HEALTH SERVICES FOR PUBLIC SECTOR INDUSTRIAL EMPLOYEES – AN EXPLORATORY CASE STUDY OF BHEL, HARIDWAR, UTTARANCHAL

Dissertation submitted to the Jawaharlal Nehru University
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CERTIFICATE

This is to certify that the dissertation entitled, **"HEALTH SERVICES FOR PUBLIC SECTOR INDUSTRIAL EMPLOYEES - AN EXPLORATORY CASE STUDY OF BHEL, HARIDWAR, UTTARANCHAL"** submitted by **Miss. Shashi Rani** in partial fulfilment for the award of the Degree of **MASTER IN PHILOSOPHY** of this University, is her original work. This dissertation has not been submitted for any other degree of this or any other University.

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Dedicated

to

Mummy & Papa

CONTENTS

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LIST OF ABBREVIATIONS

A.I.I.M.S.	:	All India Institute of Medical Sciences
A.G.M.	:	Additional General Manager
B.H.E.L.	:	Bharat Heavy Electricals Limited
B.P.	:	Blood Pressure
C.A.D.	:	Coronary Artery Disease
C.F.F.P.	:	Central Foundary Forge Plant
C.I.S.F.	:	Central Industrial Security Force
C.M.O.	:	Chief Medical Officer
D.G.M.	:	Deputy General Manager
D.L.C.	:	Differential Lymphocyte Count
D.P.S.	:	Delhi Public School
Dy. Mgr.	:	Deputy Manager
E.N.T.	:	Ear Nose Throat
Engr.	:	Engineer
E.S.I.	:	Employee State Insurance
E.S.R.	:	Erythrocyte Sedimentation Rate
G.D.M.O.	:	General Duty Medical officer
H.E.E.P.	:	Heavy Electricals Equipment Plant
I.C.U.	:	Intensive Care Unit
M.D.	:	Master Medicine
Mgr.	:	Manager
M.S.	:	Master in Surgery

N.H.P.C.	:	National Hydro Power Corporation
N.T.P.C.	:	National Thermal Power Corporation
O.B.C.	:	Other Backward Classes
O.P.D.	:	Out Patient Department
P.G.I.	:	Post Graduate Institute
P.C.R.I.	:	Pollution Control Research Institute
Q.P.P.	:	Quality from the Patient Perspective
Q.S.P.	:	Quality Satisfaction Performance
S.C.	:	Schedule Caste
S.D.G.M.	:	Senior Deputy General Manager
Sr. Engr.	:	Senior Engineer
Sr. Mgr.	:	Senior Manager
T.U.	:	Trade Unions
T.B.	:	Tuberculosis
T.L.C.	:	Total Lymphocyte Count

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INTRODUCTION

INTRODUCTION

Health care is defined as a "multitude of services rendered to individuals, families or communities by the agents of the health services.... for the purpose of promoting, maintaining, monitoring or restoring health" [1].

Health care includes availability, accessibility, appropriateness, comprehensiveness, adequacy, affordability and feasibility[2]. It could be said that these are the pillars on which health care services are based. It becomes important to keep a balance between all the above characteristics for effective and proper functioning of any type of health care services.

Since Independence, India has had a tradition of providing health care services to all its citizens. This was reflected in the first objective of the Bhore Committee, which stated that the "The health services should available to all members of the community irrespective of their ability to pay for it..... no individual should be denied adequate medical care because of inability to pay for it[3].

In addition the Bhore Committee had also stated that health services should be offered to public sector industrial employees free of cost as the economy of the nation depended on their health.

However, today, the government is moving away from the Bhore Committee's concept of public health services and is talking of Health Sector Reforms, which include user fees and privatization of the public sector. This would essentially mean an increase in cost in the health services in the public sector. In this present environment there is a real possibility that in addition to the general health services, the government might privatize medical services available in the public industrial sector as well, though so far it has not withdrawn from health services in public industrial sector.

However, a study done in Singhbum district pointed out that a large concern like TATA's has withdrawn from the Health Services which they were supplying to their employees and the villagers where this industry was situated[4]. If such big players like TATA's are withdrawing from the social sector including health services, it is entirely possible that the government would follow their lead and also withdraw from the benefits of medical care provided in public sector industries and leave the services to the private sector.

It is very likely that this privatization may not necessarily benefit the people because as data shows the private sector only moves into areas that will show profit and not those that benefit the people[5]. Also the increase in cost following privatisation would result in vast sections of the population being denied health care [6].

With such a possibility it is worth looking at people's perceptions, experiences and expectations, and to explore the preferences and needs of the people working in the public sector industries and whether they feel that private services are better then the public health care services.

It is planned to conduct the present study in public industrial sector i.e. "Bharat Heavy Electricals Limited", (BHEL), Haridwar, Uttaranchal.

Like other large scale public organization BHEL, also provides various benefits to its employees. Medical benefit is one of the important benefits provided. BHEL provides health care services through its own Hospital and dispensaries (within the campus) exclusively to its employees and their dependents.

The main purpose of this study is to explore views of employees about the functioning of health services available through BHEL through their experiences and utilization of provided health care services. The study also attempts to find out the employees views on the private health services available in the market.

The study presented in this dissertation is divided into six chapters.

The **first chapter**, deals with the review of literature which covers various aspects of health care services. It includes evolution of industrial health services, issues of patient satisfaction and quality of care, health sector reforms, and utilization of public and private health services.

The **second chapter**, presents the conceptualization of the problem. The chapter also presents the methodology of the study .The aims and objectives of the study, the sampling process, tools and techniques used in this study are discussed in this chapter. An overview of the study area is also given here.

The **third chapter,** presents a limited socio economic profile of the workers and executives. Along with the facilities available to the employees, it also details their working conditions with their hazards.

The **fourth chapter,** presents an overview of the health care services available in the study area. It covers information about the physical infrastructure, O.P.D. services, Inpatient services and other medical facilities available in the studied area.

Subsequently the **fifth chapter,** presents analysis of data collected in studied area. It also deals with experiences of the employees with the company's dispensaries and main hospital, users

satisfaction with the provided medical services along with the differences in the quality of services offered to the executives and workers and their views on the private medical services. Also, an analysis of the doctors perception is presented in the same chapter.

Finally the **sixth chapter,** presents the discussion and conclusion on the basis of the above results.

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REVIEW OF LITERATURE

CHAPTER - I

A brief review of the available literature was carried out by the researcher, in order to provide a theoretical base to the present study. Literature on health services was looked at to examine various dimensions of health service system, quality of health services and patient satisfaction as an indicator of quality of health care. Studies dealing with the issue of health sector reforms and utilization of public and private health service were also reviewed. The present chapter focuses on this review of literature by presenting some of the significant studies.

This chapter is divided into four sections:

1. Evolution of public sector industrial health services in India.
2. Patient satisfaction as an indicator of quality of care.
3. People's experiences with public and private health services.
4. Health Sector Reforms.

Evolution of Industrial Health Services

As per the rules and regulations of labour laws the provision of health services in industrial sector has been made to protect workers health. As industries develop, both in size and complexity,

occupational health poses new and more difficult problems. The national government has recognized the need for protecting the health of workers. The directive principles of state policy, in the Indian Constitution are important in this context. The relevant portions are:

The state shall, in particular direct its policy towards securing that –

(a) "The health and strength of the workers, men, women, and the tender age of the children are not abused, and that citizens are not forced by economic necessity to enter avocations unsuited to their strength.

(b) The state shall make provisions for securing just and humane conditions of work"[1].

In addition health services for industrial workers were setup as recommend by the government.

Before the British rule had ended in India, several committees had been set up to guide the newly forming Indian government to make plans for the country's development. The purpose of the "Bhore Health and Survey Committee" was to study the health problems and suggest the most appropriate health care system. In making its plans the Indian government relied mainly on the recommendations made by the Bhore committee. This committee had the option of choosing a health care structure and a system of

medicine from the wide variety of experiences that were available through out the world[2].

Once the British departed, it was left to the Indian government to implement some or all of the recommendations. Since the primary focus was on building up the economy, every activity that would boost economic growth was given preference. India decided to adopt industrialization as the means of achieving rapid economic growth. Thus an efficient working process needs sound health of the persons engaged therein. Unless the workers are physically and mentally healthy they cannot perform their duties effectively properly and smoothly. It is therefore, necessary to adopt measures to maintain their health[3].

Though resources were limited, a separate allocation was made for the health services of the industrial workers since their health was the utmost importance to the national economy[4].

In organizing an industrial health service in India, keeping all the above issues in mind the proposed objectives were:

(1) To promote the general health of the workers by providing a good working environment,

(2) To prevent occupational disease,

(3) To assist in the prevention of injuries at work,

(4) To organize a service for emergency treatment,

(5) To help in restoring the injured and disabled to full working capacity,

(6) To educate workers in the preservation of health and promotion of well being, and to promote research and investigation[5].

One of the first health measures that the newly appointed government carried out was the "Employees State Insurance Act of 1948". This provides cash and medical benefits to industrial employees in case of sickness, maternity and employment injury[6]. The scheme contained under ESI Act makes provisions for the following benefits.

(1) Sickness benefit

(2) Maternity benefit

(3) Disablement benefit

(4) Dependents benefit

(5) Medical benefit, and

(6) Funeral expenses[7].

Another important measure in regulating industrial health services was the "Factories Act 1948". The Factories Act 1948

under its chapter III contains various provisions regarding measures to be adopted by the occupier or employer of the factory to maintain proper environment of work in factory and health of the working population[8].

At present, there is no comprehensive occupational health service in India. However, there are various organizations active in the field of occupational health. The organisation of the chief advisor of factories, now Directorate General, Factory and Advisory Services was set up in 1945, to function as an integrated service to advise the government industries in matters related to the health, welfare and safety of industrial workers. The organisation deals with questions relating to the administration of the Factories Act and Acts and the rules framed thereunder and the training of factory inspectors[9].

In the organized industrial sector, employees besides getting their wages and salaries also get some fringe benefits. Medical care is one prominent benefit out of these benefits. The most important provision for medical care for employees is through the company's own hospital and clinics[10].

Generally these medical services are provided by the company exclusively to its employees or their dependents free of cost. To assess the quality of these services one would need to be able to measure patient satisfaction.

Patient satisfaction is the outcome of experiences with the health care services. The utilization and experiences of health care services would result in the patient satisfaction or dissatisfaction regarding used health care services.

Various studies dealing wit the issue of measuring patient satisfaction/ dissatisfaction with the health delivery system are reviewed below.

Patient satisfaction as an indicator of quality of health care

Various dimensions and subcomponents of health services delivery system have been getting the attention of researchers. The pressure to pay greater attention to the importance of patient satisfaction have come from many sources and have varied in emphasis from one health care system to another at different points in time.

The specific reasons why patient satisfaction has become an important issue can be identified. Evidence began to accumulate from the 1960s that patients dissatisfied with their care were less likely to comply with advice. In addition, was the growing application of social sciences methods to research both in the clinical context of health care and also in the use of social survey methodology to obtain the community's view about health care. Another specific impetus serving to highlight patient satisfaction was marketing. The final and most influential factor impelling greater attention to patient satisfaction has been increased external

regulation of health services. In both Europe and North America, both public and private bodies funding health care required more evidence of the quality of services provided. Systematic evidence via surveys of public and of users views came to be considered a vital source of evidence regarding quality [11].

Thus, as a supplement to traditional ways of measuring health care quality factors like proper infrastructure, availability of equipments and drugs and the patients perspective became important indicators in assessment of effectiveness of health care system.

A meta-analysis of the satisfaction literature presents some results pertaining to multi dimensionality in satisfaction instruments. Interestingly, in this meta analysis of published studies of inpatient satisfaction, only 6% of studies elicited patient views about the outcomes of their health care, whereas 65% included items on humanness and interpersonal relations[12]. It was noted that, there was relative neglect of patient's views about the impact of care on outcomes[13].

Another review on meta analysis presents correlation between patient satisfaction with medical care and selected patient socio-demographic characteristics. These were age, ethnicity, sex, socio-economic status, martial status and family size. But the study

states that there is no correlation between the patient satisfaction and socio-demographic characteristics[14].

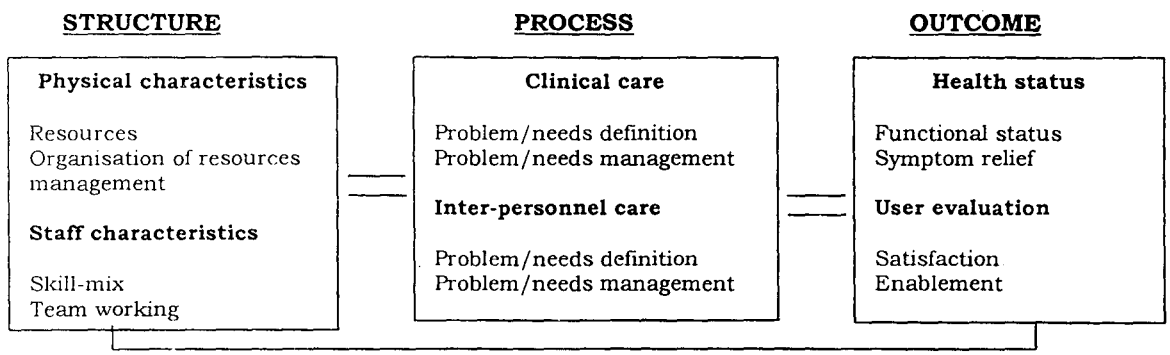
A meta analysis of studies of patients views regarding primary care, shows that an ambiguous picture emerges with regard to which aspects of health care are to be presented to the patient for judgment. Also the patients were hardly involved in the selection of the aspects for the judgment of quality of health care received[15].

Another study on general proactive consultation shows that health care is delivered during the consultation. Therefore it is within the consultation that these researchers have looked for variations in process which makes a difference to the outcome which could be patient health or satisfaction. The study shows that the situation is extremely complex. When examined closely, definitions of both 'communication skill' and ' quality of care' may be invalid if they are simplified. The study suggest that more exploration is needed of the forces which influence both parties and of how these may shape the goals and perception of each[16].

Campbell gives two dimensions of quality of health care- access and effectiveness. The two key elements of effectiveness – clinical effectiveness and interpersonal care are discussed specially with reference to the structure of the health care system, processes of care and outcomes resulting from care. The study emphasizes that quality of care is a concept that is at its most meaningful when

applied to the individual user of health care. Figure I, shows the key domains underlying structure, process and outcome for care received by individual from a health care system and the dimensions of each of these domains[17].

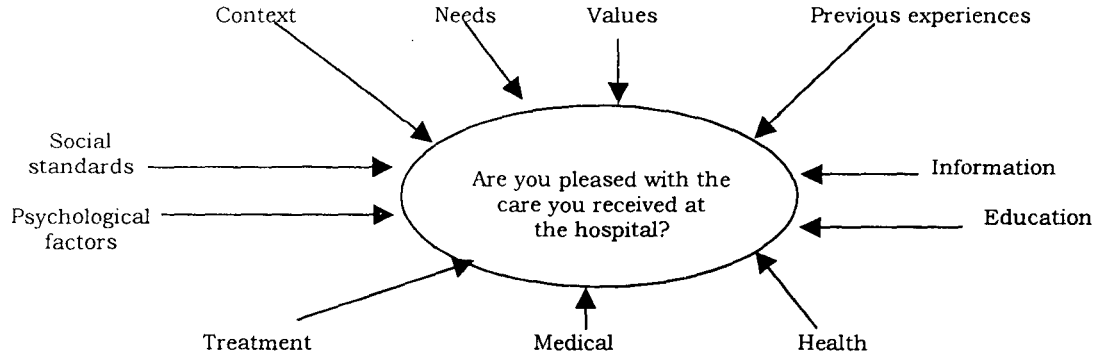
Figure 1: System based Model for Assessing Care



(Source: S.M. Cambell, et. al., "Defining Quality of Care", Social Science and Medicine, Vol. 51, pg. 1613, 2000).

Another study has suggested two methods for measuring patient satisfaction i.e., QSP and QPP. In the "Quality from the patients perspective " (QPP), the patient judges the different domains in two dimensions: perceived reality and subjective importance. The "Quality satisfaction, performance (QSP) model uses a multivariate analysis to capture the patients priorities. The study also supported the fact that patient satisfaction is a function of several variable as shown by figure II, and it is therefore of great importance to use methods in which the different factors can be isolated[18].

