CUSTOMER EXPECTATIONS IN HEALTHCARE SERVICES: AN ASSESSMENT OF SELECTED PRIVATE HEALTHCARE UNITS

A
Thesis
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By

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Candidates' Declaration

I hereby certify that the work, which is being presented in the thesis, entitled **"Customer Expectations in Healthcare Services: An Assessment of Selected Private Healthcare Units**" in the partial fulfilment of the requirement for the award of the Degree of Doctor of Philosophy, is carried under the supervision of **Dr. Anand Kumar Jain** and submitted to the Department of Business Administration, Government Commerce College, University of Kota, Kota represents my ideas in my own words and where others ideas or words have been included. I have adequately cited and referenced the original sources. The work presented in this thesis has not been submitted elsewhere for the award of any other degree of diploma from any institutions. I also declare that I have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea / data / fact/ source in my submission. I understand that any violation of the above will be cause for disciplinary action by the University and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed.

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Supervisor's Certificate

I feel great pleasure in certifying that the thesis entitled "Customer Expectations in Healthcare Services: An Assessment of Selected Private Healthcare Units" by Mrs. Anamika Sharma under my guidance. She has completed the following requirements as per Ph.D regulation of the University

(a) Course work as per the University rules.

(b) Residential requirements of the University (200 Days)

(c) Regularly submitted annual progress report

(d) Presented her work in the departmental committee.

(e) Published / accepted two research papers in the referred research journal.

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Thesis Approval for Doctor of Philosophy

The thesis entitled "Customer Expectations in Healthcare Services: An Assessment of Selected Private Healthcare Units" by Mrs. Anamika Sharma submitted to the Department of Business Administration Commerce, Government Commerce College, University of Kota, Kota is approved for the award of Degree of Doctor of Philosophy.

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Place: ----------

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DEDICATION

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PREFACE

Consumers, all over the world have become highly aware and quality-oriented in their choices, be it a product or a service; therefore it becomes necessary for any industry to understand its customers. 'Customer expectations and their impact' is a vital area to reach a better customer understanding. It is a critical issue for the sustaining growth of any service providers who generally offer services that are usually very difficult for consumers to differentiate. Thus, it is imperative for the healthcare service providers to understand the expectations of the customers.

A researcher can find out more specifically the healthcare service related factors which have a greater impact on customer expectation in this industry so that the required quality and satisfaction levels can be reached in this rapidly growing industry. The review of several studies conducted on in healthcare service industry revealed that hardly any comprehensive study has been conducted to understand and analyse the expectations of healthcare service customers. This made it imperative to study and to identify the factors which have a high influence on the expectations of the customers in healthcare services. The general objective of this study is to assess the current expectations held by customers with respect to healthcare services provided by Indian healthcare service providers. It evaluates expectations held by customers related to healthcare service dimensions including price, processes, promotion and physical environment, which have a tremendous effect on overall satisfaction and quality of healthcare services. The outcome of the study will enhance the efficiency of private healthcare service providers in the highly expanding healthcare industry and ensure its future growth.

The entire research work is divided into six chapters. Chapter one presents a well-structured methodology which acts as a blueprint for the entire study. It includes the summary of research with research problem, objectives, hypotheses and review of the literature. It gives a view about statistical tests, dependent and independent variables with respect to the hypotheses. It contains a detailed review of the literature of various studies related to healthcare service industry. Healthcare services sector is rapidly growing with advancing technology and

intense competition due to the private sector participation and needs to focus on its customers and understand customers' needs and expectation and then develop service offerings which meet them. But the review of the literature clearly shows that very limited research related to customer expectations has been carried out in the Indian context especially in the healthcare sector.

Chapter two explains the concept of customers, expectations, customer expectations in healthcare services sector along with Indian scenario in this industry. It includes a brief discussion on Indian healthcare structure, different systems, the state of healthcare in Rajasthan and the role of private healthcare services providers in healthcare service industry. It further explores the applicability of the concept of customers' expectation in this necessity based healthcare services sector

Chapter three explains the brief description of healthcare services providers in the industry with their profiles. It includes the profile of all those private healthcare services providers of Rajasthan from three cities Kota, Jaipur and Udaipur, which are part of the study. The respondents' of this study had an experience of staying at these units for more than one in one or many of these units at one or other point of time.

Chapter four and five present statistically description of the data collected using the instrument of the study. These chapters give a view about statistical tests, data analysis and data interpretation. Dependent and independent variables are also stated. The main research objective is to understand the factors affecting customers' expectation related to Price, Promotion, Process and Physical Environment dimensions in healthcare services. To achieve this objective, the factor analysis technique is applied. Since the number of statements in the instrument has been large, exploratory factor analysis has been applied, with the key objective of reducing a larger set of variables to a smaller set and summarizing the data. At the very first stage, relationships amongst the set of many interrelated variables have been examined and represented in terms of a few underlying factors, after checking the normality of the data and exploratory factor analysis of the data collected, using SPSS software. Secondly, the

expectations of healthcare service customers related to sub-factors of these dimensions have been analysed using Z-test and ANOVA test against demographic variables. The chapter also includes the test applied for hypothesis testing, which includes frequency analysis, ANOVA test, and regression analysis.

The last chapter is based on all other chapters, especially from chapter four and five. It highlights findings of study and conclusions which are drawn from the study. Recommendations and suggestions will help the healthcare services providers to meet customer expectations in this very crucial necessity based service industry and enable them to cope up with the challenges faced by healthcare services industry.

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Research Design and Methodology

This chapter deals with research design and methodologies, development of scale and questionnaire, sampling and data collection. The design of this research includes qualitative and quantitative methodology to achieve the objectives of the research. This chapter present the exploratory research-qualitative study, explains the methodology for testing the descriptive hypothesis and describes the quantitative methodology for testing of hypothesis based on conceptual model.

This chapter also comprises a comprehensive review of the existing literature. The review of literature is divided into different parts. The initial part is related to research works carried out related to Indian healthcare industry. It also reviews literature related to the marketing of the healthcare services, SERVQUAL framework in healthcare services, patient satisfaction studies in healthcare services, customer perception and service quality studies, service climate and CRM studies in the healthcare sector. Afterwards the final part describes expectation research and models in healthcare services, based on empirical literature.

1.1 Nature and Scope of the Study

In present scenario overworked, well-informed customers demand from healthcare providers, a system that accommodates their busy schedules, provides them with useful information, and fulfils their changing expectations. The healthcare providers and organizations that understand customers' expectations and their impact on healthcare quality have a clear advantage in the future. All facets of the healthcare system need to understand the interplay between customer expectations and level of satisfaction.

Understanding expectations can affect directly the quality of healthcare and build a frame work of understanding formation of expectations in this highly complex field. In order to provide customer satisfaction and service quality, it is vital to

find customers' expectations from healthcare service providers.

The present study is a significant step to understand customer expectation from healthcare service providers in the area of healthcare services delivery processes and physical environment along with price and promotion. It explores different aspects of healthcare services delivery processes and physical environment in the different private multi-speciality private healthcare units.

The study's major contribution is that it offers a way to private healthcare service providers, in understanding their customers. Second, it also provides them a clear idea of customer expectations which could be of greater importance to the customers and therefore should be given higher level of attention especially in Indian contexts. The study provides a useful basis for comprehending varied customer expectations in health care services to improve consumer satisfaction, by designing effective service delivery processes, creating amiable physical environment and developing integrated service encounters and communications, which meet unique customer needs and expectations.

This study also contributes to the existing literature on healthcare industry by studying the customers' expectations from service processes and physical environment in this field. The findings of the study are therefore informative for the private healthcare service providers to implement strategies that effectively deal with problems related to the fulfillment of these expectations. The healthcare service providers should constantly strive to fulfill them to achieve higher satisfaction and build better customer relationship which will ultimately lead to delighted consumers.

This study is to be the first study of its kind conducted in this region, in the context of Indian economy, in the field of health care services. The study identifies significant factors affecting customers' expectations related to service processes and physical environment of healthcare units, which enables the service providers to be better equipped to render quality services to their customers. Furthermore it suggests that the higher level of understanding of customer expectations related to these two dimensions of healthcare services

warrants greater level of quality care and higher efficiency in providing that care.

1.2 Objectives of the Research

The specific objectives of the study are

- To develop the conceptual framework of Customer service expectations from healthcare services for future use.
- To find out the nature of impact of various components on healthcare service expectations and identify these components that can be improved to provide high quality of healthcare.
- To trace the available literature of this highly essential and growing field.
- To support quality improvement initiatives and the accountability of healthcare services.
- To identify the factors which affect the customer service expectations related to healthcare services processes.
- To identify the most important healthcare services processes having an impact on expectations.
- To identify the factors related to the physical environment of healthcare services that affects expectations.
- To analyze the different variables of healthcare services which have a high level impact on healthcare services expectation formation.
- To identify those developing expectations from healthcare services providers which are influenced by the growth of day to day technology.
- To identify effective promotional tool for healthcare services providers.
- To find customers' expectations related to pricing policy of private healthcare services providers.

- To examine the level of expectations with healthcare services in India in a co-ordinate, cost-effective and scientifically rigorous manner.

More specifically the research aims to assess the current expectations held by customers with respect to healthcare services provided by Indian healthcare service providers. It evaluates expectations held by customers related to two major healthcare service dimensions i.e. service processes and physical environment, which have tremendous effect on overall satisfaction and quality of healthcare services. It also tries to identify those manifest expectations of the customers which can be significantly contribute in formulating effective promotion and pricing policy for the private healthcare service providers.

1.3 Review of Literature

The review of literature is divided into different parts. The initial part is related to research works carried out related to Indian healthcare industry. It also reviews literature related to the marketing of the healthcare services, SERVQUAL framework in healthcare services, patient satisfaction studies in healthcare services, customer perception and service quality studies, service climate and CRM studies in the healthcare sector. Afterwards the final part describes expectation research and models in healthcare services, based on empirical literature.

1.3.1. Research Related to Indian Healthcare Industry

A review of the literature of various studies related to customer expectations clearly shows that very limited research related to customer expectations has been carried out in the Indian context especially in the healthcare sector. The environment in India has changed dramatically in the last decade. The country now has autonomy in several service sectors. There is an increasing private participation in many service industries like healthcare, professional services, hospitality etc. Healthcare services sector is also rapidly growing with advancing technology and intense competition due to the private sector participation. Satisfying customers is vital to any healthcare service provider's well-being. To

be successful an organization needs to focus on its customers and understand customers' needs and expectation and then develop service offerings which meet them. Customer satisfaction is influenced by a complex interplay of factors; it is hardly a simple matter, which can be understood by adding two and two. Nevertheless, this calculation serves as a reminder that the customer's level of satisfaction can be affected by changes in either their expectations or the provider's performance. It means that healthcare services providers have to pay attention to both.

The Healthcare industry presents a very dynamic, unexpected, ambiguous and uncertain environment in which quality issues have occupied a central position (Manjunath et.al. 2007). A lot of research has been done in service quality over the past few decades (Zeithaml et al. 1993) and various efforts have been made to understand its meaning and to assess it affectively. However, service quality is an abstract, elusive and multidimensional construct which is very difficult for consumers to evaluate. It is observed that with the increase in the socioeconomic status of the respondents the mere fulfillment of the treatment needs was not sufficient, the behavior and attitude of service providers become important, the focus changed from just getting the service to how the service was being provided (Ritu Narang 2010).

In an article addressing issues related to Indian healthcare industry and challenges before it K.V. Ramani(2014), writes that the Indian healthcare sector needs to add 1 million doctors, 2 million nurses and 3 million hospital beds to achieve the world average of 1.7 physicians, 3.3 nurses and 3.6 beds per 1000 population. The government should invest more on medical and information technology to improve the quality of care. Health System planning has to be strengthened in order to manage the health system resources effectively and efficiently. The governance of the Indian healthcare sector should facilitate inter-sectorial and inter-ministerial coordination between the Ministry of Health and all other ministries participating in delivering health related services such as nutrition, health education and so on. Managerial challenges have to address the urgent need to scale up the financial resources to the health sector and tackle

the non-financial barriers coming in the way of healthcare delivery. Building health systems that are responsive to client needs requires politically difficult and administratively demanding choices.

Das and Hammer (2007) studied the differences in doctors' competencies in government and private hospitals located in rich and poor localities in Delhi (India). The study justified the notion that public sector was performing worse than private sector by comparing the distributions of MBBS qualified public doctors with MBBS qualified private doctors. They also found that both government and private hospitals in poor areas were performing worse than the hospitals located in rich areas.

1.3.2 Marketing of the Healthcare Services

In India hardly any research study is conducted in this line, perhaps the major reasons are the structure and state of this industry. Wide demand and supply gap of this industry diminishes the requirement of marketing and along with it patients were not really given status of consumers in this industry, so the need was not felt for using marketing tools and techniques. In a study in USA, analyzing healthcare as a service sector, which could also use marketing tools and techniques, Mark J. Kay (2007) develops a perspective on what is critical to the discipline of healthcare marketing. The paper analyses and shows contrast of customer (patient) perspective with the institutional (or organizational) perspective. This "salience issue" is complicated by the structural problems in healthcare such as societal service systems, advances in medical technology, and the escalating costs of care. Reviewing selected studies, the paper examines how consumers face increasingly difficult health choices. The paper examines the different priorities and goals for marketing that are implied by both patient and organizational perspectives in healthcare, focusing primarily on the excesses of the more "market-based" US healthcare system. Healthcare organizations need to better utilize marketing tools to inform consumers and assist their healthcare decisions. Greater consumer access to healthcare information could improve patient decision making.

A paper by J. Rama Krishna Naik, Dr Byram Anand and Irfan Bashir (2013) on "Healthcare service quality and word of mouth: key drivers to achieve patient satisfaction", aims to assess the elements of the services quality and word of mouth in the private hospitals of India. In healthcare services marketing, it is necessary to be competitive and to give quality healthcare services to consumer, because patients' satisfaction is the most important factor in positioning of healthcare institutions. The study population consisted of the patients who came for treatment to the private hospitals in Hyderabad. A total of five super-specialty private hospitals were selected in Hyderabad city for collecting data. The questionnaire was distributed to approximately 200 in-patients who were admitted to these hospitals and had stayed for more than 2 days in the hospital. The survey received 72.5 percent response rate. This paper contributes to the existing literature on healthcare industry by investing the impact of word of mouth on patient satisfaction. The findings of the study are therefore informative for the private hospitals to implement strategies that effectively utilize promotion tools to create patient satisfaction. The hospitals should constantly conduct workshops and training programmes for employees to train them on interpersonal skills and relationship building which will ultimately lead to delighted consumers.

1.3.3 SERVQUAL Framework in Healthcare Services

Researchers of services marketing have developed several service quality models to offer managers insight into the components of service quality for improving organizational offerings. The service quality model "SERVQUAL"' ranks as the most important of these models. Several research studies use SERVQUAL framework to find customer satisfaction, service quality, gaps in customer perception and expectation.

Mohsin Muhammad Butt and Ernest Cyril de Run, Malaysia (2008), for measuring private healthcare quality of Malaysian healthcare service providers, aimed to test SERVQUAL in a Malaysian private healthcare context. It used SERVQUAL as a diagnostic tool for organizations striving for continuous improvement. Changing demographics, preferences and competition require

continuous monitoring and measurement of customers' expectation and perception, so that long-term business survival can be assured. This study indicates that SERVQUAL is a robust instrument for measuring service quality. The scale's expectation and perception dimensions emerged as a uni-dimensional construct showing high reliability and validity. Therefore, the scale is an excellent tool for objectively measuring health service expectation and perception. The results also revealed that healthcare perception and expectation indicators are highly correlated on their respective dimensions. Therefore, failing to meet any single indictor could lead to an overall negative perception towards the service provider. Existing research provides an excellent tool for private healthcare practitioners to start addressing quality issues by measuring service quality gaps and taking corrective actions on a regular basis. The results indicate that Malaysian patient healthcare service expectations surpass their perception of actual healthcare delivery. Service reliability and responsiveness received the highest negative scores, which indicate that healthcare providers are mistrusted, by their customers. Service users reported that they did not receive services on time and doubted that they will receive the right service first time. Responsiveness negative scores indicate that easy-going attitudes among Malaysians are no more acceptable in healthcare service. The study has limitations like respondents' ages were skewed towards younger generations. The future studies can directly measure satisfaction and its relation to service expectation and perception. Here the researcher envisages the scope for the present study and tries to develop better understanding of the expectations of healthcare services customers in Indian context.

Norazah Mohd Suki et al. (2011) in their research try to investigate whether patients' perceptions exceed expectations when seeking treatment in private healthcare settings in the Klang Valley Region of Malaysia. A survey was conducted among 191 patients in this region to measure service quality of the private healthcare setting in Malaysia using five dimensions model SERVQUAL and three additional dimensions of the human element, when it comes to rendering good healthcare services, i.e. courtesy, communication and understanding of customers. The results revealed that the customers' perceptions

did not exceed their expectations, as they were dissatisfied with the level of healthcare services rendered by private healthcare settings in that they felt that the waiting time of more than an hour to receive the service was excessive and, when there was a problem, the healthcare provider did not provide a response fast enough. It is recommended by the research that hospital management should look into highlighted areas for which patients have high expectations. The paper adds to the existing body of research on healthcare service quality, particularly on patients' perceptions and expectations. This research inspired the present study, which takes into consideration significant role of customers' expectation into service quality and tries to find expectations related to two important dimensions of healthcare services i.e. processes and physical environment, in Indian scenario.

This paper by Dr. Wathek S Ramez (2012), on "Patients' Perception of Healthcare Quality, Satisfaction and Behavioral Intention: An Empirical Study in Bahrain", evaluates the level of service quality of healthcare providers in Bahrain with a view to uncovering, primarily, the relationship between service quality dimensions and the overall patients' satisfaction and analyzing behavioral intention of patients, by employing SERVQUAL. A sample of 235 patients of hospitals and medical centers participated in the questionnaire survey. Descriptive, factor analysis, regression and correlation statistical techniques were employed to investigate the relationship between service quality (SQ) dimensions, patients satisfaction (SAT) and behavioral intention (BI). The results show that SERVPERF scale was more efficient than SERVQUAL scale in explaining the variance in service quality. Two – Factor solution was provided by the SERVPERF scale, where reliability, responsiveness and assurance and the majority of empathy dimension were highly correlated and loaded on the first factor, while the second factor covered only the tangible dimension. Responsiveness, empathy and tangible dimensions had the largest influence on the overall service quality. Positive and significant relationships were found between overall service quality (OSQ), patients' satisfaction (SAT), and their behavior intention (BI). This research adopts the service marketing approach for evaluating the quality of healthcare. Patients' attitudes toward service quality

dimensions were the concern of the research. To get a comprehensive evaluation of the service quality, healthcare providers have to be considered in future research.

Suzana Markovic et al. (2014) in their paper shed light on the healthcare field in the Croatian context. The specific environment in which the research was done demanded the implementation of a modified SERVQUAL model which was broadened with the items referring to sports, recreation and amusement activities. It was found that the modified model has four dimensions. The 'Output quality' dimension, which refers to the services outside the sphere of medical services, has the greatest impact on the patients' satisfaction. The practical contribution of the paper is manifested as an encouragement for managers in specialty hospitals to devote greater attention to service quality and customer satisfaction measurement, especially when their goal is to enter the health tourism market. It provides directions for hospital managers to develop strategies which will meet patients' expectations of service quality and increase their competitiveness in the health tourism market. Empirical research is used to determine patients' perceptions and expectations of service quality in one specialty hospital for medical rehabilitation.

The SERVQUAL questionnaire included an expectations and perceptions section, each consisting of 34 statements. In addition, the questionnaire contained an extra section relating to demographics and an overall question on the impression of quality of the service provided. The analysis revealed that patients perceived a rather satisfactory level of healthcare quality across all SERVQUAL dimensions. Finally, this study confirms the usefulness of the SERVQUAL model in terms of its reliability and validity for measuring quality in the healthcare sector.

Rohini and Mahadevappa (2006) applied SERVQUAL framework and applied SERVQUAL factors in their study on Bangalore (India) hospitals. They obtained the perceptions of both the patients and the hospital management. The study concluded that there existed an overall gap between patient's perceptions and expectations and also between management's perception of patients'

expectations and patient's expectations. The authors provided recommendations to fulfil those gaps.

The paper 'Measuring Perceived Service Quality for Public Hospitals (PubHosQual) in the Indian Context' by Jayesh P. Aagja, Renuka Garg (2010), aims to develop a scale for measuring perceived service quality for public hospitals from the user's (patient's) perspective. It tries to measure perceived service quality of public hospitals. A reliable and valid scale called public hospital service quality (PubHosQual) is developed to measure the five dimensions of hospital service quality: admission, medical service, overall service, discharge process, and social responsibility. This study was conducted in India only, the generalizability of the PubHosQual scale has to be tested in other countries. The proposed scale PubHosQual in this study could be used as a diagnostic tool to identity areas where specific improvements are needed, and to pinpoint aspects of the hospital's services that require modification. The new scale fills the gap of absence of a validated scale to measure perceived service quality for public hospitals.

Ranajit Chakraborty and Anirban Majumdar (2011), in their paper on "Measuring Consumer Satisfaction in Healthcare Sector: The Applicability of SERVQUAL" establishes that SERVQUAL is a popular model for measuring service quality. Although many limitations of SERVQUAL approach have been identified by different researchers, yet the same instrument is applied in different healthcare organization for measuring service quality and patient satisfaction. It suggests that it is required to go deeper into the subject matter of the applicability of SERVQUAL model in Indian context.

1.3.4 Patient Satisfaction Studies in Healthcare

Pakdil and Harwood (2005) studied patient satisfaction in a pre-operative assessment clinic. The study showed that patients were most dissatisfied with the waiting time. The hospital should provide prompt services and could supply the waiting room with magazines, television set, etc. to make patients more comfortable during their wait. Positive physician-patient interaction increased

patient satisfaction more than any other provider-customer relationship. Some training could be given to patients so that their expectations became realistic and hence tended to improve their satisfaction with the service provided.

The study by K. Vidhya, Dr. C.Samudhra Rajakumar, Dr. K. Tamizhjyothi (2006), in "An empirical study on patient delight and the impact of human and non-human factors of service quality on patient satisfaction in private hospitals", has identified ten variables relating to the service quality of in-patient care. The independent variables are grouped under human factor and non –human factor. Human factor consists of interpersonal attitude, professional treatment and sense of well being as primary dimensions along with personal behaviour, communication, treatment outcomes, reliability and trust as sub dimensions. Regression analysis has been carried out to find out which factors influence patient satisfaction and patient delight. The result shows both human factor and non-human factor influence patient satisfaction. It is evident that interpersonal attitude, sense of well being, physical evidence, administrative procedure, and reputation contributed significantly to the prediction of patient satisfaction.

On the other hand professional quality has the least significance and fee has an insignificant relationship with patient satisfaction. It shows that patients and their attendants are not much aware of two dimensions which are important in healthcare service quality (professional quality and fee structure) since they are difficult to evaluate. Among the nonhuman factors, administrative procedure is the most influencing variable for patient. If a problem exists in the last encounter, discharge procedure administrative procedure diminish the overall service perception of inpatients. Among the emotional attachment variables, the other result shows that midas-touch, confidence, trust, and happiness contribute significantly to the prediction of patient delight. It confirms that the patients and their attendants are delighted when they have midas-touch along with confidence and trust on their professionals.

A paper by Imad Baalbaki, Zafar U. Ahmed, Valentin H. Pashtenko, Suzanne Makarem (2008) on 'Patient satisfaction with healthcare delivery systems" provides support for healthcare system administrators, who are often at odds with

healthcare core service administrators and personnel, with respect to long-term hospital growth strategies. It illustrates that focusing on increasing core competencies is a short-sighted approach to developing healthcare systems. It provides support for growing secondary support functions as being a more efficient means to increasing long-term core competencies. This research paper presents that patient perceptions are significantly influenced by hospital support functions. Further, these perceptions determine hospital reputation, influence future patient demands and are integral to the understanding of patients as consumers of healthcare systems rather than consumers of medical procedures.

Raman Sharma et al. (2011) in the paper on "The patient satisfaction study in a multispecialty tertiary level hospital", made an attempt to evaluate patient satisfaction level by studying the various parameters of quality services in OPD in a tertiary level institute. This paper aims to address the issues related to satisfaction in healthcare services as a measure of health system performance. Against a background of growing consumerism, satisfying patients has become a key task for all healthcare activities.

The objectives of the study were to determine the behavior and clinical care provided by clinicians; the behavior, care and cooperation provided by paramedical staff and satisfaction level in terms of amenities available. A cross sectional study was conducted to assess the patient satisfaction level visiting the hospital. This is the first ever study conducted to assess the patient satisfaction level in a premier multi-specialty hospital of North India. It provided certain factors that need corrective measures to improve the hospitals' service quality. Infrastructure and architectural corrections need to be made to enhance the comfort and satisfaction of the patients, especially at reception counter and main registration counters. Certain improvements are also needed in the waiting area by making it informative and comfortable. Though respondents are satisfied with the doctors' care and services there is need for clinicians to communicate effectively with the patients in the simple terms.

