CHAPTER IV

RESEARCH METHODOLOGY

This study tries to analyse the perception of doctors regarding the extent of HRD practices existing in government hospitals in Kerala on the one hand, and the perception of patients and bystanders regarding the quality of care provided at these hospitals on the other, as well as the linkages between the same. This chapter elaborately discusses the methodology adopted for the present study covering various aspects like objectives of the study, research questions, hypotheses tested as part of the study, research design, sampling framework, tools of data collection and data analysis etc.

4.1 Objectives of the study

Based on the research problem stated in the introduction chapter, six major objectives were set for the study, which are as follows:

1. To examine the nature and extent of HRD practices at government hospitals in Kerala.
2. To analyse the antecedents and the critical factors leading to the successful implementation of the HRD practices at government hospitals.
3. To examine the implementation of the HRD practices at government hospitals and also the constraints to implement them.
4. To examine the perception of the doctors regarding the HRD practices and also about the health care services in hospitals.
5. To examine the perception of the patients regarding the service quality of the doctors and the hospitals.
6. To offer suggestions to improve the patient care quality at the government hospitals.
4.2 Research questions

Based on the objectives of the study, the following research questions were framed:

1. To what extent have HRD practices been implemented in government hospitals?
2. What are the antecedents and the critical factors leading to the successful implementation of the HRD practices at government hospitals?
3. What are the major constraints in implementing HRD practices in government hospitals?
4. What is the perception of doctors regarding the HRD practices existing in government hospitals?
5. What is the perception of patients and bystanders regarding the quality of services provided by government hospitals?
6. How can the quality of patient care provided in government hospitals be improved?

4.3 Hypotheses

The following hypotheses were formulated and tested as part of the study.

Hypotheses relating to the perception of doctors regarding existence of HRD practices at government hospitals:

- H1: There is no significant difference in the opinion of male and female doctors regarding the existence of mechanism at their hospitals to ensure timely availability of adequate manpower.
- H2: There is no significant difference in the opinion of male and female doctors regarding the existence of mechanism at their hospitals to ensure effective utilization of manpower.
- H3: There is no significant difference in the opinion of male and female doctors regarding proper conduct and evaluation of training of doctors in their hospitals.
- H4: There is no significant difference in the opinion of male and female doctors regarding the existence of effective training and induction policies and procedures for doctors in their hospitals.
H5: There is no significant difference in the opinion of male and female doctors regarding the involvement of doctors in training in their hospitals.

H6: There is no significant difference in the opinion of male and female doctors regarding the role of training policies in their hospitals.

H7: There is no significant difference in the opinion among male and female doctors regarding goal setting and performance evaluation system for doctors in their hospitals.

H8: There is no significant difference in the opinion among male and female doctors regarding performance appraisal and employee development process for doctors in their hospitals.

H9: There is no significant difference in the opinion among male and female doctors regarding their satisfaction with appraisal system of doctors in their hospitals.

H10: There is no significant difference in the opinion of doctors across different age groups regarding the existence of job rotation policies and procedures for doctors in their hospitals.

H11: There is no significant difference in the opinion of doctors across different age groups regarding proper sequencing of activities in their hospitals.

H12: There is no significant difference in the opinion of male and female doctors regarding the existence of career guidance and mentoring mechanism in their hospitals.

H13: There is no significant difference in the opinion of doctors across various age groups regarding openness of communication system prevailing in their hospitals.

H14: There is no significant difference in the opinion of doctors across various age groups regarding common understanding about emergency communication procedures in their hospitals.

H15: There is no significant difference in the opinion of male and female doctors regarding adequacy of their compensation at their hospitals.

H16: There is no significant difference in the opinion of male and female doctors regarding timely receipt of rewards and recognition for doctors in their hospitals.
• H17: There is no significant difference in the opinion of male and female doctors regarding the existence of joint effort in providing timely patient care timely in their hospitals.

• H18: There is no significant difference in the opinion of male and female doctors regarding the existence of teamwork, professionalism and freedom of expression in their hospitals.

• H19: There is no significant difference in the opinion of male and female doctors regarding the existence of conducive physical and ethical environment at their hospitals.

• H20: There is no significant difference in the opinion of male and female doctors regarding empowerment at workplace in their hospitals.