Figure II: Spectrum of influence on patient satisfaction



(source: Nathorst. Boos, J., et. al., "An evaluation of the QSP and the QPP: Two Methods for measuring patient satisfaction", International Journal for Quality in Health Care, Vol. 3, pg. 258, 2001).

Despite the substantial body of evidence produced by research into patient satisfaction, work in this field is frequently criticized for failing fully to capture the patient's perspective with regard to health care. It is argued that indepth qualitative methods are necessary to obtain more valid evidence[19].

The above studies have dealt with patient satisfaction in general health care context. There are however a few studies which focus on special groups of patients and their views on medical services.

Studies dealing with patient satisfaction within specific groups

Ygge, claims to present a valid and reliable questionnaire as an instrument for measuring parental views on pediatric hospital care in order to improve quality of health care. The issues dealt in this

questionnaire were information on illness, information on routine procedures, accessibility, medical treatment and care process, staff attitudes participation and staff work environment[20].

Another similar kind of study was carried out for evaluation of patient satisfaction in maternity care. The proposed questionnaire includes 121 items covering labour and delivery, post natal and antenatal care[21].

Labarere, presents a French language questionnaire including 17 items on admission, nursing care, physician care, communication information, infrastructure, and facilities available in inpatient care[22].

In addition to patient satisfaction, a assessment of quality of medical services, through users perceptions, experiences has also been getting importance in various studies[23].

The next section would explore people's experiences and their perception about the public versus private health care services.

People's experiences with public and private health services

A review done by Baru and Kurian, very clearly points out the "Two dimensions in defining the parameters of quality of care. These are tangible dimensions and intangible dimensions. The

tangible dimensions would include availability of infrastructure personnel drugs and technology. And intangible dimensions would include accessibility viz., physical, social and economic, empathy, sympathy and responsiveness of personnel in terms of waiting time spent during consultation and effectiveness of care. The review shows that factors other than physical availability of medical services are also important in utilizing health services. In fact as Baru and Kurian point out, "The survey conducted by NCAER and DANIDA reveal the lack of personal attention of doctors and paramedical personnel in government institutions as an important reason for non-utilization of governmental services" [24].

Another study observed that the utilization pattern of health services is a product of not only the cost of services and proximity but it also involves the conveniences of timings of delivery of the health services delivered. The study clearly brought out that the poor preferred the private sector health services as against the public sector municipal health services as they perceived the quality of the private sector as being better than that provided in the public sector[25].

A study by Finch & Mishra, has revealed that 74% of a studied population visited the private hospital directly to receive health care services. Only 21.7% were found to go to public hospitals. But people were not fully convinced or satisfied with the

fees charged by the private health care services. The reason the poor are forced to go to the private hospitals is the non availability of government medical services and easy access to the private services[26].

According to Nandraj, the increase in private hospitals has occurred not so much because private hospital are better equipped, more efficient or manned by better qualified and more human staff as because public hospitals have simply failed to keep pace with the demand and have been starved of funds, are neglected and run down[27].

Baru states that the public hospital may be cheap but the poor have to cope with poor quality of services. Such problems are not because of lack of facilities. There is a problem of poor quality of management in handling grievance of the users, particularly when they are poor[28].

A study on users perception about health care services in government hospital and willingness to pay, finds out that users are more satisfied with the inpatient care than the outpatient. Apart from showing high levels of satisfaction with inpatient care, this study suggest that there is an association between satisfaction levels and willingness to pay[29].

Jindal presents a study on ESI coverage which shows that there are Lacunae in giving ESI compensation. Patients

reported that doctors do not diagnose their disease which occurred due to occupational hazards. Because they are not properly diagnosed they do not get compensation[30].

While studies on experiences with government health services as well as the private sector are easily available very little work seems to have been done on experiences of industrial employees with public sector health services.

The review of the available literature as done above clearly shows that studies conducted so far have assessed various dimensions of the quality of health care. Perception and satisfaction were used mainly as the major component in assessment of health services delivery in public/government and private health care institutions.

They show that attitude of doctors, availability and accessibility of care are important factors in organising health care services and that level of satisfaction may be associated with willingness to pay.

Following the arguments given today of the need to improve quality of care through privatization the following section looks at issues related to health sector reform.

Health sector reform and introduction of user fees

The issue of quality of care and privatization has received considerable attention since the last two decades within the context of the Structural Adjustment Programme (SAP)[31].

The World Development Report (WDR), 1993, "Investing in Health" advocated privatization on liberalization of the sector. According to the report introduction of user fees is said to be linked with the improvement of quality of health care[32].

The idea of introduction of user fee was based on the premise that people paid for private health care provided it was of good quality. Assumptions was that they will be equally willing to pay for government services as long as quality is assured[33]. However, since most of the countries have experienced adverse results of health sector reforms, the early belief in the beneficial effects of user fee policies has been challenged, particularly with respect to "equity"[34]. Findings of a study by Nyonetor, et. al., suggests that user fee system, as it operates in Volta region has made an essential contribution to the operating revenues for health facilities. But it failed to protect accessibility for poor members of the community. Fees have closely contributed to financial sustainability but at the expense of equity consideration[35].

There has been debate on the impact of health financing reforms on efficiency, quality of care, access by the poor and the respective roles of the public and private sector.

In the light of fixed government budget, cost recovery provides an increasingly necessary source of additional revenues for financing quality improvements. However, the sustainability of quality improvement depends critically on whether the revenues and taxes collected were, in fact channeled to pay for the costs associated with quality improvements or were used for administrative costs[36].

By the early nineties a clear correlation had been established between the introduction of user fees for health care and a marked fall in women's attendance at antenatal clinics in Zimbabwe which was one of the first African countries to experience reforms[37].

Thus, as the studies reveal, the over all evidence from both developed and developing countries suggests that these reforms have simply aggravated existing disparities and created situations which will generate damage to the health and well being of populations world wide[38]. The marginalised population is still not able to fulfill the basic needs of their livelihood. Thus, health is not a sector that can be left to market forces as to the individual purchasing power or capacity. It is a social responsibility where those least able to pay should obtain the greatest support[39].

The existing trend shows that the quality of health care would not be achieved through privatising health care services. It could be optimally achieved with proper epidemiological planning,

proper management of services and accessibility and availability to all irrespective of their capability to afford purchasing health care services.

Also, using people views, on their preferences and needs regarding health care, would be an important method of improving quality of care. Thus, looking at the user's perceptions, expectations and experiences can help to enhance the efficiency of health services system.

There is little work done on public industrial sector and the quality of services it offers and its role in providing services to the workers. These need to be understood especially in this present era of health sector reform

If the public sector industrial health services follow the lead set by TATA which has recently begin withdrawing its services in TISCO in Singbhum and withdraws leaving the medical services to the private sector would it be offering a better or worse option to the employees? This needs to be studied and could be best done through a study exploring the public industrial sector medical services by examining the perception and experiences of its beneficiaries.

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METHODOLOGY OF THE STUDY

CHAPTER - II

Conceptualisation of the Problem

Since Independence there have been many legislations to regulate the industrial environment and health of industrial workers. It was the Indian "Health and Survey Committee" (Bhore Committee), stated that proper working environment and physical fitness of workers is a very important factor contributing to economic growth. Health services in the industrial sector has been one of the important benefits provided by companies/industries to their employees in order to keep them healthy. Most industries provide health care services through their own hospitals and dispensaries, free of cost exclusively to their employees and their family members. But in the present scenario of liberalization, cut backs in the social sector and privatization of health services are gaining ground. In such a situation the provision of industrial health care services could be affected by these economic reforms.

It could be assumed that the facilities provided by these big industries to their employees would be more easily available than the health services available at the government or public hospital. This would be because the industrial sector services are provided to a

comparatively small segment of population. So, the load on these type of health care institutions would not be as high as in the government hospitals. However, the quality of care cannot be assessed only by physical availability of services. The users satisfaction has become an important indicator in assessment of quality of care.

We have seen through the literature review that many studies show that in any type of health care services along with the physical availability, clinical efficiency as well as the effectiveness of interpersonal relationship with medical personnel influence users satisfaction or dissatisfaction. People give a great deal of importance to how they are spoken to and treated by medical and paramedical personnel when they seek treatment or advice.

However, it is also possible that in the same available health services different classes of people get different levels of attention. Also, expectations vary from one social level to another. So, there is need to find out that what are the expectations of the users of different socio economic strata and how they perceive the attitudes of providers (Doctors and paramedical staff). In addition we need to know through their experiences if care differs for different classes. All these factors would also affect utilization of health services.

Another important factor which could have impact on the utilization of health care services is cost of the services. Our review of literature has shown that people prefer to go private treatment only when they are dissatisfied with the public health care services. People often use private health services since if they receive better quality of care they are willing to pay more for the health services.

The fact that people are willing to pay for better care is being used by the proponents of health sector reforms. The present trend of privatisation in public health care institution is being carried out by bringing in user fees and subcontracting out services with the assumption of improving quality of services. However, studies reviewed have also revealed that despite higher cost there is no guarantee of increase in the quality of health care services.

Whether quality improves or not if privatization is brought about in the public industrial sector the increase in cost could impact the area where industry is providing health services to its employees at free of cost.

So, keeping all these things in mind the researcher decided to conduct the study in a public industrial sector "BHEL" which provides medical services to its employees and their dependents, at free of cost.

Users experiences, utilisation and perception towards both the BHEL and private health services would need to be explored to enhance our understanding regarding what users consider effective health care services. To this end we would also need to explore the people experiences and their views on the public versus private health services.

Therefore, it is planned to find out the employees concept regarding "expectations of good care" and how it could be related to their satisfaction/dissatisfaction with the available health care services. People's views would be used as an important source of information for screening problems regarding health care services.

Aims and Objectives of the Study

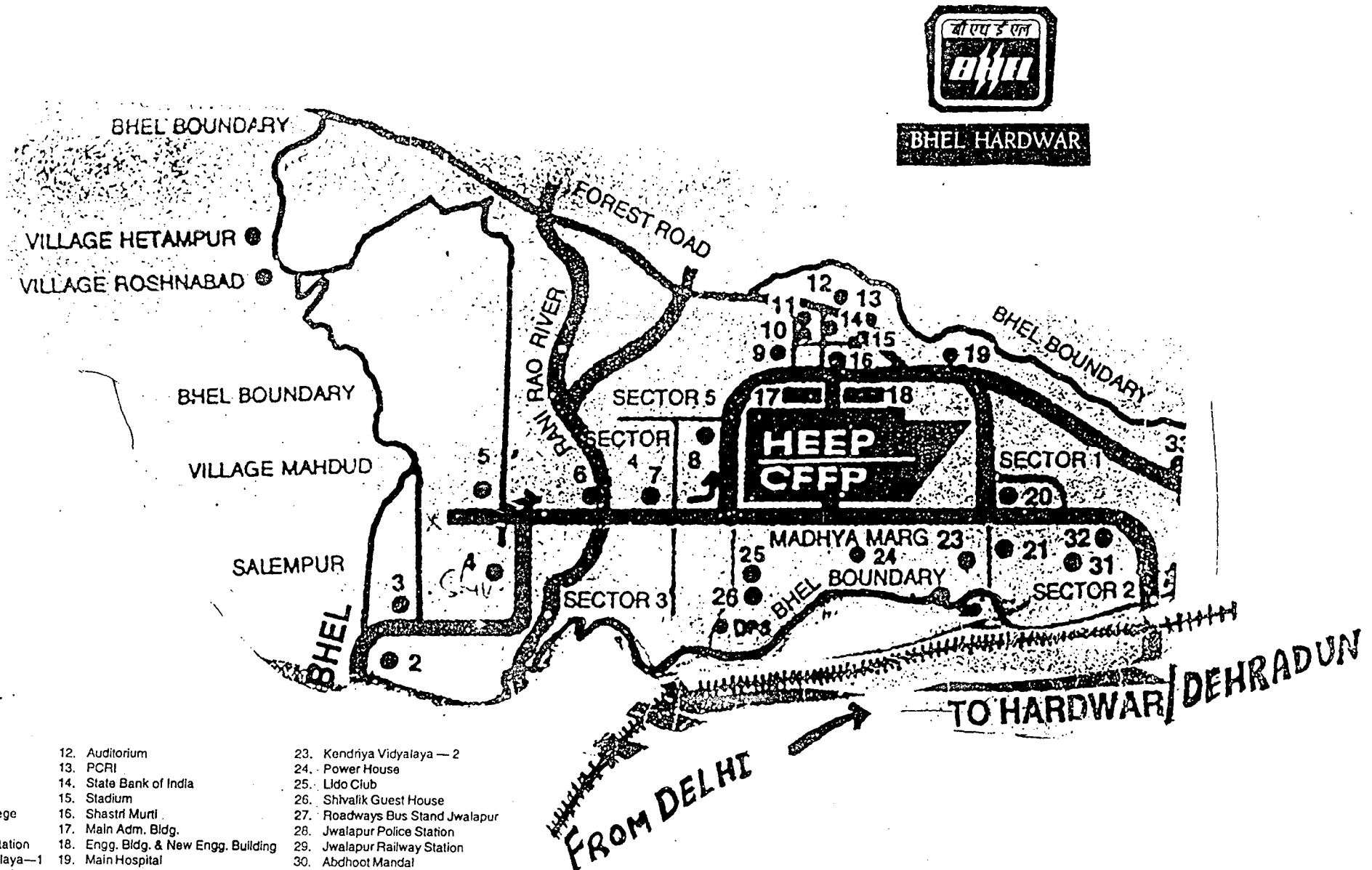
The present study is focused on the assessment of the levels of satisfaction and kind of treatment sought by the employees working in Public Industrial Sector i.e. BHEL. For this one has needed to consider the employees expectations, experiences and utilization of the existing structure of medical care system set up by BHEL for its employees and their dependents. In order to develop our understanding of the same the present study has certain objectives.

These were:

- To study the historical growth of the area and of the medical services of BHEL in Haridwar.
- To study the provisions and benefits including medical facilities provided by BHEL to its employees.
- To find out the employees experiences, expectations and utilization of available Health Services.
- To find out the differences in medical care received by the different level of employees.
- To study the perception of providers towards existing healthcare services.

In order to carry out the above objectives our sub objectives were:

- To find out the socio economic profile of the employees.
- To find out the structure of employees families.
- To study the working conditions of the employees.
- To find out the structure of existing medical facilities.
- To study the procedure of getting available medical services.



1. Bahadrabad
2. Barrier
3. U.P.S.I.D.C.
4. Shivalik Nagar
5. V.M. Inter College
6. CISF Complex
7. BHEL Police Station
8. Kendriya Vidyalaya—1
9. Project House
10. Trishul G. House
11. Club
12. Auditorium
13. PCRI
14. State Bank of India
15. Stadium
16. Shastri Murti
17. Main Adm. Bldg.
18. Engg. Bldg. & New Engg. Building
19. Main Hospital
20. Training School
21. E.T. Hostel
22. BHEL Ancillary Units
23. Kendriya Vidyalaya — 2
24. Power House
25. Lido Club
26. Shivalik Guest House
27. Roadways Bus Stand Jwalapur
28. Jwalapur Police Station
29. Jwalapur Railway Station
30. Abdhoot Mandal
31. Barrier Sector 2
32. Barrier Sector 1
33. Barrier Tibri

- To find out the problems or complaints regarding existing medical facilities specially in O.P.D. or inpatient services used by the employees or their dependents.

- To study the differences in attitude of the users and providers regarding medical services.

Study Area

The present study, was conducted in a public industrial sector, to explore people's expectations, experiences and perceptions regarding available medical services. Generally, in public industrial sector medical facilities are provided by the company through its own hospital and dispensaries.

To explore the users and providers views on the available medical services in Public Industrial Sector the area selected for the present study is BHEL i.e. "Bharat Heavy Electricals Limited', Haridwar, Uttranchal. BHEL has its corporate headquarter at Delhi and has many branches all over India. One of them is at Ranipur, Haridwar in Uttranchal State. BHEL at Haridwar was established in 1963 and since then it is engaged in manufacturing of Heavy Electrical Equipments like Thermal sets, Hydrosets and Gas Turbines etc.

This Industrial area is spread over 25 sq km at Ranipur, Haridwar, and has a big factory which is divided into two manufacturing plants. It also has a big township where the employees of this industry live. Medical service is provided exclusively to BHEL employees and their dependents, free of cost. Within the campus through its own hospital and dispensaries,. Certain people who form the non entitled category can also avail of services on payment.

