2

6. X-RAY

		No	Yes
6.1	Are adequate Equipment and chemicals available?	1	2
6.2	Is X-ray maintained in orderly manner?(observe)	1	2

7. BLOOD BANK (BB)

		No	Yes
7.1	Are adequate Equipment and chemicals available?	1	2
7.2	Is Blood Bank maintained in orderly manner?(observe)	1	2

8. ACCOMMODATION FACILITIES FOR FAMILIES OF ADMITTED PATIENTS

		No	Yes
8.1	Facility for stay available?	1	2
8.2	Cooking facility available?	1	2

9. OPERATION THEATER

9.1	Number of dedicated operation theaters (OT) available	

9.2	Number of OT used for obsteratic/Gynecological Purpose		
		No	Yes
	a. Has O.T. enough space?	1	2
	b. Is OT fitted with air conditioner?	1	2
	c. Is the air conditioner working?	1	2
	d. Is generator available for OT?	1	2
	e. Is emergency light available in OT?	1	2
	f. Is fumigation done regularly?(check the records)	1	2
	g. Is the days of sterilization in a week displayed on the public notice on O.T.?	1	2

10. EQUIPMENT

	Item	Available		Working	
		No	Yes	No	Yes
	1. 500 mA X- ray	1	2	1	2
	2. 300 mA X- ray	1	2	1	2
	3. 100 mA X- ray	1	2	1	2
	4. 60 mA X- ray	1	2	1	2
	5. Dental X- ray	1	2	1	2
	6. Ultra sound scanner (Linear)	1	2	1	2
	7. Ultra sound scanner (Linear/sector)	1	2	1	2
	8. ECG	1	2	1	2
	9. Cardiac Monitor Bedside	1	2	1	2
	10. Multi-Parameter Physiological Moniter	1	2	1	2
	11. Stress Test System (Treadmill)	1	2	1	2
	12. Central Moniter Station	1	2	1	2
	13. Audiometer	1	2	1	2
	14. Gastroscope	1	2	1	2
	15. Bronchoscope	1	2	1	2
	16. Endoscope with Laproscope and Accessories	1	2	1	2
	17. Hysicroscopy with insufflator and Colposcope	1	2	1	2
	18. Ventilator Transport	1	2	1	2
	19. Ventilator Servo	1	2	1	2
	20. Manley Ventilator	1	2	1	2
	21. Boyle's Apparetus with circle absorber	1	2	1	2
	22. Colonoscope	1	2	1	2
	23. Pulse Oximeter	1	2	1	2
	24. Dental Unit & Chair	1	2	1	2
	25. Dental Micrometer with Air Rotor	1	2	1	2
	26. Autoclave HP (Horizontal)	1	2	1	2
	27. OT Light (shadowless)	1	2	1	2

	28. Dental Lab. (Bath, Motor, Lathe)	1	2	1	2
	29. Auto-analyser	1	2	1	2
	30. Tissue prossesor	1	2	1	2
	31. Auto Stainer	1	2	1	2
	32. Refrigerator (300 Liters)	1	2	1	2
	33. A/C Machine with Stabiliser	1	2	1	2
	34. Water Cooler	1	2	1	2
	35. Three Body Mortuary	1	2	1	2
	36. Generator 30 KVA	1	2	1	2
	37. Generator 50 KVA	1	2	1	2
	38. Generator 82.5 KVA	1	2	1	2
	39. Hot Water System (Solar Unit)	1	2	1	2
	40. Incinerator	1	2	1	2

11. COLD CHAIN AND BLOOD BANK

11.1 Cold Chain

	Availability of	In working Condition No	Yes	Temperature maintained No	Yes	If not in working order since when (In months)
	1. Walk-in coolers	1	2	1	2	
	2. Walk-n freezers	1	2	1	2	
	3. Icelined freezers	1	2	1	2	
	4. Blood Bank	1	2	1	2	
	5. Refrigerators	1	2	1	2	

12. STOCK MAINTENANCE (OBSERVE)

12.1	Is there a store room to keep stock of drugs, vaccines, contraceptives and equipments	No	Yes	
	If yes,	1	2	
	i) Is the store room properly lighted and ventilated?	1	2	
		Yes	Somewhat Inadequate	Grossly inadequate
	ii) Is the size of store room sufficient for keeping stock?	1	2	3

		No	Yes
iii)	Are the stocks stored in orderly manner	1	2
iv)	Are stock registers maintained regularly	1	2

13. DRUG STORES

		No	Yes
13.1	Adequate supplies	1	2
13.2	Supplies as per requirement of the patients	1	2

14. HOSPITAL SERVICE NORMS

a)	Cleaning	Norms	Actual
	OPD	☐	☐
	Ward	☐	☐
	All around hospital	☐	☐
b)	Food of Patient	☐	☐

15. NATURE OF THE CONSTRUCTION WORK TAKEN UNDER MHSDP

	Task	Status of the work*
Renovation & face lifting of	1. _____	( )
	2. _____	( )
	3. _____	( )
Addition of facilities like	a. _____	( )
	b. _____	( )
	c. _____	( )
	d. _____	( )
Addition of Beds	_____	

Code: * Complete————1 Underway————2 Yet to be initiated————3

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Pune – 411 004

Annual Patient and Staff Satisfaction Study, 2002-2003

QUESTIONNAIRE FOR THE INDOOR PATIENT

IDENTIFICATION

HOSPITAL

RH - I
SDH(50)- II
SDH(100)- III
Dist. Hosp.- IV
Other Hosp.- V

DISTRICT ☐☐

TYPE OF PATIENT

OUTDOOR - 1
INDOOR - 2

NAME OF THE WARD - _____

NAME OF THE PATIENT - _____

ADDRESS - _____

_____

_____

INTERVIEW DATE **DAY** ☐☐ **MONTH** ☐☐ **YEAR** ☐☐☐☐

SIGNATURE OF THE INTERVIEWER- _____

CHECKED BY - _____

Note: If the patient is a child or two old: interview a person accompanying the patients

I IDENTIFICATION

1.1 Name of the Patient - _____

1.2 Name of the Ward - _____

1.3	Place of residence	Rural -1 Urban -2
1.4	Sex	Male –1 Female-2
1.5	Age (Years completed)	☐☐
1.6	Education (Years of Schooling)	☐☐
1.7	Marital Status	Unmarried ——1 Currently married——2 Widowed——3 Divorced/Separated ——4
1.8	Religion	Hindu——1 Muslim——2 Christian ——3 Sikh ——4 Buddhist/Neo Buddhist——5 Jain ——6 Other (Specify)——7
1.9	Caste	SC——1 ST——2 Others (Specify) ——3
1.10	Occupation of the patient	Not working——0 Prof.,Tech., Manag.——1 Clerical ——2 Sales——3 Agric-self employed——4 Agric-employee——5 Household & Domestic——6 Services——7 Skilled manual——8 Unskilled manual——9 Retired——10 Education——11 Don't know ——98
1.11	Occupation of the head of the household	Not working——0 Prof.,Tech., Manag. ——1 Clerical——2 Sales——3 Agric-self employed ——4 Agric-employee ——5 Household & Domestic ——6 Services ——7 Skilled manual ——8

		Unskilled manual ——— 9 Don't know ——— 98
1.12	Whether belongs to Below Poverty Level (BPL) category? (Ascertain from the BPL card)	No ——— 1 Yes ——— 2 Can't say ——— 3

II LIVING CONDITIONS

2.1	Type of House :	Kutchha ——— 1 Semi-pucca ——— 2 Pucca ——— 3
2.2	What is the main source of lighting for your household?	Electricity ——— 1 Kerosene ——— 2 Gas ——— 3 Oil ——— 4 Others (specify) ——— 5
2.3	What is the main source of drinking water for members of your household?	**Piped water** Piped into residence/Yard/Plot ——— 1 Public Tap ——— 2 **Ground water** Hand pump in yard/Plot ——— 3 Public Hand pump ——— 4 **Well water** Well in residence/Yard/Plot ——— 5 Public well ——— 6 **Surface water** Spring ——— 7 River/Stream ——— 8 Pond/Lake ——— 9 Dam ——— 10 Rain water ——— 11 Tanker Truck ——— 12 Other (Specify) ——— 13
2.4	What kind of toilet facility does your household have?	**Flush toilet** Own flush toilet ——— 1 Shared flush toilet ——— 2 Public flush toilet ——— 3 **Pit toilet / latrine** Own Pit toilet / latrine ——— 4 Shared toilet / latrine ——— 5 Public Pit toilet / latrine ——— 6 No facility/Bush/Field ——— 7 Other (Specify) ——— 9
2.5	What type of fuel does your household mainly use for cooking?	Wood ——— 1 Crop residues ——— 2 Dung cakes ——— 3 Coal/coke/lignite ——— 4 Charcoal ——— 5 Kerosene ——— 6 Electricity ——— 7

		Liquid petroleum gas——8 Bio-gas——9 Other (Specify)——10
2.6	How many rooms are there in your household?	☐
2.7	Whether separate room for cooking?	No——1 Yes——2 Cannot say——3
2.8	Does this household own this house or any other house?	No——1 Yes——2 Cannot say——3
2.9	Does this household own any livestock?	No——1 Yes——2 Cannot say——3
2.10	Does this household own any agricultural land?	No——1 → Q. 2.13 Yes——2 Cannot say——3 → Q. 2.13
2.11	How much agricultural land does this household own?	☐ Acres
2.12	Out of this land, how much is irrigated?	☐ Acres
2.13	Do you own following durables?	

	Yes	No
Mattress	1	2
Pressure Cooker	1	2
Chair	1	2
Cot or bed	1	2
Table	1	2
Clock / watch	1	2
Fan	1	2
Bicycle	1	2
Radio/Transistor	1	2
Sewing machine	1	2
Telephone	1	2
Refrigerator	1	2
B & W	1	2
Colour TV	1	2
Cupboard	1	2
Moped/Scooter/Motorcycle	1	2
Tape recorder	1	2
Car	1	2
Water pump	1	2
Bullock Cart	1	2
Thresher	1	2
Tractor	1	2

III ADMISSION TO THE PRESENT HOSPITAL

3.1	In-patient Number	☐☐☐☐☐
3.2	Date of Admission	Day ☐☐ Month ☐☐ Year ☐☐☐☐
3.3	For what ailment you got admitted here? (Case card)	Chronic amebiasis—1 Pulmonary tuberculosis—2 Sexually transmitted diseases—3 Leprosy—4 Jaundice—5 Guinea worm—6 Filaria (elephantiasis)—7 Cancer—8 Other tumours—9 Anaemia (general debility)—10 Goitre & thyroid disorders—11 Diabetes—12 Beri beri—13 Ricket—14 Other malnutrition diseases—15 Mental & behavioral disorders—16 Epilepsy—17 Other diseases of nerves—18 Cataract—19 Other visual disabilities—20 Other diseases of the eye—21 Hearing disability—22 Other diseases of the ear—23 Diseases of heart—24 High/low blood pressure—25 Piles—26 Speech disability—27 Diseases of mouth, teeth & gum—28 Gastritis hyper-acidity/gastric/peptic/duodenal ulcer—29 Diseases of kidney/urinary system —30 Prostrate disorders—31 Hydrocele—32 Pain in joints—33 Other disorders of bones and joints—34 Locomotor disability—35 Other congential deformities (excld. Disability)—36 Other diagnosed diseases (more than 30 days)—37 Undiagnosed ailment (more than 30 days)—38 Accident & Injuries—39 Burn—40 Other (specify)—41
3.4	Which is the health facility nearest to your house?	Same Hospital—1 → Q. 3.6 SC—2 PHC—3 RH—4 Private hospital—5 Other (specify)—6

3.5	Why did you not go to this hospital?	Lack of facilities——A Bad experience with the Doctors——B Poor quality——C Charge are exorbitant——D Earlier experience with the present hospital is good——E Other——F	
3.6	Before coming here, did you go any where else for treatment?	No——1 SC——2 PHC——3 RH——4 Private hospital——5 Other (specify)——6	→ Q. 3.12
3.7	Reason for going to this hospital?	Easily accessible——A Free of charge——B Good past experienc——C On others' advice——D Emergency——E Other (specify)——F	
3.8	Expenses for the treatment (excluding tests)	☐☐☐☐	
3.9	How long you took the treatment	☐☐ Day	
3.10	a) Did the doctor advise you any tests	Yes——1 No——2	→ Q. 3.12

Q. 3.11 Please give information on the following items

Sr. No	Test	Place*	Cost
1	Blood Test		
2	Urine Test		
3	X-ray		
4	ECG		
5	Other (Specify)		
6			

Code : * Govt.....1, PVT.....2, N.A.....9

3.12	Reason for coming to present hospital?	Easily accessible——A Free of charge——B Good experience——C On others' advice——D Emergency——E Good acquaintances with Hosp. Staff——F Other (specify)——G
3.13	Distance of the present hospital from your residence and how long did you take to reach here?	Distance ☐☐ Km.