1.3.5 Customer Perception and Service Quality Studies

Rao et al. (2006) developed a reliable scale to measure in-patient and out-patient perceptions in India. Their study included medicine availability, medical information, staff behavior, doctor's behavior and clinic infrastructure as dimensions of perceived quality in healthcare services. A research article by Usha Manjunath et al. (2007) provides an analysis of quality management using the Malcolm Baldrige National Quality Award Criteria (MBNQA) criteria in a 300-bed hospital in South India. Based on Malcolm Baldrige National Quality Award (MBNQA) criteria in-depth interviews are conducted with the heads of the departments in the case hospital. Data is analyzed and compared with the MBNQA points to evaluate the performance of the hospital and the data present the strengths and opportunities for improvement through MBNQA criteria. The total points scored are 753 out of 1,000 points. This reveals that quality performance of the case hospital is of higher level. However among all the seven criteria, the hospital has still more opportunity to improve the quality in MBNQA criteria no. 4, i.e. measure, analysis and knowledge management. The outcome of this paper clearly indicates that MBNQA criteria act as a powerful tool to analyze the quality performance of the hospital. It illustrates the measurement of quality performance through MBNQA is the first step for managing and improving quality in healthcare organizations. It provides lessons for those hospitals that have already started quality initiatives. Since TQM in healthcare organizations in India is in its nascent stages, the analysis of quality management using MBNQA criteria appears to be one of the best approaches in achieving performance excellence. The rich experience and knowledge of quality management available with this hospital really provides lessons to other hospitals in India and abroad in achieving superior performance. This study brings out a potential area of research about how the ratings and activities in the case hospital compares with other healthcare organizations.

Duggirala et al. (2008) proposed that healthcare service quality consisted of seven dimensions, namely, infrastructure, personnel quality, process of clinical care, administrative processes, safety indicators, overall experience of medical

care and social responsibility and in their study on Indian hospitals, revealed that all these seven dimensions of healthcare service quality were significant predictors of patient satisfaction.

The paper by Ritu Narang (2010) on 'Measuring perceived quality of healthcare services in India', sought to measure perceived quality of healthcare services in India by using a scale developed by Haddad et al. (1998) and thereafter develop an understanding of these services provided by state owned and missionary healthcare centers. The objective of this paper is to understand the perception of patients towards healthcare services in Lucknow based on the scale developed by Haddad et al. To ascertain whether the same items could be included in the study on patients visiting the government and missionary hospitals in the state capital of Uttar Pradesh, India an exploratory study was carried out. A 20-item scale was developed by Haddad et al. to measure perceived quality of healthcare services in Guinea. The original scale was adapted to reflect the Indian context. The factor analysis of the 20-item scale resulted in four homogeneous sub-scales: health personnel and practices, adequacy of resources and services, healthcare delivery and access to services. The results indicate that the mean scores for all the four factors i.e. health personnel and practices (HPP), adequacy of resources and services (ARS), healthcare delivery (HCD), and access to services (AS). It was observed that with the increase in the socio-economic status of the respondents, the mere fulfillment of the treatment needs was not sufficient, the general behaviour and attitude of service providers became important, the focus changed from just getting the service to how the service was being provided (HCD). The opinion of the respondents changed with the health service providers. The perception of the respondents from Mission hospitals showed association of HCD with quality of service. This could be due to feeling of dedication amongst the missionary hospital personnel to serve the patients. It was seen that despite limited resources and personnel, the healthcare delivery in the missionary hospitals was quite meticulous and well-managed and this aspect overshadowed all the other aspects in determining the perception of respondents related to quality of service. In state tertiary care hospital, the focus seemed to shift to hospital personnel and practices. It is unfortunate, that owing to rampant

malpractices and corruption, the perception related to quality of service was affected adversely and significantly with respect to HPP. The scale was found to be reliable to a great extent with an overall Cronbach alpha value of 0.74. “Health personnel and practices” and “healthcare delivery” were found to be statistically significant in affecting the perception. Respondents were relatively less positive on items related to “access to services” and “adequacy of doctors for women”. The tertiary health centre was rated poorer than the medical university and missionary hospitals. The paper draws the attention of health policy makers in considering the requirements and opinions of patients to effect substantial change and significant improvement in the quality of the healthcare services for better and increased utilization of the services. This study paved a path for the current study which concentrates on the private healthcare service providers and their customers. It tries to find those expectations of the customers, which have a higher level of influence on customer satisfaction and service quality.

The paper by P. Padma, C. Rajendran, L. Prakash Sai (2010) contributes to research on healthcare services by the development of a comprehensive framework for customer (both patient and attendant)-perceived healthcare quality. The purpose of this paper is to determine the dimensions of service quality in Indian hospitals, from the perspectives of patients and their family members/friends. It takes hospital service quality (SQ) into its component dimensions from the perspectives of patients and their attendants; and to analyze the relationship between SQ and customer satisfaction (CS) in government and private hospitals in India by employing questionnaire-survey approach to obtain the perceptions of patients and attendants. The instruments developed have been validated using tests for reliability, validity and uni-dimensionality. Data collected have been analyzed by using statistical techniques such as bi-variate correlation and multiple regressions. This research gives way to present study as its findings suggest that patients and attendants treat the interpersonal aspect of care as the most important one, as they cannot fully evaluate the technical quality of healthcare services. This study also revealed that the hospital service providers have to understand the needs of both patients and attendants in order to gather a holistic view of their services. The study also allows a comparison of the

performance of government and private hospitals in terms of the services offered. Today's buyers are better educated and more aware than in the past, as there is a mine of data available through bulletins, web sources, online repositories, health magazines, etc. Hence, delivering quality service becomes vital. A comparison of perceptions between patients and attendants aid them to allocate resources to various aspects of healthcare, with respect to these two customer groups. The study revealed that personnel quality had the highest correlation with CS in case of both patients and attendants, and found that patients and attendants both treat the interpersonal aspect of care as the most important one as they cannot evaluate the technical quality of healthcare services. Among other factors, patient satisfaction is highly affected by clinical care, image and trustworthiness of hospitals while attendant satisfaction was influenced by infrastructure and administrative procedures. This result reveals that service providers have to understand the needs of both patients and attendants in order to gather a holistic view of their services. It showed that no single SQ dimension had an impact on attendant satisfaction significantly in government hospitals whereas in private hospitals, infrastructure and personnel quality significantly affect attendants' satisfaction. Clinical care, administrative procedures, safety indicators and trustworthiness significantly had an impact on patient satisfaction in government hospitals. In private hospitals, infrastructure, image and trustworthiness are the significant predictors of patient satisfaction. Government hospitals in India are known to provide well-qualified physicians, and private hospitals are preferred for their infrastructure facilities. Hospital administrators can use the instruments proposed to obtain feedback on their performance on service quality parameters so that they can benchmark themselves with their competitors. But the results of the study are dependent on the nature and number of respondents, i.e. the study has captured only the perceptions of service receivers – patients and attendants; and sample size of the study – 204 patients and 204 attendants – due to limited response rate and other operational constraints.

The paper by Ritu Narang (2011) on 'Determining quality of public healthcare services in rural India' aims to measure the perception of patients towards quality of services in public healthcare centers in rural India. A 23-item scale that tested

well for reliability and construct validity was employed for the study. Mixed sampling technique was employed to select the sample. A total of 500 respondents from Eastern, Western and Central regions of Uttar Pradesh were surveyed.

It seeks to understand the quality of services in public healthcare centers in rural India by using a reliable tool. The psychometric properties of the Indian version of the scale show good internal consistency and construct validity. Five factors were identified from the factor analysis: "healthcare delivery system", "interpersonal and diagnostic aspect of care", "facility", "health personnel conduct and drug availability" and "financial and physical access to care". The mean score was high for "financial and physical access to care" and "healthcare delivery system". The tool is able discern differences across various socio-demographic characteristics. Education, gender, income and to some extent age tend to have an impact the quality perception among the Indian respondents. However, the disproportionate representation of females in the study may have an impact on the overall rating of the service quality and acted as a limitation. It also throws light on areas requiring urgent and immediate attention so that suitable strategies are employed to improve the quality of healthcare services in public centers in order to make them more sensitive and responsible to the needs of the rural population. The tool employed in the current study has highlighted some of the indicators of quality such as availability of drugs, doctors, medical, equipments; interpersonal and diagnostic aspect of care; healthcare delivery; proper disposal system, cleanliness; health personnel conduct. The study recommended that the presence of doctors to be ensured, attracting and retaining the doctors by the integration of the health development programmes with the education, infrastructure and industry development programmes of the rural regions, providing some incentives to lure the doctors into rural areas and the role of pricing in improving healthcare quality needs to be understood. This study was limited to measuring the perceived quality of healthcare services in public centers only. Therefore, it presents a scope for further studies to understand the quality related problems prevalent in the private healthcare services centers. It influenced the present study which is carried out at the private

healthcare service providers in order to understand one of the major quality related problem i.e. lack of understanding the factors affecting customer expectations.

1.3.6 Service Climate and CRM Studies in Healthcare Sector

In the research paper on, 'Examining the role of service climate in healthcare: an empirical study of emergency departments' by Claudia Steinke (2008), the role of service climate is studied in the healthcare sector. Claudia Steinke examines the mediating role of service climate by exploring service climate i.e. service training, managerial practices, physical design, job design, job satisfaction and employee empowerment on service quality, client satisfaction with service and client empowerment. The larger proposition being that certain structural variables, through their impact on service climate have the potential to positively influence outcomes in healthcare. In her research with the help of structural equation modeling she showed that the job satisfaction and employee empowerment only partially mediate the relationship between managerial practices, physical design, job design and service climate. It suggests that client satisfaction with service and customer experience was completely mediated by service climate. This study highlights the significance of service climate in healthcare services, which provides an encouragement for the present study. This research tries to evaluate those important factors of service climate or physical environment of healthcare services, which primarily influence customer expectations in this sector.

Another research by Verma, Sanjeev and Chaudhuri, Ranjan (2009) on 'A study on effect of CRM on CS in service sector in India' found that Indian service sector may be investing huge amount in CRM and its implementation but the desired customer satisfaction is still missing. It indicates that the expectations are rising with more adaptation of technology but perceived experience is not yet achieved. The service providers need to go a long way to reap the real benefits of CRM implementation. There is a wide gap in service providers' understanding of customers' expectations and real customers' expectations. The expected attributes of empathy, responsiveness and assurance had higher factor loading

than perceived experience, which indicates that the primary concerns of customers are still unaddressed. In the present study, the research study tries to find the major concerns of the healthcare services customers with special attention to processes and physical environment of this service.

The paper by Sanjaya Singh Gaur et al. (2011), on Relational impact of service providers' interaction behavior in healthcare, aims to examine, how patients' loyalty and confidence in their doctors are influenced by doctors' interaction behavior, namely, listening and explaining behavior. Primary data were collected through a survey of patients visiting the same specialist doctor more than three times a year, in selected clinics in the city of Mumbai, India, were asked to complete the study instrument. A total of 320 responses were analyzed to test the proposed hypotheses. Results confirm that the doctor-patient relationship is positively influenced by the interaction behavior of service providers, i.e. doctors. This study attempts to broaden our understanding of the association between these relational outcomes and doctors' interaction behaviors: listening, explaining and perceived competence.

Figure 1.1 presents the conceptual model. Listening refers to patients' perception that their doctors are willing to take time to listen to them and pay attention to the issues that concern them. Explaining refers to patients' perception about their doctors' ability to provide the information regarding their state of health, medication, home care and medical procedure required. Perceived competence is the extent to which patients trust their doctors' skills and knowledge required to provide for their healthcare needs. Behavioral loyalty includes repurchase intentions and world-of-mouth recommendations as suggested by various scholars. This study is conducted in India, which is currently making great strides as an advanced emerging economy. Little empirical research of service behaviors has been undertaken in emerging economies where healthcare systems work very differently in comparison to mature (i.e. Western) economies. This study attempts to bridge this important gap in the literature by integrating the findings in medical sociology literature and the work emanating from research in services marketing.

The study demonstrates that doctors' interaction behavior is instrumental in developing an effective relationship with their patients and boosts patients' confidence in their doctors. Furthermore, effective interaction enhances patients' loyalty to their service providers. The study suggests that development of effective communication skills in doctors warrants due attention in medical education. When compared to communication behavior like listening and explaining, patients' perception of their doctor's competence contributes more to confidence building, while listening contributes more to relationship satisfaction.

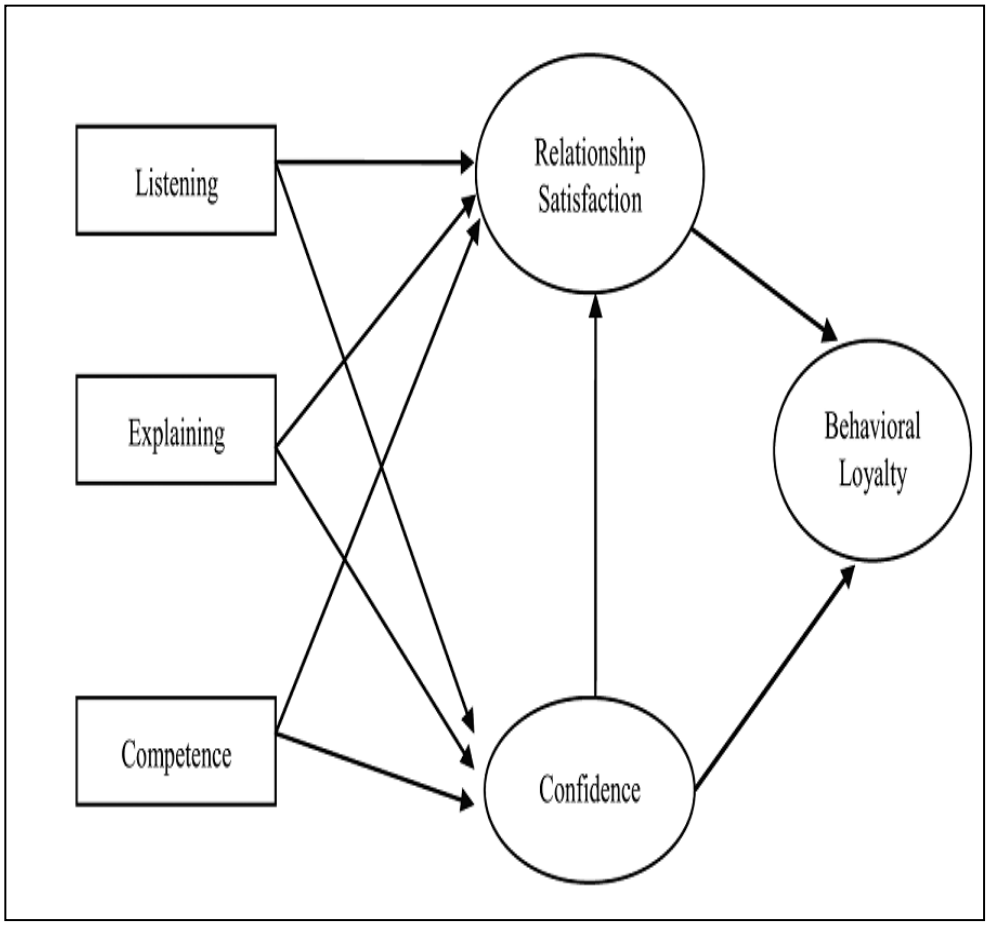


Figure 1.1 - Impact of doctors' service behaviors on patients' relational outcomes

So the study emphasized CRM in healthcare services as effective communication can greatly contribute to the creation, development and retention of long-term relationships with their patients, doctors need to seriously consider making their communication efficient and effective.

1.3.7 Expectation Research and Models in Healthcare Services

In India, there is hardly any research done related to customer expectations in the field of healthcare services. One of the most significant research paper is by Dr. Sona Bedi, Dr. Arya and Prof. Sharma (2006), on "Patient expectation survey - a relevant marketing tool for hospitals", which advocates Patients Expectation Surveys and support these surveys in respect of a particular service. According to this study, these surveys can be an important market information and research tool in the hands of contemporary hospital administrators. With the healthcare market turning from a seller's market into a buyer's market, healthcare providers require a marketing information system to know their customers, which provides information that is accurate, timely and need-based. Market research can provide such information to hospital administrators. For this patient expectation survey is a tool, which reveals what patients actually desire from hospitals. This study was conducted among patients visiting the outpatient departments of two government hospitals in the NCR of Delhi. The two hospitals were selected to give a wide base for conducting a survey. Outpatient Departments of both hospitals were selected as setting of study. A total of 230 patients were surveyed. An analysis of expectations related to medical care attributes like waiting time, consultation time, listen to problems & answer questions, physical examination by physician, discussion of problem with patient and explanation of treatment, health education & dietary counseling by doctors, reference for investigations, attitude/behavior of doctors (empathy), expectation from physical facilities (tangibles), expectations from doctors regarding clinical competence (reliability/assurance), was done by rating of various attributes in the order of importance as deemed by the patients, was done. The research proves that the consideration of technical competencies of the physicians or the 'ability to cure', communication skills and empathetic attitude, as the most important attribute of medical care in a hospital, by patients. It also suggests that the care provided by the physician, probably has a strong influence on overall assessment and resultant satisfaction of the healthcare service customers. In particular, waiting time in physicians' queues and duration of consultation time appear to be a potential dissatisfaction causing factors. The research says that healthcare service providers also need to have a strategy of

improving communication skills of physicians. This research paved a path for the present study as it emphasized the relevance of expectations studies, in this field which is having scarcity of resources. The present study tries to find expectations of healthcare customers from private healthcare service providers, to enable them in not only satisfying their customers but also framing marketing strategies which will help them in forming realistic expectations.

The aim of another paper by Aditi Naidu (2009) is to build a comprehensive conceptual model to understand and measure variables affecting patient satisfaction-based healthcare quality. A total of 24 articles from international journals were systematically reviewed for factors determining patient satisfaction and healthcare quality. According to it patient satisfaction is a multi-dimensional healthcare construct affected by many variables. Healthcare quality affects patient satisfaction, which in turn influence positive patient behaviour. Patient satisfaction and healthcare service quality, though difficult to measure, can be operationalized using a multi-disciplinary approach that combines patient inputs as well as expert judgment.

The paper developed a conceptual model that needs to be confirmed empirically. Also, most research pertains to developed countries, so the findings may not be generalized to developing nations, without empirical testing of the model. The paper has direct implications for health service providers. They are encouraged to regularly monitor healthcare quality and accordingly initiate service delivery improvements to maintain high levels of patient satisfaction.

Figure 1.2 proposes a comprehensive model that encompasses issues discussed in this article. The model shows how patient and health providers create and affect health service quality. Patient involvement is an inherent feature in healthcare services whereby he or she influences outcome quality through compliance, describing the right symptoms and physically undergoing treatment. Health service quality perceptions are antecedents to patient satisfaction, which in turn decide whether patients are loyal to healthcare providers.

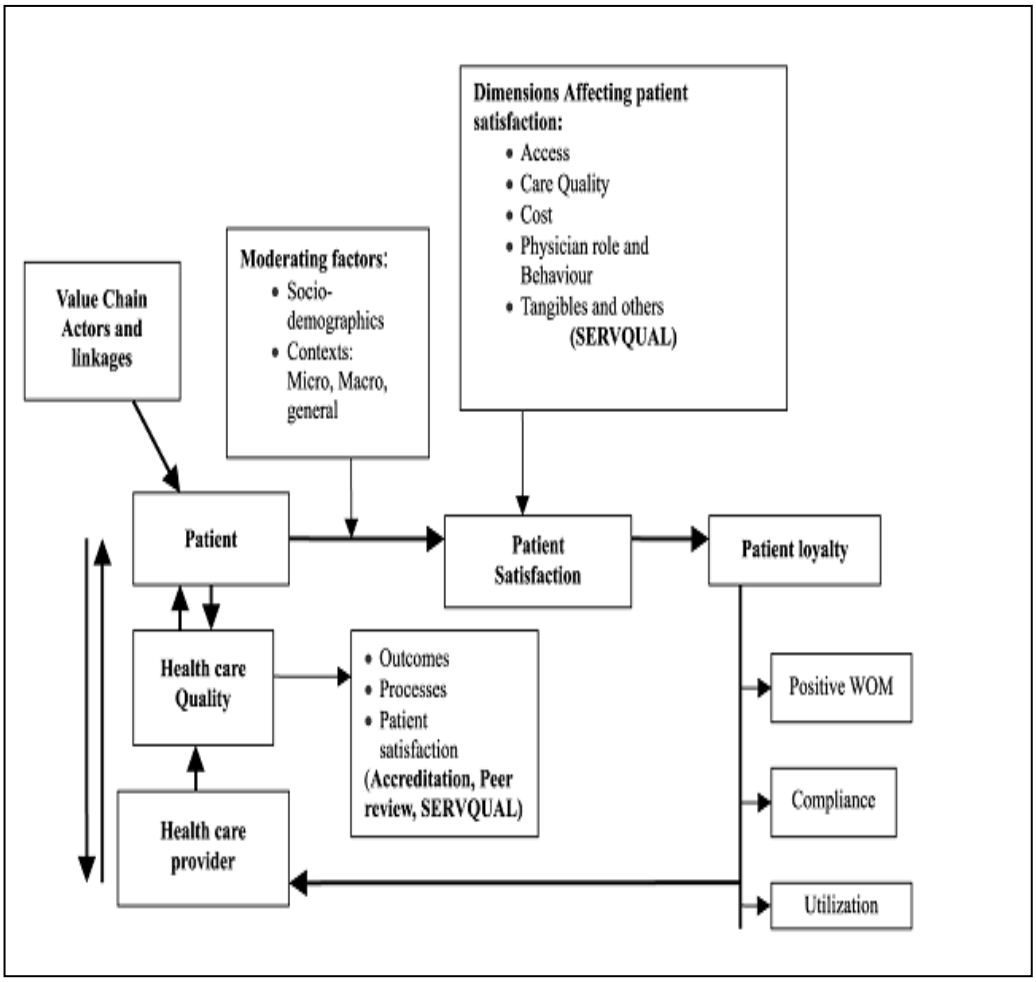


Figure 1.2 - A comprehensive model to understand healthcare services.

Patient loyalty results in positive behaviours such as recommending health services to friends and relatives, compliance and higher service use thus positively affecting profitability. Moderating factors that affect patient satisfaction are outlined. Healthcare services are difficult to evaluate as credence values are high. There is a debate about how healthcare should be evaluated. While some authors feel patient perceptions are valuable healthcare quality indicators, others contend that health service quality should be evaluated by experts. The SERVQUAL instrument is used in many patient satisfaction studies and has been found appropriate in healthcare settings, but needs to be modified to suit specific environments. Dimensions that determine patient satisfaction have been identified, including - healthcare output, access, caring, communication, and tangibles.

These are close to general service quality dimensions like reliability, responsiveness, empathy, assurance and tangibles. Healthcare experiences can be understood by studying value systems comprising various actors and links. Each has the capacity to create a positive or negative patient experience. Hospital room appearance and comfort also play a significant role in determining patient perceptions, which seem also to be moderated by socio-demographic factors though some authors contend that these play contradictory, no or miniscule roles. Physician studies show that different role expectations give rise to different patient satisfaction, perception, care take-up and other compliance behaviour. Trust has been studied in the context of health with care errors reported in the media. However, material reviewed points out that healthcare trust requires further research. Several researchers developed conceptual models to measure health services and one suggests that patient satisfaction is a multi-dimensional concept that should be studied by operationalizing it within its context. Consequently, a conceptual model to understand and measure patient satisfaction and care quality in healthcare services is proposed by the author. Measuring healthcare quality can help healthcare managers to effectively set control mechanism and initiate improvement programmes. This article, by reviewing published research, found that patient satisfaction and healthcare quality are fundamental to improving health service performance and image.

Another study by Kenneth Randall Russ (2006), on consumer expectation formation in healthcare services: a psycho-social model, at B.S., Louisiana State University surveys consumers who are actually coping with forming expectations for a health service. The multi-dimensional nature of expectations suggests that consumers form satisfaction judgments about - roles, processes, outcome, and service quality in the health service context. This research is the first in the marketing literature to include all four dimensions in a single study. The different segments along the expectation formation continuum may differentially weight one dimension over another. It is likely that the high approach-active segment will be very concerned about role and process expectations. On the other hand, consumers in the high avoidance-passive segment may use service quality cues (i.e., tangibles like nice hospital rooms and empathy and nice nurses) and

bolstering when forming their satisfaction judgments. Healthcare practitioners who understand this and segment consumers by using the expectation formation model, in addition to their medical condition, enhance their ability to manage consumer satisfaction. Overall the results of this research have contributed to the consumer satisfaction literature by developing and testing a model. In addition, this research provides a more holistic approach to understanding the complex nature of consumer satisfaction by extending the literature on an important component of post-purchase evaluation and consumer expectation formation.

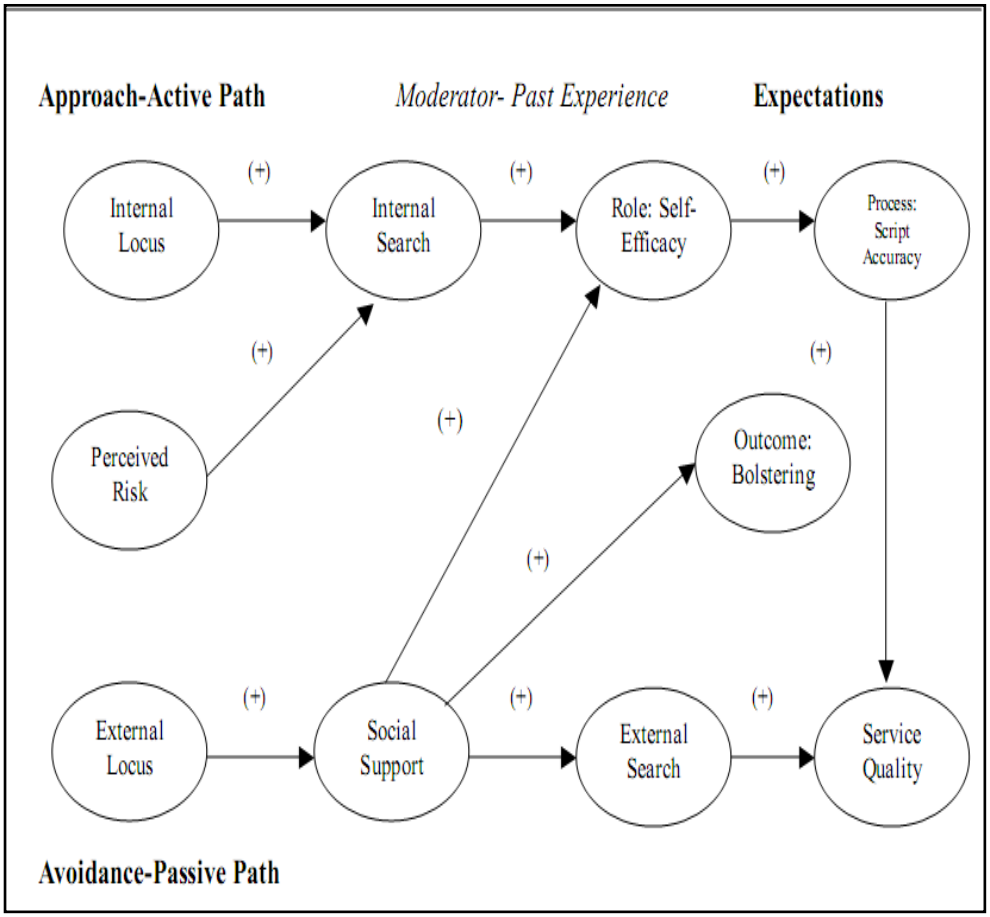


Figure –1.3 Consumer Expectations Formation in Healthcare Services: A Psycho-Social Model

The development of a model of expectation formation provides a basis for addressing the limitations of cognitive-based approaches to consumer satisfaction models. The integration of consumer traits (locus of control orientation), situational variables (perceived risk), and mediating constructs (information

search and social support) into a multi-dimensional model of expectation formation should provide both academicians and practitioners with a more holistic method to measure, predict, and improve satisfaction judgments in the healthcare services context and negative word-of-mouth communications may be avoided or minimized.