The Township

BHEL has a large township which is divided into 6 sectors i.e. sector one to six with over 6,500 houses for the different level of employees. Within the township hostel accommodation for unmarried male and female employees is also provided by BHEL. In addition loans are arranged for the employees by the management through various financial institutions to enable them to build their own houses. Many employees have their own houses in a private colony named "Shivalik Nagar" within the BHEL Campus. The factory is located centrally in the BHEL campus.

BHEL has 19 educational institutions from Nursery to Degree level for the children of its employees. These include 1 degree college, 2 central schools, 9 schools run by the BHEL educational board, 1 branch of D.P.S. (Delhi Public School), 4 polytechnic

institutions funded by state government and 2 polytechnics run by private agencies.

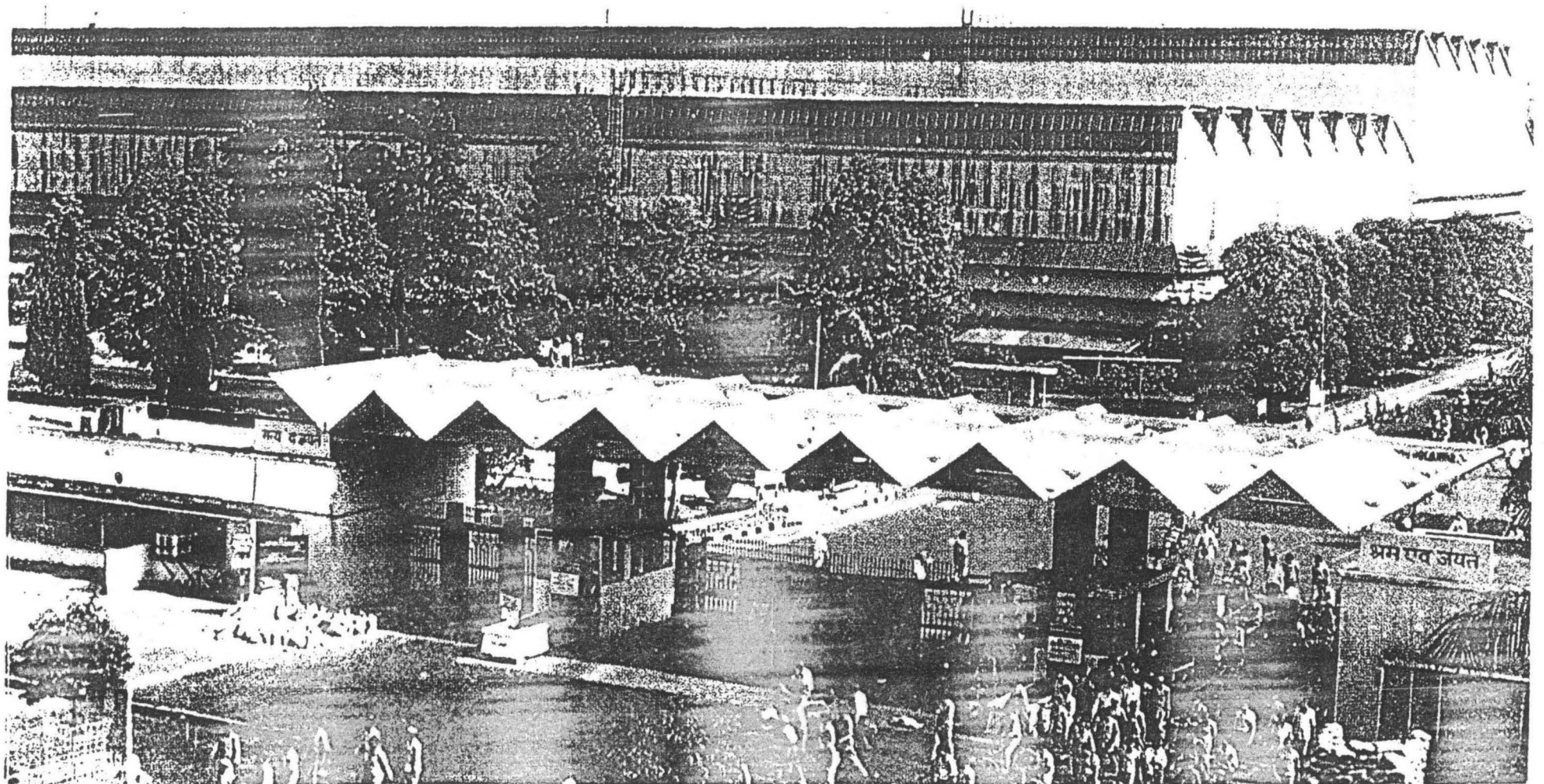
A shopping complex is located at each sector to meet the residents requirements. The post office is located in sector 1. For recreational activities, there are 3 community centres, 1 club for cultural programmes, a sports club for the indoor and outdoor games. The sports club also has a library, reading rooms and swimming pool which are available to the employees and their wards on the basis of membership for the club, (Only executives can became members of this club). Besides this there is one cinema hall also run by BHEL within the campus.

The security of the factory and BHEL residential area is undertaken by the "CISF", (Central Industrial Security Force).

Within the residential area sector 4, there is one police station which adds to the security of the total community of BHEL.

Health Care Institution

BHEL Haridwar has one main hospital and 8 dispensaries for the employees and their dependents. The main hospital is located centrally in the campus and provides O.P.D services for different



Panoramic view of HEEP-Hardwar

specialties as well as inpatient services. Out of the 8 dispensaries 6 dispensaries are located at the centre point of the different sectors and 2 are within the factory premises. In the main township area private medical practitioners are restricted. But in Shivalik Nagar which is the private colony no restrictions are applied. In this private colony there are, 3 homeopathy centres and 1 Ayurvedic clinic owned by private practitioners. But not a single Allopathic clinic was found there.

The Factory

The industry or factory is located almost centrally in the BHEL campus and its approximate area is "9083783.40 sq ft". BHEL Haridwar has two manufacturing plants, these are HEEP – "Heavy Electricals Equipment Plant" and CFFP – "Central Foundry Forge Plant", as well as PCRI i.e. "Pollution Control Research Institute", within the industrial campus. Both the manufacturing plant (HEEP and CFFP) are divided into 8 Blocks on the basis of manufacturing work. The actual manufacturing work is carried out in these Blocks. The details of these Blocks is given below:

Block – 1 It is engaged in manufacturing of electric machines like turbogenerators, hydrogenerators and AC and DC Motors.

Block – 2 : It is the main feeder Block for other manufacturing Blocks and it is engaged in fabrication of casings and other parts for turbines and generators.

Block – 3: It is engaged in manufacturing of steam turbine, hydroturbine, gasturbine and other supporting devices.

Block –4: It is small Block engaged in manufacturing and assembly of wiring for the stampings used in electric machines.

Block 5, 6, 7 and 8: These Blocks are combined with Block-2 and complete the fabrication work. These are comparatively small Blocks and devices like heat exchanger waterboxes, front wall etc are fabricated here.

Apart from the manufacturing Blocks the other working departments in the factory are administrative or personnel departments and the planning, commercial and welfare departments.

Manpower Strength

The overall strength of employees working at BHEL, Haridwar is "9334". The employees are divided into various categories according to their qualifications, seniority level and pay scale. Table 2.1 given below shows the overall strength with different categories of the employees.

TABLE – 2.1 : Manpower of HEEP, PCRI and CFFP at BHEL Haridwar

Category of employees	HEEP	PCRI	CFFP	TOTAL
Executives	1307	13	170	1490
Supervisors	1461	2	228	1691
Workers (skilled and semiskilled)	3570	-	751	4321
Supportive technical staff	643	11	62	716
Clerks	295	3	26	324
Unskilled wrks (contract Labours)	546	2	184	732
Engineer Trainees	10	-	4	14
Account Trainees	2	-	-	2
Temporary Employees	43	-	1	44
Total	7877	31	1426	9334

Selection of Sample

As we mentioned earlier BHEL has two manufacturing plants HEEP and CFFP. It was decided to take the study sample from the manufacturing plants only. The reason behind this was that only in these two plants the actual manufacturing process of Heavy machines is carried out by the industry. It was assumed that possibilities of using Health Services by the employees of these plants could be more if work hazards affected their health in any way.

As we discussed earlier, the manufacturing plants are divided into eight Blocks. The researcher got permission from the Administration to select only one Block to conduct present study. So, it was decided to have a sample size from Block-2. This is the fabrication Block and the main feeder Block for various products manufactured in other Blocks of BHEL, Haridwar. It consists of 4 Bays or sections namely Bay No. I, II, III and IV and a planning section. The Bays are 29 x 192 mtrs, 36 x 192 mtrs, 24 x 192 mtrs and 24 x 192 mtrs respectively. Block-2 has facilities for compressed air, oxygen, acetylene and carbondioxide gas pipelines for the manufacturing process.

The overall strength of employees at Block-2 is '609' and these employees are divided into various categories according to their

designation and seniority level. The following table (2.2) shows the total manpower strength of the Block-2.

TABLE – 2.2: Employees Strength in Block – 2

Employees Categories / Sections	Workers	Supervisors	Executives	Total
Bay I	87	13	7	107
Bay II	146	22	7	175
Bay III	100	25	5	130
Bay IV	123	24	4	151
Planning Section	20	13	13	46
Total	**476**	**97**	**36**	**609**

* Grand Total = '609'

The above table shows the overall strength of Block-2 with different categories of employees like workers, supervisors and executives. As one of the objectives of the present study is to explore the differences in expectations, perception and satisfaction of the employees of different level regarding available health services, we decided to choose two groups of different levels of the employees within the Block-2. It was decided to select samples from the executives and the workers.*

* We would have preferred to take samples in all 3 categories. However, then the numbers in the sample would have been such that an indepth evaluation could not have been carried out due to time constraint. Hence it was decided to take employees from the higher and lower level of categories to check for differences.

The executives and workers are divided into different categories according to their seniority level as shown by the tables 2.3 and 2.4.

TABLE – 2.3: Executives Categorization in Block– 2

Categories / Section	E8 (AGM)	E7 (SDGM)	E6 (DGM)	E5 (Sr. Mgr)	E4 (Mgr)	E3 (Dy Mgr)	E2 (Sr Engr)	E1 (Engr)	Total
Bay I	1	1	1			2	2		7
Bay II	1		1		2	2		1	7
Bay III		1			2		1	1	5
Bay IV			1		1			2	4
Planning	1		3	2	5			2	13
Total	3	2	6	2	10	4	3	6	36

* Grand Total = 36

The table given below looks at workers categorisation in Block2.

TABLE – 2.4 : Workers Categorisation in Block– 2

	*unskilled	*semiskilled	*skilled	Total
Bay I	2	4	81	87
Bay II	3	2	141	146
Bay III	3	4	93	100
Bay IV	2	4	117	127
Planning	2	8	10	20
Total	12	22	442	476

* Unskilled – Unskilled workers are contract labours.
* Semiskilled – Semiskilled are new comers or less experienced.
* Skilled – Skilled Senior worker's working from long time.

It was decided to choose only semiskilled worker. These were 22 of them. Hence all are taken up from the lower level. An equal number i.e. 23 executives from E1 to E4 were chosen.

The reason behind the selection of executives upto E4 and only semiskilled workers was that the selected employees of both the categories were comparatively junior and have joined BHEL more recently. It could be presumed that senior level or experienced employees could have contact or informal channel to get better medical facilities since they would have been working in BHEL from a long time. Therefore we didn't include "executives of above E4 level" and "skilled workers" in our sample in an attempt to understand the experiences with medical facilities of those who used the formal channels of medical care.

The reason for not choosing "unskilled workers", was that they were contract labour and therefore they were not entitled to any type of benefits including medical facilities unlike the other regular employees.

As the present study is exploring the health services of BHEL, along with the views of the users it is along necessary to have the views of the providers.

In order to do this an attempt was made to explore the doctor's perspective about the available health services. This was done in order to know if there were differences in opinion between doctors and employees regarding health care needs and services available.

For the same, Doctors of BHEL Hospital and dispensaries were to be interviewed. According to their availability and willingness to be interviewed, total 15 doctors were interviewed. Out of that 9 were specialist of main hospital and 6 were MBBS doctors from the dispensaries.

Along with the BHEL doctors we also decided to interview few of the Homeopathic and Ayurvedic private practitioners who had their clinics at BHEL private colony named as "Shivalik Nagar" (inside the Campus).

Also, we planned to conduct informal talks with the BHEL retired doctors as well as others who had their own private clinics outside the BHEL campus.

Process of Data Collection

In the present study primary and secondary data were used to collect information about the study area and the health

services. A field work of 90 days was conducted. The tools and techniques of data collection were decided according to data required.

Pilot Study

A pilot study of 15 days was conducted in the month of October. This was carried out before the 90 days of actual field work in the selected area i.e. BHEL Haridwar. A pretest of the interview schedule was done on 10 employees and necessary changes were made in the interview schedule as per the information collected in the pilot study. Thus the pilot study helped the researcher to finalize the questionnaire.

After undertaking a pilot study the actual field study of 90 days was carried out by the researcher. For the main study the tools used were-field survey, observation, informal discussions, formal and informal interviews and structured interview schedule.

Quantitative and qualitative data was collected on the basis of above techniques. The details of these techniques is given below:

Non Participant Observation

The non participant observation technique was used in the different places of studied area like-working place, township or residential area, dispensaries and at the main hospital.

The physical structure of the study area was investigated. The different spots visited were the factory area, specially manufacturing Blocks where the actual manufacturing process is carried out by the employees. Township area within that all the dispensaries and main hospital were also visited. In the main hospital O.P.D and inpatient words were visited with all the specialities departments and other departments like medicine store, casualty departments, immunology and pathology departments etc. This was done in order to have an idea about the infrastructure as well as the physical facilities available at the hospital and dispensaries.

In the working place of the employees observation was used to study working conditions and facilities available to the employees. It also helped the researcher locate differences in available facilities for all level of employees.

In the township area observation was used to have a view on the physical structure of the residential quarters of the different categories of employees.

In the dispensaries and main hospital observation was used to see the process of getting medical care. Also, to find out the availability and accessibility of the medical services to the employees, by noting when doctors were available, how much time they spent with each patient and how much time the patients had to wait before they were seen by the doctors.

Informal discussion

Informal discussions with the senior employees were carried out to gather information on the history of medical services and factory. Also, to know about the changes and development that have occurred in the area. BHEL senior retired doctors were also informally talked to about their private clinics.

Informal Interviews

Informal interviews were conducted with the various key personnel at the factory as well as the medical centers. These was mainly used to cross check the information and data given in the formal interview by the administrative personnel. At the factory area personnel officers, planning officers and clerks were informally interviewed. In the dispensaries and main hospital informal interviews were held with the nurses, paramedical staff and attendants. The information gathered was cross checked with the OPD with the records

books on patient information on the bed strength, number of patient admitted per month, and illness pattern in the inpatient department.

Formal Interviews

As mentioned above, the formal interviews were carried out with the administrative personnel. 4 administrative officers, and 3 managers were interviewed about the provisions and benefits provided by the company. At the medical center the additional chief medical officers who were the heads of the departments were interviewed in order to collect information on the services of each specialities department of the main hospital. Additionally, formal interviews were carried out with the person in charge of each dispensaries to gather information on the dispensaries and their functioning.

Structured Schedule

The interview schedule was prepared by taking into consideration the objectives of the study. Personal interview of the sample population was carried out on the basis of structured interview schedule. People were questioned about their socio-economic profile, provisions and benefits from the company, working conditions, experiences, complaints and expectations, of the available medical services along with the experiences of private treatment. Though both

open ended and close ended question were asked, if people were willing to give more information they were not restricted.

Different kind of information and data was collected on the basis of different structured interview schedule these were:

- Indentification information and family composition 'close ended' (see Appendix – I)
- Information about the working place, 'open ended' (see Appendix – II).
- Experiences and expectations of the employees with the dispensaries, 'open ended' (see Appendix – III).
- Experiences of main Hospital including O.P.D and Inpatient services, 'open ended' (see Appendix– IV).
- Experiences of private treatment 'open ended' (see Appendix– V)

Another structured interview schedule consisting of open ended questions was used to collect information from the Doctors who were working at BHEL dispensaries and Main Hospital, (see Appendix VI). This was in order to have an idea about the doctor's perceptions towards existing medical facilities and towards the users complaints or problems. The questions asked covered areas like Doctors identification

information, working hours, consultation time/patient, employees expectations and complaints towards available medical facilities, trend of illnesses and any improvements or changes they want in existing medical services.