Q. 3.14 Please provide the information on treatment expenditure incurred

Sr. No.	Mode of Transport	Self		Relation		Total
		Time (Minutes)	Fare (Rs)	No. of Persons	Fare (Rs)	Fare for one side (Rs)
1	Walking					
2	Bullock Cart					
3	Bicycle					
4	Auto Rickshow					
5	ST bus					
6	Private bus					
7	Private car					
8	Railway					
9	Ambulance					

IV WAITING TIME

4.1	Did you get admitted to IPD through OPD?	Yes, on another day——1 Yes, on same day——2 No, not through OPD (referal)——3	Q. 4.6
4.2	Who referred?	Public Doctor——1 Private Doctor——2 Health Functionaries——3 Other (specify)——4	
4.3	Time spent for contacting the doctor? (since you came to the hospital)	Minutes ☐☐	
4.4	After meeting the doctor, time taken for getting admitted to the ward?	☐☐	
4.5	Time taken for getting the service in IPD?	☐☐	Go to Section V

Q. 4.6 Please give information on the following items:

Sr. No	Waiting	Time in Minutes	Satisfaction*	
1	Registration			
2	Doctor's Call			
3	Doctor's Examination Time			
4	Admission to ward			
5	Getting Services			
6	Time to get discharge (Between the doctor's issue of discharge card and actual discharge)			

Code : * Too long.....1, Appropriate.....2, Too Short.....3, Cann't Say.....4

V. STAFF BEHAVIOUR

5.1	Did the doctor treat you in a friendly manner?	No——1 Somewhat——2 Yes——3 Can't say——4
5.2	Did he listen to your complaint patiently?	No——1 Somewhat——2 Yes——3 Can't say——4
5.3	Did the doctor let you ask questions?	No——1 Sometimes——2 Yes——3 Can't say——4
5.4	Did he respond to your questions?	No——1 Sometimes——2 Yes——3 Can't say——4
5.5	Was there privacy at the place of examination?	No——1 Yes——2 Can't say——3
5.6	Did the doctor discuss with you about your ailment?	No——1 Yes——2 Can't say——3
5.7	Did he talk to you about the recovery?	No——1 Yes——2 Can't say——3
5.8	Was the instruction for taking medicines given properly?	No——1 Yes——2 Can't say——3
5.9	Other than the medical treatment, did he give you 'other advice' relating to your health?	No——1 Yes——2 Can't say——3
5.10	How was his behaviour ?	Rude——1 Indifferent——2 Good——3 Very Kind——4
5.11	What do you think about the Doctor's competence?	Capable/Competent——1 So-So——2 Not Competent——3 Can't Say——4

5.12	How does the nursing staff behave with you?	Rude----------1 Indifferent----------2 Good----------3 Very Kind----------4
5.13	What do you think about the Nurses' care?	Negligent----------1 Arrogant----------2 Good----------3 Can't say----------4
5.14	In case of need, are the nurses available?	No----------1 Sometimes----------2 Always----------3 Can't say----------4
5.15	In case of emergency, do they attend your call immediately?	No----------1 Yes----------2 Can't say----------3
5.16	How often in a day, the doctor visits you?	☐ Times
5.20	How much time he spends with you?	☐ Minutes
5.21	Do you have faith/confidence in the doctor?	No----------1 Yes----------2 Can't say----------3
5.22	Do the Doctors visit the ward on scheduled time?	No----------1 Sometimes----------2 Yes----------3 Can't say----------4
5.14	Do the technical staff (BB technician, Lab technician, X-ray technician) behave coordially?	Rude----------1 Indifferent----------2 Good----------3 Very Kind----------4 Did not meet any technicians----------9
5.14	Does the ayahs behave cordially?	Negligent----------1 Arrogant----------2 Good----------3 Can't say----------4
5.15	Does the ward-boys behave cordially?	Negligent----------1 Arrogant----------2 Good----------3 Can't say----------4
5.16	Does the counter clerk behave cordially?	Negligent----------1 Arrogant----------2 Good----------3 Can't say----------4

VI. EFFECTIVITY OF THE TREATMENT

6.1	Is the ailment, for which you got admitted, cured now?	Fully cured——1 Partially recovered——2 Not cured——3 Can't say——4
6.2	For those who have undergone a surgery a) Was the operation successful?	No——1 Yes——2
	b) Are you satisfied with the post-operative care?	Not satisfied——1 Somewhat satisfied——2 Yes——3
6.3	Did you get all the medicines from the hospital?	No, mainly brought from outside——1 No, some brought from outside——2 Yes, all from hospital——3
6.4	In your opinion, is the hospital well-equipped, with reference to the equipment?	Well-equipped——1 Fairly-equipped——2 Not——3
6.5	In your opinion, is the hospital well-equipped, with reference to diagnostic facilities?	
	a) Blood Bank	Well-equipped——1 Fairly-equipped——2 Not——3
	b) Laboratory	Well-equipped——1 Fairly-equipped——2 Not——3
	c) X- ray	Well-equipped——1 Fairly-equipped——2 Not——3

VII. TREATMENT EXPENSES

Please give the details of your expenditure for your current ailment in this hospital?

7.1	Expenses for surgery/delivery					
7.2	Expenses for beds					
a)	Diagnostic Test	Whether advised		Got done from		Expenses	Whether exempted
		Yes	No	Public Hosp.	Private Hosp.		Yes No
	X-rays	1	2	1	2		1 2

	Blood Test	1	2	1	2				1	2
	Urine	1	2	1	2				1	2
	ECG	1	2	1	2				1	2
	Sonography	1	2	1	2				1	2
	CT-Scan	1	2	1	2				1	2
	Bronchoscopy	1	2	1	2				1	2
	Endoscopy	1	2	1	2				1	2

b)	**Medicines**	Brought from outside		
		Saline replacement		
		Blood transfusion		
c)	**Food charges (Hospital)**	No. of days		
		Daily charges		
e)	**Food charges (Brought from outside)**	No. of days		
		Daily charges		
d)	**Stay of Relatives**	No. of persons		
		Duration of stay		
		Per day expenses	Food ☐☐☐ Transport ☐☐☐ Stay ☐☐☐	
e)	Are the above expenses affordable to you?		No——1 Yes, with little borrowings——2 Yes——3	
f)	Did you borrow any money for your treatment?		No——1 → Q. 7.3 Yes——2	
g)	From whom did you borrow?		Relatives——1 Friends——2 Sale of property——3 Money lender——4	
h)	How much did you borrow?		☐☐☐ Rs.	

7.3	Did you donate any money to Poor Fund Box? If yes, How much?	No----------1 Yes----------2 ☐☐☐	

VIII. CLEANLINESS

Give your opinion about the cleanliness of the hospital?

Sr. No.	Cleanliness	Frequency	Satisfaction***	
1	Floor Cleaning*			
2	Toilet/Bathroom Cleaning*			
3	Washing of patient's uniform**			
4	Bed-Sheets Changing**			

Code: * Twice.....1
Once.....2
Less than once.....3

** Daily two time.....1
Daily one time.....2
Once in two/three days.....3
Once in four/five days.....4
Once in a week.....5
Can't say.....6

*** Not satisfied.....1
Partially satisfied.....2
Satisfied.....3
Can't say.....4

IX FOOD

9.1	Did you take food in the hospital?	Yes----------1 No----------2	▶Section X
9.2	What did you take?	Morning tea ☐ Break fast ☐ Lunch ☐ Afternoon tea ☐ Dinner ☐	
9.3	Was the food served at scheduled time?	No----------1 Yes----------2 Partially----------3	
9.4	Was the quantity of food adequate?	No----------1 Yes----------2 Can't say----------3	
9.5	How would you rate the quality of food?	Bad----------1 Alright----------2 Good----------3 Can't say----------4	

9.6	Was the food in accordance with the dietary needs of the patient?	No——1 Yes——2 Can't say——3
9.8	Are the food charges affordable?	No——1 Yes——2 Can't say——3
9.9	On the whole, are you satisfied with the catering arrangement?	No——1 Yes——2 Can't say——3

X. CROWDING

10.1	Did you get a cot immediately after admission to the ward?	Immediately——1 Same day——2 Next day——3 Not immediately after ( ) days——4
10.2	Do you feel that the space in the ward is adequate?	No——1 Yes——2 Can't say——3
10.3	Are you satisfied with the ward arrangement?	No——1 Yes——2 Can't say——3
10.4	Is the space for OPD adequate? If not : after how many days you got the cot?	No——1 Yes——2 Can't say——3
10.5	Do you feel that there is lot of noise in the ward?	No——1 Yes——2 Can't say——3

XI. FACILITIES PROVIDED BY THE HOSPITAL

Q. 11.1 Please give your opinion about the facilities available in the hospital?

	Facility	Availability		Satisfaction	
		Yes	No	Yes	No
1	T. V.	1	2	1	2
2	Canteen	1	2	1	2
3	Medical Shop	1	2	1	2
4	Telephone	1	2	1	2
5	Accommodation for relatives	1	2	1	2
6	Ambulance	1	2	1	2

11.2	If you have any complaint regarding any of the above-mentioned services, have you registered it with In-charge Nurse, Metron, Kitchen-in-charge, Doctor,A.O... /Complaint Box/Public Grievance Cell?	No----------1 Yes----------2 Can't say----------3	
11.3	If you could choose the first three dimensions in order, which are those?	• Waiting time • Coordial behaviour of the staff • Effective treatment • Availability of medicines • Prompt service • Affordable charges • Anything other than those (specify)	Rank ( ) ( ) ( ) ( ) ( ) ( ) ( )
11.4	Would you like to recommend this hospital to others	No----------1 Yes----------2 Can't say----------3	

XII FOR FEMALE PATIENTS ONLY

12.1	Who attended you?	Male Doctor----------1 Female Doctor----------2 Both----------3
12.2	Do you feel equally comfortable with Male and female doctor's, during the examination?	Yes----------1 Slightly ackward with Male doctor----------2 Not at all Confuse----------3 Can't say----------4
12.3	Do you think that a lady doctor (vis-à-vis a male doctor) is more responsive to your health problem	No difference----------1 No, it depend upon the person----------2 Yes----------3 Can't say----------4

XIII DURING THE LAST ONE YEAR, WERE THERE ANY SICKNESSES, FOR WHICH YOU/FAMILY MEMBER TOOK MEDICINES? GIVE THE FOLLOWING IFORMATION.

Sr. No	Who was sick? (Name)	Sickness	Duration of sickness	Where did you go for treatment?	Reasons for going to the given facility	Expenses (in Rs.)	Were you hospitalised or taking only ambulatory outpatient care?	Distance to the facility from your home
1								
2								
3								
4								
5								

Confidential:
For research purpose only

Population Research Centre
Gokhale Institute of Politics and Economics
Pune – 411 004

Annual Patient and Staff Satisfaction Study, 2002-2003

QUESTIONNAIRE FOR THE OUTDOOR PATIENT

IDENTIFICATION

HOSPITAL

RH - I
SDH(50)- II
SDH(100)- III
Dist. Hosp.- IV
Other Hosp.- V

DISTRICT ☐☐

TYPE OF PATIENT

OUTDOOR - 1
INDOOR - 2

NAME OF THE PATIENT - _____

ADDRESS - _____

_____

_____

NTERVIEW DATE DAY ☐☐ MONTH ☐☐ YEAR ☐☐☐☐

SIGNATURE OF THE INTERVIEWER- _____

CHECKED BY - _____

Note: If the patient is a child or too old: interview a person accompanying the patient

I IDENTIFICATION

1.1 Name of the Patient - _____

1.2	Place of residence	Rural -1 Urban -2
1.3	Sex	Male –1 Female-2
1.4	Age (Years completed)	☐☐
1.5	Education (Years of Schooling)	☐☐
1.6	Marital Status	Unmarried----1 Currently married----2 Widowed----3 Divorced/Separated----4
1.7	Religion	Hindu----1 Muslim----2 Christian ----3 Sikh ----4 Buddhist/Neo Buddhist----5 Jain ----6 Other (specify)----7
1.8	Caste	SC----1 ST----2 Others----3
1.9	Occupation of the patient	Not working----0 Prof.,Tech., Manag.----1 Clerical----2 Sales----3 Agric-self employed----4 Agric-employee----5 Household & Domestic----6 Services----7 Skilled manual----8 Unskilled manual----9 Retired----10 Education----11 Don't know----98
1.10	Occupation of the head of the household	Not working----0 Prof.,Tech., Manag.----1 Clerical----2 Sales----3 Agric-self employed----4 Agric-employee----5 Household & Domestic----6 Services----7 Skilled manual----8 Unskilled manual----9 Don't know----98

1.11	Whether belongs to Below Poverty Level (BPL) category? (Ascertain from the BPL Card)	Yes----------1 No----------2	

II LIVING CONDITIONS

2.1	Type of House:	Kutchha----------1 Semi-pucca----------2 Pucca----------3	
2.2	What is the main source of lighting for your household?	Electricity----------1 Kerosene----------2 Gas----------3 Oils---------- 4 Others(specify)----------5	
2.3	What is the main source of drinking water for members of your household?	**Piped water** Piped into residence/Yard/Plot---------- -1 Public Tap---------- 2 **Ground water** Hand pump in yard/Plot---------- 3 Public Hand pump----------4 **Well water** Well in residence/Yard/Plot----------5 Public well----------6 **Surface water** Spring----------7 River/Stream----------8 Pond/Lake----------9 Dam----------10 Rain water----------11 Tanker Truck----------12 Other (Specify)----------13	
2.4	What kind of toilet facility does your household have?	**Flush toilet** Own flush toilet----------1 Shared flush toilet---------- 2 Public flush toilet----------3 **Pit toilet latrine** Own Pit toilet latrine----------4 Shared toilet latrine----------5 Public Pit toilet latrine----------6 No facility----------7 Other (Specify)----------9	
2.5	What type of fuel does your household mainly use for cooking?	Wood----------1 Crop residues----------2 Dung cakes---------- 3 Coal/coke/lignite----------4 Charcoal---------- 5 Kerosene----------6 Electricity----------7 Liquid petroleum gas----------8 Bio-gas----------9 Other (Specify)----------10	

2.6	How many rooms are there in your household?	☐	
2.7	Whether separate room for cooking?	No——1 Yes——2 Cannot say——3	
2.8	Does this household own this house or any other house?	No——1 Yes——2 Cannot say——3	
2.9	Does this household own any livestock?	No——1 Yes——2 Cannot say——3	
2.10	Does this household own any agricultural land?	No——1 → Q. 25 Yes——2 Cannot say——3 → Q. 25	
2.11	How much agricultural land does this household own? (size & unit)	☐ Acres	
2.12	Out of this land, how much is irrigated? (size & unit)	☐ acres	
2.13	Do you own following durables?		