Hypotheses relating to the perception of patients and regarding existence of HRD practices at government hospitals:

• H21: There is no significant difference in the opinion of patients regarding the pleasantness of rooms as well as nurses and availability of medicines at the hospitals depending on the period of stay at the hospital.

• H22: There is no significant difference in the opinion of patients regarding drinking water and sanitation facilities at hospitals depending on their period of stay at the hospital.

• H23: There is no significant difference in the opinion of patients regarding timely availability of patient mobility facilities depending on their period of stay at the hospital.

• H24: There is no significant difference in the perception of bystanders regarding the ease of accessibility, pleasantness of rooms and availability of medicines at the hospitals depending on the period of stay at the hospital.

• H25: There is no significant difference in the opinion of bystanders regarding drinking water and sanitation facilities at hospitals depending on their period of stay at the hospital.

• H26: There is no significant difference in the opinion of bystanders regarding timely availability of patient mobility facilities depending on their period of stay at the hospital.
- H27: There is no difference in the opinion of male and female patients regarding the appropriateness of doctors’ prescription and co-ordination with staff.
- H28: There is no significant difference in the perception of male and female patients regarding proper diagnosis and communication by doctors with the help of nurses.
- H29: There is no significant difference in the opinion of patients regarding clarity of explanation of test results by doctors as far as gender of respondents was considered.
- H30: There is no significant difference in the perception of male and female patients regarding the clarity of prescriptions and medical advice given by doctors.
- H31: There is no significant difference in the perception of male and female bystanders regarding proper provision of treatment related information as well as co-ordination between doctors and nurses.
- H32: There is no significant difference in the perception bystanders regarding transparency of billing system.
- H33: There is no significant difference in the perception of bystanders regarding proper examination of patients as well as co-ordination among nurses as far as their gender is considered.
- H34: There is no significant difference in the perception of male and female bystanders regarding clarity of discharge summary as well as instructions to nurses.
- H35: There is no significant difference in the perception of male and female bystanders regarding appropriateness of doctors’ prescriptions as well as post discharge care instructions.
- H36: There is no significant difference in the perception of male and female bystanders regarding the regularity of doctors.
- H37: There is no significant difference in the perception of male and female patients regarding the availability of service of doctors and nurses at the hospital whenever required.
- H38: There is no significant difference in the perception of male and female patients regarding the willingness of doctors, nurses and attendants to help patients and to clear their doubts.
- H39: There is no significant difference in the perception of male and female bystanders regarding the prompt availability of test results as well as hospital bills.
- H40: There is no significant difference in the perception of male and female bystanders regarding availability of nurses’ and attendants’ services whenever required.
- H41: There is no significant difference in the perception of male and female bystanders regarding willingness of doctors, nurses and attendants to help patients and to clear their doubts.
- H42: There is no significant difference in the perception of male and female patients regarding doctors’ response during subsequent visits and clear explanation of health condition to relatives.
- H43: There is no significant difference in the perception of male and female patients regarding the courtesy of doctors and nurses and proper diagnosis of disease.
- H44: There is no significant difference in the perception of male and female patients regarding the confidentiality of disease related information and consent of patients before conducting tests.
- H45: There is no significant difference in the perception of male and female bystanders regarding courtesy of doctors, nurses and support staff as well as proper diagnosis of diseases at government hospitals.
- H46: There is no significant difference in the perception of male and female patients regarding the patience, care and concern of doctors and nurses at government hospitals in Kerala.
- H47: There is no significant difference in the perception of patients regarding doctors’ interest in patients and the comfort provided by them across gender.
- H48: There is no significant difference in the perception of male and female bystanders regarding the care and concern of doctors and nurses at government hospitals.
- H49: There is no significant difference in the perception of male and female patients regarding the knowledge, sincerity and behaviour of doctors, nurses and support staff.
• H50: There is no significant difference in the perception of patients regarding facilities and administrative effectiveness at the hospital as well as communication and team spirit of doctors.

4.4 Research design

4.4.1 Type of the study

The present study is descriptive and exploratory in nature. The study is descriptive in the sense that the researcher attempted to portray the perception of doctors working at government hospitals across Kerala regarding various aspects relating to effectiveness of Human Resource Development practices existing at these hospitals. The researcher also tried to solicit information from patients and bystanders regarding their satisfaction with the quality of services provided at government hospitals in Kerala. The study is exploratory in nature as the researcher has tried to draw inferences and arrive at valid conclusions based on scientific analysis of the collected data.