In conclusion, this research presents support for a model of consumer coping and expectation formation in a healthcare context. It provides initial evidence that consumers can be segmented based on a personality trait (locus of control) along a continuum from approach-active oriented to avoidance-passive oriented. Results support the notion that the consumer's position along this continuum will influence the extent to which they engage in coping strategies such as information search and seeking social support. Likewise, this study provides evidence that the coping strategy employed will influence role, process, outcome, and service quality expectations.

This model provides an insight into the process of expectation formation in healthcare services but it does not include which are different factors related to healthcare processes and physical environment that affect customer expectations. The present study considers the notion of this model into consideration while framing the survey questionnaire.

1.4 Research Problem

Customer expectations in healthcare are critical to healthcare service providers because of its influence on their perception and satisfaction. Many studies ascertain that patient satisfaction affects not only the outcome of the healthcare process such as patient compliance with physician advice and treatment, reduced incidents of patient complaints, service utilization, but also patient retention. A close examination of the current healthcare research studies indicates that there is a paucity of research on expectations in the field of healthcare services.

The present study evaluates the customers' expectations related to Processes and Physical Environment along with Price and Promotion, in the healthcare services.

Through primary research employing questionnaire, this study evaluates the customers' expectations from the healthcare services providers in Rajasthan with a view to uncovering, primarily; the relationship between service processes, physical environment and expectations and the overall customers' expectations related to Processes, Physical Environment, Price and Promotion with the changing status of customers.

Thus, "to understand the different customers' expectations related to two significant dimensions healthcare processes and physical environment along with price and promotion of healthcare services" is the main problem of this study.

1.5 Hypotheses

Considering these objectives, the following null-hypotheses are developed:

H1: There is a non-significant difference in the expectations of Customers' of the different gender with regard to overall service process factor and its sub-factors.

H2: There is a non-significant difference in the expectations of Customers' of the different profession with regard to overall service process factor and its sub-factors.

H3: There is a non-significant difference in the expectations of Customers' of the different age groups with regard to overall service process factor and its sub-factors.

H4: There is a non-significant difference in the expectations of Customers' of the different educational background with regard to overall service process factor and its sub-factors.

H5: There is a non-significant difference in the expectations of Customers' of the different Occupation with regard to overall service process factor and its sub-factors.

H6: There is a non-significant difference in the expectations of Customers' of the different income groups with regard to overall service process factor and its sub-factors.

H7: There is a non-significant difference in the expectations of Customers' of the different gender with regard to overall physical environment factor and its sub-factors.

H8: There is a non-significant difference in the expectations of Customers' of the different profession with regard to overall physical environment factor and its sub-factors.

H9: There is non-significant difference in the expectations of Customers' of the different age groups with regard to overall physical environment factor and its sub-factors.

H10: There is a non-significant difference in the expectations of Customers' of the different educational background with regard to overall physical environment factor and its sub-factors.

H11: There is a non-significant difference in the expectations of Customers' of the different occupation with regard to overall physical environment factor and its sub-factors.

H12: There is a non-significant difference in the expectations of Customers' of the different income groups with regard to overall physical environment factor and its sub-factors.

H13: There is a high influence of healthcare Communication process on customer's expectations in health care services.

H14: There is a high influence of healthcare Maintenance and medication process on customer's expectations in health care services.

H15: There is a high influence of Consultation process on customer's expectations in health care services.

H16: There is a high influence of Billing and Discharge process on customer's expectations in health care services.

H17: Customers' expectations are significantly related to service Process factors and its sub-factors.

H18: There is a high influence of healthcare Waiting lounge physical process factor on customer's expectations in health care services is disproved or rejected.

H19: There is a high influence of healthcare Medical and Diagnostic Facilities physical process factor on customer's expectations in health care services is disproved or rejected.

H20: There is a high influence of healthcare Canteen physical process factor on customer's expectations in health care services is proved or accepted.

H21: There is a high influence of healthcare Patient's room physical process factor on customer's expectations in health care services is proved or accepted.

H22: There is a high influence of healthcare Staff's Appearance physical process factor on customer's expectations in health care services is disproved or rejected.

H23: Customers' expectations are significantly related to Physical environment factors and its sub-factors.

H24: There are no significantly high expectations of healthcare customers' regarding various Price factors.

H25: Customers' expectations are significantly related to the availability of information on the Websites of healthcare service providers.

H26: Customers' expectations are significantly related to the availability of information through SMS services by healthcare service providers.

H27: Customers' preferences vary significantly with regard to the different sources of information related to healthcare service providers.

1.6 Research Methodology

1.6.1 Research Design

Research design chosen for the study is exploratory as well as descriptive research design. It is an exploratory research as it tries to identify manifest and latent expectations regarding two dimensions i.e. processes and physical environment of the healthcare services. It is also a descriptive research as it identifies extend of influence of the different factors related to service processes and physical environment on the expectations. In Indian healthcare service industry, there is a visible need-gap. This research tries to identify manifest and latent expectations of the customers and add to the existing understanding of

customers' expectations in healthcare services. Since expectations play a significant role in determining customer perceptions and satisfaction, service providers seek to manage customers' service expectations. Surprisingly the information about the customer expectations in the healthcare sector is very limited. This research tries to explore two significant dimensions of healthcare services i.e. processes and physical environment and find importance of the different components of these two dimensions, which may affect customer satisfaction. Managing customer expectations will affect healthcare service industry immensely. To apply this concept in healthcare services in Indian context, this study tries to examine specific components of customer expectations in this complicated but fast growing essential service. This research study is based upon longitudinal customer expectations studies. Exploratory statistical methods are used to examine substantial data comprising several customers, visitors, doctors and other employees. Comprehensive information is presented which illustrates patient expectations, their major points, and the importance of this knowledge in increasing effectiveness of healthcare service providers and health care systems.

1.6.2 Sample Design

The study is based on the primary data collected through the construct which was tested and refined at three different stages. A standardized questionnaire was developed after the discussions on the aforesaid research problem with the medical experts. The items in the questionnaire used, take care of basic and integral components of processes and physical environment of healthcare services. The questionnaire finalized initially was subjected to necessary alternations by administering a pre-test among 30 randomly selected customers of private healthcare service providers.

Universe of the Study

The study population consisted of the patients and their attendants who came for treatment to the private healthcare service providers in Kota, Udaipur & Jaipur in Rajasthan. The study population consists of the in-patients and their attendants of

private healthcare service providers in Rajasthan. In the present study for easy understanding 'customers' is used for 'the patients and their attendants'.

Sample Unit and Frame of the Study

The sampling units of the study for collecting data were patients of few multi-specialty private healthcare service providers in Kota, Udaipur and Jaipur in Rajasthan. Sampling Frame is the Private Multi-specialty healthcare service unit, which has minimum 100 beds capacity.

Sampling Technique and Sample Size

A sample size of 400 was chosen for this study, keeping in mind the average size of samples used by other researchers in similar studies. Convenience sampling technique was employed to select the target sample. Convenience sampling is deemed as appropriate because the purpose of this study is not to provide point and interval estimates of the variables, but to explore the relationships among the variables. The criterion of inclusion in this study is the local in-customers who have utilized the health care services at the private healthcare units.

Keeping in mind, the representative character of health care customers visiting private healthcare services providers in these cities, the healthcare organizations located at Kota, Udaipur and Jaipur Cities of Rajasthan were purposely selected.

A sample size of 400 was chosen, using formula for sample size selection i. e.

$$SS = Z^2 \, X \, p.(p-1) / c^2$$

Here, Z= 1.96

p = .5 percent of population

c = 0.05 (confidence interval).

It gives SS = 384.

It is also decided by keeping in mind the average size of samples used by other researchers in similar studies. In total, 485 customers who visited these private healthcare units during January-September 2014 were surveyed. It means the questionnaire was distributed to around 485 in-customers (Keeping in view non-

responses) who were admitted to these healthcare service providers and had stayed for more than one day in these units. After scrutiny of filled questionnaires the researcher found that some of the questionnaires were partially filled and some of the questionnaires were completely blank. Hence those questionnaires which were completely blank and which were partially blank were discarded and only completely filled questionnaires were retained for final analysis. Thus, in this way the final sample size was 400 responses with a response rate of 82.5%.

Criterion for Sample Selection

Data have been collected from the customers and their attendants visiting private healthcare service units in this city. The units and respondents satisfying the following criteria were included in the study -

- For the purpose of the present study, healthcare service units with minimum 100 beds have been considered.

- Customers should have been admitted in a private healthcare service unit within the previous six months when the study was conducted (customers recuperating at home or in-customers that were on the verge of discharging from health care service providers).

- The customer should have stayed in the healthcare service unit for at least one day (considered a reasonable period for experiencing all healthcare service provider-related processes).

- Similarly the attendants who were included as respondents for the present study were those who have stayed with the patient in the healthcare service unit and taken care of the patient during the period of hospitalization.

Data Gathering and Generation of Scale Items

Questionnaire Development

The first stage of questionnaire development involved a qualitative study of

customers to get an insight into issues that are important to them. In-customers were systematically sampled for in-depth interviews at one healthcare service unit located in the Kota city in Rajasthan. The in-depth interviews covered topics related to service processes and its physical environment, about the healthcare service unit, difficulties faced by customers, and ways to improve the services of healthcare service units. The main aspects of service processes and physical environment, which were identified as important included different processes like admission, discharge, medication, billing, cleaning and consultation processes along with healthcare service units' infrastructure, and availability of electricity and water. The researcher also tried to probe about price and promotion related aspects of healthcare services which were significant for the customers and included them for better insight in these areas. Finally, the scale items pertaining to these areas were developed.

The second stage involved a comprehensive review of customer-oriented studies in healthcare services, and potential scale items from these studies were selected. Results from both efforts led to an initial list of scale items. In the third stage, this list was reviewed by private healthcare service experts and a subset of items selected for pre-testing from in-customers. Each scale item had an associated 7-point Likert scale ranging from a score of 1 for 'completely agree' to 7 'completely disagree', with 4 being the neutral position. The last stage of questionnaire development consisted of pre-testing and refining the preliminary questionnaire. The initial in-patient scale contained 36 items.

Before administering the questionnaire the interviewer explained the meaning of the rating scale and then read out each statement carefully. The respondents indicated their responses to the particular statement that were recorded on the questionnaire by the interviewer. They were asked to indicate their view about each of the items in general and not relate it to the specific problem that they currently had. In case, the customer was unable to comprehend the questions the accompanying person was asked to respond.

Pilot Study

To ensure that the survey questionnaires will provide good data and results and it is comprehensive and not liable to any misinterpretation by potential respondents, questionnaire was validated and tested for its reliability. To validate questionnaire, the first draft of questionnaire was given to experts of the subjects and sought their opinion regarding this questionnaire. The necessary corrections and suggestions were incorporated in to the questionnaire.

To ensure validity and reliability of questionnaire researcher conducted a pilot study. For this study, a sample of randomly selected 30 respondents was collected from the private healthcare service provider in-customers.

Analytical Tools and Methods

A measuring instrument is reliable if it provides consistent results. Internal consistency and reliability of instrument/questionnaire that was used in the present research work was calculated using Cronbach's Alpha method. The Cronbach Alpha calculated for the tool was 0.900 that is excellent value for reliability and it shows that instrument is highly reliable.

To analyze collected primary data various statistical tools and techniques were applied. Statistical Package for Social Science (SPSS) Version 24.0 and MS-Excel are used to analyze data. The methods or techniques that are used to analyze data are described below -

Factor analysis

Factor analysis based on principal component extraction followed by Varimax rotation is employed to examine the structure within the 39-item scale. The KMO value and Bartlett's test of sphericity are used to examine the strength of relationship among the factors. Reliability of the scale is investigated through the Cronbach's alpha coefficient.

Z – Test

Z-test is based on normal probability distribution and is used for judging the significance of several statistical measures, particularly the means. The relevant statistics "Z' is worked out and compared with its probable value at a specific level of significance for judging the significance of measure concerned.

Z-test is generally used for judging the significance of difference between means of two independent sample in case of large sample of when population variance is known.

To test the significance of difference between the two sample means, the difference is expressed in terms of standard normal variate (Z) by dividing the difference by standard error.

$$Z = \frac{\left|\overline{X}_1 - \overline{X}_2\right|}{SE}$$

Where $\overline{X}_1$ = Mean of first series

$\overline{X}_2$ = Mean of second series

SE = Standard error

$$SE = \sqrt{\frac{\sigma_1^2}{N_1} + \frac{\sigma_2^2}{N_2}}$$

Analysis of Variance (ANOVA)

The analysis of variance frequently referred to as the ANOVA is a statistical technique specially designed to test whether the means of more than two quantitative populations are equal. This technique was developed by, R. A. Fisher in 1920s and is capable of fruitful application to a diversity of practical problems. Basically, it consists of classifying and cross classifying statistical results and testing whether the means of a specified classification differ significantly. In this way it is determined whether the given classification is important in affecting the results.

Technique of Analysis of Variance

The ANOVA can one–way, two-way, three-way or N-way. In one-way classification the data are classified according to only one criterion. It is customary to summarize calculations for sums of squares, together with their number of degrees of freedom and mean squares in a table called the analysis of variance table, generally abbreviated ANOVA. The specimen of ANOVA table is given below:

Table 1.1: Analysis of variance (ANOVA) table: One–way classification model.

Source of variation	**SS (Sum of squares)**	***df*** **(degrees of freedom)**	**MS (Mean square)**	**Variance Ratio of F**
Between samples	SSC	df_1	MSC	F
Within samples	SSE	df_2	MSE	

Where,

SST = Total sum of squares of variations.

SSC = Sum of squares between samples

SSE = Sum of squares within samples

MSC = Mean sum of squares between samples

MSE = Mean sum of squares within samples

Regression

In statistics, regression analysis includes many techniques for modelling and analyzing several variables, when the focus is on the relationship between a dependent variable and one or more independent variables. More specifically, regression analysis helps one understand how the typical value of the dependent

variable changes when any one of the independent variables is varied, while the other independent variables are held fixed. Regression analysis is widely used for prediction and forecasting. It is also used to understand which among the independent variables are related to the dependent variable, and to explore the forms of these relationships. In restricted circumstances, regression analysis can be used to infer causal relationships between the independent and dependent variables. Regression models involve the following variables: The unknown parameters denoted as b, the independent variables X and the dependent variable Y.

Linear regression - In linear regression, the model specification is that the dependent variable, Y_i is a linear combination of the parameters e.g. in simple linear regression for modelling *n* data points there is one independent variable: X_i, and two parameters, b_0 and b_1:

$$Y_i = b_0 + b_1X_1 + b_2X_2 + E_i,\ i = 1, 2, \ldots\ldots, n$$

The values of b's are calculated using either maximum likely hood method or least square method. After calculating values of b's the values are substituted in the equation and the resultant equation is used to estimate values of dependent variables.

Limitations of the Study

This research presents the findings of research investigating the expectations of healthcare service customers' related to processes and physical environment dimensions along with price and promotion dimensions especially in Indian healthcare setting. A shortcoming of this research is the fact that it is conducted in a particular region of Rajasthan state, albeit a handsome number of private healthcare units constitute the study. The facilities provided by different multi-specialty units enabled the convenience of having in-depth understanding of the two studied dimensions in one location. However, this in turn affects the generalization of this research. Issues causing impact on the generalization of the findings include sample size, single location and potential impact etc.

Thus results of the study are dependent on the nature and number of respondents, i.e. the study has captured only the expectations of service receivers – patients and attendants; and sample size of the study is 400 customers which leads to limited response rate and other operational constraints.

References:

- Aditi Naidu, (2009), "Factors affecting patient satisfaction and healthcare quality", International Journal of Healthcare Quality Assurance, Vol. 22 No. 4.
- Claudia Steinke (2008), "Examining the Role of Service Climate in Healthcare: An Empirical Study of Emergency Departments", International Journal of Service Industry Management, Vol. 19 No. 2.
- Das, J. and Hammer, J. (2007), "Which doctor? Combining vignettes and item-response to measure doctor quality", Journal of Development Economics, Vol. 78.
- Dr. Ranajit Chakraborty and Anirban Majumdar(2011), "Measuring Consumer Satisfaction in Healthcare Sector: The Applicability of SERVQUAL" Journal of Arts, Science & Commerce, www.researchsworld.com, Vol.– II, Issue –4.
- Dr Sona Bedi, Dr Sanjay Arya, Prof. R. K. Sharma (2006), "Patient expectation survey - a relevant marketing tool for hospitals", Journal of the Academy of Hospital Administration, Vol. 16, No. 1.
- Dr. Wathek S Ramez (2012), "Patients' Perception of Healthcare Quality, Satisfaction and Behavioral Intention: An Empirical Study in Bahrain", International Journal of Business and Social Science, Special Issue 8, Vol. 3 No. 1.
- Duggirala, M., Rajendran, C. and Anantharaman, R.N. (2008), "Patient-perceived dimensions of total quality service in healthcare", Benchmarking: An International Journal, Vol. 15.
- Gronroos, C. (1984), "A service quality model and its marketing implications", European Journal of Marketing, Vol. 18 No. 4.
- Haddad, S., Fournier, P. and Potvin, L. (1998), "Measuring lay people's perceptions of the quality of primary healthcare services in developing countries. Validation of a 20-item scale", International Journal for Quality in Healthcare, Vol. 10 No. 3.
- Jayesh P. Aagja, Renuka Garg (2010), "Measuring perceived service quality for public hospitals (PubHosQual) in the Indian context", International Journal of Pharmaceutical and Healthcare Marketing, Vol. 4 No. 1.

- J. Rama Krishna Naik, Dr Byram Anand and Irfan Bashir (2013), "Healthcare Service Quality and word of mouth: Key drivers to achieve Patient Satisfaction" Pacific Business Review International Volume 5 No. 12.
- Kenneth Randall Russ (2006), Consumer expectation formation in healthcare services: a psycho-social model, for the degree of Doctor of Philosophy, B.S., Louisiana State University.
- K. Vidhya, Dr. C.Samudhra Rajakumar, Dr. K. Tamizhjyothi (2006), in "An Empirical Study on Patient Delight and the Impact of Human and Non-Human Factors of Service Quality on Patient Satisfaction in Private Hospitals", International Journal of Quality Health Care Vol. 18 No. 6.
- Manjunath, Usha, Bhimaraya A. Metri and Shalini Ramachandran (2007), "Quality management in a healthcare organization: a case of South Indian hospital", The TQM Magazine Vol. 19 No. 2, Emerald Group Publishing Limited.
- Mark J. Kay (2007), "Healthcare Marketing: What is salient?", International Journal of Pharmaceutical & Healthcare Marketing.
- Mohsin Muhammad Butt and Ernest Cyril de Run(2010), "Private healthcare quality: applying a SERVQUAL model", International Journal of Healthcare Quality Assurance, Vol. 23 No. 7.
- Norazah Mohd Suki, Jennifer Chiam Chwee Lian, & Norbayah Mohd Suki (2011), "Do patients' perceptions exceed their expectations in private healthcare settings?", International Journal of Healthcare Quality Assurance, Vol. 24 No. 1, Emerald Group Publishing Limited
- Pakdil, F. and Harwood, T.M. (2005), "Patient satisfaction in a pre-operative assessment clinic: an analysis using SERVQUAL dimensions", Total QualityManagement, Vol. 16.
- Panchapakesan Padma, Chandrasekharan Rajendran and Prakash Sai Lokachari (2010), "Service quality and its impact on customer satisfaction in Indian hospitals Perspectives of patients and their attendants", Benchmarking: An International Journal Vol. 17 No. 6, Emerald Group Publishing Limited.
- Parasuraman, A., Berry, L.L. and Zeithaml, V.A. (1993), "More on improving service quality measurement", Journal of Retailing, Vol. 69 No. 1, pp. 140-7.

- Raman Sharma, Meenakshi Sharma (2011), "The patient satisfaction study in a multispecialty tertiary level hospital", PGIMER, India, Vol. 24 No. 1, Emerald Group Publishing Limited
- Ramani, K.V. (2014), "The India Healthcare Sector: Governance and Management Challenges", Advances in Social Sciences Research Journal, Vol. 1, No. 1.
- Rao, K.D., Peters, D.H. and Bandeen-Roche, K. (2006), "Towards patient-centered health services in India – a scale to measure patient perceptions of quality", International Journal for Quality in Healthcare, Vol. 18, pp. 414-21.
- Ritu Narang (2010), "Measuring perceived quality of healthcare services in India", International Journal of Healthcare Quality Assurance, Vol. 23 No. 2, Emerald Group Publishing Limited.
- Ritu Narang (2011), "Determining quality of public healthcare services in rural India", Clinical Governance: An International Journal, Vol. 16 No. 1, Emerald Group Publishing Limited.
- Rohini, R. and Mahadevappa, B. (2006), "Service quality in Bangalore hospitals – an empirical study", Journal of Services Research, Vol. 6, pp. 59-85.
- Sanjaya Singh Gaur, Yingzi Xu, Ali Quazi and Swathi Nandi (2011), "Relational impact of service providers' interaction behavior in healthcare", Managing Service Quality Vol. 21 No. 1, Emerald Group Publishing Limited
- Steele, David J., Barry Blackwell, Mary C. Gutman, and Thomas C. Jackson (1987), "The Activated Patient: A Review of the Active Patient Concept," Patient Education and Counseling, 10, 3-23.
- Suzana Markovic, Dina Lončarić and Damir Lončarić (2014), "Service Quality and Customer Satisfaction in the Healthcare Industry - Towards Health Tourism Market", Tourism & Hospitality Management, Vol. 20, No. 2, 2014.
- Verma, Sanjeev and Chaudhuri, Ranjan(2009), 'An study on effect of CRM on CS in service sector in India', Journal of Marketing & Communication, Vol. 5 No. 2.
- Zeithaml, V.A., Berry, L.L. and Parasuraman, A. (1993), "The nature and determinants of customer expectations of service", Journal of the Academy of Marketing Science, Vol. 21 No. 1.

Healthcare Services: An Overview

2.1. Healthcare Services in India with Special Reference to Rajasthan

Healthcare system of this 5,000 year old ancient civilization, having 325 languages spoken with 1652 dialects, is a mixed one. It has different systems of medicine like Allopathy, Homoeopathy, Ayurvedic, Unani etc. Healthcare sector of this 3.28 million square kilometre area, 29 states and 5 union territories rich country, is the responsibility of the state, local, central government and private sector. Healthcare has emerged as one of the largest service sectors in India which is dynamic and is constantly growing in the areas where it is most competent. The healthcare industry, as per the United Nations International Standard Industrial Classification [UN, 2008] consists of three categories, including Hospital Activities, mostly inpatient services, Medical and Dental Practice Activities, mostly out-patient services and other Human Health Activities, mostly non-medical such as nursing, physiotherapy services etc. Indian Healthcare sector includes government and private sector. But in terms of healthcare service delivery, the private healthcare sector plays a dominant role and is more concerned with the state. In Union territories the responsibility for healthcare services is of the Centre. The centre is also responsible for developing and monitoring national standards and regulations, linking the states with funding agencies and sponsoring numerous schemes for implementation by state governments.

The Indian healthcare industry is highly scattered and dominated by private players. It has been the centre of several successful entrepreneurial activities over last few decades. In the future, demand of healthcare services in India is expected to grow exponentially to serve the growing old age population, rising lifestyle related diseases, rising income and affordability, and increased penetration of health insurance (Dinodia 2012). Besides these, the Indian healthcare services providers are developing various innovative models to improve their performance and profitability by research viz introducing telemedicine, focusing on speciality centres and day care centres etc.

Although the Indian government continuously allocates nearly 1.3 percent of central budget funds to improve its public healthcare services, yet it is considerably lower than many other countries. The insufficient funds for the public sector healthcare services have not only resulted in the growth of private healthcare sector but also made its role vital in the Indian economy. In comparison to neighbouring countries such as Thailand, with highly state funded public health sector, the Malaysian government which maintains a balance between private and public healthcare (Ramesh &Wu, 2008), the Indian government spends around 5.5 per cent of its Gross Domestic Product (GDP) on healthcare services, which is considerably lower than other developing countries. It has led to the growth of private healthcare service providers particularly in urban areas. India falls under countries which spend the lowest on healthcare in the world- 171 out of 175 countries, in terms of public health spend (Economic Survey 2013).