	Yes	No
Mattress	1	2
Pressure Cooker	1	2
Chair	1	2
Cot or bed	1	2
Table	1	2
Clock Watch	1	2
Fan	1	2
Bicycle	1	2
Radio/Transistor	1	2
Sewing machine	1	2
Telephone	1	2
Refrigerator	1	2
B & W TV	1	2
Colour Television	1	2
Cupboard	1	2
Moped/Scooter/Motorcycle	1	2
Tape recorder	1	2
Car	1	2
Water pump	1	2
Bullock Cart	1	2
Thresher	1	2
Tractor	1	2

III ADMISSION TO THE PRESENT HOSPITAL

3.1	Out-patient Number	☐☐☐☐☐	
3.2	Was it your first visit or revisit?	First visit ---------- 1 Revisit ---------- 2	
3.2	If revisit, Number of Visits made so far	☐	
3.3	Date of Admission	Day ☐☐ Month ☐☐ Year ☐☐☐☐	
3.4	For what ailment you got admitted here? (Case card)	Chronic amebiasis ---------- 1 Pulmonary tuberculosis ---------- 2 Sexually transmitted diseases ---------- 3 Leprosy ---------- 4 Jaundice ---------- 5 Guinea worm ---------- 6 Filaria (elephantiasis) ---------- 7 Cancer ---------- 8 Other tumours ---------- 9 Anaemia (general debility) ---------- 10 Goitre & thyroid disorders ---------- 11 Diabetes ---------- 12 Beri beri ---------- 13 Ricket ---------- 14 Other malnutrition diseases ---------- 15 Mental & behavioral disorders ---------- 16 Epilepsy ---------- 17 Other diseases of nerves ---------- 18 Cataract ---------- 19 Other visual disabilities ---------- 20 Other diseases of the eye ---------- 21 Hearing disability ---------- 22 Other diseases of the ear ---------- 23 Diseases of heart ---------- 24 High/low blood pressure ---------- 25 Piles ---------- 26 Speech disability ---------- 27 Diseases of mouth, teeth & gum ---------- 28 Gastritis hyper-acidity/gastric/peptic/duodenal ulcer ---------- 29 Diseases of kidney/urinary system ---------- 30 Prostrate disorders ---------- 31 Hydrocele ---------- 32 Pain in joints ---------- 33 Other disorders of bones and joints ---------- 34 Locomotor disability ---------- 35 Other congential deformities (excld. Disability) ---------- 36 Other diagnosed diseases (more than 30 days) ---------- 37 Undiagnosed ailment (more than 30 days) ---------- 38 Accident & Injuries ---------- 39 Burn ---------- 40 Other (specify) ---------- 41	

3.5	Which is the facility nearest to your house?	Same Hospital----------1 SC----------2 PHC----------3 RH----------4 Private hospital----------5 Other (specify)----------7	→Q.3.7
3.6	Why did you not go to this hospital?	Lack of facilities----------A Bad experience with the Doctors----------B Poor quality----------C Charge are exorbitant----------D Earlier experience with the present hospital is good----------E Other----------F	
3.7	Before coming here, did you go any where else for treatment?	No----------1 SC----------2 PHC----------3 RH----------4 Private hospital----------5 Other (specify)----------6	→Q.3.13
3.8	Reason for going to this hospital?	Easily accessible----------A Free of charge----------B Good experience----------C On others' advice----------D Other (specify)----------E	
3.9	Expenses for the treatment	☐☐☐☐	
3.10	How long you took the treatment?	☐☐ Day	
3.11	a) Did the doctor advise you any tests?	No----------1 Yes----------2	→ Q. 3.13

Q. 3.12

Sr. No	Test	Place*	Cost
1	Blood Test		
2	Urine Test		
3	X-ray		
4	ECG		
5	Other (Specify)		
6			

Code : * Govt.....1, PVT.....2, N.A.....9

3.13	Reason for coming to present hospital :	Easily accessible----------A Free of charge----------B Good past experience----------C On others' advice----------D Acquaintance with the Hosp. Staff----------E Other (specify)----------F

3.14	Distance of the present hospital from your residence and how long did you take to reach here?	Minutes Time ☐☐ Distance ☐☐ Km.

Q. 3.15

Sr. No.	Mode of Transport	Self		Relation		Total
		Time (Minutes)	Fare (Rs.)	No. of persons	Fare (Rs)	Fare for one side (Rs)
1	Walking					
2	Bullock Cart					
3	Bicycle					
4	Auto Rickshow					
5	ST bus					
6	Private bus					
7	Private car					
8	Railway					
9	Ambulance					

IV WAITING TIME

Sr. No	Waiting	Time in Minutes	Satisfaction*
4.1	Registration		
4.2	Doctor Call		
4.3	Doctor's Examination Time		
4.4	Admission to Ward		
4.5	Getting Services		

Code : * Too long.....1, Appropriate...2, Too Short.....3, Can't Say.....4

V. STAFF BEHAVIOUR

5.1	Did the doctor greet you in a friendly manner?	No——1 Yes——2 Can't say——3
5.2	Did the doctor listen to your complaint patiently?	No——1 Somewhat——2 Yes——3 Can't say——4
5.3	Did the doctor let you ask questions?	No——1 Somewhat——2 Yes——3 Can't say——4
5.4	Did he respond to your questions?	No——1 Somewhat——2 Yes——3 Can't say——4

5.4	Was there Privacy at the place of examination?	No----------1 Yes----------2 Can't say----------3
5.5	Did the Doctor discuss with you about your ailment?	No----------1 Yes----------2 Can't say----------3
5.6	Did he talk to you about the recovery?	No----------1 Yes----------2 Can't say----------3
5.7	Was the instruction for taking medicines given properly?	No----------1 Yes----------2 Can't say----------3
5.8	Other than the medical treatment, did he give you 'other advice' relating to your health?	No----------1 Yes----------2 Can't say----------3
5.9	How was his behavior?	Rude----------1 Reasonable----------2 Good----------3 Very kind----------4
5.10	How did the nursing staff behave with you?	Rude----------1 Reasonable ----------2 Good ---------- 3 Very kind----------4
5.11	How much time the doctor spent with you?	Min ☐ Whether adequate: Yes 1 No 2
5.12	How did the counter clerk behave with you?	Rude----------1 Reasonable ----------2 Good ----------3 Very kind----------4
5.13	How did the nursing person supplying medicine with you?	Rude----------1 Reasonable ----------2 Good----------3 Very kind---------- -4
5.14	How did the technician (Lab., X-ray) behave with you?	Rude----------1 Reasonable ----------2 Good ---------- 3 Very kind---------- --4

VI. EFFECTIVITY OF THE TREATMENT

6.1	Is the ailment, for which you got visited the hospitals is cured?	Fully cured----------1 Still under treatment----------2 Not cured----------3 Can't say----------4
6.2	Did you get all medicines from the hospital?	No, mainly brought from outside----------1 No, some brought from outside----------2 Yes, all from hospital----------3

VII. TREATMENT EXPENSES

7.1	Diagnostic Test	Whether advised Yes	No	Got done from Public Hosp.	Private Hosp.	Expenses	Whether exempted Yes	No
	X-rays	1	2	1	2		1	2
	Blood Test							
	Urine							
	ECG							
	Sonography							
	CT-Scan							
	Bronchoscopy							
	Endoscopy							
7.2	Medicines	brought from outside						

VIII. CLEANLINESS

8.1	What do you think about the cleanliness of the OPD and Examination Room?	
	a) OPD	Not Clean----------1 Partially Clean----------2 Clean----------3 Can't say----------4
	b) Examination Room	Not Clean----------1 Partially Clean----------2 Clean----------3 Can't say----------4

IX. CROWDING

9.1	Is the space for OPD and Examination room adequate? a) OPD b) Examination room	 No——1 Yes——2 Can't say——3 No——1 Yes——2 Can't say——3

X CONTINUTY OF TREATMENT

10.1	Overall, would you say, you were satisfied with your visit to the facility today, or was you dissatisfied with your visit today?	Dissatisfied——1 Satisfied——2 Can't say——3
10.2	Why were you dissatisfied with your visit?	Lack of facilities——A Bad experience with the Doctors——B Poor quality——C Charges are exorbitant——D Earlier experience with the present hospital is good——E Other (specify)——F
10.3	Would you come again to this hospital?	No——1 May come——2 Yes——3 Can't say——4
10.4	Would you recommend this hospital to others?	No——1 Yes——2 Can't say——3

XI

11.1	If you could choose the first three dimensions in order, which are those?	• Easy access • Waiting time • Coordial behaviour of counter clerk • Coordial behaviour of doctor • Availability of medicines • Availability of diagnostic facilities • Crowding of the OPD	Rank ( ) ( ) ( ) ( ) ( ) ( ) ( )

XII **During the last one year, were there any sicknesses, for which you/family member took medicines? Give the following information.**

Sr. No	Who was sick? (Name)	Sickness	Duration of sickness	Where did you go for treatment?	Reasons for going to the given facility	Expenses (in Rs.)	Were you hospitalised or taking only medicines?	Distance to the facility from your home
1								
2								
3								
4								
5								
6								

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Population Research Centre
Gokhale Institute of Politics and Economics
Pune – 411 004

Annual Patient and Staff Satisfaction Study, 2002-2003

QUESTIONNAIRE FOR THE PROVIDER (DOCTOR)

NAME OF THE HOSPITAL - _____

I IDENTIFICATION

1.1 Name - _____ **Designation :** _____ **Ward:** _____

1.2	Age (Years completed)	☐☐
1.3	Sex	Male –1 Female-2
1.4	Marital Status	Unmarried——1 Currently married——2 Widowed——3 Divorced/Separated——4
1.5	Caste	SC——1 ST——2 Others——3
1.6	Religion	Hindu——1 Muslim——2 Christian——3 Sikh——4 Buddhist/Neo Buddhist——5 Jain——6 Other(Specify)——7
1.7	Education (Years of Schooling)	☐☐

Q 1.8 What are the trainings undergone by you?

Sr. No.	Year	Type of training	Duration of the training

II WORK EXPERIENCE : Previous places of work

Sr. No	Place of work	Position	Duration of work
1			
2			
3			
4			
5			
6			
7			

2.2	The reason for coming to the government services	Job security——A Private practice risky——B Regular income——C Opportunity to serve people——D Establishing private practice is difficult——E Fixed timings——F Retirement benefits——G Leave benefits——H Any other (specify)——I
2.3	If the doctor has earlier worked in other public hospitals (PHC, RH, corporation hospital...etc) his opinion about them	No lacunae——A Staff shortage——B Medicine shortage——C Shortage of funds——D Pressure of superiors——E Political interference——F Improper location——G Shortage of equipment——H Too many restrictions——I Lack of co-operation from the staff——J Lack of facilities such as BB, X-ray..etc——K Heavy workload——L Payment inadequate——M Any other (specify)——N

III WORK ENVIRONMENT

3.1	Do you think that the norms regarding the following are clearly defined & are you satisfied with the same?	**Norms Clearly Defined**
	a) Personnel	No——1 Yes——2
	b) Equipment	No——1 Yes——2
	c) Medicines	No——1 Yes——2
	d) Physical Services (Transport, Food, Cleaning & Communication)	No——1 Yes——2
	e) Lab, X-ray, BB, Sonography	No——1 Yes——2
	f) Space	No——1 Yes——2

3.2	Are the above mentioned norms fulfilled in your department?	Not fulfilled	Somewhat fulfilled	Totally fulfilled	Surplus
	a) Personnel	1	2	3	4
	b) Equipment	1	2	3	4
	c) Medicines	1	2	3	4
	d) Physical Services (Transport, Food, Cleaning & Communication)	1	2	3	4
	e) Lab, X-ray, BB, Sonography	1	2	3	4
	f) Space	1	2	3	4

3.3 What are your work timings and the pattern of work?

Day	Adm.	OPD	IPD	Emg.	ICU	Out-reach

3.4	Are you satisfied with the above time-table & nature of work?	Time table No——1 Yes——2	Nature of work No——1 Yes——2 → Q. 3.6
3.5	If No, Reasons for dissatisfaction Time table Nature of work	_____ _____	
3.6	What are your suggestions for improvement in the work-schedule?	_____ _____ _____	
3.7	How many rounds you take in the wards?	☐ Per day	
3.8	On an average, how much time you spend with the patients?	In-patients _____ Minutes	Out-patients _____ Minutes
3.9	Are you satisfied with the time spent?	In-patient No——1 To an extent——2 Yes——3 Can't say——9	Out-patient No——1 To an extent——2 Yes——3 Can't say——9
3.10	Have you ever experienced interference from political leaders while discharging your duties?	Never——1 Rarely/occasionally——2 Often——3	