4.4.2 Data collection

Both primary as well as secondary data was collected as part of the study. Primary data was collected from doctors working at government hospitals regarding their perception about the extent to which Human Resource Development practices are implemented at these hospitals and from patients and bystanders regarding their satisfaction with the kind of services offered at these hospitals. Three separate structured pretested questionnaires were used for collecting data necessary for the study.

A pilot study was conducted before the main survey among a sample of 50 respondents comprising of 10 doctors, 20 patients and 20 bystanders selected from the District Hospital, Kannur. Pretesting was conducted to find out whether the questionnaires were framed in a simple and understandable way and were able to obtain necessary inputs from the respondents. Based on the inputs received from the respondents, necessary modifications were made to the questionnaires. After incorporating the suggested changes, the questionnaires were finalised and the reliability of the same were tested based on the Chronbach’s alpha values. The Chronbach’s values obtained for doctors’, patients’ and bystanders’ questionnaires were .985, .829 and .823 respectively. Nunnally (1994) recommends that the research instruments should have reliability of .7 or above so as to
get reliable output. As the Chronbach’s alpha values for all questionnaires used in the present study are above .8, we can say that the questionnaires enjoy acceptable reliability. This was supplemented by the secondary data collected from various published as well as unpublished sources like books, journals, publications, reports of different agencies, websites etc. Personal interviews with experienced health care professionals, health care administrators were also conducted by the researcher to understand the ground realities of the public health care scenario of Kerala.

4.4.3 Development of data collection instrument

The outcome of research is dependent on various aspects like the topic of research, the profile of respondents, the appropriateness of data collection, methods of data analysis etc. Each of these aspects is important in its own way. However, probably the most important element is the data collection part of it because the accuracy of findings and conclusions implied by the research are greatly influenced by the appropriateness of data collection. The appropriateness of data collected is in turn determined by the appropriateness of the questionnaire used for data collection. There are numerous aspects to be taken care of while using a research instrument. The questionnaire must suit the context of the study and should be capable of obtaining the required data from the participants. The questionnaires should consist of reasonable number of questions, i.e., it should neither be too lengthy nor too short. There are generally two alternatives available for a researcher. He/she can either make use of an already established questionnaire or develop a fresh questionnaire. Though many studies have been conducted in the areas of HRD and patient satisfaction in health sector in the national and global context, in spite of an extensive review of existing literature, the researcher was unable to identify an existing questionnaire that exactly fits the context of the present study. The main reason for this may be that most of the previous studies were narrow in nature focusing on specific aspects like work stress of health professionals, work-life balance of doctors and nurses, work environment at hospitals etc. rather than taking a broader look at the HRD climate at hospitals, especially public hospitals, covering numerous aspects manpower planning, induction, training, performance appraisal etc. The same is the case with patient satisfaction. Though a number of studies assessing the satisfaction of patients with hospital service quality have already been conducted, the contexts of these studies were entirely different from that of the present study. In addition to patients, the views of bystanders regarding the quality of care provided were also examined as part of the study. So the best option for the
researcher was to develop a questionnaire that meets the requirements of the present study. The researcher developed three separate questionnaires to be administered to doctors, patients and bystanders. The researcher borrowed the variables to be included in the questionnaire from previous literature (Wallace Stewart Lockhart, 2007; Kaiser-Franz-Josef-Spital et al., 2004; Farah Lilani, 2007; etc). However, the questions were slightly modified to suit the requirements of the present study.

The design of the structured questionnaire was guided by the research objectives. Apart from the questions to gather information regarding the profile of the doctors/patients/bystanders respondents, the other questions were structured as statements intended to elicit the responses from the sample respondents. A rating scale (Likert Scale) with five response alternatives was used to measure the perception in relation to the statement given in the questionnaire. Alternative responses like, ‘strongly agree’, ‘agree’, ‘moderate’, ‘disagree’ and ‘strongly disagree’ were applicable for some set of questions and ‘very high’, ‘high’, ‘moderate’, ‘low’ and ‘very low’ for another set of questions. Responses like ‘highly satisfied’, ‘satisfied’, ‘moderate’, ‘dissatisfied’ and ‘highly dissatisfied’ were also sought in the case of certain statements included in the questionnaire meant for patients.