According to a report, per capita healthcare expenditure in India is expected to be 160 billion in dollars by 2017(Figure -2.1).The main drivers for a robust future of the sector are a growing economy, lifestyle related health issues, improving healthcare insurance penetration, government initiatives and increasing disposable income. Still the profitability margins are expected to remain stressed for many players, given the time taken to stabilize operations and attain economies of scale.

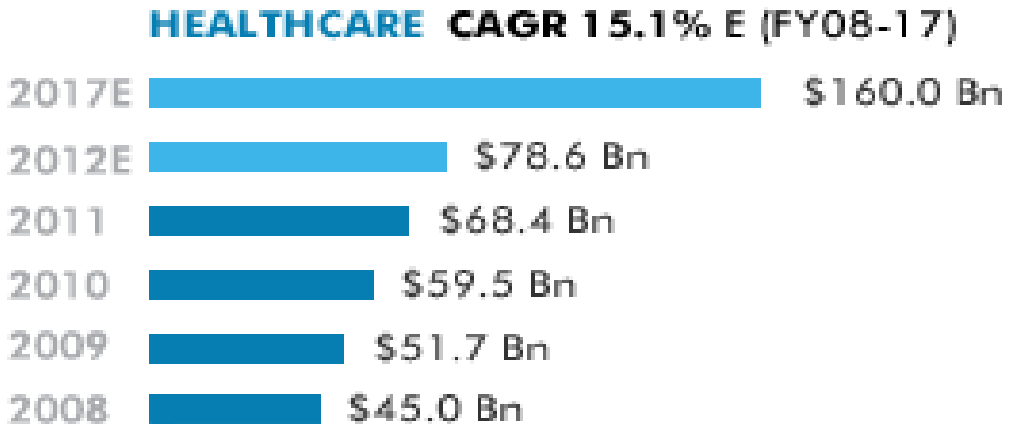


Figure 2.1: Per-capita Healthcare Expenditure in India, Source: www.infoshine.com

Indian healthcare system is a thriving and escalating sector in itself because of its vast and varied customers and their rising spending power that makes it very different from many other foreign countries. For a country of more than 1.10 billion people, it has just 203723 government- run healthcare services providers and most of those are lacking modern equipments, processes and medicine and run in the old obsolete pattern. The current ratio of doctors per persons is 6:10000, which should be 1:1800(WHO-2011). Unquestionably the current situation of the healthcare industry in India requires certain improvements and rapid development. Table -2.1 showing healthcare workforce statistics of India as compared to Global healthcare workforce statistics indicates that Indian healthcare industry requires a great number of trained qualified workforces and it undoubtedly has growth opportunities.

Table 2.1: Healthcare Workforce Statistics of India 2011

Healthcare Workforce	**Global Statistics**	**India Statistics**	
	Number	**Number**	**Density per 1000**
Physicians	9,171,877	660,801	0.6
Nursing & Midwifery Personnel	19379,771	1,430,555	1.3
Density	1,932,650	78,096	0.07
Pharmaceutical	2,587,043	578,179	0.52
Community Health Workforce	1,369,772	50,715	0.05
Total	**34,441,113**	**2,798,346**	

Source: WHO, 2011

Structure of the Healthcare System

The structure of the healthcare system in India is complex and wide ranging. It includes not only various types of providers but also different types of practices in different systems. The providers and facilities in India can be broadly classified by using three dimensions: ownership styles including public, not-for-profit, and for-profit; systems of medicine including allopathic, homeopathic, and traditional; and types of organization including hospitals, dispensaries, and clinics (Rahul Raizada 2013). These dimensions are interdependent and overlapping in nature. Indian healthcare services offer different services using several patterns and providers i.e.

- Public Health Sector
    - Primary Healthcare
        - Primary Health Centres
        - Sub-Centres
    - Hospitals / Health Centres
        - Community Health Centres
        - Rural Hospital
        - District Hospitals/Health Centres
        - Specialist Hospitals
        - Teaching Hospitals
    - Health Insurance Schemes
        - Employee State Insurance Scheme
        - Central Govt. Health Scheme
    - Other Agencies
        - Defence
        - Railways
- Private Sector
    - Private Hospitals.
    - Polyclinics.
    - Nursing Homes.
    - Dispensaries.

- General Practitioners.
- Clinics.

- Indigenous Systems Of Medicine
  - Ayurveda & Siddha.
  - Unani. & Homeopath.
  - Un-Registered Practitioners.
- Voluntary Health Agencies

The realization of the need for marketing in hospitals has gained momentum in recent years. Rapidly changing developments in the healthcare field will see more emphasis being placed on marketing of hospital services. As shown in the figure 2.2, Indian healthcare market has five major segments, where the hospital segment being the major segment of the healthcare industry.

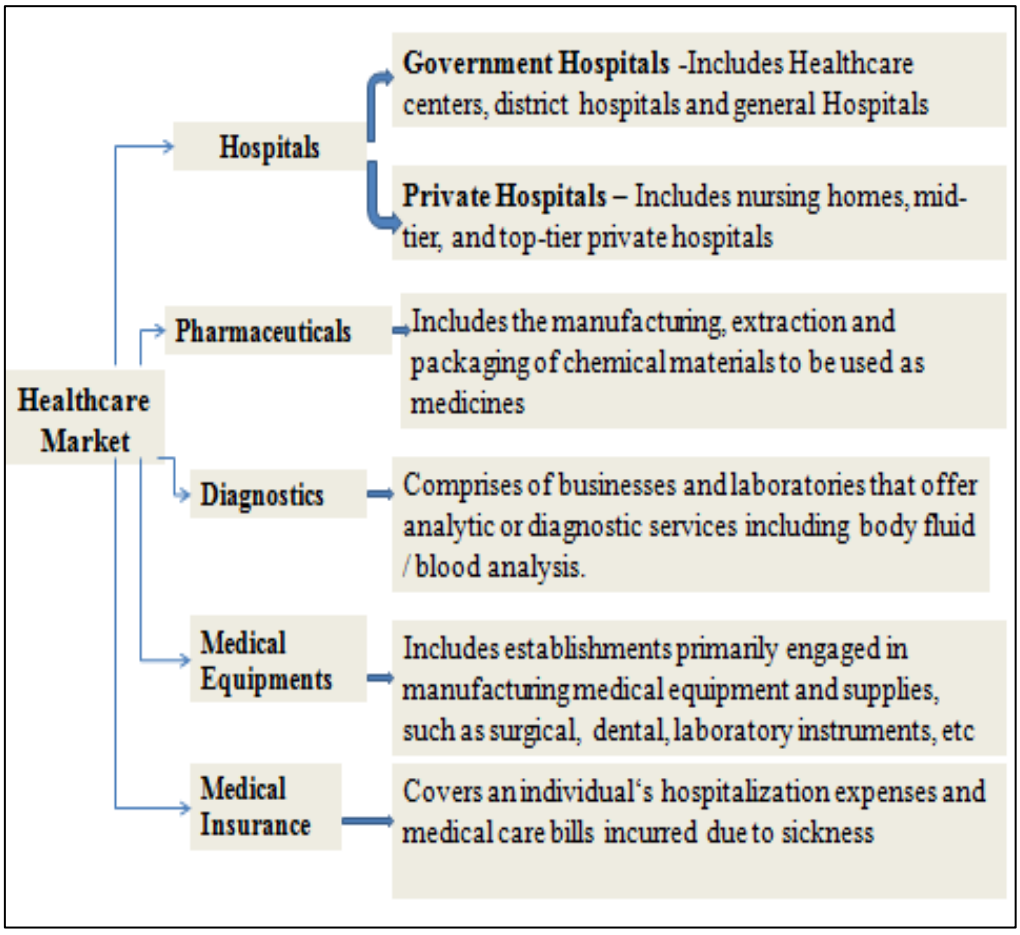


Figure 2.2: Healthcare Market Segments. Source: Dinodia 2012

The hospital segment is outpacing the overall industry growth with 71 percent market share. The size of the private hospital industry in India is estimated to be around US$25billion as per Assocham and growing at a rate of 20 percent as per CAGR. Figure 2.3 shows share of different segments in Indian healthcare sector.

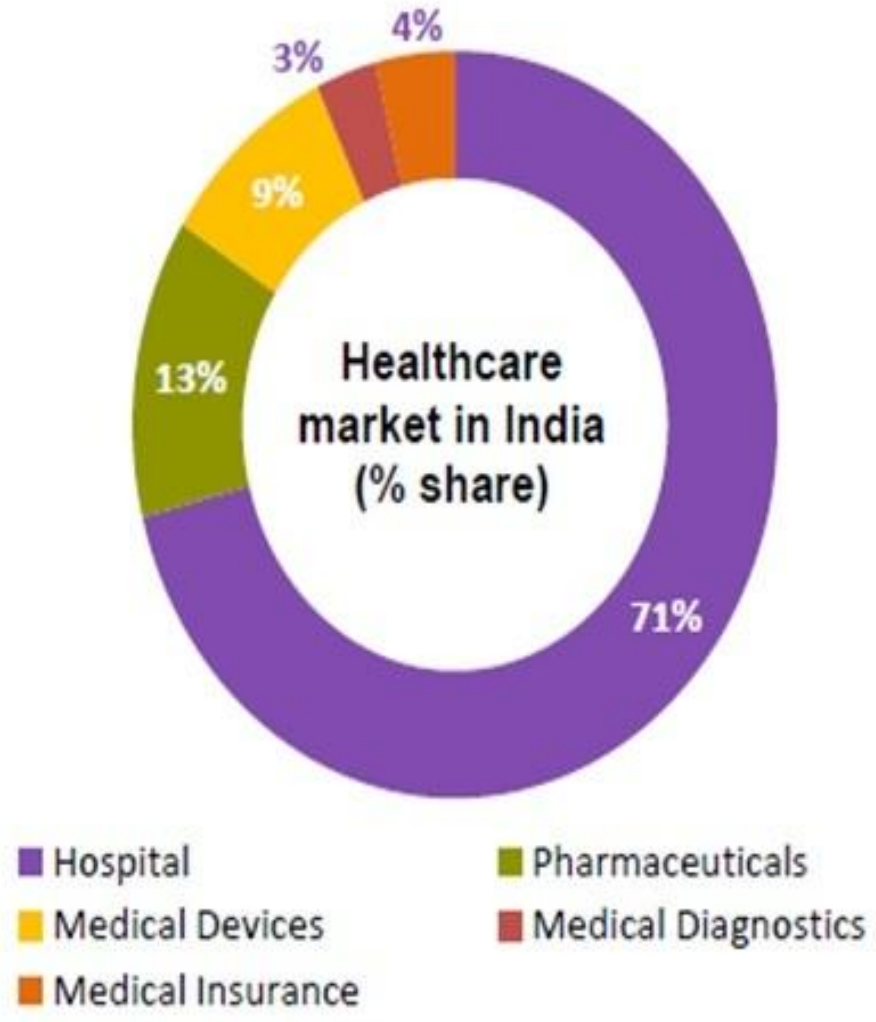


Figure 2.3- Share of Different Segments in Indian Healthcare Sector

The healthcare service delivery system of Rajasthan State is in bad shape. According to Professor V.S Vyas, Deputy Chairman of the state planning commission and member of the Economic Advisory Council to the Prime Minister, "Rajasthan is a laggard in healthcare. In none of the indicators of health

it is doing credible and at this level, it will not be able to meet the millennium development goal".

Though Rajasthan government provides several facilities like land allotment on highly concessional rate for any hospital or medical institutions, with concession from 25 percent to 100 percent of reserve prices of land, special deductions in tax payable, exemption from electricity duty on captive generation for a period of 7 years, 50 percent exemption in stamp duty and in conversion charge etc. for healthcare service providers yet Rajasthan has been witnessing a huge demand-supply gap in its service delivery, as public health care services are found to be inadequate in serving the huge population. It is the one of the least developed state of the country.

Table 2.2.: Rajasthan State Government Hospitals & Beds.

Hospitals	Number of Hospitals	Number of Beds
Rural Hospitals	347	11850
Urban Hospitals	128	20217
Total Hospitals	475	32067

2.2 Need and Significance of the Healthcare Services

Good health services are those which deliver effective, safe and good quality services. Availability, access, affordability and equity in service provision are important determinants of service quality. Improving access, coverage and quality of health services depends on the ways services are organized and managed. In India, the Ministry of Health and Family Welfare is the nodal ministry for healthcare service delivery. It focuses on prevention and cure of diseases and coordinates with other ministries to take care of physical, mental and social well-being needs for good health (Ramani,K.V.2014).

The needs of the population of India in the healthcare service sector are rapidly increasing and could not be met by the ill-equipped public sector in healthcare services. Inadequacy of public sector and the increased demand for quality healthcare services escalated by the rising spending power of middle class added to growth opportunities for private healthcare service providers. The private healthcare has developed as a strong support system of India's healthcare delivery system and achieved tremendous growth in the last few decades. It has a wide network of healthcare facilities and serves to the needs of both urban and rural populations and developed immensely to meet the increasing demands in this sector. The growth of this sector has been further triggered by a number of factors, including a liberalized economic policy, rapid influx of medical technology, growing deficits of public sector hospitals, and a rising middle income class (Rahul Raizada 2013). Factors like privatization of medical insurance medical tourism are making the market more attractive for international and national players. The Government has taken an initiative to institutionalize a mechanism of public-private partnerships (PPP) in healthcare, right up from the district level.

The realization of the need of understanding healthcare services customers has gained momentum amongst private healthcare services providers in recent years. Rapidly changing developments in the healthcare field will contribute more to understanding customers of healthcare services. Hospitals that fail to understand the importance of delivering customer satisfaction may be inviting possible extinction (Andaleeb, 1998).The success of a healthcare service provider will depend more and more on strategic planning based on timely and accurate information about its customers. Satisfying customers is vital to organizational health and well-being. Successful organizations focus on the customer to create sustainable competitive advantage. By adopting a customer orientation, the organization seeks to understand consumer needs and expectations then develop offerings which meet them (Rahul Raizada 2013).

Need of Understanding Customers' Expectations

Customers' expectations are perhaps the most difficult to define and predict. Research studies give that initial expectations set the thresholds that determine

whether disappointment, satisfaction or delight results from an encounter. Vroom (1964) suggests that expectations are "a momentary belief concerning the likelihood that a particular act will be followed by a particular outcome." Various authors point out that service expectations are multi-dimensional in nature including expectations about consumer roles and provider roles in the service encounter, the process of service delivery, alternatives/outcomes associated with the service encounter, service quality attributes. Verma, Sanjeev. et. al. (2009) write that expectations are complex and dynamic construct. They are shaped by experience and are influenced by the 'ratchet effect' well known in economic principle. Exceed a customer's expectations by adding a little extra and the customer is pleased and even delighted that the service provider went overboard. Add that same extra next time; the customer is merely satisfied.

Despite widespread support for the importance of expectations in service quality and customer satisfaction processes, few models of expectation formation have appeared in the literature (Oliver & Winer, 1987, Zeithaml et al. 1993). Expectations are formed by many uncontrollable factors, from the experience of customers with other companies and their advertising to a customer's psychological state at the time of service delivery etc. (Davidow & Uttal 1989). Fairly speaking, customers' expectations are as diverse as their education, values and experiences. According to Russ, Kenneth Rolland (2006) expectations in healthcare services context can be defined as cognitive beliefs about future roles, processes, alternatives/outcomes, and service quality related to the healthcare service encounter. Such beliefs involve fundamental uncertainty and the dependent upon psychological and behavioural antecedents and responses.

Patients' expectations and perceptions of healthcare surveys are thus an important tool that managers and administrators could utilize to evaluate and continuously monitor quality with the focus of tracing the weaker aspects of the healthcare delivery system. Researchers interested in customer expectations in the services suggest that in addition to exploring attribute type customer expectations such as reliability, responsiveness, assurance, empathy the tangibles (Zeithaml et al.1988), the dimensions of service customer expectations should be extended to

include - role, process and service delivery alternatives/outcomes expectations (Ross et al. 1987; Solomon et al. 1985).

Role Expectations are defined as, "Collection of cognitions – beliefs, subjective probabilities and elements of knowledge – which specify in relation to the complementary roles, the rights and duties, the appropriate conduct, for persons occupying a particular position." by (Serbrin and Allen 1968). Outcome expectations involve a consumers' belief that choosing a particular alternative will lead to a particular outcome (Bhandura 2005). Outcome expectations in healthcare context refer to the beliefs held by the consumer about the result or consequences associated with the alternative medical treatment or service options (Ross et al. 1987). Self-efficacy expectations represent an individual's assessment of his or her potential for having the ability to perform certain behaviour (Bhandura 2005). In the healthcare services context, self-efficacy refers to the consumer's ability or skill and willingness to participate in or contribute to service delivery (Manning & Wright 1983). Self-efficacy expectancies are based upon several sources of information: past experience, vicarious learning, verbal persuasion and physiological responding (Bhandura 1977).

In the service industry, quality definition tend to focus on meeting customer requirements and how well service providers meet their expectations, usually by an encounter between customer and service contact person. The service encounter involves exchange relationships which are based on activities and processes in addition to tangible aspects of the service setting, researchers suggest that consumers form expectations about the process of service delivery (Solomon et al. 1987). Customization via participation in the decision-making process concerning healthcare choices has been positively related to patient satisfaction (Drew, Salmon & Webb 1989). Understanding service user encounters from a consumer's perspective is highly relevant in healthcare services. Providers can establish a partnership rather than a paternalistic approach in their customers if expectations and perceptions differences are made clearer and addressed properly (Crosby 1979). The consumers may adopt various responses when experiencing anxiety in anticipation of a healthcare service encounter: information seeking in an effort to

reduce uncertainly, skill acquisition for achieving control or situation avoidance (Steele et. al. 1987). Professional service encounters consist of exchange relationships that are typically dyadic, human interactions which are goal oriented and involve role performances by both provider and consumer (Solomon et al. 1985). Role performances consist of learned and often ritualized sets or patterns of behaviour, which are thought to reside in consumer memory as "scripts" (Smith & Houston 1985).

According to Oliver (1980), in both the service and manufacturing industries, quality improvement is the key factor that effects customer satisfaction and increases purchase intention is determined by the perceived discrepancy between the actual and the desired situation and by perceptions of internal and external barriers that block the attainment of the desired situation. Moreover, if people do not attain their expectations, they will become dissatisfied. Researchers have found that Service Quality depends on individuals' perceptions (Schneider & White 2004) and their opinions can be employed for meaningful changes in healthcare system (Palmer 1991; Andaleeb 2000). Ignoring the patients' perspective may result in reducing reliability and significance of quality assessment. These value perceptions tend to impact the future purchase intentions of customers (Zeithaml et al. 1988) and healthcare utilization (Haddad et.al. 1998). In India the excessive emphasis on service coverage and inputs in the provision of healthcare services has ignored the needs of the people. Incorporating patients' views into quality assessment offers one way of making healthcare services more responsive to people's needs (Roa et al. 2006).

Service quality is defined as "a global judgment or attitude relating to the overall excellence or superiority of the service" (Zeithaml et. al.1988). One common way to conceptualize service quality as a customer's overall service quality evaluation is by applying a disconfirmation model – the gap between service expectations and performance (Cronin and Taylor, 1992; Zeithaml et al., 1991; Potter et al., 1994).If patients are viewed as consumers, a consumer model such as Expectancy- Disconfirmation model from marketing theories (Figure – 2.4) can be applied to healthcare provision.

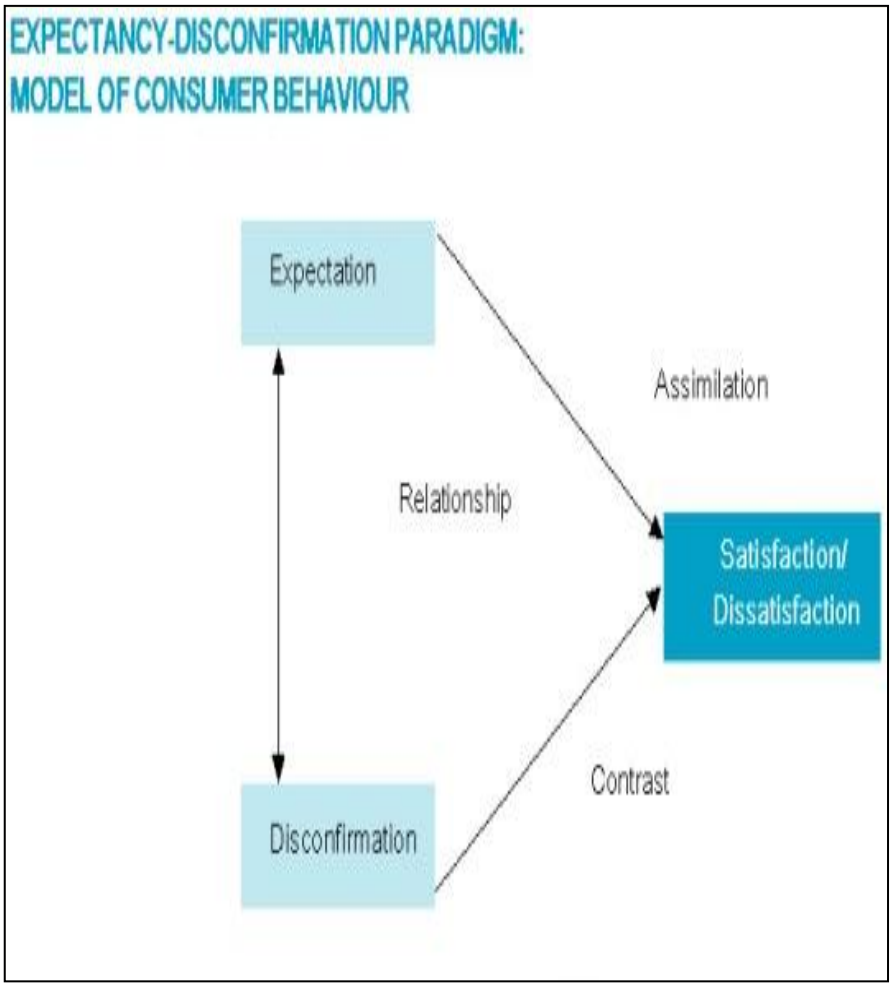


Figure 2.4: Model of Consumer Behaviour.

Perceived service quality results from comparisons by customers of expectations with their perceptions of service delivered by the suppliers (Zeithaml et al.1990). If expectations are greater than performance, then perceived quality is less than satisfactory and hence customer dissatisfaction occurs. Studies have shown that perceived quality of healthcare services has a greater influence on patients' behaviours than other factors such as access and cost. These behaviours include satisfaction, referrals, and usage (Andaleeb 1998).

Services unlike tangible products are produced and consumed at the same time in the presence of the customer and the service producer. The presence of the human element during the service delivery process greatly increases the probability of error on the part of employees and customers. This error is due to intangible

behavioural processes that cannot be easily monitored or controlled (Bowen, 1986). However, although a substantial amount of service quality research has focused on service customers' perceived service quality (Zeithaml et al., 1988; Zeithaml et al., 1991), relatively little attention has been paid to exploring the factors that have certain impact on customers' expectations in services.

As shown in the figure 2.5, in this model, the assumption is that patients have expectations when they visit a hospital. These expectations are formed due to prior experience or word-of-mouth communication, third party information or cultural milieu. The degree to which these expectations are fulfilled can be measured and there is a relationship. The higher the perceived fulfilment of expectation is, higher is the satisfaction. When fulfilment is lower than expectation, the lesser is the satisfaction. When expectations are low, they are easily fulfilled and satisfaction level is kept high and vice versa (Baron-Epel et al 200, Thompson, DA et al 1995).

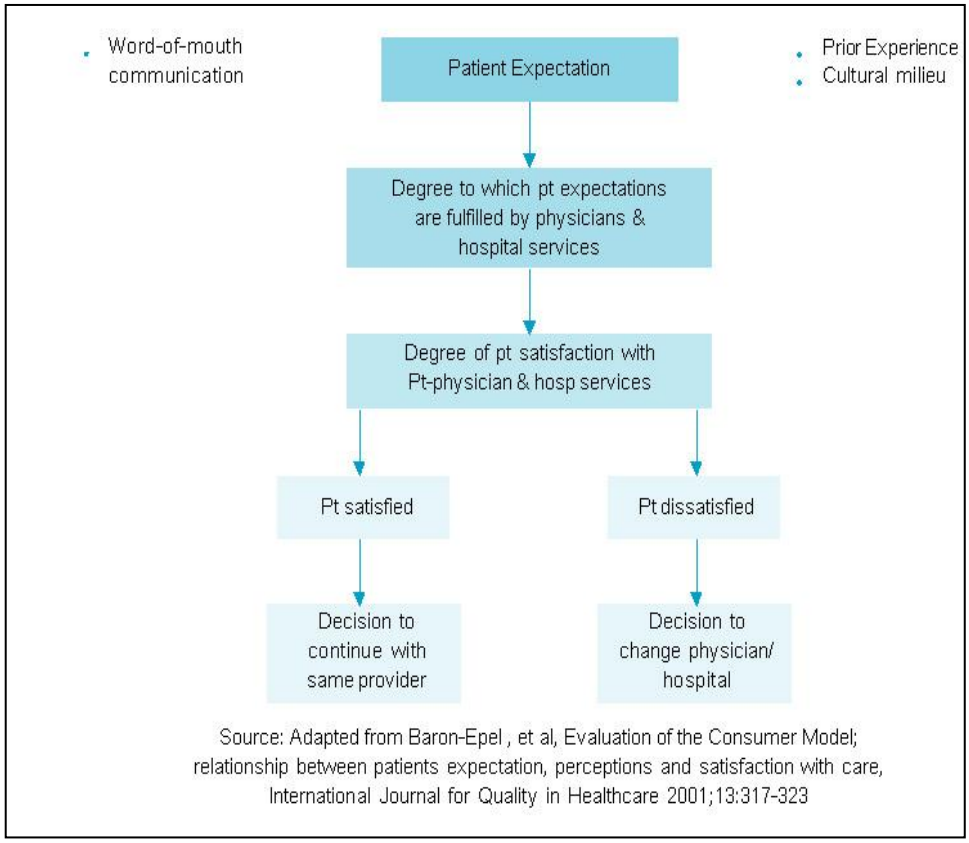


Figure 2.5: Model of Consumer Behaviour. Source: Baron-Epel et.al(2001)

There is increasing evidence that appropriately addressing consumerism in health care leads to improved health care outcomes. Expectations about the quality of care are linked to perceptions of care, and when patients' perceptions are positive their clinical experience and outcomes are more likely to be positive (Kenagy, JW et al 1999). In its 1999 report, "The State of Managed Care Quality," the US National Committee for Quality Assurance found that health plans with the highest satisfaction scores for the service aspects of health care also have the highest clinical quality scores. Addressing those service aspects of health care that consumers most readily appreciate, such as access, provider relationship, availability of information, and opportunity for participation can influence health care quality outcomes. Thus Consumer expectations are central to satisfaction studies. Although there is a general agreement about the influence of customer's expectations in overall service quality and customer satisfaction, considerable work remains to be done regarding the exact way this process takes place (Coye, 2004). It is assumed that consumers create expectations prior to their service experience against which performance is evaluated. Perception can disconfirm expectation (either for "worse" or "better") or confirm it ("neutral" comparison).