3.11	Do you feel that promotion/transfers or related matters in the health department are done taking into account only the merit or otherwise?	Merit not at all taken into account——1 Not only merit——2 Only on merit——3	
3.12	In your opinion what are the top three important ideal dimensions in Work Environment?	• Good physical working conditions • Knowing what you are expected to do and achieve at work • Freedom from political interference in decision making • Not needing to pay bribes to get what you want	Rank ( ) ( ) ( ) ( )

IV WORK RELATIONSHIP

4.1	Do you think that the doctors in this hospital work as a team?	No——1 Not in all departments——2 Not in all activities——3 Yes always——4 Yes, sometimes——5 Other (Specify)——6 Cannot say——9
4.2	Are you comfortable in contacting the doctors from other departments in connection with your work?	Not comfortable——1 Somewhat comfortable——2 Fully comfortable——3 Cannot say——9
4.3	Is there a free exchange of ideas and information between the doctors of different departments?	No——1 To an extent——2 Yes——3
4.4	Does your junior staff work in accordance with the norm?	No——1 Partially according to the norm——2 Yes——3
4.5	Are you satisfied with the assistance offered by your junior staff in discharging your duties?	No——1 Yes——2
4.6	If no, reason?	Staff not interested in work——A Over burdened——B Not competent——C
4.7	Do you have frequent discussion with your colleagues in connection with the work of your department?	No——1 Not frequently——2 Yes——3 Can't say——9
4.8	What are the points of discussion (regarding the hospital matters) between the RMO/CS/Metron and yourself?	_____ _____ _____
4.9	Is their attitude encouraging?	No——1 To an extent——2 Yes——3
4.10	Have you, on your own talked to the CS/RMO/Metron about improvements needed in the hospital?	No——1 To an extent——2 Yes——3
4.11	If yes, how do they respond?	Doesn't respond positively——1 Respond Positively——2

4.12	If no, the reasons for the same?	_____ _____ _____
4.13	Do you feel that the patients have respect and trust in you?	No——1 Yes——2 Can't say——3
4.14	Have you ever experienced a fighting reaction from the patients when they were not satisfied with the services provided by you?	Yes, often——1 Yes, occasionally——2 Yes, very rarely——3 Not at all——4
4.15	Do you feel that such an attitude of patients is becoming more frequent these days?	No——1 Yes——2 Can't say——3
4.16	Do your superiors appreciate your good work?	No——1 Rarely——2 Sometimes——3 Always——4 Cannot say——9
4.17	In your opinion what are the top three important ideal dimensions in Work Relationship?	• Good working relationship with colleagues ( ) • Superior recognises your work ( ) • Respected and trusted by clients ( ) • Independence from interference by superiors ( ) **Rank**

V PROFESSIONAL SATISFACTION

5.1	Are there any on-job activities/training programmes in your field, for which you are deputed by the administration?	No——1 Yes——2 Training in other activities distantly related——3
5.2	Are you satisfied with your present work?	No——1 Somewhat satisfied——2 Yes——3
5.3	What are the reasons for dissatisfaction?	Pressures of superiors——1 Political interference——2 Too many restrictions——3 Lack of equipment——4 Lack of medicines——5 Lack of facilities——6 Lack of co-operation from the staff——7 Heavy workload——8 Family problems on account of small Place/frequent transfers....etc——9 Techniques, manpower and resources——10 Time allocation improper——11 Staff inadequate——12 Other (Specify)——13
5.4	Are you able to utilise your expertise in the present job?	Very rarely——1 To some extent——2 Fullest extent——3
5.5	Are you satisfied with your accomplishment so far?	Not at all——1 Some extent——2 To a large extent——3

5.6	Do you feel that you would have progressed better in the private set-up?	No——1 Yes——2 Can't say——3
5.7	Does the government service have good scope for career advancement?	No——1 Yes, for some——2 Yes, for all——3
5.8	What are the professional advantages of working in a Govt-hospital?	_____ _____
5.9	What are the professional disadvantages of working in a Govt-hospital?	_____ _____
5.10	Do you feel that being in the government service leads to loss of contact with your contemporaries in the field outside?	No——1 Yes——2
5.11	Rank the top three important ideal dimensions in Professional Satisfaction?	• Training opportunities to improve skills or learn new skills ( ) • Job satisfaction ( ) • Career development (good opportunities to advance to a better job) ( ) • Challenging work that offers a sense of accomplishment ( ) • Service to poor people ( )

VI PERSONAL GAINS / LOSSES

6.1	Do you live in staff quarters?	No——1 Yes——2
6.2	If yes, are you satisfied with the condition of the quarter?	No——1 To an extent——2 Yes——3
6.3	If not staying in quarters : a)Type of staying arrangement b) What is the distance of the Hospital from your residence?	Rented——1 Own——2 [ ] km.
6.4	What is the mode of Transportation?	Walking——1 Bicycle——2 Auto Rickshow——3 ST bus——4 Private bus——5 Private car——6 Railway——7
6.5	Do you think that working in the government hospital leads to an easy access to the health services for your family?	No——1 Yes——2
6.6	Because of transferable job and nature of the place of work do you face any family problem, such as education of children, spouse is working .....etc	No——1 To an extent——2 Yes——3 Can't say——9

6.7	Do you get sufficient time for the family and personal work?	No——1 Sometime——2 Yes——3	
6.8	What do you think about the pay package being offered to you by the govt.?	Not Adequate——1 Adequate——2	
6.9	In your opinion what are the top three important ideal dimensions in Personal Gains?	• Being based in a desirable location (e. g. one with good schools) • Sufficient time for personal or family life • Good employment benefits (e.g. pension, housing) • Good income • Job security	Rank ( ) ( ) ( ) ( ) ( )
6.10	Rank the following four dimensions namely, Work environment, Work relationship, Professional satisfaction, Personal gains in order of importance for your satisfaction.	• Work environment • Work relationship • Professional satisfaction • Personal gains	Rank ( ) ( ) ( ) ( )

VII SATISFACTION WITH THE HOSPITAL

7.1	Which are the services in this hospital that are satisfactory?	Diagnostic Facilities——A Personnel——B Equipment——C Medicines——D Support services——E Space——F Others(specify)——G
7.2	Which are the services in this hospital, which need strengthening?	Diagnostic Facilities——A Personnel——B Equipment——C Medicines——D Support services——E Space——F Others(specify)——G

VIII SATISFACTION WITH THE HEALTH SYSTEM AS A WHOLE

8.1	What are the weaknesses of the govt. health system / hospital?	a) _____ b) _____ c) _____ d) _____
8.2	What are the strengths of the Govt. Health System/Hospital	a) _____ b) _____ c) _____ d) _____

8.3	What are your recommendations for the improvement of Govt. Health System/Hospital	a) _____ b) _____ c) _____ d) _____

IX For Female Doctors

9.1	Are you comfortable while working with your male colleagues?	Yes----------1 To an extent----------2 Not at all----------3
9.2	Have you ever faced any serious problem while working with your male colleagues?	Always----------1 Sometimes----------2 Rarely----------3 Not at all----------4 Can't say----------9

Date of Interview :

Interviewed by : _____

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Annual Patient and Staff Satisfaction Study, 2002-2003

QUESTIONNAIRE FOR IN-CHARGE NURSE

I IDENTIFICATION

NAME OF THE HOSPITAL : _____

1.1 Name -_____ Designation : _____ Ward : _____

1.2	Sex	Male –1 Female-2
1.3	Age (Years completed)	☐☐
1.4	Marital Status	Married——1 Unmarried——2 Widowed——3 Separated——4
1.5	Education (Years of Schooling)	☐☐
1.6	Religion	Hindu——1 Muslim——2 Christian——3 Sikh——4 Buddhist/Neo Buddhist——5 Jain——6 Other(specify)——7
1.7	Caste	SC——1 ST——2 Others——3
1.8	Years of Service	Total years ☐☐ In the present place ☐☐ years

II WORK ENVIRONMENT

2.1	Do you have adequate number of staff nurses?	No——1 Yes——2
2.2	Do you have adequate number of ayahs?	No——1 Yes——2

2.3	Do you have adequate number of ward boys?	No----------1 Yes----------2	
2.4	Do you have adequate supply of medicines?	Shortage in all medicines----------1 Shortage in some medicines----------2 No shortage ----------3	
2.5	Do you have adequate equipment?	Shortage in all equipments----------1 Shortage in some equipments ----------2 No shortage ----------3	
2.6	What are your work timings?	From ☐ To ☐	
2.7	What is the nature of your duties?	_____ _____	
2.8	Do you feel that promotion/transfers or related matters in the health department are done taking into account only the merit or otherwise?	Merit not at all taken into account----------1 Not only merit----------2 Only on merit----------3	
2.9	In your opinion, which are the top three ideal dimensions of good work environment	• Good physical working conditions • Knowing what you are expected to do and achieve at work • Freedom from political interference in decision making • Not needing to pay bribes to get what you want	Rank ( ) ( ) ( ) ( )

III WORK RELATIONSHIP

3.1	Does your staff nurses work in accordance with the norm?	No----------1 Yes, partially ----------2 Yes----------3
3.2	Are you satisfied with the assistance offered by your staff nurse in discharging your duties?	Not satisfied----------1 Yes, partially satisfied----------2 Yes, fully satisfied----------3
3.3	If no, reason	Staff not interested in work----------1 Over burdened----------2 Not competent----------3
3.4	Does your ayahs work in accordance with the norm?	No----------1 Yes----------2
3.5	Are you satisfied with the assistance offered by your ayahs in discharging your duties?	Not satisfied----------1 Yes: partially satisfied----------2 Yes: fully satisfied----------3

3.6	If no, reason	Staff not interested in work——1 Over burdened——2 Not competent——3
3.7	Does your ward boys work in accordance with the norm?	No——1 Yes——2
3.8	Are you satisfied with the assistance offered by your ward boys in discharging your duties?	Not satisfied——1 Yes: partially satisfied——2 Yes: fully satisfied——3
3.9	If no, reason	Staff not interested in work——1 Over burdened——2 Not competent——3
3.10	Do you have frequent discussion with your colleagues in connection with the work of your department?	No——1 Not frequent——2 Yes, sometimes——3 Yes, frequently——4
3.11	What are the points of discussion (regarding the hospital matters) between the RMO/CS/Metron and yourself?	_____ _____
3.12	Is their attitude encouraging?	No——1 To an extent——2 Yes——3
3.13	Have you, on your own talked to the CS/RMO/Metron about improvements needed in your ward?	No——1 To an extent——2 Yes——3
3.14	If yes, how do they respond?	Doesn't respond positively——1 Respond positively——2
3.15	If no, the reasons for the same	_____ _____
3.16	Do you feel that the patients have respect and trust in you?	No——1 Yes——2 Can't say——3
3.17	Have you ever experience a fighting reaction from the patients when they were not satisfied with the services provided by you?	Yes, often——1 Yes, occasionally——2 Yes, very rarely——3 Not at all——4
3.18	Do you feel that such an attitude of patients is becoming more frequent these days?	No——1 Yes——2 Can't say——3

3.19	Do your superiors appreciate your good work?	No——1 Rarely——2 Sometimes——3 Always——4 Indifferent——5	
3.20	In your opinion what are the top three important ideal dimensions in Work Relationship?	• Good working relationship with colleagues • Superior recognises good work • Respected and trusted by clients • Independence from interference by superiors	Rank ( ) ( ) ( ) ( )
3.21	What generally are the main concerns of the patients?	_____ _____	

IV PROFESSIONAL SATISFACTION

4.1	Are there any on-job activities/training programmes in your field, for which you are deputed by the administration?	No——1 Yes——2 Training in other activities distantly related——3	
4.2	Are you satisfied with the time-schedule?	No——1 Yes——2 →	Q. 4.4
4.3	If not, What are your suggestions?	_____ _____	
4.4	What do you think about the workload and nature of work?	**Work load** Less than adequate—1 Appropriate——2 Overburdened——3 Can't Say——4 **Nature of work** Properly designed——1 Needs improvement—2	
4.5	Do you have any suggestion regarding the workload of the nursing staff?	No——1 → Yes——2	Q. 4.7
4.6	If yes, What are they?	a) _____ b) _____ c) _____ d) _____	
4.7	Do you think that any of your duties are not actually related to your skills and hence could be transferred to someone else? Give the List	a) _____ b) _____ c) _____ d) _____	

4.8	Generally it is observed that the doctor gets the credit for curing the patient and your service goes unnoticed. Do you agree? Give reasons for your answers.	Do not agree——1 Agree——2 **Reasons for the above answer** a)_____ b)_____ c)_____ d)_____	
4.9	Have you fulfilled the desires with which you join the nursing cadre?	Not fulfilled——1 Partially fulfilled——2 Totally fulfilled——3	
4.10	In your opinion what are the top three important ideal dimensions in Professional Satisfaction?	• Training opportunities to improve skills • Job satisfaction • Service to poor people	Rank ( ) ( ) ( )