Semi Structured Schedule

This was used to collect information from the Homeopathy and Ayurvedic private practitioners who had their clinics at private colony in BHEL Haridwar i.e. 'Shivalik Nagar'. This open ended schedule was administered to have an idea about the pattern of use of these services by the employees of BHEL.

Secondary Sources

- The map of BHEL campus was used to understand the exact location of the places and to have an idea about the study area.
- The manpower planning books from administrative office of the industry was checked out to collect data on the employees strength, (for sampling purpose) at the.
- Information was gathered from the published brochure, the personnel manual and company records on the strategy plan of the industry.

- At the medical centres various records were checked out with the help of the concerned staff. O.P.D Registration Books and Inpatient records were checked for the last 3 months to gain information about the patient age, group, sex, designation and disease pattern etc.

Rapport Building

Informal interviews and discussions were initiated in order to develop rapport with the studied population. This helped the researcher in making favourable environment to conduct the present study.

Data Analysis

The collected qualitative and quantitative data has been analysed by the researcher after completing field work. Through coding and tabulation techniques the collected data has been analysed.

Limitations of the Study

It is an exploratory research study so it cannot be generalized to other public sector industries. However its value lies in the data generated for BHEL. To increase the generalisability more studies would be needed.

EVOLUTION AND PRESENT STATUS OF MEDICAL SERVICES AT BHEL

CHAPTER – III

All the employees of BHEL Haridwar, their families and dependents are entitled for free medical aid and services at the company's hospital and dispensaries located at various sectors in the residential area and in the Factory area.

Development of Medical Services in BHEL

BHEL was established in 1963, and since that time medical services were started at BHEL Haridwar. Initially there was only a 12 bedded Dispensary. Within this there was a mini pathology lab and test like – T.L.C., D.L.C., E.S.R., H.B, stool test, blood test, urine test and X-Ray were available to the employees. The strength of Doctors at that time was only 3 (2- male Doctor & 1 lady Doctor).

Then another Dispensary started in 1965 at "Factory gate" and 1 Doctor was appointed there. In serious condition cases were referred to District hospital or to a near by city i.e. Dehradun or Delhi. A few more dispensaries were started within a year.

In 1969 the "main hospital" was established. Initially the main hospital had 6 departments. These were Surgery, Medical, Dental, Pediatrics, Gynecology and Pathology. There were- a male ward,

चिकित्सा विभाग, वी.एच.ई.एल. रानीपुर, हरिद्वार

a female ward, a children ward and a maternity ward. Then after five years in 1974, a few new wings were constructed, in order to separate the medical and surgical ward. By 1987 a Casualty Department was also started within the premises of main hospital. Thus for emergencies there was a 24'hours services for the employees.

It becomes necessary to mention here that no document is available on the development of medical services at BHEL. So, old employees or key persons were enquired for the details of Development of Medical services.

The Present Profile of Medical Services

Beneficiaries

As mentioned earlier all the employees of BHEL and their dependents are entitled to free medical services. In addition, the non entitled cases are also allowed treatment on payment in both O.P.D & indoor department at BHEL hospital. The company has divided these non entitled cases into 3 broad categories these are:

- The **first category** is of known relatives or children of BHEL employees (son above the age of 24 years, married daughter, son in law and daughter in law). The payment is deducted from employees salary if his relatives are using the services in BHEL.

- The **second category** is of employees in Haridwar of NTPC, NHPC and the school of D.P.S. BHEL provides facilities to these people on Authority of their Department.
- The third category is of Adopted villages near the BHEL boundaries. These villages are – Roshanabad, Hatempur, Anaki & Pathri, BHEL organizes medical camps in these villages for free check up and medicine distribution. The villagers are also permitted to get free treatment in O.P.D services, but they need to pay for hospitalization, at BHEL hospital.

Procedure followed by non-entitled cases

- All non entitled cases have to make separate card from Registration Department of Medical Services.
- Money charges for non entitled cases already fixed by the corporate headquarter of BHEL.
- If patient is a blood relation of employee then 30% of the charge is deducted from his/her salary. In other cases the full charges are fixed according to the treatment expenses. The patient have to deposit money in Account Department of Medical services. This money goes to BHEL fund.

Dispensaries in the Campus

A total of 8 Dispensaries are located in the different residential sectors as well as in the factory premises. Out of these 8 Dispensaries 6 are located at the centre of each sector in the township (Residential area), and 2 located at the Factory campus i.e. 1 at HEEP and 1 at CFFP.

Timings: 8.30 a.m. to 11.30 a.m
4.30 p.m. to 6.30 p.m.

Strength of Medical Personnel

The strength of medical personnel is the same at each Dispensary. This is –

- 3 MBBS Doctors (G.D.M.Os) – 2 male / 1 female
- 1 Staff Nurse
- 2 Pharmacist
- 2 Dressers
- 1 Attendant

Investigations available at dispensaries

- B.P. Check Up
- Weight Measurement
- Malaria Test

Oxygen cylinder is available for emergency cases.

Treatment Procedure

No Registration procedure has to be followed for treatment in Dispensaries. Any patient who have his/her medical card can consult the doctor directly.

However there is a queue. The doctors would treat the patient here, for investigations patients are sent to the main hospital. This is because all investigation facilities are available only at the main hospital.

Patients are not expected to go to the main hospital without a referral from the GDMO of the dispensary. This is so for investigation or referral to a specialist at the main hospital.

All dispensaries have their mini medicine store where medicine prescribed by the doctor is distributed free of cost to the patient.

The main hospital

The main hospital located near the factory. It is a 200 bedded hospital providing specialized O.P.D. and inpatient services to the employees and their dependents.

Timings: O.P.D. Services – 8.30 A.M. to 1.00 P.M.
– 3.30 P.M. to 5.30 P.M.

For inpatient services the patient can be admitted at main hospital any time in the day. Round the clock casualty services are also available within the premises of the main hospital.

Personnel strength

At present there are a total of about 300 employees working in the medical department. These comprise doctors, nurses, pharmacists, technicians, attendants, clerks, peons, sweepers and others. Contract labourers are also working here specially in kitchen section as the cook and the attendants who serves food. Other contract labourers are sweepers. The contract labourers are appointed on the basis of daily wages.

Qualification and Eligibility for the Medical personnel

Appointment in the medical services is through proper channel. The eligibility criteria is –

For	General Duty Medical Officer (G.D.M.O)	– MBBS
	Specialist	– M.S./M.D.
	Nurses	– Diploma in Nursing
	Compounders	– Diploma in pharmacy
	Technicians	– Diploma Holders
	Attendant	– 8th Pass

Hierarchy of Personnel in Administration

The Medical Department of BHEL, is headed by Chief Medical Officer (C.M.O.), who is head of the Medical Services. The Hierarchy of medical personnel in administration of medical services is given below –

Chief Medical Officer (C.M.O)

↓

Additional C.M.O.

↓

Medical Assistant Chief Officer

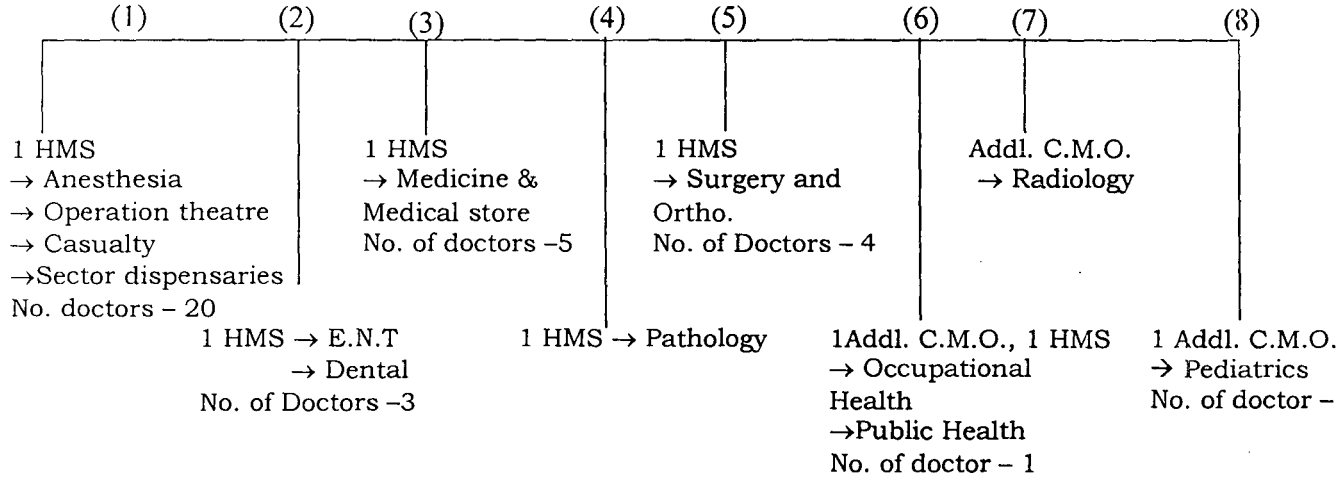
↓

Senior Medical Offices

↓

Medical Officer

Head of Medical Services (H.M.S), of different department



The HMS or Additional Senior Incharge (Additional C.M.O.) of the Medical Services head all department of specialties separately.

Strength of Specialist & General Duty Medical Officer's (G.D.M.O.)

TABLE 3.1: Total Strength of Doctors at BHEL

Doctors	Strength
Specialist	29
G.D.M.Os	25
Total	**54**

TABLE 3.2: Overall Male and Female distribution of Doctors

Doctors	Strength
Male	31
Female	23
Total	**54**

Overall strength of Doctors at BHEL is 54. Out of that the strength of specialist at the main hospital is 29. These specialist look after different departments according to their specialties. These departments are given in the following table.

TABLE 3.3: The division of specialties department of BHEL Main Hospital

Department of Specialty	Strength of specialist
Surgery	4
Orthopedic	2
ENT	2
Medicine	5
Children	2
Skin	1
Gynecology	3
Eye	3
Dental	2
Anesthesia/Operation Theater	3
Occupational & Public Health	1
Pathology	1
Total	**29**

General Duty Medical Officers (G.D.M.O)

The strength of General Duty Medical Officers (G.D.M.O's) is 25. These G.D.M.Os perform duties only in the various Dispensaries and in casualty services by Rotation. There are 3 G.D.M.O.s at 1 Dispensary and 1 G.D.M.O at Casualty Services (Round the Clock in 8 hours shift).

Registration Procedure

At the main hospital the counter, registration system is available to the employee or patient for O.P.D. Services. A medical card is issued by BHEL to its employees and their dependents. The identification information with staff number and photograph are recorded on these. Each patient has to show his/her medical card at the registration counter in order to get the Registration Number of the specialist. Allocation of specialist is according to the patient choice or as per the treatment needed. On the medical card of the patient the number, timings are written with the Doctors Name or Department. The Table given below shows the number of Registered cases attended by the surgeons and physicians over one day:

TABLE 3.4: Number of cases attended by doctors per day

Doctors	Cases		Total
	Morning	Evening	
Surgeon	30	18	48/Per day
Physician	35	18	53/Per day

* 30-35 is the maximum number of patients allotted for morning/evening

Departmental Division of the Main Hospital

There are 17 departments or sections in the main hospital. The following table shows the different departments at main hospital of BHEL.

TABLE 3.5: Departmental division in the main hospital

Departments
a- Administration
b- Anesthesia/Operation Theatre
c- Casualty & Services
d- Dental
e- E.N.T (Eye, Nose & Throat)
f- Gynecology & Obstetrics
g- Kitchen Section
h- Medicine
i- Occupational Health & Public Health
j- Orthopedics
k- Pathology
l- Pediatrics
m- Radiology
n- Registration
o- Surgery

Medical Services available at BHEL Hospital

Out Patient Department Services

The O.P.D. services which are available at the main hospital of BHEL are-

a) Skin & Veneral Disease

b) Cardiology

c) Orthopedics

d) E.N.T

e) Dental

f) Occupational and Public Health

g) Pathology

h) Medicine

i) Endocrinology

Inpatient Services

For Inpatient services patient can be admitted any time at the main hospital as per the instructions of the doctors. There are 6 wards in which patients are admitted. These are: -

TABLE 3.6: Details of inpatient services

Wards	**No. of general Beds**	**Special room**	**Private or staff room**	**Total cases admitted in December 2001**		
				Executives	**Workers**	**Total**
Male medical	25	2	2	7	24	31
Surgical	27	3	2	6	56	62
Female medical	28	2	2	20	36	56
Female surgical	28	2	2	17	30	47
Gynecology	31	1	1	4	26	30
Maternity	16	2	1	9	6	15
Total	**155**	**12**	**10**	**63**	**178**	**241**

Source: Registration books of each inpatient word of the BHEL Hospital.

At each ward the Doctors take routine rounds for check up of admitted patient twice in a day or more than twice if required. Nurses are on duty on Rotation Shifts for 24 hours. Drugs are given by the Nurses as prescribed by the Doctors. Also food is served to the patient 3 times in a day in the ward as per the prescribed diet given by the doctors.

Trend of Illnesses

In the inpatient cases the number of workers patient is very high (see table 5.6).The Doctors and Nurses were interviewed at each inpatient ward. The more common illnesses reported by them are as follows –

Illnesses in Medical Ward (Male and Female)

Hypertension, Coronary Artery Disease, Diabetes, Upper Respiratory Tract Infection, Typhoid, Malaria, Bronchitis Asthma, Fever, T.B., Jaundice, Gastroenteritis and Alcohol intake. Through recorded details of patients it was found that illnesses like Hypertension, Diabeties and Heart problem are more common in Executives, while illnesses like T.B, Malaria, Asthama and cases of Alcohol intake in male patient are higher in the patient belong to non executive class.

Illnesses in surgical ward

More common illnesses recorded were- Road Accidents, Head injury, operations cases like – Hernia, Appendix, Cholecystitis, Stone Operation and Renal colic. The percentage of Road accident is higher in workers.

Gynacology and Maternity Ward

Records of these wards also checked out. The more frequently admitted patient belongs to worker class, though in December there were more relatives of executives in the maternity ward.

Illnesses in the Employees Family for which care sought in the main hospital

TABLE 3.7: Major illnesses in families of employees over the last one year

Illnesses	**Executives (%)**	**Workers (%)**	**Total (%)**
Infectious illnesses	4 (17.3)	5 (22.7)	9 (20.0)
Hospitalization/surgery	2 (8.7)	7 (31.9)	9 (20.0)
Lower back pain	0	1 (4.5)	1 (2.2)
Diabeties	0	1 (4.5)	1 (2.2)
Allergies	0	3 (13.7)	3 (6.7)
No major illnesses	17 (74.0)	5 (22.7)	22 (48.9)
Total	**23 (100)**	**22 (100)**	**45 (100)**

The above table shows that two major problems common in the employees families are infectious illnesses and problems requiring hospitalisation. Infectious illnesses like fever, pneumonia, jaundice, polio and typhoid are reported by the employees. Interestingly, the qualitative data reveals that the diseases like polio, typhoid and jaundice are reported only by workers. Though the main hospital provides immunization the case of polio reported by the employee for his children raises the question on quality of preventive services available.

While infectious illnesses were reported in almost equal numbers by both the groups, it is seen that there are more allergies amongst the workers and they also have greater episodes of illness requiring hospitalization. Thus we have seen earlier the table also shows that workers are using the inpatient services in the main hospital more than the executives.

Casualty Services

Round the clock casualty services are available to the employees within the main hospital campus. G.D.M.Os are on duty here on Rotation basis. 70 or 75 cases per day are attended by this department. Cases come directly or through O.P.D. Cases are usually referred from the O.P.D to different wards, according to the diagnosis.

The complicated cases needing immediate attention are sent to casualty.

TABLE 3.8: Strength of Manpower at casualty services

Medical personnel	**Strength**
Doctors	1
Staff Nurse	2
Dressers	3
Attendant	1
Sweeper	1
Total	**8**

In casualty the Bed Strength is 14 in a common ward. There is one isolation room, two I.C.U. and one Dressing Room.

Ambulance Facilities

Round the clock, ambulance service is available to the employees and their dependents. Total 3 ambulance are working at present. 2 are at the main hospital and 1 at the factory.