Understanding customers' expectations in service sector is vital for the customers' satisfaction. Adopting a more holistic view of customer expectation formation and satisfaction processes is especially significant and relevant in the services context. So the present study is chiefly concerned with finding those major factors related to healthcare services processes and physical environment, which have high influence on customer expectations in healthcare services. It is required to provide expected services in healthcare service sector which was a demand-driven service in India and was ignored for a long time.

2.3 Government Policy Regarding Healthcare Services in India

Good health services are those which deliver effective, safe and good quality services. Availability, access, affordability and equity in service provision are important determinants of service quality. Improving access, coverage and quality of health services depends on the ways services are organized and managed. In India, the Ministry of Health and Family Welfare

is the nodal ministry for healthcare service delivery. It focuses on prevention and cure of diseases and coordinates with other ministries to take care of physical, mental and social well-being needs for good health(Ramani,K.V.2014). After independence Indian healthcare sector struggled to gain strength at initial stage. Though the progress has many gaps, yet it has achieved an immense success in several areas. Some of the milestones reached in the healthcare sector are its Primary Health Centres 1952, Family Planning 1952, Green Revolution 1967-77, National Health Programmes From 1957, National Health Policy 1982, 2002, National Rural Health Mission 2005, and Public Health Foundation of India PHFI 2008. (NHP2012). The government has made great efforts through the vast institutional network and diverse human resource(Satpathy & Venkatesh 2006), comprising Accredited Social Health Activist(ASHA) workers, Ayurveda, Yoga and naturopathy, Unani, Siddha and Homeopathy (AYUSH) practitioners, midwives, nurses, doctors, pharmacists, community health workers, anganwadi workers, lab technicians to reduce the regional imbalances and inequities, and improve the reach of healthcare services to rural areas where the majority of the Indian population resides. Indian government contribute to the growth of this sector by making continuous efforts to facilitate its rural and urban areas equally by providing basic healthcare services at subsidized or economic rates. The five year plans reflected long term vision consistent with the international aspirations of which India has also been a signatory(Report, Ministry of Health,GOI). In line with National Health Policy 2002, the National Rural Health Mission (NRHM) was launched on 12th April 2005 with the objective of providing accessible, affordable and quality healthcare to the rural population. It sought to re-invigorate the system of health care delivery through a comprehensive outlook. It seeks to bring about architectural correction in the health systems by adopting the following main approaches- increasing involvement of communities in planning, management of healthcare facilities, improved programme management, flexible financing and provision of untied grants, decentralized planning and augmentation of human resources (Report, MHFW, GOI 2011).

The Government has had an active policy in the last 25 years of building a positive economic climate for the health care industry by taking measures like lower direct taxes, higher depreciation in medical equipment, income tax exemptions for 5 years for rural hospitals, custom duty exemptions for imported equipment that are lifesaving, income tax exemption for health insurance, and active engagement through publicly financed health insurance which now covers almost 27 percent of the population. As on 31stMarch, 2015, there were 153655 Sub Centres, 25308 Primary Health Centres (PHCs) and 5396 Community Health Centres (CHCs) functioning in the country. While the Sub Centres, PHCs and CHCs have increased in number in 2014-15, the current numbers are not sufficient to meet their population norm.

Other forms of assistance are preferential and subsidized allocation of land that has been acquired under the public acquisitions Act, and the subsidized education for medical, nursing and other paramedical professional graduating from government institutions and who constitute a significant proportion of the human resources that work for the private sector; and the provision for 100 percent FDI(NHP2015).

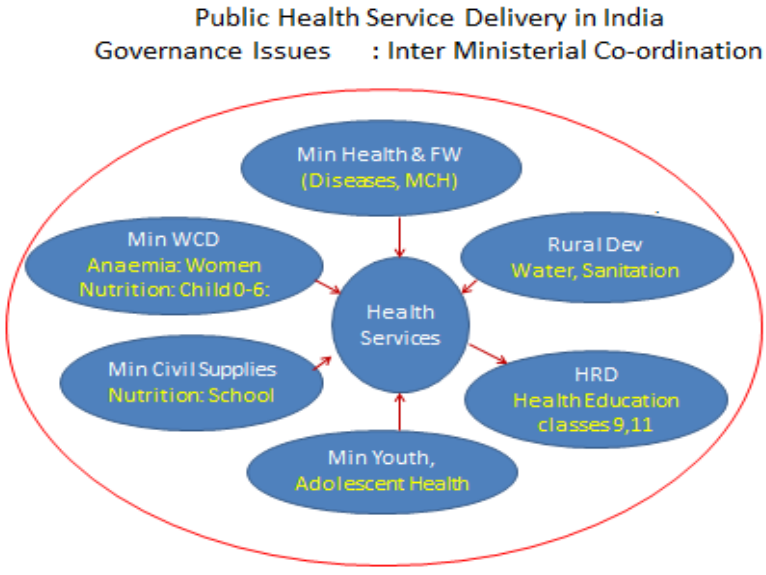


Figure 2.6: Public Healthcare Service Governance in India

Source: Ramani, KV 2014.

According to the constitution of India, the states cater and work for improvement of public health. The planning commission of the country provides the states a broad framework and the states develop their healthcare services infrastructure and facilities for medical education and research. Since the initiation of the planning process, the state and central governments have experienced a number of constraints in implementing the health programmes effectively. To overcome these hurdles in effective implementation, in 1982 the policy suggested a comprehensive approach towards the future development of healthcare services, recommending that the states design processes to encourage the practices by private medical professionals and investment by non-government agencies in developing curative healthcare centres. States were also suggested to facilitate organized financial and technical support to voluntary agencies active in the health field. The policy thrust of NHP in promoting the private and voluntary health curative services has been one important step towards providing clear direction to the states. These directions helped the state governments to foster their own strategies to utilize untapped resources and strengthen their ability to meet the growing health needs of people (NHP 2012).

NRHM has also played a vital role in strengthening state health systems. Some of the most noticeable attributes of this healthcare sector reform strategy are involvement of communities in planning and monitoring, provision of untied grants to the health facilities and the communities annually, placing a trained female health activist in each village for 1000 population known as Accredited Social Health Activist (ASHA) to act as a link between the public health system and the community and bottom-up planning etc. It not only focuses on infrastructure strengthening but also on providing human resources i.e. medically skilled/technical and managerial personnel. Integrating vertical Health & Family Welfare Programmes and their budget and bringing them on one horizontal platform, is its mission. It provides a platform for convergence with departments looking after determinants of health like safe water, sanitation and nutrition. Similarly, the Public Health Foundation of India (PHFl) is an initiative to redress the limited institutional capacity in India for strengthening training, research and policy development in the area of Public Health. It is a public private partnership

that was jointly developed through consultations with multiple institutions. It works as an independent foundation and adopts a broad, integrative approach to public health, making its efforts by taking into consideration Indian conditions and bearing relevance to countries facing similar challenges and concerns. It focuses on broad dimensions of public health that include promotional, preventive and therapeutic services, especially those which are frequently overlooked in policy planning as well as in popular understanding.

Recently the government increased its allocation to the healthcare sector in budgets and raised its expenditure from Rs 30702 crore to Rs 37330 crore, with main emphasis on the development of infrastructure status of the healthcare sector. It will certainly lead to the growth of this sector in general. It will also allow them to pay lower interest rates on loans, pay lesser taxes and increased funds for setting up projects, resulting in rising interest of people in this sector. Infrastructure status would allow people to set up more healthcare service providers, hire more doctors and also allow Foreign Direct Investment (FDI) in healthcare. It would also make the process of setting up standard medical educations easy increase public private partnership in the healthcare sector (Budget 2015).

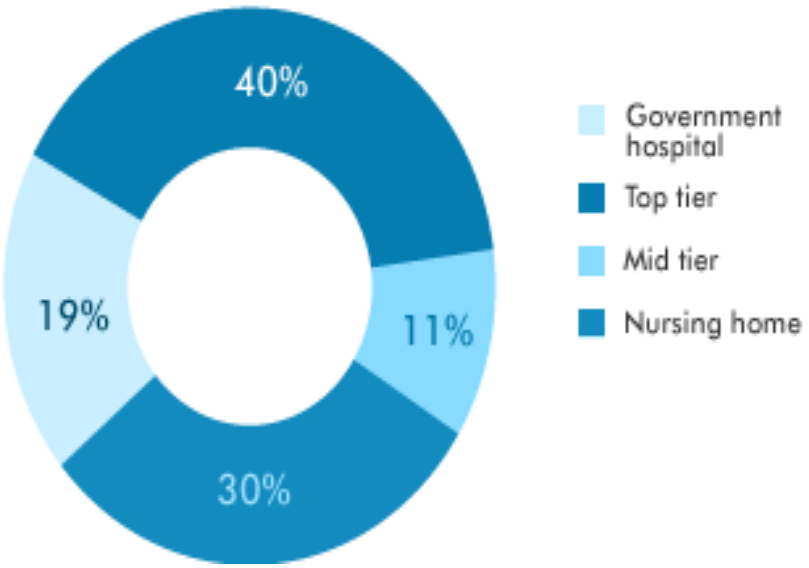


Figure 2.7: Shares in Healthcare Service Spending 2015,
Source:www.ibef.org.com

The Government has allocated Rs 16,500 million to AIIMS-like institutions and Rs 47,270 million for medical education, research and training. Additionally, given the landscape of talent availability in medical profession in India, the Government plans to make Ayureda, Unani, Siddha and Homeopathy (AYUSH) practitioners mainstream and allocated Rs 10,690 million for the same. An allocation of Rs. 6,58,670 million is made to the Ministry of Human Resource Development, which is an increase of 17 percent over the revised estimates of the current year. The government is taking several initiatives to bring better investments in the sector. There has been a focused approach to increase supply of all healthcare professionals, strengthen primary healthcare delivery by distributing incentives to government health workers and to increase health insurance coverage among the lower socio-economic population. Along with these, some initiatives by the government have been taken primarily to support private sector participation. There is a growing appreciation for the role that the private involvement may have in meeting public demand and the government is considering the use of PPP models to help improve infrastructure and healthcare provision (Budget 2015).

Healthcare Services Policies of Rajasthan

Due to the various initiatives and schemes implemented by the Rajasthan Government, a poised rise in the health index of the people in the state can be seen; still a lot is to be done. The Government is working with Public-Private-Partnership (PPP) to provide proper healthcare delivery to improve health conditions of women and child, and improving the nutrition status. Government is planning to run a Primary Health Centre (PHC) scheme, Haemodialysis in district hospitals, running CT scan and MRI machine, cancer care units in 17 district hospitals, IVF centre in district hospitals under PPP, the establishment of eight new blood banks and seven new blood component separation units in the state, construction of 100 new mortuaries and increasing beds etc. According to the Union Budget 2015-16, a National Institute of Pharmaceutical Education and Research will be setup in the state. Apart from all these initiatives the state government has also inculcated various other initiatives in the healthcare sector.

The private healthcare sector also plays a significant role in providing services in this sector as the people of Rajasthan continue to demand high-quality medical care. Furthermore, as per capita incomes increase, people increase the amount of money that they spend on private health care. In a state where 30% people lives at BPL level, the government needs to shake hand with NGO's or private sector to provide less expensive and quality health care facilities to the poorest of Rajasthan also (Bhat1999). Supporting government policy, high demand for quality health care facilities, failure of most of the public health care facilities to provide quality health care facility and a small chunk of resources provided by governments i.e. central and state both are some of the factors which show a high potential for private sector to establish (JainVK2011). The Rajasthan Government is running various schemes with the support of latest technology such as ASHA Soft, e-Upkaran, e-Sushrut, PCTS (Pregnancy, Child Tracking &Health Services Management System),IMPACT (Integrated System for Monitoring of PCPNDT Act), Saghan NirikshanAbhiyaan and CHRIS (Computerised Human Resource Information System). The Mukhya mantri Nishulk Dava Yojna (Chief Minister's free medicine) was also initiated by the Government under which patients could get free generic medicines from Designated Drug Distribution Centres (DDCs). Recently, the Government has also signed a Memorandum of Understanding (MoU) with Tata Trust and'Antara' Foundation to improve the health status of women and children. The Government of Rajasthan is aggressively promoting Medical and Healthcare sector, also offering an opportunity for the private sector to invest in medical and healthcare institutions (medical, dental and paramedical etc).In order to facilitate the establishment of quality health institutions within the framework of set standards and norms, the Government seeks participation from the private sector for qualitative healthcare delivery. The state has the potential of extending its tourism into medical tourism with its RIPS (Rajasthan Investment Promotion Scheme)-2014offering concessions and tax benefits for such investments. The state government aims to develop complementary and alternative medicine centers, super specialty healthcare institutions to ensure qualitative delivery of healthcare at pocket-friendly cost. The government also promotes development of centers of excellence for medical care, investment of

private sector in medical healthcare institutions and support units(diagnostic centres, blood banks and paramedical training institutions), and promotion of medical tourism (ehealth,2015). Bhamashah Health Insurance Scheme is a Budget Declaration for the year 2014-15. The scheme was visualized in order to provide quality healthcare to all National Food Security Scheme (NFSS) families and also to reduce the workload on government Health Institutions. Moreover, benefits like hassle free cash less treatment, improved quality of care with efficiency etc, are also envisaged. The scheme envisages benefits for the NFSS (National Food Security Scheme) beneficiaries and RSBY (Rashtriya Swasthya Bima Yojana) beneficiaries (as RSBY is proposed to be taken over by Health Department from Oct., 15). Implementation of the scheme shall be done through Bhamashah Cards, but till the time Bhamashah cards are issued, identity related to NFSS and RSBY shall also be honoured. Health Insurance Cover of Rs. 30,000/- for general illnesses and Rs. 3.00 lacs for critical illnesses shall be given to a family on floater basis in one year for IPD procedures. 7-day pre-hospitalisation and 15 days post hospitalization is covered under the scheme. Patients shall be benefitted for 1045 packages under General Illnesses, 500 packages under Critical Illnesses, and 170 packages reserved for Govt. Hospitals. These benefits shall be cashless for the beneficiaries and services shall be provided through public health institutions and empanelled private health institutions. All the government hospitals and more than 659 private hospitals are empanelled under it.

Health Care Services Regulations and Accreditations

In India, the central and state governments have formed various laws to protect and provide quality healthcare to its population. But no standard or norms are there for clinical processes that need to be followed by the healthcare services providers. Existing hospital needs to comply with several acts like the laws governing the commissioning of hospital, law governing storage/ sale of drugs and safe medication. The existing set of regulations related to health care can be broadly divided into three categories: Drugs Related, Practice Related and Facilities Related (Rahul Raizada 2013). These laws come under different ministries such as the Quality Council of India and its NAHB, which is under

Ministry of Commerce and Industry, the IPHS and Clinical Establishment Act which come under Ministry of Health and Family Welfare, BIS (Bureau of Indian Standards) and Consumer Protection Act are under Ministry of Consumer Affairs, Food and Public Distribution, whereas Medical Council of India is another governing body.

Besides that, the numbers of laws are to be considered by the healthcare services providers include an exhausting list under the mentioned categories like Drug Related acts i.e. Pharmacy Act, Dangerous Drugs Act, Drugs and Magic Remedies Act, Drugs Control Act, Drugs Price Order, Poisons Act, Medical and Toilet Preparation Act, Narcotic Drugs and Psychotropic Substances Act etc. Then there are Practice related laws like Consumer Protection Act, Indian Medical Council Act, Human Organ Transplant Act, Medical Termination of Pregnancy Pre-natal Diagnostic Techniques (Regulation and Prevention of Misuse) Act etc. and Facilities (including Technology, Manpower) Related acts i.e. Nursing Home Act, Nurses, Midwives and Health Visitors Act, Public Nuisance Act, Minimum Wage Act, Bureau of Indian Standards etc. Although these laws pertaining to health care in India are effective in protecting the interests of the patients, yet these laws are complex and controlled by different governing bodies which make their enforcement lax and their implementation complicated. It is need highly essential and required to regulate this rapidly growing sector as its efficiency and effectiveness directly affects the life of human beings. Ineffective implementation and enforcement of rules and regulations and considerable amount of resistance from various constituents of the private health care sector to accept in principle the applicability of certain regulation to their profession raise questions related the accountability of the private healthcare service providers.

In an effort to prescribe the minimum standards of facilities and services provided by a private healthcare service provider The Clinical Establishments (Registration and Regulation) Act, 2010 (the Act) has been enacted by the Central Government. It provides for registration and regulation of all clinical establishments in the country establishments from the public and private sectors, of all recognised systems of medicine including single doctor clinics, the only exception will be

establishments run by the Armed forces. Such efforts are mandatory and would bring desired quality standards and required control on the healthcare service providers.

Accreditation suggests credibility and trust; it is an age old mechanism of seeking a trustworthy establishment or provider to put oneself in its care. The Joint Commission International (JCI) of the USA, QHA Trent Accreditation of United Kingdom, Australian Council on Healthcare Standards International (ACHSI) of Australia, Quality Health New Zealand (QHNZ) of New Zealand and Accreditation Canada of Canada are some of the accrediting schemes for healthcare providers which strengthen healthcare systems and ensure benchmarking in this sector. In India, National Accreditation Board for Hospitals & Healthcare Providers (NABH) is a constituent board of Quality Council of India, set up to establish and operate accreditation programme for healthcare organisations. The board is structured to cater to much desired needs of the consumers and to set benchmarks for progress of health industry. Accreditation of healthcare facilities, taking quality promotion initiatives like Safe-I, Nursing Excellence, Laboratory certification programs etc. and the IEC activities including public lecture, advertisement, workshops/ seminars, education and training for quality & patient safety, recognition by endorsement of various healthcare quality courses/ workshops, all such activities are taken by the board to improve standards of healthcare services. The board while being supported by all stakeholders including industry, consumers, government, has complete functional autonomy in its operation. It is equivalent to JCI and other International standards. Its standards have been accredited by ISQUA which is the umbrella organization responsible for accrediting the Joint Commission International (JCI) accreditation scheme in the USA and Accreditation Canada, as well as accreditation organizations in the United Kingdom and Australia. ISQUA is the apex body accrediting the accreditations hence NABH accreditation becomes at par with the world's most leading hospital accreditations. It is ensuring to the healthcare customers that Indian accreditation body is following international quality norms, but surprisingly very few private healthcare providers have been accredited by

NABH so far. It should be made essential for the healthcare service providers for getting accreditation and maintaining these standards.

Along with it, Indian Confederation for Healthcare Accreditation (ICHA) is a professionally owned and driven not-for-profit organisation having trust, transparency and transactions as its core values. It is incorporated as a Section 25 Company. The basic aim of it is to strengthen our health system using modified accreditation as a tool. Addressing comprehensively the complexities of health system requires a collaborative team effort of all stakeholders. ICHA is the national multi-stakeholder confederation of national associations/ institutions for establishing validated excellence in healthcare in line with similar bodies in all developed countries. It comprises all stakeholder groups viz. Providers, Receivers and users, Payers and funders and Educators and regulators.

2.4 Changing Dimensions of Healthcare Services

According to a report of Equentis Capital, the healthcare system of this country is developing rapidly and it continues to expand its coverage, services and spending in both the public as well as private sectors. The factors behind the growth are raising incomes, easier access to high-quality healthcare facilities and greater awareness of personal health and hygiene. The requirements of Indian healthcare customers are changing very quickly as they are growing more alert and careful of their health needs. Now the customers of healthcare services demand quick response, less waiting times, and above all better approachability of the healthcare unit. For them the billing and price is an important factor but it is not at the top of their priority list. Now insurance reach is getting stronger especially amongst customers visiting an urban hospital. It brings tremendous opportunities for existing healthcare service providers. This is the window to the future of healthcare, which gives great opportunities and possibilities to re-organize and re-vitalize overall healthcare sector in this developing country. There is room to increase efficiency and develop effectiveness of this sector, is a fact which is known to everyone. The WHO recommends four beds per thousand populations and according to this India has a deficit of approximate 30 lacs beds currently. Therefore, in near future India would need nearly 12000 hospitals with a capacity

of 250 beds on an average. This would result in a great rise in the major private sector healthcare providers in this industry.

With changing government policy with its thrust on better quality in healthcare, there is increasing awareness among the hospitals to provide quality healthcare. They are striving for the accreditation and for fulfilling other quality measures and waking up to the long due need for better quality in this sector of this country. According to a credit rating agency the demand for healthcare services is going to rise tremendously due to various factors shown in the figure 2.8. The changing scenario will bring new dimensions for the expansion of healthcare services.

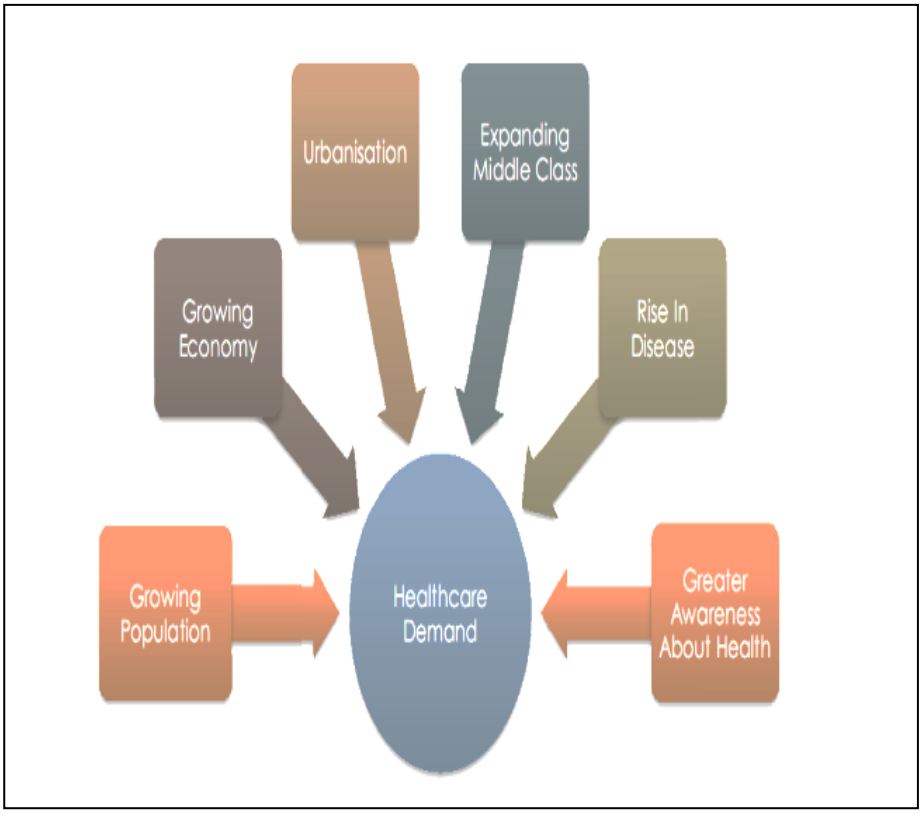


Figure 2.8: Factors Affecting Healthcare Demand. Source: ONICRA, December 2013

Huge population of India would provide a great opportunity to this sector like other sectors viz telecom and insurance. Each sector is expected to observe a growth because of increase in income of every family due to the willingness of every individual to work and actively contribute to the earnings of the family.

Healthcare sector will especially get benefited due to the easy availability of financial assistance to the individuals with the reach of health insurance to almost 20 percent of the population in the next few years. Along with this better health schemes offered by the government to the poor like Arogyashree, ASHA, e-Aushadhi etc. will contribute to the growth of this sector. Increasing trend of medical tourism which is supported by the Indian tourism industry, would also contribute to the development of this sector. It will lead to demand of better quality services with more facilities. An immense growth in the private healthcare service providers is imminent because of the government support to the private partnership in this growing sector. The government has realised that to provide quality healthcare services to its huge population, it is highly needed to work with private healthcare service providers.

Though the future trends are quite promising yet a number of challenges are there before this industry. Increasing cost of land and medical equipments is leading to a rise in the total project cost, which will lead to a proportionate rise in treatment cost. It is an undesirable situation for a developing country like India where there is a need of cost effective healthcare. According to Dr. Pratap Reddy of Apollo Group, the fast expanding domestic healthcare industry is the third largest employer but it is facing a severe shortage of manpower. As per Ministry of Health, there is a shortage of approximately half a million doctor, a million nurses in the next five years. It will also impose a challenge before the healthcare service provider especially to curb high patient care cost while maintaining a balance with the high salaries demanded by the skilled and qualified professionals and trained staff members. The healthcare sector needs to adopt changes in its traditional model i.e. being run as an un-organized sector to acquire operational efficiencies and better profitability. Taking adequate initiatives and innovative steps would be a great challenge before this industry.