V PERSONAL GAINS / LOSSES

5.1	Do you live in staff quarters?	No——1 → Q. 5.3 Yes——2	
5.2	If yes, are you satisfied with the condition of the quarter?	No——1 To an extent——2 Yes——3	
5.3	If not staying in quarters:a) Type of staying arrangement b) What is the distance of the Hospital from your residence?	Rented——1 Own——2 ☐ Km.	
5.4	What is the mode of Transportation?	Walking——1 Bicycle——2 Auto Rickshow——3 ST bus——4 Private bus——5 Private car——6 Railway——7	
5.5	Do you think that working in the government hospital leads to an easy access to the health services for your family?	No——1 Yes——2	
5.6	Because of transferable job and nature of the place of work do you face any family problem, such as education of children, spouse is working .....etc	No——1 To an extent——2 Yes——3 Can't say——9	

5.7	Do you get sufficient time for the family and personal work?	No ——————————1 Sometime ——————————2 Yes ——————————3	
5.8	What do you think about the pay package being offered to you by the govt.?	Not Adequate ——————————1 Adequate ——————————2	
5.9	In your opinion what are the top three important dimensions in Personal Gains/Losses?	• Being based in a desirable location (e. g. one with good schools) • Sufficient time for personal or family life • Good employment benefits (e.g. pension, housing) • Good income and job security	Rank ( ) ( ) ( ) ( )
5.10	Rank the following four dimensions namely, Work environment, Work relationship, Professional satisfaction, Personal gains in order of importance for your satisfaction.	• Work environment • Work relationship • Professional satisfaction • Personal gains	Rank ( ) ( ) ( ) ( )

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Annual Patient and Staff Satisfaction Study, 2002-2003

QUESTIONNAIRE FOR THE ADMINISTRATIVE OFFICER

I IDENTIFICATION

1 Name : _____

2	Age	☐☐ Years
3	Sex	Male ——— 1 Female ——— 2
4	Marital Status	Unmarried ——— 1 Currently married ——— 2 Widowed ——— 3 Divorced ——— 4
5	Caste	SC ——— 1 ST ——— 2 Others ——— 3
6	Religion	Hindu ——— 1 Muslim ——— 2 Christian ——— 3 Sikh ——— 4 Buddhist/Neo Buddhist ——— 5 Jain ——— 6 Other(Specify) ——— 7
7	Education	☐☐ years of schooling
8	What are your specific responsibilities?	_____ _____

9	What do you think about the workload and type of work you do? Workload Type of work	 Not heavy at all----------1 Slightly heavy----------2 Significantly burdened----------3 Can't say----------4 Lot of responsibilities----------1 Routine work----------2 No incentive----------3
10	Are there any problems in discharging your duties ?	No----------1 Yes----------2 No cooperation from the staff----------3 Lot of restrictions----------4 Difficulties due to constrains of resources----5 Difficulty in getting funds----------6
11	Are you satisfied with the work you have to do?	No----------1 Yes----------2
	If no, the reasons	No freedom----------1 Administrative work not interesting----------2
12	In your opinion, are there any lacunae in the administrative system of the hospital?	No----------1 Yes----------2
	If yes, what are they?	_____ _____
13	Within the limited resources at hand, what improvement can you suggest?	_____ _____
14	If you are given powers and additional resources, what improvements would you suggest?	_____ _____
15	In your opinion, what changes are necessary so that the hospital is able to provide its services efficiently to the people, particularly the needy ones?	_____ _____
16	Was the increase in user charge raised the revenue?	_____ _____
17	Was retaining the user charges with the hospital been helpful?	_____ _____

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QUESTIONNAIRE FOR TECHNICIANS

Name of the Hospital _____

I IDENTIFICATION

1 Name -_____ 2. Designation - _____ 3. Section -_____

4	Sex	Male –1 Female-2
5	Age (Years completed)	☐☐
6	Marital Status	Married——1 Unmarried——2 Widowed——3 Separated——4
7	Education (Years of Schooling)	☐☐
8	Religion	Hindu——1 Muslim——2 Christian——3 Sikh——4 Buddhist/Neo Buddhist——5 Jain——6 Other(Specify)——7
9	Caste/Category	SC——1 ST——2 Others——3
10	Duration of Service	Total (Year) —— ☐☐ In present place —— ☐☐
11	What are your working hours?	From ☐ To ☐
12	Does your lab / X-ray unit / BB have adequate number of technicians according to the norm?	No——1 Yes——2
13	Does your lab / X-ray unit / BB get adequate supplies of materials?	Shortage of all supplies——1 Shortage in some supplies——2 No shortage——3

14	Does your lab / X-ray unit / BB have adequate equipment?	Shortage of all equipments——— 1 Shortage in some equipments——— 2 No shortage———3
15	Does lab / X-ray unit / BB have adequate space according to the norm ?	Not according to the norms———1 Yes, partially———2 Yes, fully———3
16	Do you face any difficulties in doing this work?	No———1 Yes———2
17	What are those difficulties?	_____ _____
18	Have you ever talked to your superiors about the difficulties?	No———1 Yes———2
19	What was his/her response?	_____ _____
20	Does your superiors appreciate your good work?	No———1 Rarely——— 2 Sometimes———3 Always——— 4 Can't say———5
21	Are you satisfied with your work?	No———1 Yes———2
22	Do you have any pressures at work?	No———1 Yes———2 Can't Say ——— -3
23	In your opinion, what are the improvements needed to improve the efficiency of your department?	(a) _____ (b) _____ (c) _____
24	What do you think about your work load?	Lest than adequate———1 Appropriate———2 Overburdened———3 Can't say——— 4
25	Do you have any suggestion regarding the workload of the technicians?	No———1 Yes———2
26	If yes, what are they?	a)——— b)——— c)——— d)———

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QUESTIONNAIRE FOR THE DRUG STORE INCHARGE

NAME OF THE HOSPITAL : _____

I IDENTIFICATION

1 Name of the Person - _____ Designation: _____

2	Sex	Male –1 Female-2
3	Age (Years completed)	☐☐
4	Marital Status	Married——1 Unmarried——2 Widowed——3 Separated——4
5	Education (Years of Schooling)	☐☐
6	Religion	Hindu——1 Muslim——2 Christian——3 Sikh——4 Buddhist/Neo Buddhist——5 Jain——6 Other(specify)——7
7	Caste/Category	SC——1 ST——2 Others——3
8	Year of Service	Total (Year)——☐☐ In present hospital——☐☐
9	What are your Duties?	_____ _____
10	Nature of the work	Properly defined——1 Needs some improvement——2 Needs total change——3

11	Are you satisfied with the work you do ?	No——————————1 Yes——————————2
12	If not, reasons for dissatisfaction	Over-burdened——————————1 Duties not properly defined——————2 Pressures from superiors——————3 No appreciation——————————4 Lack of cooperation from the juniors————5
13	Do you think that the norms for supply of drugs/medicine is adequate?	No——————————1 Yes——————————2
14	If not, which are the drugs in short supply ? and which are in excess inlist.	Short supply——————————1 Excess Supply——————————2
15	Have you ever told about this to the superior?	No——————————1 Yes——————————2
16	If not, why ?	No use of complaints——————————1 Superiors also cannot give a solution————2
17	Are there periodical meetings for deciding on the adequacy and composition of the drug- supply ? What is the frequency of such meetings?	_____ _____
18	Do you have any role in such decision making?	No——————————1 Yes——————————2
19	What do you do to avoid the misuse of drugs/medicines in the hospital?	_____ _____
20	If you were to decide about the drug supply matters, what changes you will make in the current system?	_____ _____

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Annual Patient and Staff Satisfaction Study, 2002-2003

QUESTIONNAIRE FOR THE CLASS IV WORKER

Name of the Hospital _____

I IDENTIFICATION

1 Name -_____ 2. Designation - _____

3	Age (Years completed)	☐☐
4	Sex	Male –1 Female-2
5	Marital Status	Unmarried——1 Currently married——2 Widowed——3 Divorced/Separated——4
6	Caste	SC——1 ST——2 Others——3
7	Religion	Hindu——1 Muslim——2 Christian——3 Sikh——4 Buddhist/Neo Buddhist——5 Jain——6 Other(Specify)——7
8	Education (Years of Schooling)	☐☐
9	Since how many years are you working?	Total ☐☐ Present ☐☐
10	What are your job responsibilities?	_____ _____
11	What are the working hours?	From ☐ To ☐

12	Do you feel that you get adequate and uninterrupted supply of logistics, Lab material, X-ray films, consumable, etc.	No——1 Yes, sometimes——2 Yes, always——3
13	What kind of problems do you face during your work? (For example, if he/she is a sweeper, then shortage of cleaning materials could be one problem)	_____ _____
14	If you were given a choice, what type of work would you like to do?	_____ _____
15	What are your feelings about your current job?	Routine——1 Challenging——2 Odd job people——3
16	Do you get your salaries in time?	No——1 Yes——2
17	What benefit (about health care) do you get on account of working in the hospital?	_____ _____
18	Do you avail of such benefits?	No——1 Yes——2
19	Are you satisfied with the remuneration you get for the work you do?	No——1 Yes——2
20	Do you feel that you have an opportunity of upward mobility in your job?	No——1 Yes——2 Can't say——3
21	Can you talk openly to your seniors about the problems that you come across?	No——1 Yes——2
22	If yes, is their attitude encouraging?	No——1 Yes——2 Indifferent——3
23	Do you get recognition from the patients as well as colleagues?	**Patients** / **Colleagues** No 1 1 Yes, sometimes 2 2 Yes, always 3 3

Interviewed by : _____ **Date:** _____

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Patient and Staff Satisfaction Survey, 2002-2003

GUIDE FOR FOCUS GROUP DISCUSSION *(for IPD only)*

1. Introduction (introduce each other, purpose of discussion, confidentiality of information, usefulness of the discussion for the improvement of hospital services etc.)

2. Get some background information of the patients (age, education, caste, religion, residence etc.)

3. Ascertain the nature of aliment for which they have admitted in the hospital

4. Reason for coming to this hospital

5. Why they did not go to other/private hospital

6. Direct or referral patients, waiting time for registration and satisfaction, behaviour of concerned hospital staffs

7. Availability of bed/cot

8. Behaviour and availability of doctors (explaining the details of sickness and effectiveness of the treatment, quality of care, courtesy of doctors, communication of the doctors, inter-personal relationship, timely visit of doctors, availability of resident doctors etc)

9. Quality of Doctors (technical competency of the doctors)

10. Behaviour and availability of nurses (quality of care by nurses, courtesy of nurses, availability at the time of need, time of giving medicine, etc.)

11. Quality of Nurses (Technical competency of Nurses)

12. Recovery of their ailment – ascertain the effectiveness of treatment (dis-comfort to comfort / pain to relief from pain)

13. Quality and courtesy of Technicians (Lab, X-ray, BB etc.)

14. Quality and courtesy of Supporting Staff (Office Clerks, Reception, Registration, Billing etc.)

15. Quality and courtesy of Class IV Supporting Staff (Ayah, ward boy, sweeper etc.)

16. Availability of diagnostic facilities (adequacy, waiting time to get the results etc.)

17. Cleanliness of the ward (floor, bathroom toilet, change of bed sheet and uniform etc.)

18. Adequacy of post operative care (from patients who had undergone surgery)

19. Availability of medicine and other supplies

20. Catering services (quantity, quality, timings, charges, visit of dietician to ward etc.)

21. Patients' grievance cell, suggestion box, complaints etc.

22. Contribution to Poor Fund Box

23. Availability of water, electricity, free accommodation for relatives and other amenities in the hospital

24. Corrupt practices in the hospital (under table payment for services for Nurses and other supporting staff)

25. Time taken to leave the hospital after obtaining the discharge card

26. Discuss about the user charges and affordability of the patients (cost of treatment)

FGDs will be conducted by keeping the following in mind: (Five vocal IPD patients - with male and female combination representing different wards - in the absence of providers).

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Patient and Staff Satisfaction Survey, 2002-2003

OBSERVATION GUIDE (for OPD only)

1. **Serial number of the observation:** _____

2. **Date of observation:** _____

3. **Name of the health facility:**
   District Hospital _____
   Rural Hospital _____

4. **Time observation began:** _____ **a.m / p.m.**
   (record the entry time of the patient)

5. **Type of patient:**
   1. New patient
   2. Revisit patient

6. **Sex of patient:**
   1. Male
   2. Female

7. **Time the patient reaches the registration counter:** _____ **a.m / p.m.**

8. **Department to which the patient is referred:** Name of the dept. _____

9. **Time the doctor calls the patient:** _____ **a.m / p.m.**

10. **Did the doctor greet the patient in a friendly manner?**
    No ——— 1
    Yes, somewhat friendly ——— 2
    Yes friendly ——— 3

11. **Did the doctor listen to the patient's complaint patiently?**
    No ——— 1
    Yes, somewhat patiently ——— 2
    Yes, patiently ——— 3

12. **Did the doctor allow the patient to ask questions?**
    No ——— 1
    Yes ——— 2

13. Did the doctor respond to the patient convincingly?
No ——————————1
Yes, somewhat convincingly —2
Yes, convincingly ——————3

14. What was the type of examination done?
1. _____
2. _____
3. _____
4. _____

15. Was he advised to carry out any tests immediately?
No ——————————1
Yes ——————————2

16. Was there an adequate privacy for the examination of the patient?
No ——————————1
Yes, inadequate ——————2
Yes, adequate ——————3

17. Was the instruction for taking medicine given properly by the doctor?
No ——————————1
Yes——————————2

18. Did the doctor communicated with the patient efficiently?
(whether the patient understood the doctor's communication)
No ——————————1
Yes, somewhat efficiently -2
Yes, efficiently ——————3

19. Was the patient told clearly or given a written reminder to when to return for next visit?
No ——————————1
Yes ——————————2

20. Was there a sitting arrangement provided for the patient during the examination?
No——————————1
Yes——————————2

21. Was the patient clearly told where to go after the check-up?
No ——————————1
Yes ——————————2

22. In all, how do you rate the doctor's behaviour with the patient?
Very cordial ——————1
Somewhat cordial ————2
Indifferent ——————3
Not at all cordial ————4

23. Time the patient leaves the doctor's cabin? _____ a.m / p.m.

24. Time the patient comes out of:
(If the patient visits more than one of the places listed, please record the time taken for each)

Lab _____ a.m/ p.m.
Injection _____ a.m/ p.m.
Dressing_____ a.m/ p.m.
Dispensary _____ a.m/ p.m.
X-ray _____ a.m/ p.m.
Other _____ a.m. / p.m.