Investigations available

Medical Investigations are carried out within the BHEL campus at main hospital. There is a separate Pathology Department headed by 1 pathologist (MBBS, M.D). There are 8 technicians in this department. It has 4 sections or lab these are-

- Biochemistry section,
- Haematology section,
- Microbiology and Serology section, and
- Blood Bank Section.

Various test are carried out in different labs and reports are given next day or same day as per the requirements.

Medical Store

The medical store is the main store at the main hospital. The medical Board take all the decisions regarding the medical store. Different pharmaceutical companies contact BHEL through tender. BHEL purchases medicine from the contracted pharmaceuticals only.

The medical store is headed by one MBBS Doctor (Sr. Incharge), he is assisted by 1 Chief Pharmacist, 3 Pharmacist, 1 Receipt section clerk and 1 Attendant. Medicines are distributed as per the requirements in different wards and departments from the store. Medicines are also sent to the Dispensaries from this store every month. Direct payment is given to the patient in case of essential drugs which are not available at BHEL.

Medical Board

The head of the Medical Board is Chief Medical Officer (C.M.O). The Board is Advisory in Nature and has power to take local

decisions and other related matters to medical services. Monthly meetings organised by the Medical Board. Issues discussed in meetings are –

- Charge of Duties of medical personnel,
- Matter of compensation or Reimbursement,
- Policy matters discussed with corporate office,
- Yearly budget discussed in these meetings.

Finance and Budget for medical services

BHEL financial departments takes all financial decision about health services. Funds are sanctioned yearly and in case of need there is also provision for additional sanctions of fund. The budget of 6 crore is sanctioned to the medical services of BHEL Haridwar by the corporate headquarters of BHEL annually. This budget is calculated as– Previous year budget + 10% extra yearly

Contacts with other Hospitals

In serious conditions or if required doctors can recommend cases to different Hospital according to seriousness of the patient. BHEL has contacts to some other private as well as government hospitals these are-

Delhi

- Private Hospitals - Ganga Ram, Batra, Escorts &VIMHANS.
- Public Hospitals - Safdarjung Hospital, A.I.I.M.S & Kalawati Saran Hospital.

Chandigarh

- Public Hospital - P.G.I.

Medical facilities available in the District

In the Haridwar District of Uttranchal, a Government District Hospital (G.D. Hospital) provides medical services to its citizens. In the main city of Haridwar, many other private practitioners also run their own clinic. Also some retired doctors of BHEL have opened their own private clinics in the city.

A PROFILE OF THE EMPLOYEES

CHAPTER – IV

The present chapter presents the profile of employees lives. Information on different variables like- religion and caste, education, age group, monthly income, overtime, employees benefits, family size and working conditions of the respondents have been given below.

Religion and caste

All the 45 respondents are "Hindu" but they belongs to different caste. The majority of employees belong to the upper castes (53%). These are Brahmin (29%) and Vaise (24%). Then O.B.C. (20%), S.C., (9%) comes next. Other caste like Jat, Kshatriya, Punjabi, consist (15%) out of the total studied population. Despite the fact that higher percentage of employees belongs to upper caste, it has no effect on the working life of the lower caste employees. The respondents didn't report any type of discrimination on caste basis in their professional lives.

Educational level

All the 45 respondents have minimum Educational Qualification which is required for their job i.e. for workers – high school + I.T.I (Technical Qualification) and for executives they should be graduate in Engineering or M. Tech. However for the workers further time is needed to gather skills. (This is reflected in the table 4.1). As

per the corporate Recruitment policy every employee has to first get through the selection process of the company.

Age

TABLE – 4.1: Age of the respondents

Age in years	Executives (%)		Workers (%)		Total	(%)
25-35	9	(39.1)	0		9	(20.0)
36-45	5	(21.8)	10	(45.4)	15	(33.3)
46-55	9	(39.1)	10	(45.4)	19	(42.2)
56-65	0		2	(9.2)	2	(4.5)
Total	**23**	**(100)**	**22**	**(100)**	**45**	**(100)**

Table shows that almost 90% of the workers are between the ages of 36-55. While amongst the executives a substantial percentage (39%) are in the younger age group of 25-35. This could be because executives are chosen through an exam after graduation while workers have to develop skills. The only relevance this may have for utilization pattern could be that the workers being older would have wives and children and may thus utilize the services more often which is what the earlier data seems to bear out.

Income

TABLE – 4.2: Employees monthly income:

Monthly income in Rs.	Executives (%)		Workers (%)		Total (%)	
5000 to 15000	6	(26.0)	20	(91.0)	26	(58.0)
16000 to 25000	7	(30.0)	2	(9.0)	9	(20.0)
26000 to 35000	10	(43.0)	0		10	(22.0)
Total	**23**	**(100)**	**22**	**(100)**	**45**	**(100)**

It is worth noting that while many executives are younger, their salaries are markedly more then the workers. While 90% workers earn less than 15,000 pm. 73% executives earn more than 15,000 pm.

However overtime provision is available for workers. The maximum time limit of the overtime in a day is 16 hrs/day. As per the present rule overtime payment is double that of the actual payment of workers. Earning by overtime given below.

TABLE- 4.3: Extra income through overtime

Over time in Rs/ P.M	Workers' strength (%)	
Below 5000	8	(36.0)
5000 – 15000	9	(41.0)
15000 – 25000	2	(9.0)
No overtime	3	(14.0)
Total	**22**	**(100)**

The table shows that about 40% of workers receive Rs. 5,000 to Rs. 15,000 monthly for overtime. Thus through working overtime many workers increase their incomes. The table shows that most of the workers are doing overtime to double their salaries. However, many executives still seem to earn more i.e. 43% earn Rs. 26000 to 35000 pm. It would be worthwhile to note later if higher income lead to executives accessing private practitioners rather than using BHEL health services.

Benefits

All the permanent employees are eligible for getting benefits provided by BHEL. The benefits provided by the company vary according to the salary grades. The list of these benefits is given below:

TABLE 4.4: Benefits provided by the BHEL to its employees

Allowances	Travelling Allowance, Daily Allowance, House Rent Allowance, City Compensatory Allowance, Reimbursement of Conveyance expenditure to Executives, Disturbance and Baggage Allowance, Transfer Allowance in case of retirement or death.
Benefits other than the allowances	Gratuity Fund, Group Insurance Scheme, Provident Fund, Bonus, Plant Performance Payment, Free of cost medical facilities at BHEL hospital and dispensaries, reimbursement of money in case of outstation treatment referred by the BHEL hospital.
Non monetary benefits	Duty Dress, Shoes, new year gift, educational facilities, phone, paper and magazine facilities according to designation and cooking gas connection to permanent employees.

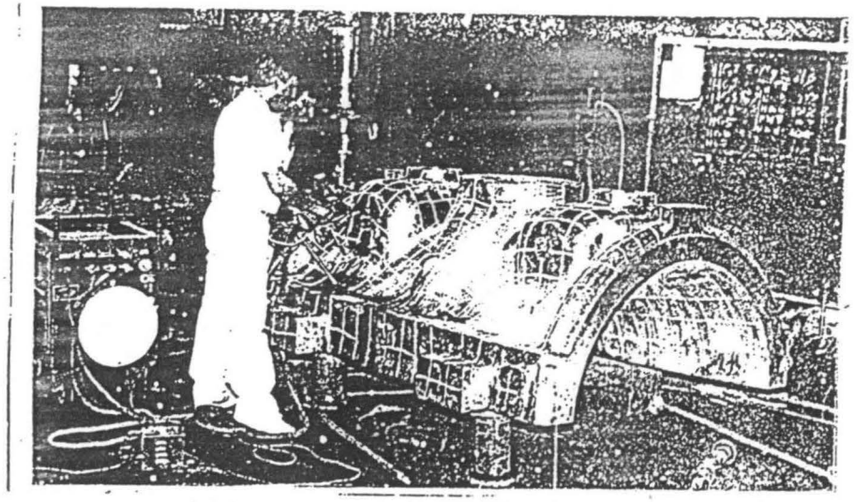
Family Members

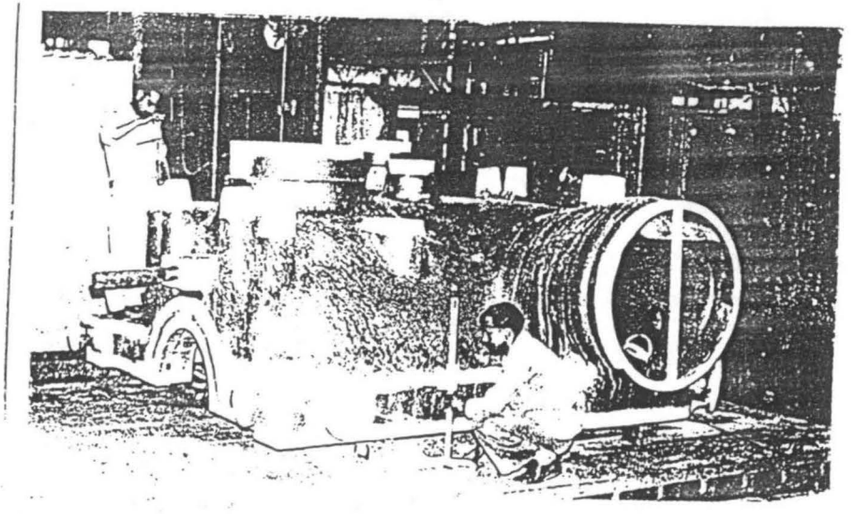
The table given below shows the numbers of family members in the families of executives and workers.

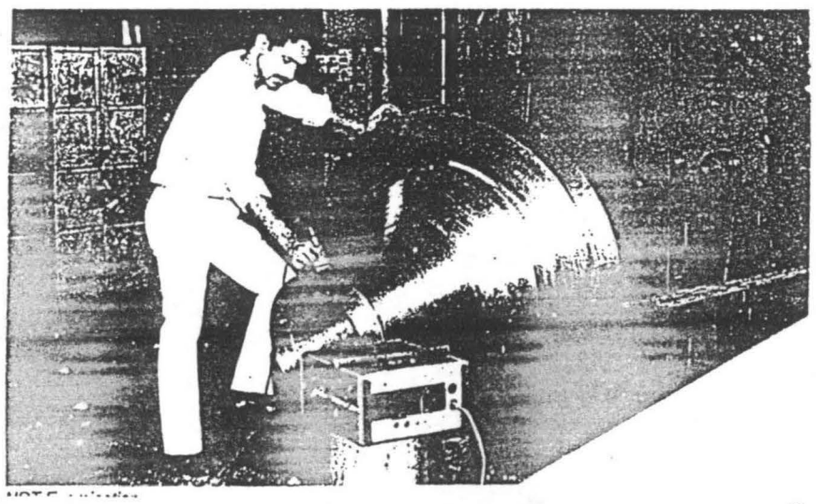
TABLE -4.5: Family members of employees

Family Members	Executives (%)	Workers (%)	Total (%)
Less than 2	5 (21.7)	0	5 (1.1)
2 - 4	17 (73.9)	0	17 (37.8)
4 - 6	1 (4.4)	21 (95.5)	22 (48.9)
6 - 8	0	1 (4.5)	1 (2.2)
Total	**23 (100)**	**22 (100)**	**45 (100)**

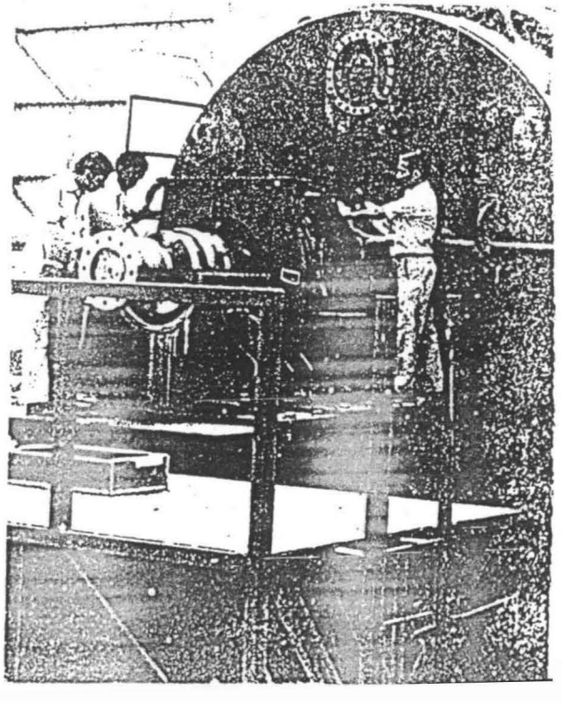
The above table gives clear information regarding employees family size. In Executives majority i.e. 74% have 2 to 4 members in their family, 22% are new recruited executives who are living alone. Among workers 95% have 4 to 6 members in their family. It shows that workers family size is bigger than the executives family. This as mentioned earlier could be due to the relative age differences and it could affect utilization of services. Further according to the information given by the employees most of the respondents families are nuclear. Only 9% in executives and 18% in workers have joint families.







View of working conditions of the employees



The executive children tend to go for higher studies and those in services earn more than Rs. 10000 pm. While workers children tend to stop studying after school and earn smaller amounts i.e. Rs. 2000 pm.

The socio-economic condition of the employees shows that executives get more benefits but they have less burden due to their small family size (see table – 4). While the workers are getting less payment and have more burden on their shoulder due to their larger family size. When they were asked "why they are interested in doing overtime?" they replied that "the income they getting is very less and they have to fulfil their family requirements".

It seems that the most important difference seen here in the income. It would be worth following up this to see if the income makes a difference to the kind of health services sought public or private.

Working Conditions

As per the industrial laws BHEL has to provide certain basic facilities to its employees. Facilities like – safety measures, hygienic conditions, canteen facilities, creche services, welfare and medical facilities are available at working place.

All the employees have to follow the same dress code. This reflects the uniformity of employees without any discrimination.

Working Hours

The manufacturing process is carried out by the employees 24 hours round the clock. Therefore, employees come for duty according to their shift timings. In general duty timings for all are 8 hrs/day. However, as mention earlier for workers there is also an option of overtime. The timings of different duty shifts are as follows:

- Inside the manufacturing blocks there are 3 shifts i.e.
  - 7.00 am to 4.00 pm I shift (Day shift)
  - 4.00 pm to 12.00 pm II shift (Night shift)
  - 12.00 pm to 7.00 pm III shift (Morning shift)
- Outside the manufacturing block in other departments there is only one shift i.e. 8.00 am to 5.00 p.m. (Day shift).

Identity cards are issued to all the employees and everyday after strict checking of the identity cards by security officers employees can enter the Factory premises.

Facilities at Work Place

When the question was asked about the satisfaction of respondents with the available facilities at work place, almost equal numbers of employees 75% out of the total respondents seemed to be satisfied with facilities available to them. At the same time employees also felt that different facilities were offered to executives and workers.

But workers accepted that the executives would get better facilities due to company rules.

The following table shows the employees responses about the differential facilities available at work place.

TABLE 4.6: Differences in facilities for workers and executives

Facilities different	**Executives %**	**Workers %**	**Total %**
Yes	11 (47.8)	14 (63.6)	25 (55.6)
No	12 (52.2)	8 (36.2)	20 (44.4)
Total	**23 (100)**	**22 (100)**	**45 (100)**

The above table shows the difference in perceiving facilities available at work place. More than half of the workers i.e. 63% reported facilities are different. While 50% of the executives agreed to the fact that they get better facilities than the workers. However, the executies also felt that they are entitled to better facilities.

It was observed that if workers want to take tea they had to go themselves to take it while executives get the tea at their cabin/chamber. Also while workers got tea twice a day, the executives could order the tea as many times as they wanted with room service. Also, though all are working at the same place the executives have the

facilities of separate cabin with coolers/AC, computer and phone according to their seniority.

Work Hazards

Employees were asked name the hazards which they felt are related to their work or working environment.

The following table shows the main work hazards which employees themselves reported to researcher.

TABLE 4.7: Occupational Hazards at work place

Hazards	**Executives (%)**	**Workers (%)**	**Total (%)**
Air pollution	10 (43.5)	19 (86.4)	29 (64.4)
Noise pollution	21 (91.3)	22 (100.0)	43 (95.5)
Accident	4 (17.3)	9 (40.9)	13 (28.9)
Welding rays	0	15 (68.2)	15 (33.3)
Computer rays	8 (34.9)	0	8 (17.9)
Total	**43/23**	**65/22**	**108/45**

* Due to multiple responses total will not be 45 but more.