A pilot study was conducted inorder to refine and validate the process of data collection using the questionnaire. This was done among a sample of 10 doctors, 20 patients and 20 bystanders and the suggestions of the respondents were incorporated before finalizing the questionnaire. The refined questionnaire was then used for collecting data through field survey.

The field survey for the study was conducted over a period of seven months from July 2012 to January 2013.

4.4.4 Population of the study

The present study is confined to 15 district hospitals, 10 general hospitals and 1 speciality hospital in Kerala. As such, the population of the study comprises of the doctors, patients and bystanders at these 26 hospitals. While the population of doctors working at these hospitals is finite in nature, the total number of doctors being 879 as on June 2012 (details attached below), the population of patients and bystanders visiting these hospitals is infinite.
TABLE 4.1

Number of doctors working with District/General/Specialty Hospitals in Kerala

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Name of Institution</th>
<th>District</th>
<th>Doctors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>General Hospital*</td>
<td>Thiruvananthapuram</td>
<td>44</td>
</tr>
<tr>
<td>2.</td>
<td>District Hospital</td>
<td>Perurkkada, Thiruvananthapuram</td>
<td>14</td>
</tr>
<tr>
<td>3.</td>
<td>District Hospital</td>
<td>Neyyattinkara, Thiruvananthapuram</td>
<td>23</td>
</tr>
<tr>
<td>4.</td>
<td>District Hospital</td>
<td>Kollam</td>
<td>48</td>
</tr>
<tr>
<td>5.</td>
<td>District Hospital</td>
<td>Kodanchery, Pathanamthitta</td>
<td>26</td>
</tr>
<tr>
<td>6.</td>
<td>General Hospital*</td>
<td>Pathanamthitta</td>
<td>30</td>
</tr>
<tr>
<td>7.</td>
<td>Speciality Hospital**</td>
<td>Adoor, Pathanamthitta</td>
<td>22</td>
</tr>
<tr>
<td>8.</td>
<td>General Hospital*</td>
<td>Alappuzha</td>
<td>42</td>
</tr>
<tr>
<td>9.</td>
<td>District Hospital</td>
<td>Mavelikkara, Alappuzha</td>
<td>26</td>
</tr>
<tr>
<td>10.</td>
<td>District Hospital</td>
<td>Kottayam</td>
<td>37</td>
</tr>
<tr>
<td>11.</td>
<td>General Hospital*</td>
<td>Pala, Kottayam</td>
<td>45</td>
</tr>
<tr>
<td>12.</td>
<td>District Hospital</td>
<td>Idukki</td>
<td>20</td>
</tr>
<tr>
<td>13.</td>
<td>General Hospital*</td>
<td>Eranakulam</td>
<td>63</td>
</tr>
<tr>
<td>14.</td>
<td>General Hospital*</td>
<td>Moovattupuzha, Eranakulam</td>
<td>24</td>
</tr>
<tr>
<td>15.</td>
<td>District Hospital</td>
<td>Thrissur</td>
<td>41</td>
</tr>
<tr>
<td>16.</td>
<td>District Hospital</td>
<td>Palakkad</td>
<td>48</td>
</tr>
<tr>
<td>17.</td>
<td>District Hospital</td>
<td>Tirur, Malappuram</td>
<td>20</td>
</tr>
<tr>
<td>18.</td>
<td>District Hospital</td>
<td>Manjeri, Malappuram</td>
<td>23</td>
</tr>
<tr>
<td>19.</td>
<td>General Hospital*</td>
<td>Kozhikode</td>
<td>54</td>
</tr>
<tr>
<td>20.</td>
<td>District Hospital</td>
<td>Vadakara, Kozhikode</td>
<td>26</td>
</tr>
<tr>
<td>21.</td>
<td>District Hospital</td>
<td>Mananthavady, Wayanad</td>
<td>20</td>
</tr>
<tr>
<td>22.</td>
<td>General Hospital*</td>
<td>Kalpatta, Wayanad</td>
<td>30</td>
</tr>
<tr>
<td>23.</td>
<td>District Hospital</td>
<td>Kannur</td>
<td>48</td>
</tr>
<tr>
<td>24.</td>
<td>General Hospital*</td>
<td>Thalassery, Kannur</td>
<td>47</td>
</tr>
<tr>
<td>25.</td>
<td>District Hospital</td>
<td>Kanhagad, Kasargod</td>
<td>38</td>
</tr>
<tr>
<td>26.</td>
<td>General Hospital*</td>
<td>Kasargod</td>
<td>20</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>879</td>
</tr>
</tbody>
</table>

Note: General Hospitals* and Speciality Hospitals** included are those raised to the status of district hospitals

Source: Directorate of Health Services Kerala, June 2012.