In the near future, in healthcare services a great out-of-the-box thinking is expected. Major improvements will be observed in the way healthcare services are delivered. In the coming year healthcare services providers will become more quality conscious. Reputed hospitals like Wadia and Masina in central and south

Mumbai and other across the country are taking a quality gap analysis and streamlining their operations and management to bring about better sustainability. Even the tier 2 or 3 cities are suddenly becoming attractive to the healthcare service providers due to increasing disposable income among Indian families across the countries and lack of quality infrastructure in these locations. Other encouraging changes which are taking place in the fast growing industry are Focus on medical tourism, development of health cities, joint ventures for a quick entry in the target area, outsourcing of the non-core operational aspects including laundry, kitchen, housekeeping, security along with revenue-centric departments like imaging laboratory and pharmacy. All these will contribute a great rise in the growth of this sector.

Beyond this increasing awareness among customers encourages them to take specialist's second opinion, which in turn affects the rising need of quality healthcare service providers. The healthcare insurance sector is open to private sector and growing rapidly. It will bring a demand for better quality care from the healthcare customers with preference to professionalization and facilities. With growth in the providers, there will be a rise in expectations of the customers from their healthcare service providers. The government is also improving its own healthcare service infrastructure and striving to get NABH accreditation for public units. It will bring growth in private healthcare and in PPP projects in this sector.

With the personal disposable income rising by more than 70 per cent and over all income of the population rising, the demand for better quality in healthcare is bound to exponentially rise. With the CGHS mandating the requirement of NABH for all reimbursements, and hundreds of hospitals applying to get the coveted ISQua approved NABH-the mark of international healthcare quality, this is just the beginning says Dr. Akash S Rajpal, Head, Consultancy Services, HOSMAC India Pvt. Ltd. Thus in future with the increase in population and continuous endeavours made by public and private sector to bridge the gap of number of beds, many quality healthcare units are expected to come up. It will also give rise to the need of unconventional model of healthcare delivery by way of single specialty centres, life style units, and retails clinics. In order to sustain as

well as effectively compete with these other players, the Indian players need to improve their quality and standardize their processes with their competitors. Implementing some of the guidelines enunciated in business excellence frameworks like Malcolm Baldrige National Quality Award (MBNQA, 2007) and accreditation requirements for healthcare industry like Joint Commission International (JCI, 2007), would aid such efforts(Padma,P.et.al.2010). It becomes imperative to understand where and how to improve functional aspects of service provided. The state of healthcare delivery in India is well summarized by the World Bank that reported: "a detailed survey of the knowledge of medical practitioners for treating five common conditions in Delhi found that the average doctor in a public primary health centre has around a 50-50 chance of recommending a harmful treatment".

Apparently in future the consumers will have options of several providers, so they would demand better services with greater operational efficiencies and with it there will be a rapid rise in the customer expectations. This imminent growth in expectations will be mainly in two areas of healthcare society from its delivering processes and its physical environment. Private healthcare service provider will gain competency by specially concentrating on their processes and providing ambience and exclusivity in environment.

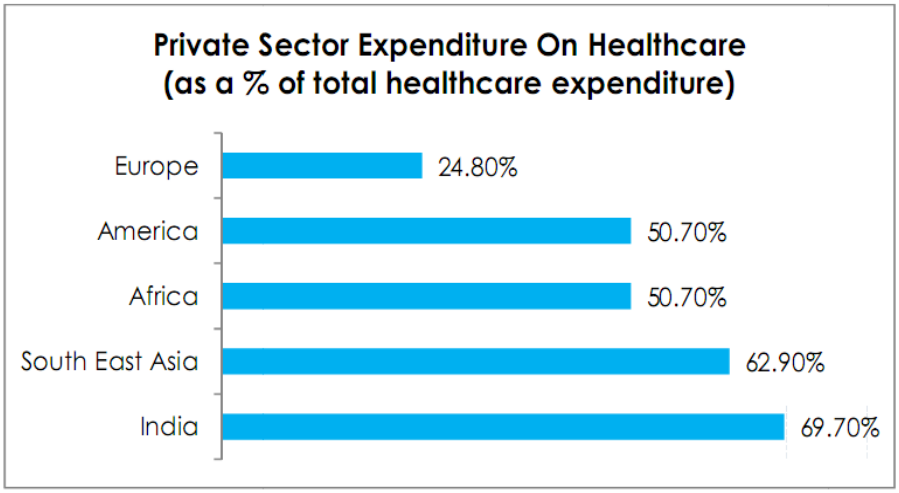
2.5 Role of Private Sector in Healthcare Services

A considerable portion of healthcare services in India is managed & provided by the private sector which consists of the "not-for-profit" and the 'for-profit' health sectors. The health sector which runs not-for-profit includes various health services provided by Non-Government Organisations (NGO's), charitable institutions, missions, trusts, etc. Health care sector consists of various types of practitioners and institutions are included in the for-profit health. Private sector hospitals have two classes, one run by trust, charity and religions organizations and their objective is not profit earning, other class of hospital is large-sized, multi- or single-speciality service provides, using relatively high technology, and their objective is profit earning(Srinivasan, A.V. 2009).

In India Private Healthcare service providers are preferred to the public service providers because of their quality and approachability along with their emphasis on secondary and tertiary care. The private sector today provides nearly 80 percent of outpatient care and about 60 percent of inpatient care. The government-run facilities have inadequate equipment and poor quality, and as a result private players can capitalize on this opportunity. The private sector is expected to contribute 80-85 percent of the 86 billion US$ investments required in healthcare till 2025 (Dinodia 2012).

More than 70% (72% in rural and 79% in urban) spells of ailment were treated in the private sector (consisting of private doctors, nursing homes, private hospitals, charitable institutions, etc.). In treating the in-patients, private institutions dominated both the rural (58%) and urban areas (68%). As high as 86% of rural population and 82% of urban population were not covered under any scheme of health expenditure support.

Though private health care services providers are frequently criticized for over-charging their customers and for the unethical practices followed by the staff, yet, they contribute more than 67 percent of total 30,000 healthcare service providers, 33 percent of 1,000,000 beds and 60 percent of 5 million doctors (Figure-2.9).



Source: World Health Statistics 2012, published by World Health Organisation (WHO)

Figure 2.9: Spending of Private Healthcare Providers, Source:WHO Statistics

By NSSO estimates as much as 40 percent of the private care is likely to be by informal unqualified providers. 72 percent of all private health care enterprises are own-account-enterprises (OAF's), which are house-hold run businesses providing health services. In terms of comparative efficiency, public sector is value for money as it accounts (based on the NSSO 60th round) for less than 30 percent of total expenditure, but provides for about 20 percent of outpatient care and 40 percent of in-patient care. This same expenditure also pays for 60 percent of end-of-life care (RGI estimates on hospital mortality), and almost 100 percent of preventive and promotive care and a substantial part of medical and nursing education as well (National Health Policy 2015).

References

- Amit Mookim, article (2013) on the Union Budget 2013.
- Andaleeb, S.S. (1998), "Determinants of customer satisfaction with hospitals: a managerial model", International Journal of Health Care Quality Assurance, Vol. 11 No. 6.
- Baron-Epel O, Dushenat M, Freidman N (2001), Evaluation of the Consumer Model; relationship between patients expectation, perceptions and satisfaction with care, International Journal for Quality in Healthcare.
- Bedi, Dr Sona, Dr Sanjay Arya, Prof RK Sarma (2004), Patient Expectation Survey - A Relevant Marketing Tool for Hospitals, Journal of the Academy of Hospital Administration, Vol. 16.
- Bandura, A. (1977), "Toward a Unifying Theory of Behavioral Change," Psychological Review, 84.
- Bandura, A. (2005), 'The Primacy of Self-Regulation in Health Promotion', Applied Psychology: An International Review, 54(2).
- Cronin, J. and Taylor, A. (1992), "Measuring service quality: a re-examination and extension", Journal of Marketing, Vol. 56.
- Coye, R.W. (2004), "Managing customer expectations in the service encounter", International Journal of Service Industry Management, Vol. 15 No. 1.
- Damani, Gaurang (2013), The problems of healthcare system in India and how it can be overcome, http://www.moneylife.in/article/
- Davidow, William H. and Bro Uttal (1989), "Service Companies: Focus or Falter," Harvard Business Review, 67, 77-85.
- Drew, N.C., P. Salmon, and L. Webb (1989), Mothers', Midwives' and Obstetricians' Views on the Features of Obstetric Care which Influence Satisfaction with Childbirth', British Journal of Obstetrics and Gynecology.
- Haddad, S., Fournier, P. and Potvin, L. (1998), "Measuring lay people's perceptions of the quality of primary health care services in developing countries. Validation of a 20-item scale", International Journal for Quality in Health Care, Vol. 10 No. 3.

- http://articles.economictimes.indiatimes.com/2013-12-02/news/
- http://ehealth.eletsonline.com/2015/05/healthcare-in-rajasthan/sthash.dI6fnGnF.dpuf.
- http://www.healthliteracy.in/wcm/node/2
- http://healthsummit.eletsonline.com/2015/Rajasthan/healthcare-in-rajasthan/
- http://www.indianmba.com/Occasional_Papers/OP169/op169.html.
- http:// www.searo.who.int/EN/Section313/Section1519_10852.htm
- http://www.thehindubusinessline.com/economy/budget/healthcare-needs-a-critical-push/article6925795.ece
- https://www.gita.org.in/Attachments/Reports/AHPI-Healthcare-India.pdf
- Jain, V. K. (2013), http://www.indianmba.com/Occasional_Papers/OP169/op169.html.
- Kenagy JW, Berwick DM, Shore MF (1999), Service quality in health care. JAMA.
- Kenneth Randall Russ (2006), Consumer expectation formation in health care services: a psycho-social model, for the degree of Doctor of Philosophy, B.S., Louisiana State University.
- Lewis, R.C. and Booms, B.H. (1983), “The marketing aspects of service quality”, American Marketing Association, Chicago, IL.
- Manning, Martha M. and Thomas L. Wright (1983), "Self-Efficacy Expectancies, Outcome Expectancies, and the Persistence of Pain Control in Childbirth," Journal of Personality and Social Psychology, 45, 2.
- National Health Profile 2010-11.
- Oliver, Richard L., and Russell S. Winer (1987), "A Framework for the Formation and Structure of Consumer Expectations: Review and Propositions," Journal of Economic Psychology.
- Palmer, R.H. (1991), “Considerations in defining quality of care”, in Palmer, R.H. (Ed.), Striving for Quality in Health Care: An Inquiry into Policy and Practice, Health Administration Press, Ann Arbor, MI.
- Potter, C., Morgan, P. and Thompson, A. (1994), “Continuous quality improvement in an acute hospital: a report of an action research project in three

hospital departments", International Journal of Health Care Quality Assurance, Vol. 7 No. 1.

- Ramani, K.V. (2014), "The India Healthcare Sector: Governance and Management Challenges", Advances in Social Sciences Research Journal, Vol. 1, No. 1.
- Ramesh, M. and Wu, X. (2008), "Realigning public and private healthcare in southeast Asia", The Pacific Review, Vol. 21 No. 2.
- Rao, K.D., Peters, D.H. and Bandeen-Roche, K. (2006), "Towards Patient-centred health services in India – a scale to measure patients perception of quality", International Journal for Quality in Health Care, Vol. 18 No. 6.
- Ross, Caroline K., Gayle Frommelt, Lisa Hazelwood, and Rowland W. Change (1987), "The Role of Expectations in Patient Satisfaction with Medical Care," Journal of Health Care Marketing.
- Schneider, B. and White, S. (2004), Service Quality: Research Perspectives, Sage Publications, Thousand Oaks, CA.
- Sarbin, Theodore R. and Vernon L. Allen (1968), "Role Theory," in the Handbook of Social Psychology, 2nd ed., Vol. 1, Gardner Lindsey and Elliot Aronson, Reading, MA: Addison-Wesley Publishing Company.
- Steele, David J., Barry Blackwell, Mary C. Gutman, and Thomas C. Jackson (1987), "The Activated Patient: A Review of the Active Patient Concept," Patient Education and Counseling.
- Smith, Ruth Ann and Michael J. Houston (1985), "A Psychometric Assessment of Measures of Scripts in Consumer Memory," Journal of Consumer Research, 12 (September).
- Solomon, Michael R. and Surprenant, Carol F. and (1987), "Prediction and Personalization in the Service Encounter," Journal of Marketing, 51 (April).
- Thompson DA, Yarnold PR (1995), Relating Patient Satisfaction to Waiting Time Perceptions and Expectations: The Disconfirmation Paradigm , Acad Emerg Med..
- UN, 2008, International Standards Industrial Classification of all Economic Activities. Statistical papers, unstats.un.org/unsd/publication/ seriesm_4rev4e.pdf.

- V. Srinivasan, Managing a Modern Hospital by Sage Publications.
- Verma, Sanjeev and Chaudhuri, Ranjan(2009), 'An study on effect of CRM on CS in service sector in India', Journal of Marketing & Communication, ISSN-09732330.
- Vroom, Victor H. (1964), Work and Motivation. New York: Wiley.
- WHO 2011, World Health Statistics 2011, Health workforce, infrastructure and essential medicines.
- World Bank. Challenges and World Bank Support for India's Health Sector: http://www.worldbank.org.in
- Zeithaml, V.A., Parasuraman, A. and Berry, L.L. (1988), "SERVQUAL: a multiple-item scale for measuring consumer perceptions of service quality", Journal of Retailing, Vol. 64 No. 1.
- Zeithaml, Valerie A., Parasuraman, A. & Berry, Leonard L. (1990) Delivering Quality Service, The Free Press, New York, N.Y
- Zeithaml, Valerie A., Parasuraman, A. & Berry, Leonard L. (1991), "Understanding customer expectations of service", Sloan Management Review, Vol. 32.
- Zeithaml, Valerie A., Berry, Leonard L. & Parasuraman, A. (1996) "The behavioral consequences of service quality," Journal of Marketing, vol. 60(2).
- Zeithaml, Valerie A. & Bitner, Mary J. (1996) Services Marketing, McGraw-Hill, New York, N.Y
- Zeithaml, Valerie A. & Bitner, Mary J. (2000) Services Marketing: Integrating customer focus across the firm, 2nd ed., Irwin/ McGraw-Hill, Boston, M.A

Profiles of Selected Private Healthcare Units of Rajasthan

3.1. Major Private Healthcare Service Providers

Major Private healthcare services providers in India include Fortis, Apollo, Wockhardt, Care Group, Kovai Medical Center and Healtcare services provider and Narayana groups.

Apollo Healtcare services providers has been the forerunner of integrated healthcare in Asia. It has acquired a position of strength at every touch point of the healthcare delivery chain. It provides health insurance services, global projects consultancy, 15 academic institutions and a research foundation with a focus on global clinical trials, epidemiological studies, stem-cell and genetic research. The group adopted clinical excellence as an industry standard and has international quality accreditation like the JCI and developed centres of excellence in cardiac sciences, orthopaedics, neurosciences, emergency care, cancer treatment and organ transplantation. It has over 10,000 beds across 61 healtcare services providers, more than 1500 pharmacies, over 100 primary care and diagnostic clinics, 115 telemedicine units across nine countries.

Recently, it has started Apollo Spectra Hospitals in C-Scheme, Jaipur, with a capacity of 35 beds. The hospital offers superlative care in wide range of services including surgical specialties like Bariatric Surgery, ENT, General & Laparoscopic Surgery, Orthopaedics & Spine, Urology, Varicose Veins, to name a few. It is spread over 18500 sq. ft. area and offers quality healthcare supported by more than 120 healthcare professionals, including 60 specialist consultants. It has 4 beds dedicated to critical care services, 4 ultra-modern modular OTs, state-of-the-art rehabilitation unit, in-house pharmacy, and in-patients' family waiting area and provides benchmarking healthcare services including Consultations, Health Checks, Radiology, Pathology Lab services, Pharmacy, Surgeries, Physiotherapy & Rehabilitation. (http://apollohealtcare services providersnashik.com/ Company _ Overview).

Fortis Healthcare Ltd, India, which started its first healtcare services provider at Punjab, Mohali in 2001 is a multi-speciality healthcare service provider in Asia,

providing primary care, diagnostics, day care speciality and healtcare services providers, with an asset base in seven countries. The healthcare verticals of the company primarily comprise healtcare services providers, diagnostics and day care specialty facilities.

Currently, the company operates its healthcare delivery services in India, Dubai, Mauritius and Sri Lanka with 76 healtcare services providers, over 600 primary care centres, 191 day care specialty centres, over 230 diagnostic centres a talent pool of over 23,000 people. It is leading the way through diversification and is driven by the vision of becoming a global leader in the integrated healthcare delivery space and the larger purpose of saving and enriching lives through clinical excellence.

In a global study of the 30 most technologically advanced healtcare services providers in the world, its flagship, the Fortis Memorial Research Institute' (FMRI), was ranked No.2, by 'topmastersinhealthcare.com, and placed ahead of many other outstanding medical institutions in the world.

The hospital is also empanelled hospital under renowned Bhamashah Yogna of Rajasthan government and provide services like Anaesthesiology, Cardiac Anaesthesia, Cardiology(invasive and Non invasive) Cardiothoracic Surgery, Clinical Psychology, Critical Care (Adult, Paediatrics, Neonate), Dentistry, Ear Nose andThorat, Endocrine Surgery, Endocrinology, Gastroenterology (Adult and Pediatric), General Surgery, Gl Surgery & Bariatric Surgery, Hand &Micro Surgery, lnternal Medicine, Medical Oncology, Nephrology including Dialysis, Neurology (Adult & Paediatrics) Neurosurg€ry, Obstetrics & Gynaecology, including infertility, Ophthalmology, Orthopaedic (lncluding Joint Replacement Surgeries), Paediatric Cardiology, Paediatric Surgery, Paediatrics and Neonatology, Plastic and Cosmetic Surgery, Psychiatry (Only OPD), Renal Transplant, Respiratory Medicine, Rheumatology, Skin & Venereal Diseases, Sports lnjury Management, Surgical Oncology, Urology and all other available facilities.

Figure 3.1: Fortis JK Hospital, Udaipur.

Source- https://www.healthcare services providerkhoj.com

Recently, a 201 bed multi- speciality hospital with all modern medical facilities, Fortis JK Hospital was inaugurated in Shobhagpura on Wednesday. It will have dual level critical care monitoring through State of Art Critinext E-ICU system. A flat panel digital cathlab has been installed through which cardio-vascular and neuro-vascular surgeries will now be possible. An Emergency and Critical care unit has also been established along with cardiology, neurology, gastrology, orthopaedics and joint replacement, gynaecology, child care, renal sciences and endocrinology services. (http://udaipurtimes.com/inauguration-of-fortis-jk-hospital-excellent-health-care-facilities-for-people)
(http://www.fortishealthcare.com).

The CARE Healtcare services providers Group, founded in 1997 by Dr. B. Soma Raju and a team of India's leading cardiologists, has developed Asia's first indigenous coronary stent-the 'Kalam-Raju stent' and is a multispecialty healthcare provider, with 13 healtcare services providers serving seven cities across six states of India. The regional leader in tertiary care in South/Central India and among the top five pan-Indian healtcare services provider chains, the Group delivers comprehensive care and strives to make healthcare affordable for all, while ensuring clinical outcomes at par with international standards. It offers comprehensive customer-focused care, with advance and well-maintained infrastructure, medical equipment and facilities, supported by well-trained and experienced doctors and professional support staff (http://www.carehealtcare services providers.com).

Narayana Health is one of India's largest and the most economical healthcare service providers. It started in July 19, 2000 at Bangalore as a private limited company and has evolved as India's second largest healthcare operator. It has now become a corporate, multi speciality healthcare service provider, with 26 healtcare services providers, 6,900 beds and presence in 16 cities within the country including Bengaluru, Kolkata, Ahmedabad, Hyderabad, Jaipur, Raipur, Jamshedpur, Guwahati, Mysore etc. It offers 30+ super-specialty tertiary care facilities in different areas of specialization in healthcare services through 14,330

full-time Employees and Associates including 3,011 doctors. (www.narayanahealth.org)

Wockhardt Healtcare services providers is the subsidiary of the Wockhardt Group, which was founded in the early 1960s by Mr Habil Khorakiwala. It is a global pharmaceutical and biotechnology organization, providing affordable, high-quality medicines for a healthier world. It is India's leading research-based global healthcare enterprise with relevance in the fields of pharmaceuticals, biotechnology and a chain of advanced super-specialty healtcare services providers.

Headquatered in Mumbai,India, it has full-fledged operations in the USA, UK, Ireland and France with marketing presence in nearly 16 other countries. Wockhardt Hospital Limited a tertiary care, multi-speciality healthcare networks in India which was incorporated in 1991 now has 12 multi-speciality healtcare services providers across the country.

E-research centres and 12 manufacturing plants, with businesses including the manufacture and marketing of pharmaceutical and biopharmaceutical formulations, active pharmaceutical ingredients (APIs) and vaccines. One of the few technology-oriented measures undertaken by Wockhardt Hospital Limited is that whenever a patient comes to the hospital, it provides them a tablet to capture all the relevant data along with digital signature directly and conveniently. It has kept the entire system very simple.

Once the data has been captured and saved, patients are asked to come to respective counters for verification of captured data and also to make any corrections by the customer executive. The patients are also issued cards with bar codes and all relevant information for hassle-free service in the hospital. Such a system allows easy access of exhaustive information by its associates.

Therefore, it has witnessed increased satisfaction from the patient side, as well as enhancement in efficiency. With the Wi-Fi in the entire building, such entry of information can be done from anywhere. It has interfaces that allow patients to see

diagnostic test results online. Basically, it has designed our website 2 years ago in such a way that it is mobile-friendly. Currently, it is in the process of creating a mobile application. It collaborates with the vendor with technical capabilities, but the underlining feature of such a feature should be integrated with its own information system in order to ensure data and patient privacy.

(http://ehealth.eletsonline.com/2016/09/wockhardt-hospitals-ensuring-fast-easy-access-to-healthcare-services) (http:// www.wockhardt.com/)

Lotus is a listed corporate eye healtcare services provider in India with seven state-of-the-art Centres in Tamil Nadu and Kerala. It offers comprehensive eye care to hundreds of customers daily in Coimbatore, Tirupur, Salem, Mettupalaym and Cochin in South India with a highly qualified and experienced team of ophthalmic experts and known for its excellence in ophthalmic services with personalized care. It is committed to pioneering in the technological revolution in eye care and rendering service to thousands of customers from across the globe to see the world better than ever before (http://www.lotuseye.org/)

Some other private corporate healthcare services providers which are rendering quality services to their customers include KMC Speciality Healtcare services provider, Reliance Life Sciences (RLS) and Vaatsalya healtcare services providers.

3.2 Selected Private Healthcare Service Units of Kota

Private Healthcare Service Unit - I

Bharat Vikas Parishad Sewa Sansthan is running various projects in Kota. In July 1993, it started with pathology lab, ambulance and homeopathic dispensary in a leased premise. At present, the Society is running a Multi-speciality Healtcare services provider in Kota City of Rajasthan, which was established in 1997. It is a 220 bedded healtcare services provider spread over land area of 54,000 sq. feet and constructed area of more than 60,000 sq. ft., which is being expanded and renovated further.

Figure 3.2: Bharat Vikas Parishad Sewa Sansthan, Kota.

Source- https://www.healthcare services providerkhoj.com

It has several departments functioning like General Surgery, Gynaecology, Orthopaedic, Paediatric, General Physician, Eye, E.N.T, Cardiology, Dental, Physiotherapy, Dietician, Neuro-physician, Neuro-surgery, Urology, cancer treatment, skin, etc. with all the facilities of pathological diagnosis, Colour Doppler, TMT, Angiography, Sonography, Digital X-Ray etc, are available in the Healtcare services provider. It provides 24 hours facilities and emergency services. It has highly qualified and experienced more than 50 medical consultants and 300 dedicated staff members providing round the clock services. The healtcare services provider is also running a Nursing School as well as a College of Nursing with more than 300 students. It started blood bank named BVP Blood Bank in Oct.2014 equipped with the latest machines. During the previous year itself i.e. 2014-15, the healtcare services provider provided treatment to a total of 1.80 lakh customers, in addition to it 40,000 customers were admitted in healtcare services provider for treatment in various departments. It was one of the selected units for the present study. (www.bvpindia.com/kota_healtcare services provider.htm)

Private Healthcare Service Unit – II

Sudha Hospital & Medical Research Centre Pvt. Ltd. is one of the largest multi-super specialty institutes located in this industrial and educational town in the Hadoti Region. It is founded by eminent surgeons Dr. R. K. Agrawal and Dr. (Mrs.) Sudha Agrawal, under vision of Lt. Shrilal Agrawal. It has 220 beds, over 50 critical care beds and covers an area of more than 25,000 sq feet. It also runs a research centre and a nursing school. It brings together an outstanding pool of doctors, and clinical researchers to foster collaborative, multidisciplinary investigations, inspiring new ideas and discoveries; and caters to over 20 specialties.

The institution has been envisioned with the aim to give to India the highest standards of medical care along with clinical research, education and training. It integrates modern and traditional forms of medicine to provide accessible and affordable healthcare by its research. It is another well-established, multi-

speciality private healthcare service provider located at Jhalawar Main Road,Talwandi, which is selected for the study. It works on the principle of providing affordable medical services to customer with care, compassion & commitment. (http://sudhahealtcare services providerkota.com/about-us)

Figure 3.3: Sudha Hospital & Medical Research Centre Pvt. Ltd., Kota.