* Percentages show the employees responses in their group.

The table revealed that most common hazards reported by executives and workers are Noise and Air pollution. The next common problem reported by the respondents is of accidents at work place.

Interestingly, while 68% of workers reported problems due to welding rays, 34% of executives have reported problems due to computer radiations.

Effects of work hazards on health

The following table shows the effects of work hazards on health as reported by the employees.

TABLE 4.8: Effects of work hazards on employees health

Hazards	**Executives (%)**	**Workers (%)**	**Total (%)**
Headache	16 (69.7)	19 (86.3)	35 (77.8)
Bodyache	11 (47.9)	21 (95.4)	32 (71.1)
Tiredness	9 (39.1)	17 (77.3)	26 (57.9)
Allergy	2 (8.8)	8 (36.5)	10 (22.2)
Eye problem	6 (26.1)	10 (45.5)	16 (35.6)
Hypertention	15 (65.2)	14 (63.7)	29 (64.4)
Gastric problem	18 (78.2)	16 (72.8)	34 (76.6)
Accidents	3 (13.0)	7 (31.9)	10 (22.2)
Hearing impairments	0	1 (4.6)	1 (2.2)
Total	**80/23**	**113/22**	**193/45**

* Due to multiple responses total will not be count as 45.
* Percentage show the percentage of employees in their group with the problem.

The table shows that workers seem to have more effects of the occupational hazards than executives. Amongst effects due to work hazards on health reported by the executives and workers, the common problems are of headache, bodyache, hypertension and gastric problem. While both groups reported the problem of tiredness, allergy, accidents and eye problems these are very common among the workers. It shows that because both executives and workers have to do different types of work their patterns of ill health are different.

Employees Relations at work place

Employees were asked about their relations with other employees at work place. The common response given by all the respondents was that normally they have congenial relationship with other employees, but sometimes there are tensions. Like in the end of the financial year due to work load everyone would get angry. Also, at the time of meeting with trade unions and management in setting grievances the members of each parties get tense. Respondents also state that except few employees in normal working days everyone work with cooperation.

Opinion about Trade Unions

At present in BHEL Haridwar, 11 Trade Unions are registered. Among them only 3 were playing a major role in the organization. About the membership of these trade unions only 35%

out of the 22 workers have reported that they are members of the trade unions.

The main role of these trade unions is to talk to management on the issues of disputes, grievances and welfare programmes for the employees. Also, they play a major role in decision making with the management on organisational matters.

Interestingly a majority of the employees in both the categories were not satisfied with these trade unions. They have a poor opinion about the leaders and functioning of these trade unions. Though the executive (78%) and worker (55%) have a poor opinion about trade unions their reasons of disappointment were different. The workers felt that the leaders were selfish, corrupt and not sincerely places their roles. On the other hand executives felt that the leaders misguide workers against the management and they are only interested in raising issues to disturb organizational peace.

PEOPLE'S PERCEPTIONS AND EXPERIENCES WITH THE MEDICAL FACILITIES

CHAPTER – V

As we mentioned earlier, BHEL provides various monetary and nonmonetary benefits to its employees. One of the most important provisions is of free of cost medical services. These medical services are provided by the company through its hospital and dispensaries within the campus. The provision of medical services reimbursement is also an important benefit the employees get from the company.

In general these types of company owned hospital and dispensaries are easily accessible to all because it is planned to cover all the categories of its employees. However, studies also state that when a hospital or clinic of the company exists while it is generally accessible to all employees of the company, discrimination does exist as to how different employees are treated[1].

Our study planned to explore the employees experiences, expectations and their perceptions regarding available medical services. For the same, we try to understand the experiences of different level of employees with the existing medical facilities through the data analysis in the present chapter.

Experiences of the employees with the medical facilities available at the BHEL dispensaries

To understand the employees pattern of use of health services we need to look at their experiences and expectations with the available medical services.

As we discussed in the earlier chapter, there are 6 dispensaries located at different sectors and 2 at factory premises. There is also one main hospital centrally located with the specialties O.P.D. and Inpatient services.

It is observed that these dispensaries are very neat and clean and maintained beautifully. In the dispensaries 3 G.D.M.Os (General Duty Medical Officers) are available for consultation. Each dispensary has its own mini store of drugs. No investigations are available at the dispensaries. All investigations are carried out at the main hospital. There is no registration system at dispensaries and anyone can directly consult the doctors. Generally these dispensaries are overcrowded, so patients wait in a queue to consult doctors. There is a separate queue for male and female patients. After consultation with the doctor, the employees collect the prescribed medicine from the ministore of the dispensaries. Paramedical staff is available in enough strength for dressings and medicine distribution.

As the study population was divided into two groups i.e. executives and skilled workers, their experiences and expectations were explored by interviewing them.

The table given below is about the illnesses for which employees go to dispensaries.

Table: 5.1: Illnesses for which employees go to dispensaries

Illnesses	**Executives (%)**	**Workers (%)**	**Total (%)**
Only Minor*	20 (86.0)	7 (31.8)	27 (60.0)
All	3 (13.0)	15 (68.2)	18 (40.0)
Total	**23 (100)**	**22 (100)**	**45 (100)**

The table indicates that a majority of the executives i.e. 86% go to dispensaries only for minor illnesses. While in workers group only one third i.e. 31% reported they go for minor illnesses but the rest of the workers i.e. 68% going for all type of illnesses. On further questioning about major and minor illnesses the worker reported that generally they go for all type of illnesses first at dispensaries and if doctor (G.D.M.Os) referred them to consult specialist then they go to main hospital. This is because only G.D.M.Os has authority to send any patient for specialist consultation.

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* Minor illness included, fever, cold, cough, bodyache amd minor dressings.

However the executives stated that they consult G.D.M.Os only for minor illnesses. They consults specialist themselves if they feel they have a major illness rather than go for referral through G.D.M.Os of dispensaries. Therefore it seems that the executive are able to bypass the referral system of dispensaries. On the other hand the workers are required to go first to the dispensaries and they still depend on the G.D.M.Os referral. Unlike the executives they will be attend in the main hospital only subsequent to the dispensaries G.D.M.Os referral.

It was also enquired whether employees preferred to go main hospital in general. More than half of the executives i.e. 58% replied that yes most of the time they prefer to go main hospital. While majority of workers replied no, they do not prefer to go main hospital. However, if the doctors referred them then they had to go to consult specialist. At the same time few i.e. 15% workers reported that sometimes, when they don't get relief from the dispensaries then they go to consult specialist or for investigations on their own.

Interestingly executives state that Doctors at dispensaries are new comers, and therefore they are inexperienced, but in the main hospital the doctors are senior and experienced. Moreover they are known to them. Therefore despite the registration problem they prefer to go main hospital. On the other hand, many workers state that it

takes time to go main hospital because first they have to take registration number which is a big problem. The number of patients per specialist in a day is already fixed. So if they are late they will not get registration number. Sometimes they need to go 2 or 3 times to get this registration number. Workers feel that in dispensaries they easily get treatment without all these problem.

Accessibility in terms of distance, time to reach and transport

Dispensaries are located centrally in each sector of the township. Almost all the respondents in both the groups replied that the maximum distance is 1 km and it takes 5 to 10 minutes to reach dispensaries. But three (3) workers who live in villages outside the campus, reported that they had to cover long distance to reach dispensaries.* Otherwise all the respondents replied that dispensaries are easily accessible.

Employees also reported that in general they use to go dispensaries by walk. All the respondents reported that they have their personal vehicles. If they need they use their own vehicle to go to dispensaries or main hospital. So, there was no transport problem.

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* These are local people who belong to those villages and own land there.

Availability of Doctors

When the executives and workers were asked about the availability of doctors, most of the respondents in both the categories replied that the doctors are easily available.

Almost all the employees don't have problem with the availability of doctors at dispensaries. But in workers group few of them who are not residing in the industrial campus have problem because they had to come from the village outside the campus. So, it takes more time to reach dispensaries. If they are late then the doctors will leave and they would have to wait till evening to be seen. However doctors official timings are fixed and they come on time.

Waiting time

The majority of the employees reported that they do need to wait for long time to consult doctors. Near about 85% employees reported that they wait for 20-30 minutes but sometimes more than 30 minutes to consult doctors. After consultation again they had to stand in a queue to collect medicines. It clearly indicates that majority of the respondents did spend time waiting in queues.

Consulting time

The following table show the information regarding consulting time at dispensaries.

Table: 5.2: Consulting time given by the doctors to the patient at dispensaries.

Consulting Time	Executives (%)	Workers (%)	Total (%)
Less than 5 min	9 (39.1)	14 (63.6)	23 (51.1)
5 – 10 min	4 (17.4)	4 (18.2)	8 (17.8)
10 – 15 min	0	0	0
Depend on illness	10 (43.5)	4 (18.2)	14 (31.1)
Total	**23 (100)**	**22 (100)**	**45 (100)**

The table clearly shows that majority of workers i.e. 64% reported less than 5 minutes consulting time, no matter whether the illness was minor or major. While most of the executive i.e. 44% replied that consulting time depends on the illness. Workers reported that doctors just prescribed medicine on the medical card but do not give any information regarding illness. While executive state that it depends on illness, how much time doctor will take. Interestingly when doctors were interviewed they mentioned that officially it has been decided to give each patient 3 minutes. But executives take more consulting time then the workers because they insist on asking various question regarding their ill health.

Sufficient Information

The table given below is about the employees comments on the sufficient information given by the doctors.

Table 5.3: The employees comments on the sufficient information given by the doctors at dispensaries

Comments	**Executives (%)**	**Workers (%)**	**Total (%)**
Yes	14 (60.9)	2 (9.1)	16 (35.6)
No	7 (30.4)	18 (81.8)	25 (55.6)
Sometimes	2 (8.7)	2 (9.1)	4 (8.8)
Total	**23 (100)**	**22 (100)**	**45 (100)**

The data revealed that more than half of the executive i.e. 61% reported that they got sufficient information. While in workers 82% reported that in general doctors do not use to give any information regarding illness. The workers said that doctors usually just write medicines on the medical card and the rest of the information regarding medicines was collected from the paramedical staff. While the majority of executives seems to be satisfied with the doctors consultation. This seems to link up with the observation made by doctors that executives take more consultation time and ask question about their illnesses.

Availability of Paramedical Staff

All respondents stated that paramedical staff came on the time, as their official timings are also fixed. All the employees in both the categories reported that the strength of paramedical staff is enough at dispensaries, and that paramedical personnel are easily available to them. When the question was asked about the hastiness of paramedical staff, most of the respondent reported that it depends on the work load. Interestingly few executives i.e. 6% state that, "these medical personnel only show that they have work load. But in fact they don't have that much work load". The rest of the executives felt that they were just performing their duty, while workers supporting these paramedical staff.

Medical personnel attitude towards patients

Employees have given different responses when the question was asked about the medical staff attitude towards them. Most of the executives i.e. 75% were satisfied with the attitude of doctors. If they asked anything doctors give them proper information. But at the same time 69% executives are dissatisfied with the paramedical staff. They state that these staff don't know how to talk and deal with the patient and sometimes they behaved very rudely. Interestingly one senior executive stated that – "medical officers should

conduct a training programme for the paramedical staff to teach how they should take care of patient".

On the other hand 82% of the workers reported biased attitude of the doctors. They mentioned that doctors have good attitude towards executives and trade union leaders. They also state that doctors don't have time to talk, or to show humaneness and sympathy towards them. Workers reported that few senior doctors are really kind hearted and helpful to all but in general rest all are just performing their duty. But the workers seem to be satisfied with the paramedical staff. They told that most of the paramedical staff is known to them so, they always ready to help.

It clearly shows the differences that exist between the responses of two classes of employees. While the executive are more close to the doctors, workers seems to be more comfortable with the paramedical staff.

Investigations Needed at dispensaries

As we mentioned earlier no investigations facilities are available at the dispensaries. Therefore employees need to go to the main hospital as all investigations are possible there. A majority of the employees in both groups reported that they don't have investigation facilities at dispensaries but few of them did mention that weight

measurement, Blood Pressure (BP) measurement and malaria investigations are possible at dispensaries.

When the question was asked to the employees that whether investigations needed at dispensaries or not, the majority of executives replied no while workers feel that investigations should start at dispensaries. The table given below show the responses of employees.

Table 5.4: The investigations needed at dispensaries

Investigation Needed	**Executives (%)**	**Workers (%)**	**Total (%)**
Yes	7 (30.4)	17 (77.2)	24 (53.3)
No	16 (69.6)	5 (22.8)	21 (46.7)
Total	**23 (100)**	**22 (100)**	**45 (100)**

The data revealed that in executives group only 30% wanted to start investigations at dispensaries. But majority of them i.e. 70% don't feel that investigations are needed at dispensaries. While in workers almost all near about 80% want to start investigation at dispensaries.

Explanations given by both the groups for their different responses. The executives reported that all investigations are available at main hospital. So, they don't feel that investigations should start at

dispensaries because, they can easily go to main hospital. But on the other hand workers reported that it takes more time to go main hospital for all the investigation because first they need to get referred by the dispensaries for main hospital. Then they had to take first registration number to consult specialist and if specialist will send them for investigations then only investigations could be possible. So, the whole process will take more time and if investigations will start at dispensaries it will save their time. It shows that because workers are not able to bypass the dispensaries they needed investigations there, while executives go to the main hospital more frequently so they did not feel the need to start investigations at dispensaries.

Availability of good quality drugs

When the employees were asked about the availability of good quality of necessary drugs, they have given different responses. The table below gives their responses.

Table 5.5: Employees responses about availability of good quality drugs at dispensaries

Comments	**Executives (%)**	**Workers (%)**	**Total (%)**
Available	21 (91.3)	6 (27.2)	27 (60.0)
Not available	2 (8.7)	16 (72.8)	18 (40.0)
Total	**23 (100)**	**22 (100)**	**45 (100)**

The table indicates that in executive group only 9% reported that all drugs are not available. But 90% replied that necessary drugs are available, while in workers group 72% reported that all drugs are not available, drugs are limited, duplicate, substitute and are often brought at a cheap rate from substandard pharmaceuticals. When the same question was asked to executives they also said that quality of drugs are not good.

Interestingly a few workers reported that sometimes they had to fight with the doctors to prescribe expensive medicine because generally doctors don't prescribe expensive medicine to all. While executives reported that if the expensive medicines are not available at medical store the doctors prescribe these medicines from the market. The executive then buy these drugs and easily get reimbursement for them. It clearly shows that while executives are able to get better drugs workers still using medicine which are available in the dispensaries or hospital.

Employees experiences with the medical facilities available at the main hospital

The main hospital of BHEL has 14 specialties departments. O.P.D and 24 hours services are provided by the hospital to the BHEL employees. For O.P.D services all the employees have to follow the registration system. Each specialist will see about 30-35 patients in a

day. Round the clock casualty services are also available at the main hospital. Also it has its own medicine store and pathology services exclusively for BHEL employees.

Illness for which care sought at main hospital

On enquiring, what type of illnesses employees go to the main hospital. The following illnesses were reported by the employees of both the categories.

Table 5.6: Illness for which employees go to main hospital

Responses	**Executives (%)**		**Workers (%)**		**Total (%)**	
Minor illnesses	10	(43.5)	2	(9.0)	12	(26.6)
Major illnesses	11	(47.9)	10	(45.0)	21	(46.6)
Accident	7	(30.4)	8	(36.3)	15	(33.3)
Illness needing						
Investigations	20	(86.9)	18	(81.8)	38	(84.4)
Specialist	17	(73.9)	16	(72.7)	33	(73.3)
Admission	7	(30.4)	10	(45.4)	17	(37.7)
Referred by dispensaries	5	(21.8)	20	(90.9)	25	(55.5)
Emergency	12	(52.2)	9	(40.9)	21	(46.6)
Total	**89/23**		**93/22**		**182/45**	

* Multiple responses have given therefore total will not be 45.

* Percentage drawn from the total number of respondents of each category i.e. 23 and 22 respectively.

The table shows that in both the groups the main reason to go to the main hospital is, for consultation with the specialist and for investigation availability. However, as we discussed earlier that executives are able to consult specialist or go for investigation on their own, workers still need to come through referral system of dispensaries. Also, while the workers visit the main hospital for major illnesses, the executives go for equal proportion of major and minor illnesses.