As per the Table shown above, the total number of doctors working in 26 hospitals was 879 by the end of June 2012.

4.4.5 Sample size determination

The sample size for the present study was determined with the help of the formula proposed by Daniel (1991). He proposes two separate formulas for calculating the sample size for finite and infinite population respectively.
In the present study, as the population of doctors is finite, the following formula was used:

\[
n^1 = \frac{NZ^2 \times P(1-P)}{d^2(N-1) + Z^2P(1-P)}
\]

For a population of 879, at 95 percent confidence interval, at 5 percent precession at an expected \( P \) of 0.3, the \( Z \) static value is 1.96 and a sample of 237 is considered adequate.

As the population of patients and bystanders is infinite in nature, the following formula was used:

\[
n = \frac{Z^2 \times P(1-P)}{d^2}
\]

For infinite population, at 95 percent confidence interval and at expected \( P \) of 0.3, the \( Z \) static value is 1.96 and a sample size of 323 is considered adequate (Daniel, 1991).

Notations:
- \( n = n^1 \) = Sample size
- \( N \) = Population size
- \( Z \) = \( Z \) static for a level of confidence
- \( P \) = Expected prevalence
- \( d \) = Precision

### 4.4.6 Sampling procedure

A multi-stage sampling procedure was adopted for selecting the requisite sample for the present study which is as follows.

**Stage I**  
In the first stage, the researcher selected all the 14 districts in the State of Kerala.

**Stage II**  
In the second stage, the researcher selected 9 districts out of the 14 districts in Kerala with the help of random sampling technique. The districts thus selected were i) Thiruvananthapuram, ii) Kollam, iii) Pathanamthitta, iv) Thrissur, v) Palakkad, vi) Malappuram, vii) Kozhikode, viii) Wayanad and ix) Kannur.

**Stage III**  
In the third stage, one hospital was selected at random from each of the 9 districts.
selected vide stage II. General Hospital (Thiruvananthapuram), District Hospital (Kollam), General Hospital (Pathanamthitta), District Hospital (Thrissur), District Hospital (Palakkad), District Hospital (Manjeri), General Hospital (Kozhikode), District Hospital (Mananthavady) and District Hospital (Kannur) were the hospitals thus selected by the researcher.

Stage IV

In stage IV the researcher attempted to obtain responses by personally meeting 30 doctors selected using judgemental sampling technique from each of the 9 hospitals selected vide stage III which resulted the total sample size of doctors included in the study 270. This type of sampling technique might be the most appropriate if the population to be studied is difficult to locate or if some members are thought to be better (more knowledgeable, more willing, etc.) than others to interview. But due to the busy schedule of doctors and lack of their willingness to participate in the study, the researcher was able to obtain only 250 responses from doctors consisting of 30 responses from General Hospital (Thiruvananthapuram), 30 responses from District Hospital (Kollam), 25 responses from General Hospital (Pathanamthitta), 30 responses from District Hospital (Palakkad), 25 responses from District Hospital (Thrissur), 28 responses from District Hospital (Manjeri), 26 responses from General Hospital (Kozhikode), 26 responses from District Hospital (Mananthavady) and 30 responses from District Hospital (Kannur). Out of the 250 responses of doctors, 10 responses, ie, 2 responses each from General Hospital (Thiruvanthapuram) and District Hospital (Kollam) and 3 responses each from District Hospital (Pathanamthitta) and District Hospital (Kannur) were found to be incomplete and were hence were not considered for analysis. Hence, in total, 240 responses which represent about 28 percent of total population of doctors were considered for the study. However, for a population size of 879, at 95 percent confidence interval and at expected P of 0.3, a sample size of 237 is considered adequate (Daniel, 1991) and hence the sample collected from doctors for the present study was statistically adequate.