25. Time the patient pays the bill: _____ a.m. / p.m.

26. How do you rate the behaviour of the supporting staff of the hospital with the patient?
(please tick wherever applicable)

Sl. No.		Very courteous	Courteous	Indifferent
1	Registration clerk			
2	Nurse			
3	Doctor's attendant			
4	Technician (lab)			
5	Technician (x-ray)			
6	Technician (BB)			
7	Dresser			
8	Dispenser			
9	Injection			

27. Time the patient leaves the hospital: _____ a.m. / p.m.

28. Remarks by the observer: *(please mention if the patient had undergone any activity other than the activities listed above, for eg. Patient may have visited more than one doctor)*

Name of the observer:

Checked by:

Based on the above observations please fill up the time spent by the patient for different activities in the hospital:

Sl. No.	Activity	Time taken from one activity to another		Time Spent *(in minutes)*
		Time taken from	**To**	
1	Registration time	Entry time	Completion of registration	
2	Waiting time for doctor's call	Completion of registration	Doctor's call	
3	Time spent with the doctor	Doctor's call	Leaving the doctor's cabin	
4	Time to get (fill-up as applicable)	Leaving the doctor's cabin	Get inj/lab test/medi/xray/dres	
	i) Injection			
	ii) Lab test done			
	iii) X-ray			
	iv) Dressing			
	v) Other (specify)			
5	Time taken to pay the bill	Get inj/lab test/medi/xray/dres	Pay the bill	
6	Time the patient leaves the hospital	Paying the bill	Leaving the hospital	
7	**Total time taken by the patient**	**Entry time**	**Leaving the hospital**	

Appendix 3.1

Construction of Standard of Living Index (SLI)

The Standard of Living Index has been calculated by adding the following scores:

Standard of Living Indicator	Scores
House type	4 for pucca 2 for semi-pucca 0 for kachha
Toilet Facility	4 for own flush toilet 2 for public or shared flush toilet or own pit toilet 1 for shared or public pit toilet 0 for no facility
Source of lighting	2 for electricity 1 for kerosene, gas, or oil 0 for other source of lighting
Main fuel for cooking	2 for electricity, liquid petroleum gas, or biogas 1 for coal, charcoal, or kerosene 0 for other fuel
Source of drinking water	2 for pipe, hand pump, or well in residence/yard/plot 1 for public tap, hand pump, or well 0 for other water source
Separate room for cooking	1 for yes 0 for no
Ownership of house	2 for yes 0 for no
Ownership of agricultural land	4 for 5 acres or more 3 for 2.0 - 4.9 acres 2 for less than 2 acres or acreage not known 0 for no agricultural land
Ownership of irrigated land	2 if household owns at least some irrigated land 0 for no irrigated land
Ownership of livestock:	2 if owns livestock 0 if does not own livestock
Ownership of durable goods	4 each for a car or tractor 3 each for a moped/scooter/motorcycle, telephone, refrigerator, tape recorder, or colour television 2 each for a bicycle, electric fan, radio/transistor, sewing machine, black and white television, water pump, bullock cart, or thresher 1 each for a mattress, pressure cooker, cupboard, chair, cot/bed, table or clock/watch.

The index scores range from 0 – 18 for a low SLI to 19 – 28 for a medium SLI and 29 – 73 for a high SLI.

Appendix 4.1

Hospital Scores

1	**Building Condition**	1.1	Compound wall/Fencing	All around ——1 Partial/None——0
		1.2	Water supply	Piped/Bore well——1 Well & other ——0
			a) Overhead tank & Pump exist	Yes——1 No——0
			b) Overhead tank capacity & Pump in working condition	Yes——2 Either of the two, not working ——1 None of them——0
		1.3	Electricity	In all parts——1 In some parts/None——0
			Power Supply	Regular——3 Fail occasionally/Power cut in Summer——2 Regular power cut——1 No power supply——0
			Alternative arrangement	Generator/ Solar system both present——2 Either of the two present——1 None of them ——0
		1.9	Building	
			a) Ownership	Own——1 Rented——0
			b) Maintenance	
			i) Condition of Painting	Good & Fair——1 Poor——0
			ii) Frequency of Painting	Once in a year——1 Once in three yrs./more than three yer.——0
			c) Plaster on walls	Well plastered——1 Plaster coming off in some/many places or no plaster——0
			d) Condition of Floor	Floor in good condition——1 Floor coming off in some/many places or no Flooring——0
		1.10	Animal Trap	Yes——1 No——0

		1.11	Cleanliness		Good	Fair/Poor
				OPD	1	0
				OT	1	0
				Rooms	1	0
				Wards	1	0
				Toilets	1	0
				Premises	1	0
		1.12	Are any of the following close to the hospital?		No	Yes
				a) Garbage Dump	1	0
				b) Cattle shade	1	0
				c) Stagnant Pool	1	0
				d) Pollution from industry	1	0
2	**Diagnostic Facilities**		**LABORATORY**		**Yes**	**No**
		5.1	Are adequate Equipment and chemicals available?		1	0
		5.2	Is laboratory maintained in orderly manner?(observe)		1	0
			X - RAY		**Yes**	**No**
		6.1	Are adequate Equipment and chemicals available?		1	0
		6.2	Is X-ray maintained in orderly manner?(observe)		1	0
			BLOOD BANK		**Yes**	**No**
		7.1	Are adequate Equipment and chemicals available?		1	0
		7.2	Is Blood Bank maintained in orderly manner?(observe)		1	0
		9.1	Number of Theaters		☐	
		9.2			**Yes**	**No**
			a. Has O.T. enough space?		1	0
			b. Is OT fitted with air conditioner?		1	0
			c. Is the air conditioner working?		1	0
			d. Is generator available for OT?		1	0
			e. Is emergency light available in OT?		1	0
			f. Is fumigation done regularly?(check the records)		1	0
			g. Is the days of sterilization in a week displayed on the public notice on O.T.?		1	0
		10	**Equipments**		**Available**	**Not available**
					Working	Not working
			1. 500 mA X- ray		2	1 0
			2. 300 mA X- ray		2	1 0
			3. 100 mA X- ray		2	1 0
			4. 60 mA X- ray		2	1 0
			5. Dental X- ray		2	1 0
			6. Ultra sound scanner (Linear)		2	1 0
			7. Ultra sound scanner (Linear/sector)		2	1 0
			8. ECG		2	1 0
			9. Cardiac Monitor Bedside		2	1 0
			10. Multi-Parameter Physiological Moniter		2	1 0
			11. Stress Test System (Treadmill)		2	1 0

		10		Available		Not available
				Working	Not working	
			12. Central Moniter Station	2	1	0
			13. Audiometer	2	1	0
			14. Gastroscope	2	1	0
			15. Bronchoscope	2	1	0
			16. Endoscope with Laproscope and	2	1	0
			Accessories	2	1	0
			17. Hysicroscopy with insufflator and	2	1	0
			Colposcope			
			18. Ventilator Transport	2	1	0
			19. Ventilator Servo	2	1	0
			20. Manley Ventilator	2	1	0
			21. Boyle's Apparetus with circle absorber	2	1	0
			22. Colonoscope	2	1	0
			23. Pulse Oximeter	2	1	0
			24. Dental Unit & Chair	2	1	0
			25. Dental Micrometer with Air Rotor	2	1	0
			26. Autoclave HP (Horizontal)	2	1	0
			27. OT Light (shadowless)	2	1	0
			28. Dental Lab. (Bath, Motor, Lathe)	2	1	0
			29. Auto-analyser	2	1	0
			30. Tissue prossesor	2	1	0
			31. Auto Stainer	2	1	0
			32. Refrigerator (300 Liters)	2	1	0
			33. A/C Machine with Stabiliser	2	1	0
			34. Water Cooler	2	1	0
			35. Three Body Mortuary	2	1	0
			36. Generator 30 KVA	2	1	0
			37. Generator 50 KVA	2	1	0
			38. Generator 82.5 KVA	2	1	0
			39. Hot Water System (Solar Unit)	2	1	0
			40. Incenerator	2	1	0

		11.1	**Cold Chain**	**Working & Temp. Maintained**	**Temp. not maintained**	**Not working & Temp. not maintained**
			1. Walk in Coolers	2	1	0
			2. Walk in Freezers	2	1	0
			3. Icelined Freezers	2	1	0
			4. Blood Bank	2	1	0
			5. Refrigerators	2	1	0
		1.4	Sewerage	Connected to Municipal Sewerage——1 Soak Pit——0		
		1.5	Whether source segregation is practiced?	Yes——1 No——0		
		1.6	Whether hazard reduction is ensured through use of needle syringe destroyer and disinfectant spray?	Yes——1 No——0		
		1.7	Whether protective cloths are used by waste handlers?	Yes——1 No——0		
		1.8	Whether deep burial pit / other technology like incinerator or autoclave is available for waste disposal?	Yes——1 No——0		
		12.1	i) the store room properly lighted and ventilated?	Yes——1 No——0		
			ii) Is the size of the storeroom sufficient for keeping stock?	Yes——2 Somewhat inadequate——1 Grossly inadequate——0		
			iii) The stock stored in orderly manner	Yes——1 No——0		
			iv) Are stock registers maintained regularly	Yes——1 No——0		
			Nature of work taken under MHSDP Renovation & Face lifting	Complete——2 Undergoing——1 Yet to be initiated——0		
			2. Vehicles No. of Vehicles on road	☐		

		11.1	Cold Chain	Working & Temp. Maintained	Temp. not maintained	Not working & Temp. not maintained
			1. Walk in Coolers	2	1	0
			2. Walk in Freezers	2	1	0
			3. Icelined Freezers	2	1	0
			4. Blood Bank	2	1	0
			5. Refrigerators	2	1	0
		1.4	Sewerage	Connected to Municipal Sewerage——1 Soak Pit——0		
		1.5	Whether source segregation is practiced?	Yes——1 No——0		
		1.6	Whether hazard reduction is ensured through use of needle syringe destroyer and disinfectant spray?	Yes——1 No——0		
		1.7	Whether protective cloths are used by waste handlers?	Yes——1 No——0		
		1.8	Whether deep burial pit / other technology like incinerator or autoclave is available for waste disposal?	Yes——1 No——0		
		12.1	i) the store room properly lighted and ventilated?	Yes——1 No——0		
			ii) Is the size of the storeroom sufficient for keeping stock?	Yes——2 Somewhat inadequate——1 Grossly inadequate——0		
			iii) The stock stored in orderly manner	Yes——1 No——0		
			iv) Are stock registers maintained regularly	Yes——1 No——0		
			Nature of work taken under MHSDP Renovation & Face lifting	Complete——2 Undergoing——1 Yet to be initiated——0		
			2. Vehicles No. of Vehicles on road	☐		

Appendix 6.1

Scores for patients' Satisfaction

	Variable	Questions	Satisfaction
1	**Behaviour Scores**	Did the doctor greet you in a friendly manner?	Yes, always——2 Yes, somewhat——1 No——0 Can't say——0
		How was Doctor's behaviour ?	Very Kind, Good ——2 Indifferent——1 Rude——0
		How does the nursing staff behave with you?	Very Kind, Good——2 Indifferent——1 Negligent, Arrogant ——0 Can't say——0
		Do the technical staff (BB technician, Lab technician, X-ray technician) behave coordially?	Very Kind, Good——2 Indifferent——1 Rude——0 Did not meet any technician——0
		Do the ayahs behave cordially?	Good ——2 Indifferent——1 Negligent, Arrogant——0
		Do the ward-boys behave cordially?	Good ——2 Indifferent——1 Negligent, Arrogant——0
		Do the counter clerk behave cordially?	Good ——2 Indifferent——1 Negligent, Arrogant——0