Source- https://www.healthcare services providerkhoj.com

Private Healthcare Service Unit – III

S. N. Pareek Memorial Healtcare services provider & Research Centre in Kota was also one of the selected units for the present study. It is a well-known and easily accessible multi-speciality private healthcare service provider in Basant Vihar, Kota, having more than 100 beds facility. It is a recognized name in customer care and was established in the year 2003. It is well-equipped with technologically advanced healthcare facilities. It has a great team of well-trained medical staff, non-medical staff and experienced clinical technicians work round-the-clock to offer various services. Their professional services make it a sought after private healthcare services providers in Kota. It brings world class healthcare facilities within the reach of every individual with its team of doctors on board, including specialists equipped with the knowledge and expertise for handling various types of medical cases. It offers specialities like General Medicine, Gynaecology, General Surgery, Paediatric, ENT, Physiotherapy, Orthopaedic, Cardiology, Dietician, Neuro-physician, Skin treatment etc.

Private Healthcare Service Unit – IV

Kota Heart Institute and General Hospital is one of the renowned private healthcare service providers in the educational city, Kota. It is an acclaimed name in multi-specialty healthcare units as well as the pioneer in Cardiac related treatments. It was incepted in the year 2005 and is located in easily accessible Talwandi area. It provides quality healthcare to everyone and has facilities like Resuscitation, Trauma Management, Poison Management & Life support System.

It gives holistic quality care at an affordable price in a hygienic environment with the help of its team of qualified doctors and skillful nurses. It has not only advance technology to match world-class but also support services like pharmacy, laboratory and cafeteria which makes customers at the hospital peaceful and comfortable.(http://kotaheart.in/Aboutus.aspx) https://www.justdial.com/KOTA-RAJASTHAN/Kota-Heart-Institute---Multi-Speciality-Healthcare services provid er -Talwandi-Kota-H-O/9999PMU

Figure 3.4: Kota Heart Institute and General Hospital, Kota.

Source- https://www.healthcare services providerkhoj.com

Private Healthcare Service Unit – V

Opera Hospital is a well-equipped multispecialty 150 bedded healthcare services provider located in Kota city of Rajasthan state of India, offering high quality affordable medical care to the people of Rajasthan. It is a well-known name in healthcare industry which has been serving and caring for the people for more than two decade now. It has different Diagnostic Services available including ECG, Digital X-ray, Sonography, 4-D Ultrasound, Colour Doppler, Computerized TMT, Laboratory, Blood Gas Analysis etc. The hospital keeps abreast of the latest advances in medical technologies. It also helps in providing education to its staff, customers and the community regarding the latest developments in this field. (http://site.operahealtcare services provider.com/opera/)

Private Healthcare Service Unit – VI

Jaiswal Multi-Speciality Hospital and Neuro Institute is another selected unit in Kota-Rajasthan. It was established in the year 1995 in Vigyan Nagar on Jhalawar Road. The healthcare services provider is situated at an easily accessible location and could be reached by public and private means of transport. Its multidisciplinary services offer customers comprehensive and state-of-the-art medical care with the best possible outcomes. It has full range of primary and specialty care services which enable cross-specialty consultation and assure outstanding treatment for each customer. This 100 bedded institution has a vision to offer high quality and focused customer care.

It is well-equipped with technologically advanced healthcare facilities and is one of the upcoming names in the city for providing improved customer environment and delivery of high-quality, affordable healthcare. It has a team of well-trained medical staff; non-medical staff which provides world-class care in a friendly, compassionate environment conducive to customer in a family atmosphere. www.jaiswalneurohealtcare services provider.com

Figure 3.5: Jaiswal Multi-Specialty Hospital and Neuro Institute, Kota.

Source- https://www.healthcare services providerkhoj.com

It is well-equipped with technologically advanced healthcare facilities and is one of the upcoming names in the city for providing improved customer environment and delivery of high-quality, affordable healthcare.

It has a team of well-trained medical staff; non-medical staff which provides world-class care in a friendly, compassionate environment conducive to customer in a family atmosphere. www.jaiswalneurohealtcare services provider.com

Private Healthcare Service Unit – VII

Maitri Hospital in Kota is another selected multi-speciality healthcare service provider for the present study. It is a premier institution and recognized name in customer care.

Since its inception in the year 1995, it has been a familiar, trusted and comforting presence, ministering to the healthcare needs of the community. It has a strong foundation of the state of the art facilities, best medical expertise, education and research, which inspires great confidence, trust among its customers.

Its highly skilled practitioners provide a wide variety of medical services in the field of General Medicine, Gynaecology, General Surgery, Paediatric, ENT, Physiotherapy, Orthopaedic, Cardiology, Dietician, Neuro-physician, Skin treatment etc..

Its professional staff members including trained nurses remain dedicated to humanizing treatment and work together to achieve optimum level in medical and lifestyle outcomes.
https://www.justdial.com/kota-rajasthan

Figure 3.6: Maitri Hospital, Kota.

Source- https://www.healthcare services providerkhoj.com

Private Healthcare Service Unit – VIII

PMC American Hospital, a well-established institution in Kota city is another selected private healthcare service provider, for the present research. It is situated adjacent to Allen Career Institute, Indra Vihar, which is a densely populated area of this education hub. It was founded by a philanthropist of stature and foresight, who wanted to bring the finest medical care and the best diagnostic and surgical facilities in one place. It is a multi-specialty healtcare services provider with more than 100 beds, equipped with modern technologically and advanced equipment. PMC American Hospital is a multi-storeyed infrastructure with air-conditioned and deluxe rooms' facilities. It is dedicated to specialized Medical Care and has been providing the best possible customer care and comfort to its customers during their stay in the hospital by comprehensive medical services from diagnostics and investigations to various therapies and post-operative care. It has a team of well-trained medical staff, non-medical staff and experienced clinical technicians, who work round-the-clock to offer various services that include Chemist, Ambulance Service etc. Its professional services make it a sought after Multispecialty healthcare services providers in Kota.

3.3 Selected Private Healthcare Service Units of Udaipur

Private healthcare services providers in Udaipur are healthcare institution providing treatment with specialized doctors. In Udaipur, the private healthcare service providers usually provide different healthcare services facilities, with large numbers of beds for intensive care and long-term care of the customer. There are many private healthcare services providers in Udaipur city including trauma centres, healthcare services providers of rehabilitation, children's healthcare services providers and healthcare services providers related to psychiatric problems. They have well-trained and experienced medical and non-medical staff including professional doctors like the physician, surgeons, and nurses. These healthcare services providers in Udaipur have a wide range of departments such as surgery care unit, cardiology, emergency care, ICU, chronic treatment unit, radiology, pathology, etc.

(https://www.healthcare services providerkhoj.com/healthcare services providers/private /udaipur)

Private Healthcare Service Unit – I

Aravali Hospital Pvt Ltd is a studied unit in Udaipur, which is a recognized name in healthcare services. It started operations in the year 1998. It is one of the well-known Multispecialty Healthcare services providers in Udaipur. Its mission is to bring healthcare and its related services of standards within the reach of every individual. It believes in quality and compassionate care with a human touch. Late Dr. S.B. Gupta laid the foundations of Aravali Group, with the inception of Anil Clinic in 1972. He has always been its guiding force. He was a visionary par excellence and always believed in the philosophy of spreading smiles among the distressed.

It contributes and promotes a positive attitude towards the health of an individual. It has many departments including Surgery, Medicine, Gynaecology & Obstetrics, Orthopaedics, Paediatrics, ENT, Diagnostics, Nephrology (Kidney Care), Critical Care Unit (ICU) etc. It is located at 332, Amba Mata Scheme and offers a lot of facilities for customer's treatment like ambulance, ICU/general beds, Pharmacy, Canteen, etc. along with these facilities, the healthcare services provider is specialised for Anesthesiology, Cancer, Cardiology, Cosmetic & Plastic Surgery, Dental, Dermatology, Diabetes, ENT, Gynecology, Nephrology, Neurology, Opthalmology, Orthopaedics, Radiology, Urology.

It has a team of well-trained medical staff, non-medical staff, and experienced clinical technicians, who work round-the-clock to offer various services. It provides comprehensive care to customers from all over Rajasthan. It continuously strives to provide newer standards of medicine with a human touch. It's no wonder then that today the name is synonymous with care. Here, the right doctors make this institution a great healthcare services provider, for they are the ones who set the direction, bring in the skills and expertise and ultimately heal the customers.

Figure 3.7: Aravali Hospital Pvt. Ltd., Udaipur.

Source- https://www.healthcare services providerkhoj.com

Contributing a step towards making of the Smart City, Aravali Hospital Private Limited is launching first of its kind, highly equipped, Trauma Emergency and Critical Care Hospital loaded with international standard facilities and best critical care expert doctors. The hospital has 21 Beds ICU ward for responding critical patients of heart attack, severe injury and paralysis. The emergency service will be provided 24 hrs by well known doctors of Ahmadabad.
(http://udaipurtimes.com/aravali-critical-care-hospital-to-save-lives-more-adequately)

Private Healthcare Service Unit –II

Mewar Hospital Pvt. Ltd. in Udaipur is an acclaimed name in the field of healthcare services. It is one of the most distinguished and recognized practitioners in the orthopaedics discipline of medicine. It is situated at a convenient location in Udaipur City. Bedla is popular landmarks in the clinic's close vicinity that make spotting the establishment rather easy. An orthopaedic consultant, Mewar Hospital Pvt. Ltd. in Udaipur City has been practicing since 1998. The doctor is also a stem cell transplant surgeon who has acquired training in orthopaedic surgery and stem cell transplantation from some of the most prominent institutes. In addition to being known as one of the most recognized stem cell therapy doctors that the country has, also performed an extensive number of knee replacement surgeries. The doctor is also known for conducting physiotherapy sessions that constitute an important part of any orthopaedic procedure as it helps in restoring the movement of the concerned body part.

3.4 Selected Private Healthcare Service Units of Jaipur

Private Healthcare Service Unit –I

Santokba Durlabhji Memorial Hospital (SDMH) is a trust managed, autonomous, a fee for services, not for profit multidisciplinary private healthcare services provider which was envisioned by the venerable Late Padamshri Khailshankar Durlabhji. It has a self-contained campus with good facilities and is located in the heart of the pink city. It was founded with a vision to provide quality care to the common man – without favour or discrimination. It was inaugurated by the then

Figure 3.8: Santokba Durlabhji Memorial Hospital, Jaipur

Source- https://www.healthcare services providerkhoj.com

Prime Minister, Smt. Indira Gandhi, in 1971 and was dedicated to the Armed Forces as the nation was then in the throes of a war with Pakistan. It had a very modest beginning with a bed-strength of only 80 beds and 6 specialties. Since then, S.D.M.H. has continued to provide affordable health care through the several philanthropic initiatives it has undertaken e.g. The Avedna Ashram, the Rehabilitation and Limb Fitting Centre, the Outreach Programme, Project Prayatna (eradication of thalassemia) and several other projects that serve to alleviate human suffering. Now the bed strength of the healthcare services provider has increased to 551beds including many wards, Operation theatres, ICUs, laboratories etc., which enable the healthcare services provider to cater to different specialties and super specialties services.

Private Healthcare Service Unit –II

Apex Hospital is one of the most rapidly developing multi-super specialty healthcare services providers in Rajasthan located in Malviya Nagar, Jaipur, near Jaipur International Airport. It is established by a well-known physician, Dr. S. B. Jhawar. The institution has been founded with the aim of providing medical services to customers with care, compassion, commitment. It is managed under the guiding principles of bringing the highest standards of medical care along with clinical research, education and training at an affordable cost. It has 200 beds with 4 operation theatres rendering services and treating over 20 specialties. It has six centres of excellence which will provide medical intelligentsia, cutting-edge technology and state-of-the-art infrastructure with a well-integrated and comprehensive information system. The Healthcare services provider promotes collaborative, multidisciplinary investigation, inspiring new ideas and discoveries; and translating scientific advances more swiftly into new ways of diagnosing and treating customers and preventing diseases with the help of an outstanding pool of doctors, scientists and clinical researchers. It provides holistic quality care at a reasonable cost in a hygienic environment with perseverance, dedication and compassion. It is also empanelled hospital under Bhamashah Yogna of Rajasthan government and provides services like Anaesthesiology, Cardiac Anaesthesia,

Cardiology(invasive and Non invasive) Cardiothoracic Surgery, Clinical Psychology, Critical Care (Adult, Paediatrics, Neonate), Dentistry, Ear Nose and Throat, Endocrine Surgery, Endocrinology, Gastroenterology (Adult and Paediatric), General Surgery, GI Surgery & Bariatric Surgery, Hand &Micro Surgery, internal Medicine, Medical Oncology, Nephrology including Dialysis, Neurology (Adult & Paediatrics) Neurosurgery, Obstetrics & Gynaecology, including infertility, Ophthalmology, Orthopaedic (including Joint Replacement Surgeries), Paediatric Cardiology, Paediatric Surgery, Paediatrics and Neonatology, Plastic and Cosmetic Surgery, Psychiatry (Only OPD), Renal Transplant, Respiratory Medicine, Rheumatology, Skin & Venereal Diseases, Sports injury Management, Surgical Oncology, Urology and all other available facilities.

References

- http://udaipurtimes.com/aravali-critical-care-hospital-to-save-lives-more-adequately
- https://www.healthcare services providerkhoj.com/healthcare-services-providers /private /udaipur
- https://www.justdial.com/kota-rajasthan
- www.jaiswalneurohealtcare services provider.com
- http://site.operahealtcare services provider.com/opera/
- http://kotaheart.in/Aboutus.aspx
- https://www.justdial.com/KOTA-RAJASTHAN/Kota-Heart-Institute---Multi-Speciality-Healtcare services provider-Talwandi-Kota-H-O/9999PMU
- http://sudhahealtcare services providerkota.com/about-us
- www.bvpindia.com/kota_healtcare services provider.htm
- http://www.lotuseye.org/
- http://ehealth.eletsonline.com/2016/09/wockhardt-hospitals-ensuring-fast-easy-access-to-healthcare-services
- http:// www.wockhardt.com/
- www.narayanahealth.org
- http://udaipurtimes.com/inauguration-of-fortis-jk-hospital-excellent-health-care-facilities-for-people
- http://www.fortishealthcare.com.
- http://apollohealtcare services providersnashik.com/Company_Overview
- http://www.carehealtcare services providers.com.
- https://www.healthcare services providerkhoj.com

Customer Expectations and Various Dimensions of Healthcare Services

This section presents the description of the various dimensions of healthcare services and details of the studied dimensions. It also discusses the construct used in the current study. The studied dimensions of healthcare services have been measured from the perspectives of customers and their expectations with regard to different factors of these dimensions have been examined, analyzed and identified. The chapter also presents the demographic profile of the customers. The first research objective is to understand the factors affecting customers' expectation related to Process, Price, Promotion and Physical Environment dimensions in healthcare services. To achieve this factor analysis technique is applied.

Since the number of statements is large, exploratory factor analysis is applied, with the key objective of reducing a larger set of variables to a smaller set and summarizing the data. Relationships amongst the set of many interrelated variables are examined and represented in terms of a few underlying factors. At the very first stage, after checking the normality of the data, Exploratory factor analysis of the data collected is done using SPSS software to explore the underlying factors of the data. Subsequently, construct validity of the measures are also established.

4.1 Dimensions of Healthcare Services

Most private healthcare service providers today are well equipped with the most advanced diagnostic and treatment facilities. They try for total health care – preventive and curative. Most private healthcare service providers in developing counties like India have grown to a truly words class stature over the years. The marketing mix of Private healthcare service providers includes 7P's.

Product: Private healthcare service provider provides quality healthcare services with many specialities including – Heart, Orthopaedics, Spine, Cancer Care, Gastroenterology, Neurosciences, Nephrology & Urology Critical Care. Along

with Emergency services, Ambulance services, Diagnostic services, Pharmacy Services and Casualty services.

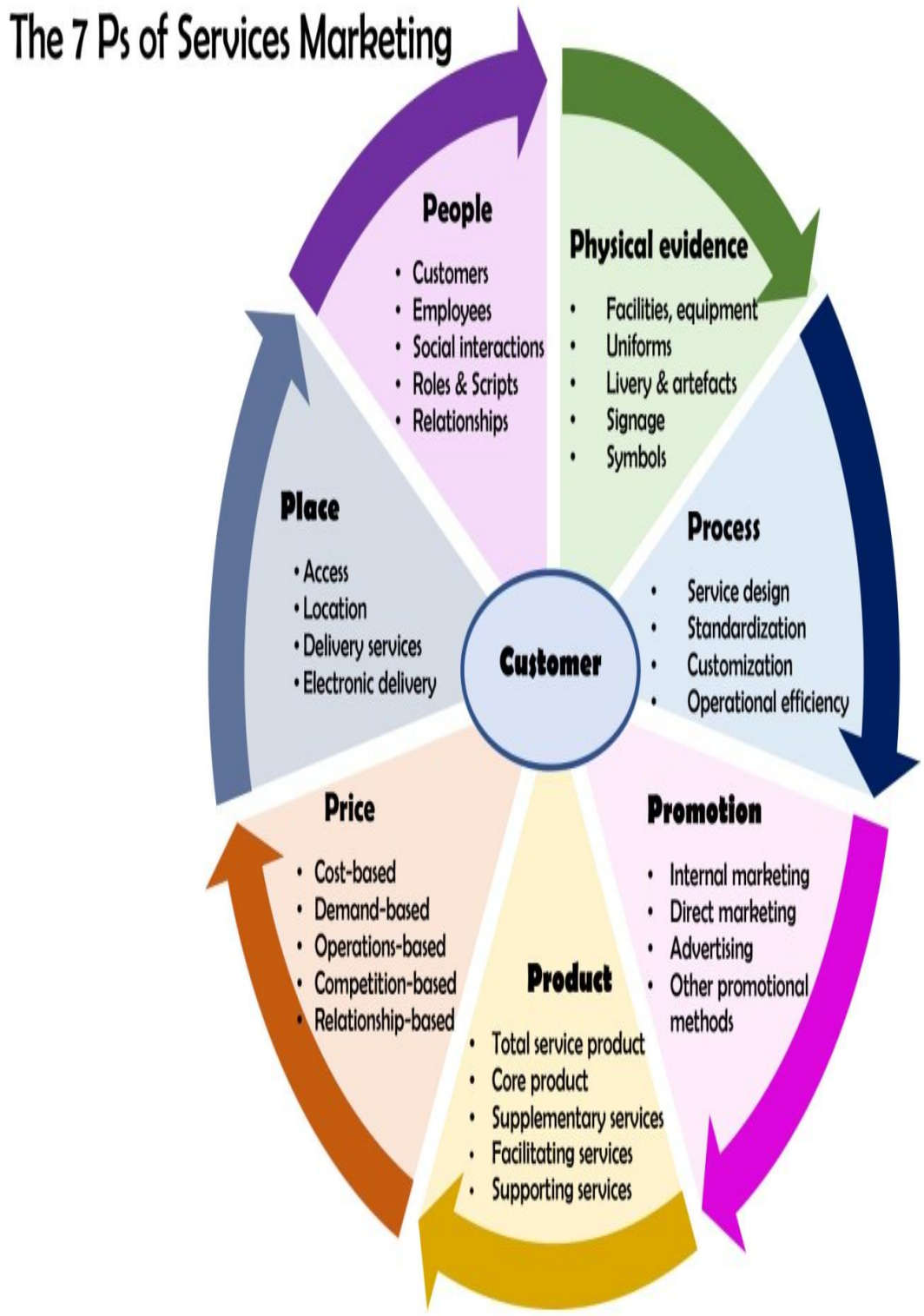


Figure 4.1: Seven P's of Marketing of Services

Price: The Prices depend on treatment process, surgical needs and category of room required by a patient which might range from deluxe to general ward. The private healthcare service provider believes in providing the best possible services at the lowest possible prices with a reasonable pricing policy. This makes it affordable and pocket-friendly and hence brings good business.

Place: Private healthcare service providers try to establish its hospitals in places that can provide maximum accessibility to its patients.

Promotion: Promotion is an integrated part of any organisation. It is important that customers become aware of different product and services provided by Private healthcare service providers as it will help in maintaining their presence. Marketing strategy related to promotion may include publicity, sales promotion, personal selling and advertising.

People: It includes doctors, nurses, paramedics, clinical staff and management professionals etc. needed to manage any private healthcare service providers.

Process: It involves several established procedures and documentation related to healthcare services, facilities and supporting services.

Physical Environment: It includes all the physical evidences which are part of healthcare services including Blood bank, pathology, OT, canteen, other equipment and facilities.

Confronted with the emergence of the competitive growth of healthcare industry and the increasing demand for quality and value care, it becomes essential for the healthcare service providers to understand the expectations of the customers and provide them quality care, in all these area.

4.2 Demographic Profile of the Respondents

In the present section demographic profile of the respondents surveyed is given. This section present gender based, profession based, age based, occupation based and income based distribution of the respondents.

Table 4.1 shows distribution of the respondents according to gender. There were 56.25% male respondents and 43.75% female respondents in the survey.

Table 4.1: Gender wise Distribution of Respondents

Option	N	%
Male	225	56.25
Female	175	43.75
Total	**400**	**100.00**

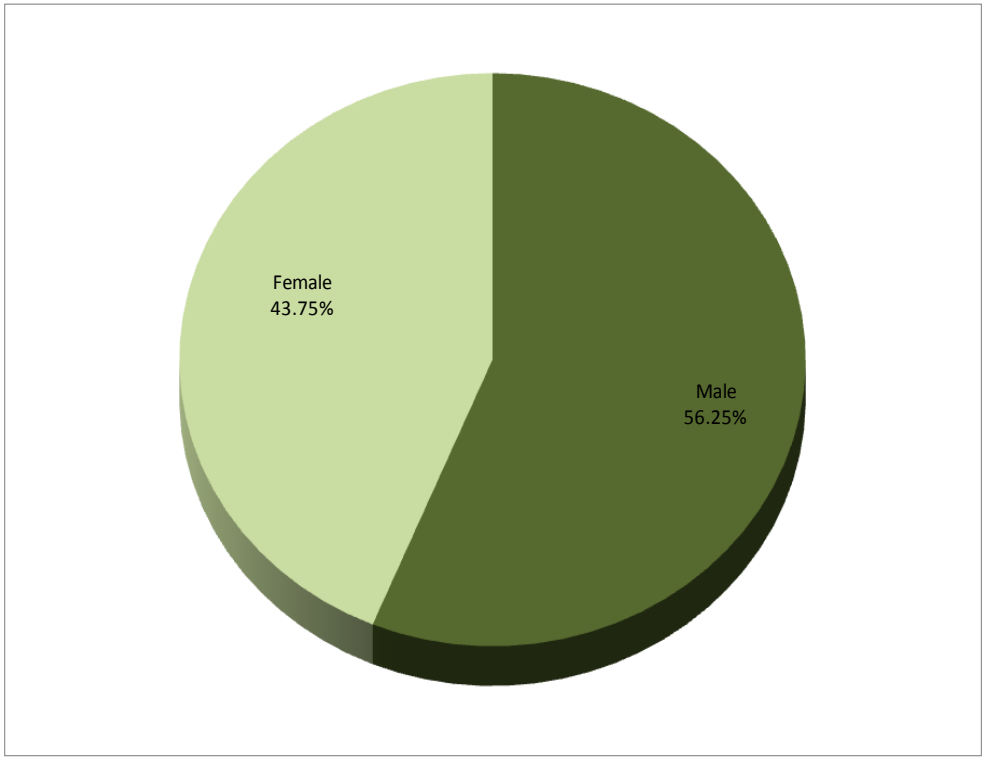


Figure 4.2: Gender wise Distribution of the Respondents

Table 4.2 shows distribution of the respondents according to their profession. There are 965.96% non-medical in the survey. Only 4.04 % medical professional respondents are the respondents in the study.

Table 4.2: Distribution of Respondents according to Profession

Profession	N	%
Medical	16	4.04
Non-Medical	380	95.96
No Response	4	0.00
Total	**400**	**100.00**

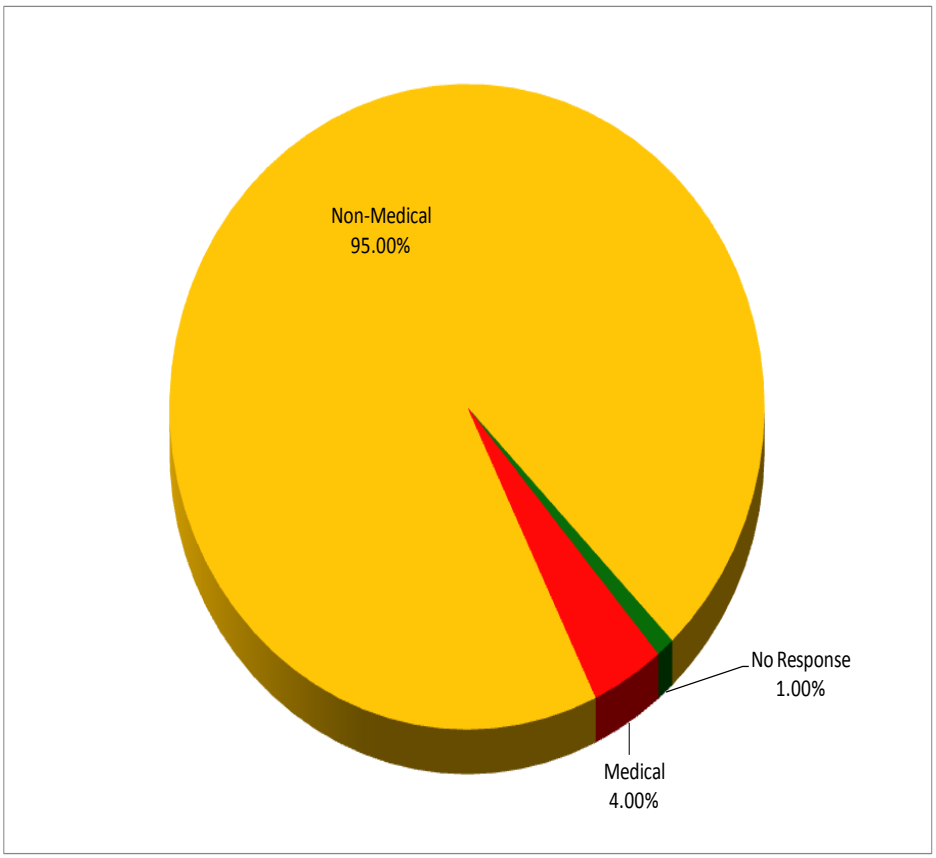


Figure 4.3: Distribution of the Respondents according to Profession

Table - 4.3 shows distribution of the respondents according to age of the respondents. A bird's eye view shows that the respondents are almost equally distributed in the different age groups from young generation to old age groups (up to 60 yrs), though maximum respondents were in 21-30 years age group. Only two respondents (0.5%) did not reveal their age.