The researcher also collected responses from 40 in-patients as well as 40 bystanders of these select in-patients regarding their satisfaction with service quality from each of the 9 hospitals visited thereby collecting a total sample of 360 responses from patients as well as bystanders. The patients and bystanders included in the study were selected using judgmental sampling technique. This type of sampling technique might be the most appropriate if the population to be studied is difficult to locate or if some members are thought to be better (more knowledgeable, more willing, etc.) than others to interview. The respondents were selected based on their availability and willingness to cooperate on the specific days during which the researcher visited the hospital and
also based on researcher’s judgement. Patients who were admitted at least for two days and bystanders who were accompanying patients at least for two days at a stretch in the hospital were included in the sample. However, patients with congenital cardiac failure and patients who were unable to answer were excluded from the study. On scrutiny, it was found that 30 responses of patients comprising of 10 from District Hospital (Manjeri), 8 from District Hospital (Mananthavady) and 12 from General Hospital (Pathanamthitta) and 30 responses of bystanders comprising of 6 from District Hospital (Manjeri), 11 District Hospital (Mananthavady) and 13 District Hospital (Thrissur) were incomplete and hence they were eliminated. The remaining 330 responses were considered for analysis. For an infinite population, at 95 percent confidence interval and at expected P of 0.3, a sample size of 323 is considered adequate (Daniel, 1991) and hence the sample collected from patients and bystanders for the present study was adequate.
FIGURE 4.1
Sampling Procedure

TVM: Thiruvananthapuram  TCR: Thrissur  CLT: Kozhikode  GH TVM: General Hospital, Thiruvananthapuram
QLN: Kollam  PGT: Palakkad  WYD: Wayanad  DH QLN: District Hospital, Kollam
PTA: Pathanamthitta  MPM: Malappuram  KNR: Kannur  GH PTA: General Hospital, Pathanamthitta
DH TCR: District Hospital, Thrissur  DH MAANJERI: District Hospital, Manjeri  GHCLT: General Hospital, Kozhikode
DH WYD: District Hospital, Wayanad  DHCAN: District Hospital, Kannur

14 Districts in the State of Kerala: Thiruvananthapuram, Kollam, Pathanamthitta, Alappuzha, Kottayam, Idukki, Ernakulam, Thrissur, Palakkad, Malappuram, Kozhikode, Wayanad, Kannur and Kasargod
4.4.7 Data analysis

The collected data was analysed with the help of Statistical Products and Service Solutions (SPSS) software (version 16). Factor analysis and multiple regression analysis were primarily used for analysing the present data. All the three sets of data were analysed with the help of factor analysis and multiple regression analysis. In addition to this, percentage analysis was also performed, wherever necessary to have a deeper understanding about the perception of doctors regarding the extent of HRD practices and of patients and bystanders regarding quality of patient care at government hospitals across Kerala.

4.4.7.1 Factor analysis

Factor analysis tries to bring inter-correlated variables together under more general, underlying variables. More specifically, the goal of factor analysis is to reduce “the dimensionality of the original space and to give an interpretation to the new space, spanned by a lower number of new dimensions which are supposed to underlie the old ones” (Rietveld and Van Hout, 1993), or to explain the variance in the observed variables in terms of underlying latent factors”. In the present study, factor analysis was used to identify the key variables influencing the perception of doctors regarding the extent of HRD practices at government hospitals as well as the most prominent variables impacting the satisfaction level of patients and bystanders with the services rendered at government hospitals. These variables were reduced into certain factors based on common properties.

4.4.7.2 Multiple Regression analysis

Multiple Regression is a statistical technique that allows us to predict the value of one variable on the basis of values of several other variables. There will be two set of variables – predictor variables which are helpful in predicting the values of other variables and the criterion variables i.e.; the values which are predicted based on the values of predictor variables. This statistical technique can be used while exploring linear relationships between the predictor and criterion variables. Multiple regression analysis helps us to understand the significance level of different dependent variables in relation to one or more independent variables also to identify the most significant factor(s) (Brace, et al, 2012). In the present study, multiple regression was performed to find out whether there existed significant difference in the perception of doctors regarding various aspects
relating to existence of HRD practices as well as in the perception of patients and bystanders regarding their satisfaction with the services rendered at the hospitals depending on various factors like gender, age etc. Descriptive statistics were also used to supplement factor analysis and regression results.