2	**Treatment Scores**	Was there privacy at the place of examination?	Yes, total privacy————2 Yes, partial privacy———1 No————————0 Can't say————————0
		Was the instruction for taking medicines given properly?	Yes————————1 No————————0 Can't say————————0
		What do you think about the Doctor's competence?	Capable/Competent———2 So-so————————1 Not Competent————0 Can't Say————————0
		How often in a day, the doctor visits ?	Two or more visits———2 Less than two visits———0
		How much time he/she spends with you?	**Whether adequate** Yes No 1 0
		Do you have faith/confidence in the doctor?	Yes, completely————2 Yes, partially————— 1 No————————0 Can't say————————0
		Do the Doctors visit the ward on scheduled time?	Yes, always————2 Yes, sometimes———— 1 No————————0 Can't say————————0
		What do you think about the Nurses' skill?	Capable/Competent———2 So-so————————1 Not Competent————0 Can't Say————————0
		In case of need, are the nurses available?	Yes, always————2 Yes, sometimes————1 No————————0 Can't say————————0
		In case of emergency, do they attend your call immediately?	Yes————————1 No————————0 Can't say————————0
		Is the ailment, for which you got admitted, cured now?	Fully cured————2 Partially cured————1 Not cured————0
		Did you get all the medicines from the hospital?	Yes all from Hospital——2 No, some brought from outside————1 No, mainly brought from outside————0
		In your opinion, is the hospital well-equiped, with reference to the equipment?	Well-equiped————2 Fairly equiped————1 Not at all————0

3	**Communication Scores**	Did the doctor listen to your complaint patiently?	Yes, always——2 Yes, somewhat——1 No——0 Can't say——0
		Did doctor let you ask questions?	Yes, always——-2 Yes, sometimes——1 No——0 Can't say——0
		Did he respond to your questions?	Yes, always——-2 Yes, sometimes——1 No——0 Can't say——0
		Did the doctor discuss with you about your ailment?	Yes——1 No——0 Can't say——0
		Did he/she talk to you about the recovery?	Yes——1 No——0 Can't say——0
		Other than the medical treatment, did he/she give you 'other advice' relating to your health?	Yes——1 No——0 Can't say——0

4	**Waiting Scores**	**If admitted as referral patient**	
		Time spent for contacting the doctor? (since you arrived at the hospital	Too short, Appropriate—2 Too long——0 Can't say——0
		After meeting the doctor, how much time taken for getting admitted to the ward?	
		Time taken for getting the service to IPD?	
		If admitted through OPD	
		Registration	Too short ,Appropriate—2 Too long——0 Can't say——0
		Doctor Call	
		Doctor's Examination Time	Too long, Appropriate—2 Too short——0 Can't say——0
		Administration to ward	Too short ,Appropriate—2 Too long——0 Can't say——0
		Getting Services	
		Time to get discharge (Between the doctor's issue of discharge card and actual discharge)	

5	**Cleanliness Scores**	Floor Cleaning	Full Satisfied----------2 Partially Satisfied-------1 Not Satisfied----------0
		Toilet/Bathroom Cleaning	
		Washing of patient's uniform	
		Bed-Sheets Changing	

6	**Crowding Scores**	Did you get a cot immediately after admission to the ward?	Immediately, Same day -- 2 Next day----------1 Not immediately after ( ) days----------0
		Do you feel that the space in the ward is adequate?	Yes----------1 No----------0 Can't say----------0
		Are you satisfied with the ward arrangement?	Yes----------1 No----------0 Can't say----------0
		Is the space for OPD adequate?	Yes----------1 No----------0 Can't say----------0 NA(for referral patient)--0
		Do you feel that there is lot of noise in the ward?	No----------1 Yes ----------0 Can't say----------0

7	**Borrowing Scores**	Are the above expenses affordable to you?	Yes----------- 2 Yes, with little borrowings----------- 1 No----------0
		Did you borrow any money for your treatment?	No---------- 1 Yes---------- 0
		How much did you borrow? (District Hosp.)	Did not borrow----------2 Rs. Up to 1000----------2 Rs. 1001 to 2000----------1 Rs. 2000 +----------0
		How much did you borrow? (Other Hosp.)	Did not borrow----------2 Rs. Up to 500----------2 Rs. 500 to 1000----------1 Rs. 1000 +----------0

Appendix 6.2

IPD Hospitalwise Scores (Mean)

Type	Name	Treat-ment Score	Beha-viour Score	Clean-liness Score	Communi-cation Score	Waiting time score	Crowd-ing Score	Borrow-ing Score	All Average
DH	Ratnagiri	71.8	72.7	79.8	64.3	80.9	61.9	89.6	74.4
	Jalgaon	64.4	78.6	47.4	69.9	80.7	59.2	84.1	69.2
	Jalna	82.3	88.1	55.3	88.7	94.9	77.1	90.4	82.4
	Beed	64.7	84.8	62.4	85.0	89.6	88.6	90.6	80.8
	Buldhana	65.4	89.7	43.9	77.0	84.7	64.2	86.0	73.0
	Bhandara	46.7	78.3	34.1	51.7	85.9	76.0	94.0	66.7
SDH (100)	Chopada	71.0	78.6	87.5	90.3	69.2	74.2	47.5	74.0
	Sawantwadi	70.2	79.6	77.8	57.4	72.8	95.6	43.3	71.0
	Parli-Vaijnath	44.8	81.7	.00	45.3	92.3	67.7	100.0	61.7
	Murtizapur	63.1	76.7	25.0	51.3	88.9	61.8	86.3	64.7
	Tumsar	64.3	84.8	34.0	66.1	97.5	99.2	92.0	76.8
	BGW Gondia	35.3	62.8	58.3	33.3	86.2	91.1	56.8	60.5
SDH (50)	Dapoli	52.1	74.0	24.4	70.1	96.2	94.9	70.8	68.9
	Chandwad	86.4	93.9	40.5	65.1	88.6	97.6	77.1	78.5
	Indapur	52.0	63.6	41.7	45.5	89.7	91.0	80.0	66.2
	Karmala	61.4	52.0	41.0	60.3	88.8	93.1	89.2	69.4
	Kankavali	77.1	74.0	77.8	85.1	94.4	82.2	71.7	80.3
	Ambad	83.1	95.9	14.3	100.0	100.0	95.2	77.1	80.8
	Dharni	72.6	90.0	.00	33.6	100.0	90.5	100.0	69.5
	Mul	78.6	89.5	79.5	78.6	98.7	98.7	92.3	88.0
RH (30)	Wada	73.8	100.0	81.0	64.3	94.3	97.1	82.9	84.8
	Sakri	66.9	70.7	88.1	44.4	100.0	90.0	77.1	76.7
	Sangola	55.9	29.5	13.3	24.6	68.7	81.0	58.0	47.3
	Atpadi	57.5	59.2	66.7	76.2	91.4	97.6	54.3	71.8
	Mantha	75.9	82.3	.00	71.4	100.0	85.2	82.9	71.1
	Ahmedpur	76.6	91.8	58.3	87.3	90.5	97.6	77.1	82.7
	Akot	64.2	83.5	76.9	61.5	94.9	96.2	95.4	81.8
	Rajura	51.9	72.9	85.7	27.0	94.3	81.0	85.7	71.2

Appendix 6.3

OPD Hospitalwise Scores (Mean)

Type	Name	Treat-ment Score	Beha-viour Score	Clean-liness Score	Communi-cation Score	Waiting Time Score	Crowd-ing Score	All Average
DH	Ratnagiri	52.7	83.0	75.2	75.4	77.5	4.4	61.4
	Jalgaon	43.2	83.6	57.0	78.3	78.2	53.1	65.6
	Jalna	47.8	84.7	95.9	83.8	95.4	90.8	83.1
	Beed	50.2	91.1	95.8	76.4	91.3	90.3	82.5
	Buldhana	46.0	94.6	61.7	82.0	88.0	57.1	71.5
	Bhandara	53.8	86.3	81.1	80.5	83.3	81.6	77.8
SDH (100)	Chopada	53.7	85.2	100.0	87.4	95.3	96.0	86.3
	Sawantwadi	50.1	66.3	63.5	71.1	79.1	03.8	55.7
	Parli-Vaijnath	44.2	93.3	65.4	76.0	89.0	38.5	67.7
	Murtizapur	49.8	85.3	14.4	82.8	82.3	08.1	53.8
	Tumsar	48.8	62.4	24.5	25.4	87.2	12.7	43.5
	BGW Gondia	47.6	75.7	72.4	38.8	87.3	76.2	66.3
	Dapoli	42.4	72.5	58.3	68.8	94.8	01.4	56.4
SDH (50)	Chandwad	69.2	100.0	66.7	89.4	89.6	64.1	79.8
	Indapur	50.1	63.2	36.0	54.0	99.0	14.7	52.8
	Karmala	38.1	51.0	46.7	47.7	86.2	13.3	47.2
	Kankavali	58.3	79.0	92.0	66.6	77.7	04.0	62.9
	Ambad	54.5	96.5	100.0	96.2	100.0	100.0	91.2
	Dharni	45.2	96.8	85.3	75.5	87.0	73.3	77.2
	Mul	49.3	80.0	68.0	69.5	98.0	38.7	67.3
RH (30)	Wada	38.7	96.2	97.4	84.1	98.1	05.1	69.9
	Sakri	48.1	74.2	66.7	86.5	82.1	66.7	70.7
	Sangola	36.1	56.5	92.3	59.6	84.0	00.0	54.8
	Atpadi	47.1	63.8	59.0	51.9	81.2	00.0	50.5
	Mantha	50.6	66.2	70.5	75.0	100.0	66.7	71.5
	Ahmedpur	39.5	75.6	82.2	53.2	90.0	75.6	69.4
	Akot	24.6	61.5	100.0	05.8	93.8	97.4	63.9
	Rajura	45.5	90.4	100.0	40.4	100.0	00.0	62.7

Appendix 7.1

Principal Component Analysis [*]

Principal Component Analysis is the statistical technique that linearly transforms an original set of variables in to substantially smaller set of uncorrelated variables that represents most of the information in the original set of variables. It searches for few uncorrelated linear combinations of original variables. The technique has been applied to virtually every substantive area including biology, chemistry, metrology, geology and behavioural and social science.

Indices force a 'p' dimensional system into one dimension. For example, a set of socio economic status indicators such as occupational level, educational level and income, which can be characterized as p dimensional vector (x_1, x_2,————,x_p) can be linearly transformed by ($Y = a_1x_1 + a_2x_2 + ------ + a_px_p$) into one dimensional SES index, y. Given p indicators measured on n cases, the principal component analysis yields the best linear combination among the indicators. 'Best' is defined algebraically as having the largest portion of variance explained and geometrically as having the least sum of squared (per particular) deviations from the best line.

The geometrical method is shown in the accompanying graph. There are two measurements each on five cases. The five cases are represented by points p1 to p5 in the two-dimensional scattergram corresponding to the two indicators. Consider any line L in this plane the perpendicular deviations of the 'cases' from the line are $d_1, d_2, d_3, d_4, and\ d_5$. The sum of the squares of these deviations is

$$S = d_1^2 + d_2^2 + d_3^2 + d_4^2 + d_5^2$$

The line L which is chosen to minimize the sum S is called the principle component. It represents the best linear relationship among the indicators.

Algebraically, the first principal component, Y, is linear combination of x_1, x_2,——, x_p.(i.e $Y_1 = a_{11}x_1 + a_{12}x_2 + ---+ a_{1p}x_{1p}$) such that the variance of Y_1 is maximised given the constrained that the sum of squared weights is equal to one (i.e $\sum a_{ij}^2 = 1$) the second principal component is a line of closest fit to the residual from the first principal component.

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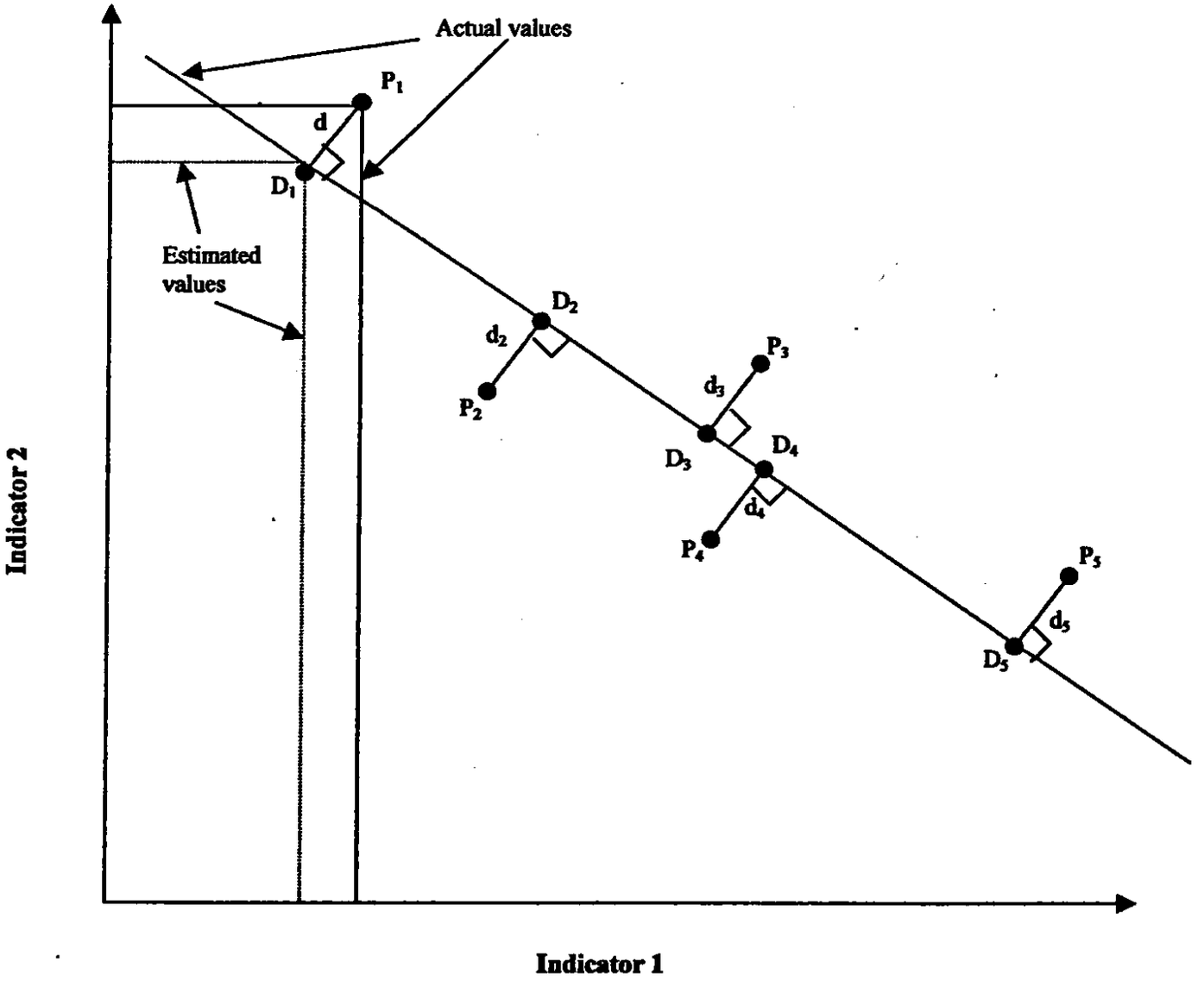
1 Duneteman, G.H. Principal Component Analysis in 'Factor Analysis and Related Techniques', edited by Michael Lewis. Sage Publications