Accessibility in terms of distance and time to reach

The main hospital is easily accessible to all as it is located centrally in the study area. Most of the employees in both the groups replied that, it hardly takes 15 to 20 minutes to reach main hospital by their own vehicles. And most of the employees do not have transport problem because they have their own vehicles. The maximum distance reported by employees is 2 km. But a few workers like those living in village state that it will take 1 to 2 hours to reach main hospital.

Availability of Doctors and paramedical staff

It was enquired whether doctors at the main hospital were easily available or not. The table given below shows the employees responses.

Table5.7: Employees responses on availability of doctors at main hospital

Employees Responses	Executives (%)	Workers (%)	Total (%)
Problem	8 (34.8)	13 (59.1)	21 (46.7)
No problem	15 (65.2)	9 (40.9)	24 (53.3)
Total	**23 (100)**	**22 (100)**	**45 (100)**

The table shows that 65% of the executives said that doctors are easily available and they don't had to face any kind of problem in consulting specialist. While in workers more than half i.e. 60% state that they had to face many problems in consulting specialist. As we mentioned earlier that the main problem is of getting registration. And after getting registration they had to wait minimum 1 to 2 hours in a queue. Sometimes this waiting time would clash with their duty hours, for they cannot be absent from their duty for such a long time. The workers reported that executives and trade union leaders usually broke the queue. Also because the doctors are known to them, they get registration in advance.

As regards the availability of the paramedical staff at main hospital, most of the employees i.e. 89% replied that there was a shortage of manpower in the main hospital. The hospital is usually overcrowded therefore the present strength of paramedical staff is not

enough. When the doctors were interviewed they also accepted that they have insufficient technical staff but they cannot recruit new staff as the company corporate policy has stopped the new recruitment in this grade since last 5 to 6 years. So, they had to manage with the existing strength of the paramedical staff at main hospital.

Doctors behaviour and staff attitude

The table given below shows the employees perception regarding the behaviour of doctors at the main hospital.

Table 5.8: Employees responses on the doctors attitude at main hospital

Responses	**Executives (%)**	**Workers (%)**	**Total (%)**
Rude and Abrupt	2 (8.7)	3 (13.6)	5 (11.1)
Helpful	10 (43.5)	2 (9.1)	12 (26.7)
Helpful to those they know	8 (34.8)	2 (9.1)	10 (22.2)
Just performing their duty	3 (13.0)	4 (18.2)	7 (15.6)
Biased	0	11 (50.0)	11 (24.4)
Total	**23 (100)**	**22 (100)**	**45 (100)**

The table clearly shows that maximum executives reported good behaviour of doctors. They also mentioned that known doctors are

good. But 50% of the workers reported that doctors have biased attitude towards them. They feel that doctors are rude to them and also they don't give proper information on asking and they don't prefer to talk with them. 18% state that in general doctors are performing their duty they don't have time to show sympathy towards patients and moreover they don't like to talk every one. At the same time they also accept that few senior doctors are always ready to help patients. But in general workers are dissatisfied with the biased attitude of the doctors. On the other hand executives are seems to be more satisfied with the doctors.

Attitude of paramedical staff

While talking about the attitude of the other medical staff most of the executives said that these personnel are not trained and they don't have adequate manners. So, there should be a training programme for them. But at the same time workers reported that these personnel have a heavy workload but most of them are helpful and have good behaviour towards them.

It clearly shows that executives expectations from paramedical staff is very high as they think that these personnel should be proper trained. But on the other side workers accept them as they are.

Employees general comments on the Investigation Techniques

As we have already mentioned, the main hospital has its own pathology lab exclusively for BHEL employees and their dependents. Almost all the test are possible there. Employees also reported that most of the blood test, x-ray and ultrasound are possible at main hospital.

The following table shows employees responses regarding available investigations.

Table 5.9: Employees responses on the investigation techniques

Responses	**Executives (%)**	**Workers (%)**	**Total (%)**
No problem	3 (13.0)	4 (18.2)	7 (15.6)
Wrong results	16 (69.6)	18 (81.8)	34 (75.6)
Machines are not working properly	4 (17.4)	0	4 (8.8)
Total	**23 (100)**	**22 (100)**	**45 (100)**

According to the employees, the common problem regarding investigations are that reports are incorrect and that machines are not working properly. When the question was asked how did you came to know that reports are wrong. The employees reported that the medical personnel themselves suggest to get investigations

once more from somewhere else and that the investigations done from outside for the same have a different report and it is the latter report that is accepted by the doctors.

Investigations needed at the main hospital

More than 86% employees out of the total 45 respondents state that because M.R.I and C.T. Scan is not possible in the main hospital often when the patient was in a serious condition they had to run to other medical centres. Therefore to avoid risk they want that these medical investigations to start at their hospital. Blood bank is another common demand of the employees.

Interestingly majority of the employees also felt that BHEL does not have money to invest in medical services. Therefore employees are not interested in raising these demands strongly.

Drugs Availability and their quality

As we mentioned earlier the main hospital has its own medicine store from where medicines are distributed to all the departments of the main hospital and dispensaries. The medicines are obtained from the different pharmaceutical companies. These companies get contract through tenders passed by the BHEL administration board.

When questioned about the drugs, the employees gave the same answer as they had about the quality of drugs available at dispensaries. In the executives near about the half employees reported that drugs are limited and quality is not good. While amongst the workers (95%) almost all respondents stated that drugs are duplicate, substitute, substandard and obtained from the cheap pharmaceuticals.

Strikingly doctors also know that employees have these complaints but most of them denied the fact of bad quality of drugs. However their responses should be seen in the light of a statement of an executive. He stated "A senior specialist himself advised me personally not to take medicines from here. Moreover he prescribed medicines to get from the market." After that the executive got reimbursement easily. It shows that while providers of medical services seem to know the weaknesses of the system they are not ready to accept it openly.

Employees Experiences of Hospitalisation in BHEL Hospital

Out of the total 45 interviewed employees, 36 (15 executives and 21 workers) i.e. 80% had experiences of inpatient services either themselves or for their dependents (executive 65% and workers 95%). When asked about whether they preferred to be admitted in the BHEL hospital, or private medical centers, interestingly

almost all have said BHEL hospital. Even though they are not fully satisfied with the BHEL hospital employees prefer to go to the BHEL hospital. The most common reason for preferring admission given by the respondents was. "It is easily accessible, free of cost, doctors are qualified and familiar". Therefore they all preferred BHEL hospital. Only 35% executives out of the total 45 respondents preferred not to go BHEL hospital, because they felt that private medical services were better than the BHEL Hospital services.

The following table looks at the inpatient services used by the respondents or their family members. Patient were admitted directly in emergency case or after referred by the specialist of O.P.D services.

Table 5.10: Inpatient services used by the employees.

Inpatient ward	**Executives (%)**	**Workers (%)**	**Total (%)**
Surgical	5 (33.4)	12 (57.1)	17 (47.2)
Medical	10 (66.8)	11 (52.4)	21 (58.2)
Maternity	4 (26.8)	2 (9.5)	6 (16.6)
Total	**19/15**	**25/21**	**44/36**

* The total will not be 36 due to multiple responses of the employees.

* Percentage shows the responses of employees in their group.

The table shows that majority of respondent or their family members 40% were admitted in medical ward. The next maximum number admitted in surgical ward and the minimum cases admitted in maternity ward.

All the employees reported that doctors are available anytime in case of emergency. Officially doctors have to visit patient twice a day, but strikingly about 80% executives reported doctors visiting frequency 3 times in a day. While workers state that doctors visit them twice in a day. However, if doctors are known then sometimes they visited them unofficially.

When asked about the attitude of medical personnel in inpatient services, near about 70% executives were satisfied with the doctor's behaviour. The reasons given by them are that most of the doctors are known to them therefore they take as much care of them as they can. But at the same time 55% executives state that Nurses are very rude and are just performing their duty.

On the other hand, 68% workers reported biased attitude of doctors. About Nurses 50% of the workers also felt that they were just performing their duty. But few workers state that senior Nurses really take very good care of the patient. It is reported that Nurses are available 24 hours and they use to give drugs on the time but their behaviour is rude.

The above section clearly shows that most employees are satisfied with the doctors. However, it seems that executives have more

contacts than the workers, therefore they seem to be more satisfied with the doctors than the workers.

Cleanliness and Food Availability

All the respondents accept that the Hospital is very neat and clean. But different responses were given by the employees regarding food quality. All the employees in both the groups reported that food is served on time and the same food is served to all with no discrimination. But executives are not satisfied with the quality of food while workers are satisfied with the food available in inpatient services.

The following table looks at the responses given by the employees regarding available food.

Table 5.11: Employees responses on the quality of food

Comments	**Executives (%)**	**Workers (%)**	**Total (%)**
Good	0	10 (52.6)	10 (35.7)
Bad	6 (66.7)	4 (21.1)	10 (35.7)
According to Diet	3 (33.3)	5 (26.3)	8 (28.6)
Not eaten hospital food	6	2	8
Total	**9/15 (100)**	**19/21 (100)**	**28/36 (100)**

* Percentage are according to those who took the diet.

The table indicates the clear differences between the expectation of the executives and workers. Out of the total 36 hospitalized respondents 8 (22%) have never tasted food served in the hospital. They bring food from their own houses. Interestingly the majority of them are of executives i.e. 6 and only 2 were workers.

Only few executive felt that food is not tasty because it is served according to patient diet but rest all state that quality is really bad. While data shows that among the workers about 52% respondents reported that quality of food is good. It is clearly shows the differences between the expectations of the two groups.

Employees responses on the satisfaction of the treatment

The following table shows the employee responses on the satisfaction of the treatment during the hospitalisation.

Table 5.12: Employees responses on the satisfaction of the treatment sought

Comments	**Executives (%)**	**Workers (%)**	**Total (%)**
Good	11 (73.4)	4 (19.0)	15 (41.7)
Bad	2 (13.3)	7 (33.3)	9 (25.0)
Satisfactory	2 (13.3)	10 (47.7)	12 (33.3)
Total	**15 (100)**	**21 (100)**	**36 (100)**

The table shows that 73% of the executives are happy with the treatment and that they reported that treatment was good though as data reveals they were not satisfied with the paramedical staff and quality of food available to them. As an executive (manager) stated "the administration board should take some action to improve the skills of paramedical staff and quality of food served to admitted patient".

On the other hand among the workers about 47% state that treatment was only satisfactory and very few felt it was good (19%). They got relief but the behavior of doctors is not good. A worker stated "Doctors have their monopoly on the medical services and they don't want to listen to patients complaints against them. Doctors think that workers are illiterate and they don't know anything while towards executives they have different attitude because executives could pressurize them". Possibly this attitude of he doctors influences the way workers regarded their experience of hospitalization.

Employees responses about the comparison of BHEL medical facilities and private medical services

As we have already discussed in the earlier chapter, in both Shivalik Nagar and Haridwar city private medical facilities are there other than those provided by BHEL. In Haridwar city many private practioners run their own clinics or nursing homes. Many of them are BHEL retired doctors. After retirement from the BHEL service

these doctors have started private practice in their own clinics or nursing homes.

When asked about the experiences of the private treatment, out of the total 45 respondents 35% have used private medical services, while 65% reported that they rarely sought private treatment. On further questioning it was seen that of this 35% i.e. 11 executives and 5 workers all did not go to seek private care as their first option.

Table 5.13: Employees responses on the private treatment sought

Responses	**Executives %**	**Workers %**	**Total %**
Only BHEL	12 (52.2)	17 (77.3)	29 (64.5)
BHEL then Private	4 (17.4)	4 (18.2)	8 (17.8)
Only Private Allopath	2 (8.7)	0	2 (4.4)
Only Private Homeopath	5 (21.7)	1 (4.5)	6 (13.3)
Total	**23 (100)**	**22 (100)**	**45 (100)**

As table shows the majority of employees 64.5% use BHEL services usually. 17.8% of the employees first preferred to go to BHEL and only if they did not relief there, then they sought private treatment.

Of the 17.8% of employees who went first to the private doctors, only 2 executives went directly for private treatment. Of the rest it was seen that they all went for homeopathy a facility that is not available in BHEL hospital/dispensaries.

This shows that among these who sought private allopathic treatment there was no worker as they all prefer to go to BHEL. The reason they gave was that this is a facility given to them by the company and it is free of cost so they should utilize this rather than pay for private treatment.

Comparison of BHEL and private medical services

The following table shows the employees responses about the comparison of BHEL medical facilities with the private medical services.

Table 5.14: Employees comparison on BHEL and private medical services

Responses	**Executives (%)**	**Workers (%)**	**Total (%)**
BHEL is better	15 (65.2)	17 (77.3)	32 (71.1)
Private is better	3 (13.1)	2 (9.1)	5 (11.1)
Both are same	5 (21.7)	3 (13.6)	8 (17.8)
Other if any	0	0	0
Total	**23 (100)**	**22 (100)**	**45 (100)**

The table indicates that the majority of employees replied that BHEL is better. The commonest reason given by the employees is that "BHEL medical facilities are easily available and accessible, it is free of cost, the hospital and dispensaries are neat & clean and experienced known doctors are available". About the private medical centres out of the total 45 respondents, majority i.e. 92% replied that private medical services are not easily available and accessible. Among them workers (63%) are more than the executives (36%). The respondents state that for private treatment they had to cover long distance i.e. is minimum 2 km to 3 km. Also about the availability of doctors respondents replied the BHEL doctors are available to them "on

24 hours call" service. So in any time emergency they can contact these doctors. On the other hand private practioners have fixed timings for the consultation and they are not easily accessible all the time. Also, private practioners "not experienced and moreover they are very expensive and money makers".

Employees state that private treatment becomes very expensive and more over they don't have faith on private practitioners. It reflects that the employees realize that in the private sector better treatment is often not available, and every body cannot afford these services.

When asked about the investigations and drugs availability in the private sector most of the employees i.e. near about 85% in both the groups reported that investigations and quality of drugs are better in the private sector. According to them, in BHEL hospital drugs are limited and not all the investigations are possible. But in the market all the new technologies and better drugs easily available. At the same time employees also stated that these "expensive investigations and drugs" are beyond the pocket of most of the people.

About the "attitude" of the doctors near about 75% executives replied that attitude of BHEL doctors is better than the private doctors because they are known to them. While in contrast of this 65% workers reported that private doctors attitude is better than

the BHEL doctors. The reason given by them is if, they are paying money for the treatment the doctor would definitely give equal treatment to all. On the other hand near about 35% workers felt that private practioners also have same attitude like BHEL doctors. As one Trade Union leader stated "private practioners prescribe expensive drugs and more investigations but they are more busy than the BHEL doctors. So, they don't have time to fulfill patient expectations".

Interestingly those employees who sought Allopathic treatment in the private sector, mentioned that it is the BHEL retired doctors that they prefer to consult because these doctors are senior, experienced and moreover they are known to them.

One of the them "Dr. B. K. Dixit" who is retired from BHEL services and started his own pediatric clinic in the city said that the maximum patients in his clinic came from BHEL campus. Because of his treatment and good relationship with the patients, BHEL employees still prefer to consult him.

Another doctor, Dr. Prashant Malshey (Physican) stated that "In BHEL Hospital most of the doctors do not believe in establishing good rapport between patient and Doctors. But in my case patients are satisfied with my consultation". It shows that while there are many private practitioners in the city employees still prefer to

consult BHEL retired doctors, because they had good relationship with them and they could trust these doctors.

The above section reflect that good relationship between providers of medical services and its users is one of the important factors in satisfaction of the users. Responses of the studied population also shows that they have given emphasis on their relationship with the medical personnel. So, it could be analysed that employees are not dissatisfied with the treatment but with the attitude of the providers of medical care.

Perception of providers about the existing medical facilities at BHEL

The present section is about the providers views on the BHEL medical services. Interviews with Doctors were conducted to collect information about their experiences within the existing medical facilities. Doctors in BHEL service are not allowed to do private practice. In BHEL official timings are already fixed for all the doctors of dispensaries and main Hospital. In the dispensaries G.D.M.Os have to see all the patients who come for consultations while in the main hospital number of patient are fixed for all the O.P.D. specialists to about 30-35 patients/day.

An attempt was made to interview at least one specialist from each specialities department of the main hospital and one G.D.M.O. from each dispensaries. Total 15 doctors were interviewed, out of that 9 doctors were specialists of main hospital and 6 were MBBS doctor appointed at dispensaries.