2 Srikantan, K.S. ' Family Planning Programme in the Socio Economic Context. New York: Population Council.

Figure F.1: Geometrical illustration of the principal component for two indicators and five cases



NOTE: The sum of squares of perpendicular distance from L,

$S = d_1^2 + d_2^2 + d_3^2 + d_4^2 + d_5^2$

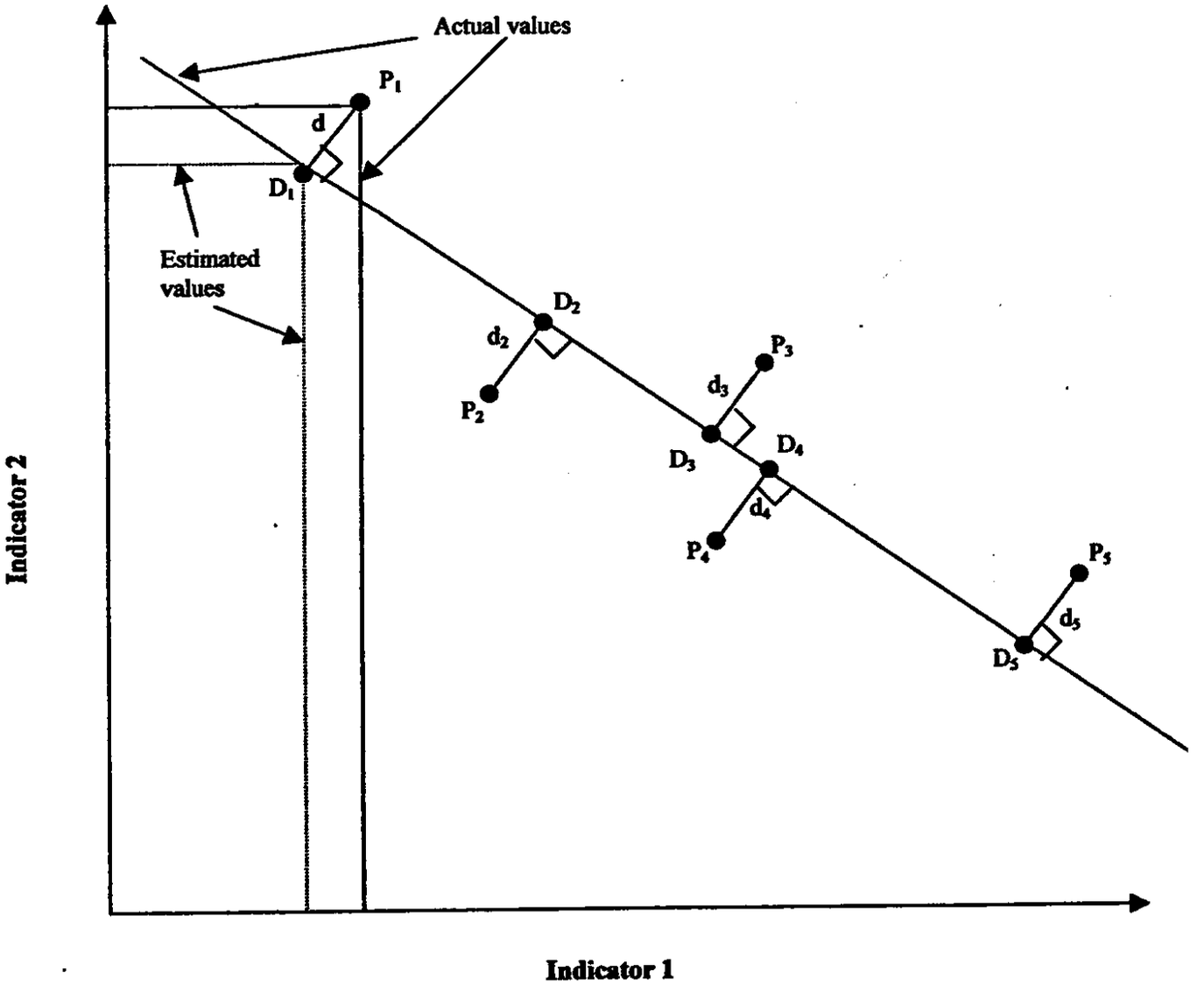
In the principal component method line L is chosen to minimize S. The coordinates of the fit, perpendicular D from the point P to the line are the estimated values.

Appendix 8.1

Doctor's Satisfaction Scores

1	**Work Environment**	3.2	Are the above mentioned norms fulfilled in your department? a) Personnel b) Equipment c) Medicines	Totally fulfilled / Somewhat fulfilled / Not fulfilled 2 / 1 / 0 2 / 1 / 0 2 / 1 / 0
		3.4	Are you satisfied with the above time-table & nature of work? a) Time Table b) Nature of work	Yes / No 1 / 0 1 / 0
		3.9	Are you satisfied with the time spent?	**In-patient**: Yes—2; To an extent—1; No—0; Can't say—0 **Out-patient**: Yes—2; To an extent—1; No—0; Can't say—0
2	**Work Relationship**	4.2	Are you comfortable in contacting the doctors from other departments in connection with your work?	Fully comfortable—2 Somewhat comfortable—1 Not comfortable—0 Cannot say—0
		4.5	Are you satisfied with the assistance offered by your junior staff in discharging your duties?	Yes—1 No—0
		4.9	Is their attitude encouraging?	Yes—2 To an extent—1 No—0
		4.13	Do you feel that the patients have respect and trust in you?	Yes—1 No—0 Can't say—0
		4.16	Do your superiors appreciate your good work?	Always—3 Sometimes—2 Rarely—1 No—0 Cannot say—0
3	**Professional Satisfaction**	5.1	Are there any on-job activities/training programmes in your field, for which you are deputed by the administration?	Yes—2 Training in other activities distantly related—1 No—0
		5.2	Are you satisfied with your present work?	Yes—2 Somewhat satisfied—1 No—0
		5.4	Are you able to utilise your expertise in the present job?	Fullest extent—2 To some extent—1 Very rarely—0

Figure F.1: Geometrical illustration of the principal component for two indicators and five cases



NOTE: The sum of squares of perpendicular distance from L,

$S = d_1^2 + d_2^2 + d_3^2 + d_4^2 + d_5^2$

In the principal component method line L is chosen to minimize S. The coordinates of the fit, perpendicular D from the point P to the line are the estimated values.

Appendix 8.1

Doctor's Satisfaction Scores

1	**Work Environment**	3.2	Are the above mentioned norms fulfilled in your department?	Totally fulfilled / Somewhat fulfilled / Not fulfilled
			a) Personnel	2 / 1 / 0
			b) Equipment	2 / 1 / 0
			c) Medicines	2 / 1 / 0
		3.4	Are you satisfied with the above time-table & nature of work?	Yes / No
			a) Time Table	1 / 0
			b) Nature of work	1 / 0
		3.9	Are you satisfied with the time spent?	**In-patient**: Yes—2; To an extent—1; No—0; Can't say—0 **Out-patient**: Yes—2; To an extent—1; No—0; Can't say—0
2	**Work Relationship**	4.2	Are you comfortable in contacting the doctors from other departments in connection with your work?	Fully comfortable—2; Somewhat comfortable—1; Not comfortable—0; Cannot say—0
		4.5	Are you satisfied with the assistance offered by your junior staff in discharging your duties?	Yes—1; No—0
		4.9	Is their attitude encouraging?	Yes—2; To an extent—1; No—0
		4.13	Do you feel that the patients have respect and trust in you?	Yes—1; No—0; Can't say—0
		4.16	Do your superiors appreciate your good work?	Always—3; Sometimes—2; Rarely—1; No—0; Cannot say—0
3	**Professional Satisfaction**	5.1	Are there any on-job activities/training programmes in your field, for which you are deputed by the administration?	Yes—2; Training in other activities distantly related—1; No—0
		5.2	Are you satisfied with your present work?	Yes—2; Somewhat satisfied—1; No—0
		5.4	Are you able to utilise your expertise in the present job?	Fullest extent—2; To some extent—1; Very rarely—0

		5.5	Are you satisfied with your accomplishment so far?	To a large extent----------2 Some extent----------1 Not at all ----------0
		5.6	Do you feel that you would have progressed better in the private set-up?	No----------1 Yes----------0 Can't say----------0
		5.7	Does the government service have good scope for career advancement?	Yes, for all----------2 Yes, for some----------1 No----------0
		5.10	Do you feel that being in the government service leads to loss of contact with your contemporaries in the field outside?	No----------1 Yes----------0
4	**Personal Gains**	5.1	Do you live in staff quarters?	Yes----------1 No----------0
		5.5	Do you think that working in the government hospital leads to an easy access to the health services for your family?	Yes----------1 No----------0
		5.6	Because of transferable job and nature of the place of work do you face any family problem, such as education of children, spouse is working .....etc	No----------2 To an extent----------1 Yes----------0 Can't say----------0
		5.7	Do you get sufficient time for the family and personal work?	Yes----------2 Sometime----------1 No----------0
		5.8	What do you think about the pay package being offered to you by the govt.?	Adequate----------1 Not Adequate----------0

Appendix 9.1

Nurse's Satisfaction Scores

1	**Work Environment**	2.1	Do you have adequate number of staff nurses?	Yes——1 No——0
		2.2	Do you have adequate number of ayahs?	Yes——1 No——0
		2.3	Do you have adequate number of ward boys?	Yes——1 No——0
		2.4	Do you have adequate supply of medicines?	No shortage——2 Shortage in some medicines——1 Shortage in all medicines——0
		2.5	Do you have adequate equipment?	No shortage——2 Shortage in some equipments——1 Shortage in all equipments——0
		2.8	Do you feel that promotion/transfers or related matters in the health department are done taking into account only the merit or otherwise?	Only on merit——2 Not only merit——1 Merit not at all taken into account——0
2	**Work Relationship**			
		3.2	Are you satisfied with the assistance offered by your staff nurse in discharging your duties?	Yes, fully satisfied——2 Yes, partially satisfied——1 Not satisfied——0
		3.5	Are you satisfied with the assistance offered by your ayahs in discharging your duties?	Yes, fully satisfied——2 Yes, partially satisfied——1 Not satisfied——0
		3.8	Are you satisfied with the assistance offered by your ward boys in discharging your duties?	Yes, fully satisfied——2 Yes, partially satisfied——1 Not satisfied——0
		3.12	Is their attitude encouraging?	Yes——2 To an extent——1 No——0
		3.14	If yes, how do they respond?	Respond positively——1 Doesn't respond positively——0
		3.16	Do you feel that the patients have respect and trust in you?	Yes——1 No——0 Can't say——0

		3.19	Do your superiors appreciate your good work?	Always——4 Indifferent——3 Sometimes——2 Rarely——1 No——0
3	**Professional Satisfaction**	4.1	Are there any on-job activities/training programmes in your field, for which you are deputed by the administration?	Yes——2 Training in other activities distantly related——1 No——0
		4.2	Are you satisfied with the time-schedule?	Yes——1 No——0
		4.4	What do you think about the workload and nature of work? a) Work load b) Nature of Work	 Less than adequate——2 Appropriate——1 Overburdened——0 Can't Say——0 Properly designed——1 Needs improvement——0
		4.9	Have you fulfilled the desires with which you join the nursing cadre?	Totally fulfilled——2 Partially fulfilled——1 Not fulfilled——0
4	**Personal Gains**	5.1	Do you live in staff quarters?	Yes——1 No——0
		5.5	Do you think that working in the government hospital leads to an easy access to the health services for your family?	Yes——1 No——0
		5.6	Because of transferable job and nature of the place of work do you face any family problem, such as education of children, spouse is working .....etc	No——2 To an extent——1 Yes——0 Can't say——0
		5.7	Do you get sufficient time for the family and personal work?	Yes——2 Sometime——1 No——0
		5.8	What do you think about the pay package being offered to you by the govt.?	Adequate——1 Not Adequate——0