The present section is dealing the doctors responses about the consultation time, employees expectations, employees complaints regarding medical facilities, doctor's work load and doctor's views on the improvements or changes, if, they want in existing medical services.

The following table look at the doctors responses about he consultation time which they are able to give one patient.

Table 5.15: Doctor responses on the consultation time given to on patient

Responses	**Doctors No. %**
Less than 5 min	8 (53.3)
5 min to 10 min	4 (26.7)
10 min to 15 min	1 (6.7)
Depends on illness	2 (13.3)
Total	**15 (100)**

The table clearly shows that near about half of the doctors i.e. 53% are able to give less than 5 minutes to one patient. The commonest reason given by them is that they have a heavy work load and present strength of doctors is not enough. Almost all the doctors also accepted that executives were getting more consulting time because they often asked more question about their illnesses than the workers.

Doctor's response to patient expectations and complaints

About the patient expectations almost all the doctors replied that patient want proper hearing, more information and sympathetic attitude. But at the same time Doctors (specialists) reported that along with the O.P.D. duties they also have to visit inpatient word and due to that they have an excessive work load and at present doctors strength is not enough. So, they are not able to satisfy the expectations of the patients.

Interestingly all the doctors are well aware about the employees complaints about the medical services. Doctors stated that regarding medicines, investigations and referral system employees have more complaints. When the question was asked that which categories of employees have more grievances *all* the doctors replied that workers class have more grievances than the executives. Doctors stated that

they are able to satisfy executives but it is really very tough to satisfy workers. As one physician stated "workers are pushed by the trade union leaders. Therefore these people have more grievances". the doctors feel that since executives are literate they can understand doctors problem but workers have more expectations and it is not possible to fulfill their all expectations. Then another senior surgeon stated that "the rumors of bad quality of medical services is spread by the T.U. (Trade Union) leaders". Further he said "employees interference in medical services should be restricted".

Interestingly as we have already discussed in the earlier sections that workers are dissatisfied with the biased attitude of the doctors. Here by the above statements of the doctors seen to reveal that because doctors and executives belong to same class therefore doctors felt that they can easily dialogue with the executives than the workers.

On being asked on the kind of changes and improvements doctors want to introduce in the present medical facilities, almost similar kind of responses were given by the doctors. The table given below shows their responses.

Table 5.16: Doctors responses on improvements and changes which they want in BHEL health services

Responses	**Doctors No. %**
More Investigations	3 (20.0)
Improvement in quality of drugs	0
More medical personnel	5 (33.0))
More trained paramedicals staff	2 (13.0)
Start grievance cell for patient	0
More power to them	0
Start payment for medical services	9 (60.0)
Nothing	4 (26.0)
Total	**15 (152)**

* Due to multiple responses total will not be count as 100.

The table shows that maximum number of doctors are seems to be in favour of "payment for the medical services". Strikingly majority of doctors seems to feel that payment for the medical services would improve the quality of services. Also they believed that an important way to satisfy employees would be payment for medical services. A few statement were given by the doctors about the changes and improvements.

Dr. Ranjana Said – "Allotment of more doctors and medical facilities provided by the BHEL should be on payment basis".

Dr. K. Agarwal states – "Paid clinic and pathology should start in BHEL campus and collected fund should deposit in the BHEL account exclusively for medical services. By doing this patient will be satisfied".

All the above statements reflects that providers of medical services believe that, if they will start payment for medical services people will definitely be satisfied with the same treatment which they are getting at present. The doctors feel that because medical services are provided free of cost it becomes valueless for the employees. If they pay for medical services they would be satisfied.

On the other hand what the doctors don't realize is that users prefer to consult these doctors because free of cost medical services is available to them and because many of the users cannot afford private practitioners because they are expensive.

The above table also revealed that the next most common demand is to increase medical personnel. Interestingly none of them seems to think it necessary to take action regarding employees complaints of wrong investigations, low quality of drugs and bad attitude of the medical personnel.

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DISCUSSION & CONCLUSION

CHAPTER – VI

Through this study we have explored the Health Services available to the employees of BHEL. We have examined whether there are any differences in the services available to two strata of employees. In order to do this we have used the experiences and perceptions of the employees regard to the available medical services. We have also tried to understand through the employees experiences and perception the reason for their pattern of utilization of health services provided by BHEL.

After studying the selected population we find that, these employees are getting various benefits by the company. They have their own neat and clean township, well constructed houses, 24 hours water and electricity facilities, educational institutions for their children. In addition they have recreational clubs and free of cost medical services within the BHEL campus. All the employees have a very similar living environment. Despite this fact there are some differences in their lives, which were explored. These differences also affect to some extent their working conditions and experiences of utilization of health services.

Though all the employees are working in the same environment they have differential facilities. The executives are entitled to facilities of AC/Cooler's, phone and computers in their own

chambers, while the workers work on machines, and share the common facilities of drinking water, toilet and phone.

Air pollution and noise pollution are mentioned as the commonest hazards. This affects the workers more because they work on the noisy machines all the time. Welding rays are another major hazard affecting workers. These are mainly used by skilled workers.

Such occupational hazards have been documented by others as well. "Non manual workers are likely to have much lower rates of exposure to chemical and other physical hazards, and so suffer less from both their known and unknown health effect than the manual workers"[1].

Our data on the workers health shows higher rates of sickness –body stress, respiratory problem, headache, bodyache, cold and cough and risk of accidents. Among the executives the reported illnesses are -spondylitis, hypertension, muscular pain and headache. It shows how occupational differences contribute differentially to ill health.

The executives receive more than double of the workers salaries. Workers compensate by doing overtime but in the long run, this would have negative affect on their health. Skilled workers work longer hours by overtime to add more money to their pocket.

Most of the employees families are nuclear. In executives families their children had gone for higher studies or if they are in service they earned above Rs. 10,000 pm or Rs. 20,000 pm. While in skilled workers families their children do not go for higher studies and start working at the low payment of Rs. 2,000 p.m. or maximum Rs. 9,000 p.m.

When the experiences in utilization of health services was enquired into it was found that the socio-economic status have close relationship to employees experiences. In fact it may not be an exaggeration to say that these employees have different experiences due to their different level in the society.

The experiences of employees with the medical services are reflected in the differences in utilization of the medical services available. The workers are more dependent on dispensaries but executives are not. Workers go to main hospital after being referred by the dispensaries doctors (GDMOs) but executives go themselves to consult specialist or to have investigations carried out. No investigations are carried out at the dispensary. Therefore workers want to start necessary investigation at dispensaries. However executives can directly approach the specialist or have their investigation easily they are not concerned about that. However workers don't have such contacts.

Workers complain that medicines are duplicate, limited, substitute but when executives and doctors were interviewed their comments was different. They state that yes, the medicines are limited but workers don't have knowledge about the drugs that's why they complain all the time. "Every time they want some issues to fight for with the management".

However, the statement of an executive adds to these view about medicine. An interviewed executive reported – "A senior specialist doctor BHEL himself advised me not to take medicine from here, because the medicine available at BHEL are not good. The doctor prescribed 'good' medicines for me to purchase from the outside market". The executive is known to that doctor so the doctor advised him personally to get reimbursement from the company.

Interestingly while Doctors were interviewed most of them said that " because employees are getting free of cost medicines, they don't realize its value therefore the medical services should be on payment basis".

Almost all the employees had complaint of wrong reports for investigations. It is worth noting that the medical personnel suggest that the patients get investigations done from outside. But they do not

insist on the improving the quality of investigation in the main hospital.

The recorded data of inpatient services shows that workers are more frequently admitted than the executive. However admitted executives are visited by doctors 3 times in a day and interestingly almost all the workers reported two visits per day.

Workers also reported that doctors are not ready to refer cases outstation. Usually they refer at the last moment when it is too late. A worker reported that, his wife died due to cancer but the doctors of BHEL were not ready to refer her to another hospital. He had to fight for this and at last moment they referred but no medical personnel was sent with the patient. Mid way she died. On the other hand executives did not report any problem with referrals.

While workers have problems with the attitude of the doctors, both executives and workers feel that BHEL doctors are easily accessible, qualified and experienced. While in private medical services doctors are less experienced and expensive. Therefore, they don't have faith on the private doctors.

While workers opt for using the BHEL medical services because these are free, accessible and provide satisfactory treatment the attitude of the doctors is also important to them.

This seems to indicate very clearly that it is not the technical quality of medical services alone but the attitude of the caregivers which is also important in providing users satisfaction. It could therefore be said that, one of the important ways of improvement in Health services is understanding of the relationship that exists between the medical care providers and its users.

Additionally, all the employees know that the medical facilities provided to them by the company are bound with the budget sanctioned by the corporate office. So, they are only emphasizing on the proper management of the medical services available to them rather than adding more high tech facilities in the hospital/ dispensaries.

Despite all these problems, BHEL services have a big advantage according to workers and executives, that is, it is free of cost and easily accessible to all. On the other hand doctors believe because it is free of cost it has lost its values, so, they feel the medical services should be on payment basis.

Despite the fact that workers are getting different care in the available services, they prefer to go BHEL hospital/dispensaries. The studies reflect that people depend on services that are free, easily accessible, and the treatment is satisfactory. All the people interviewed,

are using these services as this is the biggest advantage. Despite this evidence providers seems to see free services as valueless.

Interestingly like the medical providers proponents of health services reform seem to believe that privatization of medical care and introduction of user fees, would lead to greater efficiency and increase utilization of paid medical care. While many studies opposed these arguments. As 'Kasturi Sen' pointed out, in general the evidence on different aspect of health sector reforms do not reveal the positive outcomes, either in economic terms or in terms of quality of care projected by the reforms. Rather they seem to reinforce the view that, in situations of gross structural socio-economic inequalities, the application of market principles act to reinforce poverty and inequality. There is little guarantee that the implementation of market formulas improves the quality of provisions and no guarantee that they improve the health of those in greatest need[2].

The emerging trend of privatization is a major threat to people lower socio-economic conditions. This study has shown that the inequalities of socio-economic level and capability to pay means that the majority opt for free health services despite the problems they may face in obtaining them.

Thus our study seems to demonstrate that cost of medical care as well as easy accessibility plays an important role in employees deciding whether public or private services should be used.

Though our study has dealt only with the public industrial sector these findings are extremely significant. While policy makers and the employees in our study would both agree that health care services would need improvement, they would regard the problem differently. Policy makers assumed that privatization with introduction of user fees would lead to improvement in health care services.

Like the policy maker our study population also wanted improvement of existing health care services. However, while they felt that some of the factors that are important for good services were, accessibility, availability, good doctors patient relationship and proper management, the cost of health care services was one of the top priorities for the majority. Therefore privatization which is known to increase cost would seem to be ignoring the people's needs. Thus, while health sector reform are surely needed, to make them successful it is people's perceptions and experiences that should be considered.

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APPENDICES

APPENDIX – I

IDENTIFICATION INFORMATION

1. Name of the Respondent

2. Full Address of work place

3. Full Address of Home/Residence

4. Age

5. Religion Caste

6. Occupation/work other than BHEL

7. Designation

8. What are the effects of work hazards on health

Hazards	Effects
a)	
b)	
c)	
d)	

9. Education
   a) Academic

   b) Technical

10. Monthly Income
    Over Time/Month

    Over time hours per day

11. Other perks if any
    (Financial level of Perks)

APPENDIX – II

FAMILY COMPOSITION

S.No.	Name	Relation with the head	Age	Sex (M/F)	Educational level	Occupation	Monthly income	Illness/Accident/Hospitalization (in last one year)
1.								
2.								
3.								
4.								
5.								
6.								

JOB PROFILE

1) Working Hours (Official)

2) Facilities at work place (General comment on work place).

3) Are facilities at work place different (for executives and workers) in any way?

4) Relations with the Supervisors/managers/Workers.

5) Member of any Trade Union. Yes ☐ No ☐

6) Name of the Trade Union

7) Functions of Trade Union

8) Opinion about Trade Union

APPENDIX – III

EXPERIENCES OF THE EMPLOYEES WITH THE MEDICAL FACILITIES AVAILABLE AT BHEL

EXPERIENCES AND EXPECTATIONS FROM DISPENSARIES

1) For what kind of ill health do you and your family go to dispensaries?

2) Availability of

   Doctors

   Paramedical Staff

   Drugs

3) Accessibility of dispensary

   Distance

   Time to reach

   Transport (personal/other)

   Waiting visits

   Consulting time

4) Staff attitude

   Humane

   Sympathetic

   Informative

5) Do you get sufficient information about your problem of ill health?

6) What investigation facilities are available?

7) Are any other investigation needed?

8) Do you prefer to go to Main Hospital for all problems?

Yes ☐ No ☐

9) If yes, then why?

10) If no, then when do you go to main hospital (for what type of illness & why).

11) Are necessary drugs available at dispensaries, if no what procedure followed to obtain drugs?

12) Any improvement you want at dispensaries and general comments about dispensaries.

APPENDIX – IV

EXPERIENCES WITH THE MAIN HOSPITAL

1) For what problems of ill health do you go to the main hospital

2) Availability of

   Doctors

   Paramedical Staff

   Test Equipment

   Drugs

3) Accessibility

   Distance

   Waiting time

   Transport

   Registration

   Return visit

4) Doctors Behavior or attitude towards you

   Humane

   Sympathetic

   Informative

5) Behavior of other staff

   Humane

   Sympathetic

   Informative

6) What Investigation Techniques and Pathology facilities are available?

7) Techniques are

New

Old

Mixed

8) Any other investigation techniques needed.

9) General comment on techniques (do they work properly, have you had problems for investigation etc.)

10) Are all necessary drugs prescribe?

Yes ☐ No ☐

11) Do you have any problem in getting prescribed drugs?

12) Are you satisfied with the treatment?

Yes ☐ No ☐

13) If yes, then why?

14) If no, then why?

15) Is there anything which you feel is needed to improve overall services?

APPENDIX – V

EXPERIENCES OF HOSPITALIZATION IN BHEL

1) Have you or your dependents ever-experienced hospitalization?

   Yes ☐ No ☐

2) If yes, then specify

   a) Surgical ☐

   b) General ☐

3) Duration of the hospitalization.

4) Where do you prefer to go?

   a) BHEL's hospital ☐

   b) Public (city) hospital ☐

   c) Private hospital ☐

   d) Any other ☐

5) Why do you go to the above mentioned one not to others?

6) Visiting frequency of Doctors in a day.

   a) Once ☐

   b) Twice ☐

   c) More than twice ☐

7) Is doctor available in emergency case at any time?

   Yes ☐ No ☐

8) Are nurses' available 24 hours?

Yes ☐ No ☐

9) Comments on attitude of

Doctors

Nurses

Other staff

10) General comments on the cleanliness of the ward.

11) Is food available on time?

Yes ☐ No ☐

12) General comments on quality of food.

13) Drugs are given on time

Yes ☐ No ☐

14) Comments on the treatment you get during hospitalization.

15) Any thing which you feel important to improve the existing medical facilities.

APPENDIX – VI

EXPERIENCES OF PRIVATE TREATMENT

1. Have you or your families ever used the private facilities for medical care.

2. If yes then where. Within the city/outstation.

3. If yes then which Private Practitioners clinic/who.

4. Why did you need to use this facility?

5. Compare private medical facilities to BHEL's medical facilities on

   Availability

   Accessibility

   Investigation

   Attitude

   Drugs

6. Which one do you feel is better?

   BHEL's hospital

   Private hospital

   Any other

7. If any one specific then why?

8. If all are same than why?

9. General comments on private practitioners.

APPENDIX- VII

DOCTOR PERCEPTION TOWARDS EXISTING MEDICAL FACILITIES

Name :

Age :

Sex :

Qualification :

Address

a) Official :

b) Residence :

Official working hours :

Years at BHEL (Hardwar) :

Monthly income :

1) How many patients do you see in a day?

2) How much time are you able to give to one patient?

3) What do you think about patient's (executives and workers) expectations from you?

4) Do you feel able to fulfill expectations of patients?

5) Are the number of doctors sufficient or you have work load (comments in general).

6) What are the general complaints or employees regarding the treatment?

7) Which category of employees having more grievances towards existing medical facilities.

8) Which category of employees often asks more information about their illness?

9) Any change which you feel needed in overall medical services at BHEL (Hardwar).

10) Any improvement, which you feel, needed in existing medical facilities.

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