Table 4.3: Age wise Distribution of Respondents

Age	N	%
Up to 20 yrs	54	13.50
21 - 30 yrs	125	31.25
31 - 40 yrs	83	20.75
41- 50 yrs	65	16.25
51- 60 yrs	61	15.25
61 - 70 yrs	8	2.00
71 - 80 yrs	2	0.50
No Response	2	0.50
Total	**400**	**100.00**

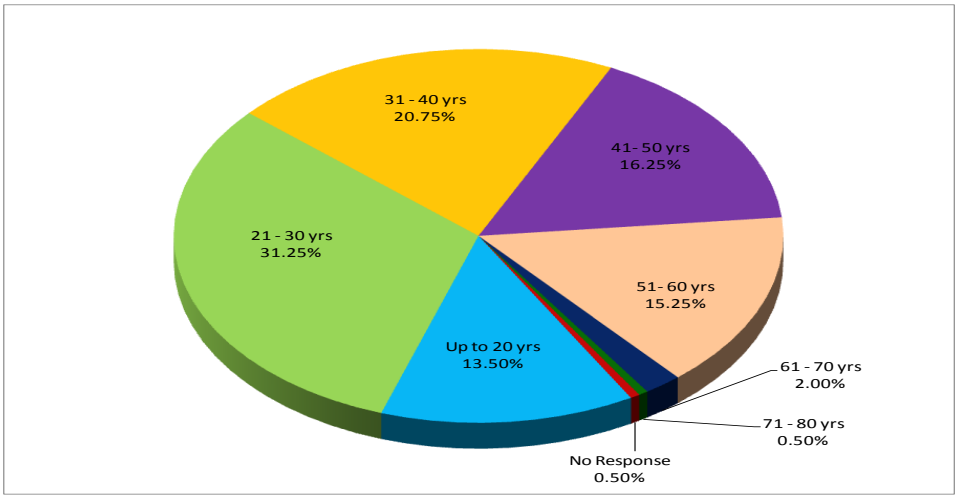


Figure 4.4: Age wise Distribution of the Respondents

Table 4.4 shows distribution of the respondents according to their educational qualification. There were only 2.25% respondents who were illiterate, 21.5% undergraduates were part of this study whereas literate respondents dominate the sample of the study i.e. 97% respondents in the survey.

Table 4.4: Educational Qualification of the Respondents

Education	N	%
Illiterate	9	2.25
Below Graduate	86	21.50
Graduate	134	33.50
Post Graduate	166	41.50
Above PG	2	0.50
Others	0	0.00
No Response	3	0.75
Total	**400**	**100.00**

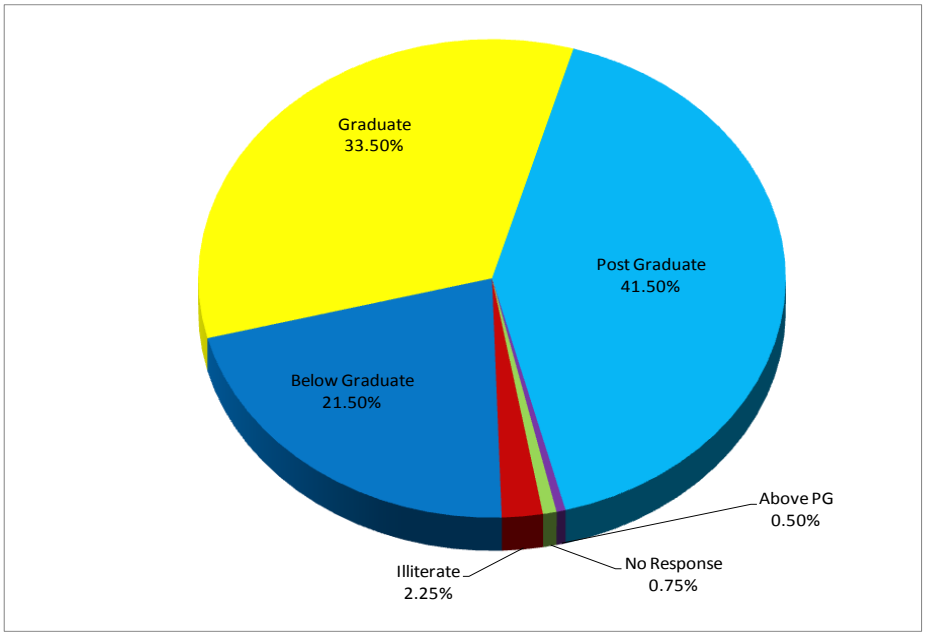


Figure 4.5: Educational qualification of the Respondents

Table -4.5 shows distribution of the respondents according to their occupation. A bird's eye view shows that respondents are almost equally distributed in different occupational groups from business class to unemployed/students, though maximum respondents are from private services group. Housewives and students were eager to discuss their expectations from healthcare service providers and they consist 38% of the sample.

Table 4.5: Distribution of the Respondents according to Occupation

Occupation	N	%
Business	25	6.25
Service (Govt.)	24	6.00
Service (Pvt.)	136	34.00
Self-Employed	59	14.75
Housewife	70	17.50
Unemployed/Student	82	20.50
Other	4	1.00
Total	**400**	**100.00**

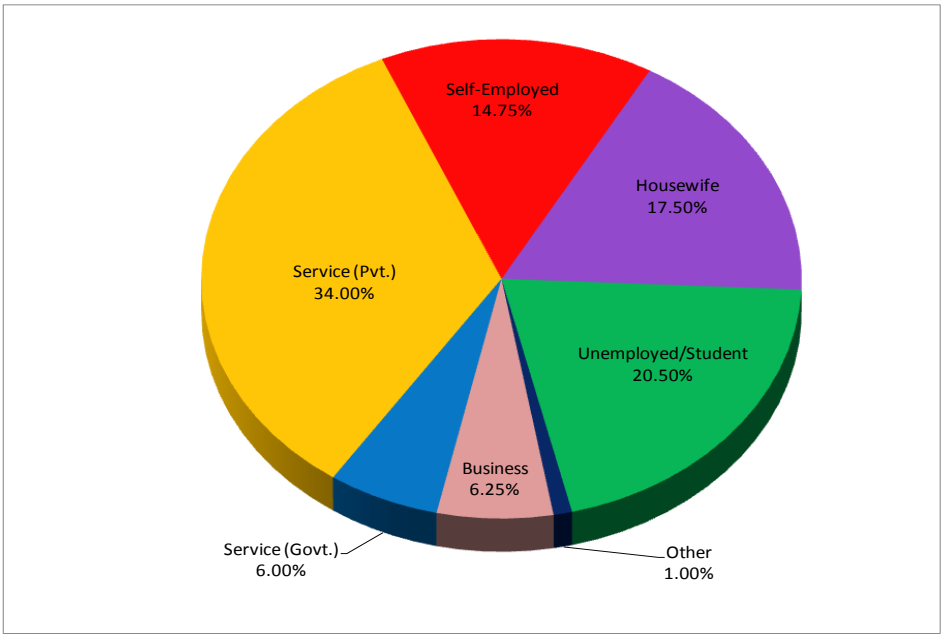


Figure 4.6: Distribution of the Respondents according to Occupation

Table-4.6 shows distribution of the respondents according to their income. It is clearly visible from the data that the respondents are almost equally distributed in the different income groups from Below 20,000 rupees to Above 1,00,000 rupees

monthly income. The maximum respondents are from income group which has income between 40,001 to 60, 000 rupee per month i.e. 26.50%. Income groups of Rs. 60,001 - Rs. 80,000, Rs. 80,001 - Rs. 1,00,000 and Above Rs. 1,00,000 income groups consist 14%, 9% and 12% of the sample.

Table 4.6: Distribution of the Respondents according to Income

Income	N	%
Below Rs. 20,000	68	17.00
Rs. 20,001 - Rs. 40,000	84	21.00
Rs. 40,001 - Rs. 60,000	106	26.50
Rs. 60,001 - Rs. 80,000	56	14.00
Rs. 80,001 - Rs. 1,00,000	36	9.00
Above Rs. 1,00,000	48	12.00
No response	2	0.50
Total	**400**	**100.00**

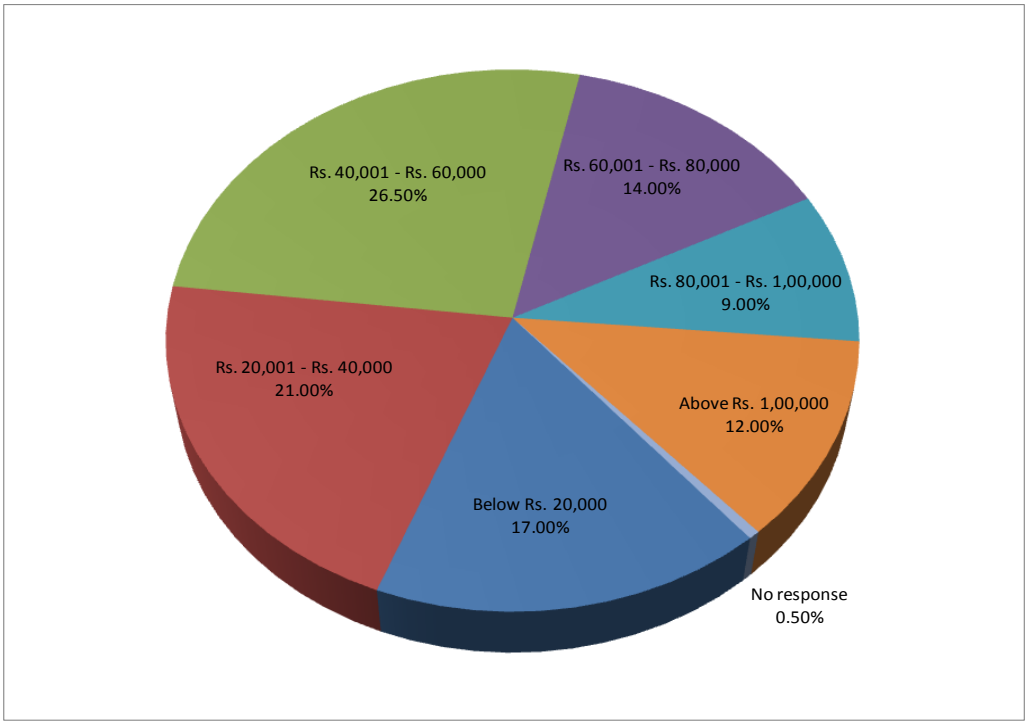


Figure 4.7: Distribution of the Respondents according to Income

4.3 Validity and Reliability Tests

Respondents' demographic Characteristics are already discussed earlier in the research methodology of the research study. A total of 400 usable responses are obtained through the questionnaire-based survey.

In order to validate the instrument, reliability, validity and uni-dimensionality of the questionnaire are tested with the collected data before proceeding with further statistical analyses. In order to assess the face validity, one looks at the measure and sees whether it is a good reflection of the construct on its face. The items in the current study have been mostly chosen after the review of existing literature and the additional items included in the study have been examined by experts like industry practitioners (physicians and hospital administrators) and academicians. Further, the scales have also been revised by using pilot study in which patients participated. All these steps ensure that the instrument possesses face validity.

The Kaiser- Meyer – Olkin (KMO) Test measures the sampling adequacy (determines if the responses given with the sample are adequate or not) and its value be more than 0.5 for a satisfactory factor analysis to proceed. Kaiser (1974) recommend 0.5 (value for KMO) as minimum (barely accepted), values between 0.7 - 0.8 acceptable, and values above 0.9 are very good. The Kaiser-Meyer-Olkin (KMO) measure verified the sampling adequacy for the analysis (Table 4.7), which is 0.807. it is considered ‘great’ according to Field, (2000).

The Bartlett’s test is another indication of the strength of the relationship among variables. This tests the null hypothesis that the correlation matrix is an identity matrix. That is, significance is less than 0.05. i.e. the significance level is small enough to reject the null hypothesis.

This means that correlation matrix is not an identity matrix. Bartlett’s test of sphericity is also found significant (Approx. Chi-Square = 9627.972, df703; Sig. 0. 00) indicating that correlations between the instrument items are sufficiently large for Exploratory Factor Analysis. Therefore, in the present study, the Kaiser-

Meyer – Olkin (KMO) value (0.807) and the Bartlett sphere test results indicate that the study sample is adequate to be used in factor analysis.

Table 4.7: Kaiser- Meyer – Olkin (KMO) & Bartlett's Test of Sphericity

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.807
Bartlett's Test of Sphericity	Approx. Chi-Square	9627.972
	df	703
	Sig.	0.000

5.2 Factor Analysis and Reliability Tests

Exploratory Factor Analysis is a data reduction technique which is traditionally used to explore the possible underlying factor structure of a set of observed variables without imposing a preconceived structure on the outcome. Factor analysis based on principal component extraction followed by Varimax rotation was employed to examine the structure within the 39-item scale, as the KMO value and Bartlett's test of sphericity examined and identified sampling adequacy and the strength of relationship among the factors.

An initial analysis has been done to obtain eigenvalue for each component in the data and found components which have eigenvalue over Kaiser's criterion of 1 and in combination explained 64.632% of the variance (Table 4.8). The factor analysis of the 39-item scale instrument, on the basis of principal component extraction has resulted in nine homogeneous sub-scales with the Eigen values above 1comprising 39 statements. Factor identification has been done based on the fact that items having the highest correlation with a factor would define its conceptual meaning.

Table 4.8: Factors and Variation Explained

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	**% of Variance**	**Cumulative %**	**Total**	**% of Variance**	**Cumulative %**	**Total**	**% of Variance**	**Cumulative %**
1	9.653	24.751	24.751	9.653	24.751	24.751	4.808	12.329	12.329
2	3.634	9.317	34.068	3.634	9.317	34.068	3.360	8.616	20.945
3	3.067	7.865	41.933	3.067	7.865	41.933	3.340	8.565	29.510
4	2.374	6.086	48.019	2.374	6.086	48.019	3.106	7.964	37.475
5	1.826	4.683	52.703	1.826	4.683	52.703	2.308	5.918	43.393
6	1.605	4.117	56.819	1.605	4.117	56.819	2.236	5.733	49.125
7	1.307	3.352	60.171	1.307	3.352	60.171	2.200	5.641	54.767
8	1.181	3.027	63.198	1.181	3.027	63.198	2.099	5.383	60.149
9	1.064	2.729	65.927	1.064	2.729	65.927	1.748	4.483	64.632
10	0.972	2.672	68.599						
11	0.957	2.454	71.054						
12	0.934	2.396	73.450						
13	0.871	2.234	75.684						
14	0.845	2.166	77.850						
15	0.748	1.918	79.768						
16	0.683	1.750	81.518						
17	0.661	1.695	83.214						
18	0.599	1.536	84.750						
19	0.585	1.500	86.250						
20	0.531	1.361	87.611						
21	0.477	1.223	88.834						
22	0.407	1.043	89.876						
23	0.398	1.021	90.898						
24	0.376	.965	91.862						
25	0.368	.943	92.805						
26	0.345	.885	93.691						
27	0.309	.794	94.484						
28	0.299	.767	95.251						
29	0.268	.688	95.939						
30	0.262	.672	96.611						
31	0.204	.522	97.133						
32	0.191	.489	97.622						
33	0.180	.462	98.084						
34	0.172	.442	98.526						
35	0.151	.387	98.913						
36	0.127	.326	99.239						
37	0.113	.289	99.527						
38	0.101	.260	99.787						
39	0.083	.213	100.000						

Identified factors have been named based on the statements that correlate the highest with it. Table- 4.9 shows factor loadings after rotation. Factor rotation is a process in factor analysis for improving the interpretability of factors. In essence, an attempt is made to transform the factors that emerge from the analysis in such a way to maximize factor loadings that are already large, and minimize factor loadings, that are already small.

Factor rotation produces rotated component matrix which is used to know the factor composition and interpret the factors. The items that cluster on the same components suggest what these nine components represent. After identification of the number of factors and the variables associated with each factor, the names of these sub-factors have been identified based on the variables that loaded heavily on them. The first component has comprised four statements related to healthcare service Communication processes. The second sub-scale has comprised of ten statements related to healthcare service Medication and maintenance processes.

Next sub-scale comprising three statements has been healthcare service consultation process. The fourth sub-scale has comprised of three statements related to Billing & Discharge Processes. Remaining five sub-scales comprise of statements related to Physical environment dimension resulting in five sub-factors i.e. Waiting Lounge, Medical & Diagnostic Facilities, Canteen & Other Facilities, Patient's Room Facilities and Staff Appearance factors. Among the five sub-factors of Physical environment, Waiting Lounge sub-scale has comprised of three statements, Medical & Diagnostic Facilities sub-scale has comprised of six statements, Canteen & Other Facilities sub-scale has comprised of four statements, Patient's Room Facilities sub-scale has comprised of three statements and Staff Appearance sub-scale has comprised of three statements.

Table 4.9 summarizes the statements of the scale, their loadings on the corresponding factors and factor names.

Table 4.9: Factor Loading Details for Process & Physical Environment Factors

Factor No. & Name	Component No.	Sub-Factors	Statement	Factor Loading
F-1 Process Factor	1	Communication Process	32. Clear instructions and the options related to cost were specified at the time of admission in the hospital.	0.861
			31. Information about approximate waiting time was properly provided.	0.798
			33. The staff informed initially about the day medication	0.763
			26. Proper response was given to any query by the hospital administration	0.652
	2	Maintenance & Medication	11. Nursing staff was well trained.	0.447
			24. Provisions of safety and security were there in the hospital administration	0.785
			25. No fear of theft and personal belongings at the hospital	0.784
			30. Privacy and confidentiality of patient was properly maintained by the hospital	0.324
			3. Immediate attention was given to patient when get admitted in the hospital	0.764
			7. Services provided at the hospital were prompt	0.741
			8. Emergency situation / unforeseen conditions are handled quickly	0.525
			18. Doctors and Nursing staff was always available at the time of our need	0.523
			6. Diagnostic test results were good and accurate	0.511
			14. Clean and Hygiene was maintained always by the hospital	0.738
	3	Consultation Process	29. Waiting time for consulting with doctor was not more than 30 minutes.	0.357
			1. Consulting with relevant doctor was easy and comfortable	0.776
			10. Behaviour of doctors was friendly and soothing	0.696
	4	Billing & Discharge	34. Billing process was systematic and quick.	0.799
			2. Discharge and billing process was easy and accurate	0.674

Factor No. & Name	Component No.	Sub-Factors	Statement	Factor Loading
F 2 Physical Environment Factor	5	Waiting Lounge	28. Proper seating arrangement was there for patients and his/her attendants at waiting area	0.846
			27. Waiting area for the patients was properly maintained	0.720
			39. Waiting lounge was properly ventilated & with sufficient sitting capacity.	0.457
	6	Medical & Diagnostic Facilities	5. All the diagnostic equipments were well maintained.	0.502
			16. Necessary medical equipments were in proper working condition	0.412
			35. Ambulance services were available	0.829
			38. Wheel chair /stretcher were available quickly	0.690
			17. Life support facilities like ventilator, oxygen cylinder etc. were available at the hospital for critical conditions	0.619
			15. Required medicines were available in the hospital	0.730
			4. All the required diagnostic facilities were available at the hospital	0.490
	7	Canteen & Other Facilities	23. Proper light arrangement was there in the wards / rooms	0.489
			9. Hospital's visiting hours were appropriate	0.610
			36. Canteen facility was available with quality food.	0.603
			22. Proper seating arrangement was there for patient's attendants and visitors.	-0.579
	8	Patient's Room Facilities	21. Patient's room/ward were properly ventilated and provision of fresh air was there	0.393
			19. Patient's ward or rooms were cleaned everyday	0.860
			20. Patient's bed sheets, pillow cover etc. were clean and hygienic and were maintained every day.	0.845
	9	Staff Appearance	37. All the staff members were properly dressed and neat &clean	0.669
			13. Hospital's supportive staff was courteous and helpful	0.721
			12. Nursing staff was supportive and caring	0.560

For this research further these nine factors are grouped in to two major factors related to two dimensions of healthcare services (Table- 4.10).

Table 4.10: Factors Groups and the Dimensions

Factor Number	Factor Name	Factors Group/Dimension
1	Communication Process	Process Factors
2	Maintenance & Medication	
3	Consultation Process	
4	Billing & Discharge Process	
5	Waiting Lounge	Physical Environment Factor
6	Medical & Diagnostic Facilities	
7	Canteen & Other Facilities	
8	Patient's Room Facilities	
9	Staff Appearance	

Reliability Assessment

After identifying the factors and the variables constituting those factors, the data has been statistically analysed to check for internal consistency. In order to prove the internal reliability, this study has performed Cronbach's Alpha Test of Reliability. Cronbach's alpha is a coefficient of internal consistency. It is commonly used as an estimate of the reliability of a psychometric test for a sample of examinees. Alpha is measured on the same scale as a Pearson's Coefficient of Correlation and typically varies between 0 and 1. The closer the alpha is to 1, the greater the internal consistency of the items in the instrument being assessed. Applying this test specifies whether the items pertaining to each dimension are internally consistent and whether they can be used to measure the same construct or dimension of service. According to Nunnally (1978) Cronbach's alpha should be 0.700 or above. But, some of studies 0.600 also considered acceptable (Gerrard, et al, 2006).

In the present questionnaire, the results of the reliability test for each sub-factor are given below in the Table- 4.11. The Cronbach's alpha values have ranged from 0.857 to 0.650 for the subscales. The reliability is the highest for "Communication process" (0.857) and the lowest for "Canteen & other facilities" (0.650). In this study, overall six calculated reliability values of Cronbach's Alpha test are higher than 0.7 which is acceptable value whereas three values are below 0.7 but near to 0.7, which shows that questionnaire is reliable.

Table 4.11: Consistency Measure of Questionnaire by Cronbach's Alpha Values.

Factor	Cronbach's Alpha
Process Factor	
Communication Process	0.857
Maintenance & Medication	0.761
Consultation Process	0.654
Billing & Discharge Process	0.778
Physical Environment Factors	
Waiting Lounge	0.755
Medical & Diagnostic Facilities	0.693
Canteen & Other Facilities	0.650
Patient's Room Facilities	0.739
Staff Appearance	0.713

The Cronbach's Alpha value for Consultation Process, Medical & Diagnostic Facilities and Canteen & Other Facilities was 0.654, 0.693 and 0.650 which is less than cut-off point of 0.7 but values are accepted because Kline (1999) say that although a cut-off point of 0.7 is more suitable but when dealing with psychological constructs, values below even 0.7 can be, realistically, expected and accepted because of the diversity of the constructs being measured. Hence, all these factors and the construct are considered reliable.

Managing and Evaluating Customer Expectations in Selected Private Healthcare Units

This chapter describes the details of data analysis and its interpretation. At the very first stage, after checking the normality of the data, Exploratory factor analysis of the data collected is done using SPSS software to explore the underlying factors of the data. Subsequently, construct validity of the measures are also established. Then in this chapter the expectations of healthcare service customers related to sub-factors of these dimensions are analysed using Z-test and ANOVA test against demographic variables.

5.1 Hypotheses Testing

After testing the validity and reliability of the construct, with the application of statistical tools like the KMO test, Bartlett's test of Sphericity, Exploratory Factor Analysis, the Cronbach's Alpha test, the set hypotheses have been tested. All the facts and figures have been analyzed and tested in order to derive logical inferences.

5.1.1 Process Factors

To test whether the level of expectations under various factors varies with demographic variables, various tests have been applied as per the requirement of data. First of all the sub-Factors of Process factors have been tested.

H 1: There is a non-significant difference in the expectations of Customers' of the different gender with regard to overall service process factor and its sub-factors.

First of all Process factor and its sub-factors have been tested for gender. To compare the expectation level with regard to various sub-factors of process factor, the test for difference of means i.e. Z-test has been applied. The description of each test is given below. The null hypothesis that there is a non- significant difference between the expectations of the different gender with regard to overall service process factor and its sub-factors needs to be statistically tested. The

statistical significance has been examined by using Z-statistic. If the estimated value of Z-statistic is greater than 1.96 and less than 2.58, it is significant at 5% level. If its value exceeds 2.58, it is significant at 1% level. In the event of the Z-statistic being significant, it implies that there is a significant difference between the expectations of the different gender with regard to overall service process factor and its sub-factors. The test results given below show results of the expectation level tested against gender in the Table 5.1. The results clearly indicate that there is a highly significant difference in the level of expectation regarding Communication process ($Z = -3.56$, $p < 0.001$) and Billling & Discharge process factors ($Z = -2.43$, $p < 0.05$). Contrary to differences in the expectations among the two genders, with regard to Communication and Billing & Discharge processes, there is no significant difference in the expectation level of female and male customers with regard to Maintenance & Medication process ($Z = -0.76$, $p<0.05$) and Consultation process($Z = -1.60$, $p<0.05$). But overall expectation level of female customers is found to be significantly higher as compared to the expectation level of male customers. Therefore, it can be concluded that there is a significant difference between the expectations of Female and Male customers related to healthcare services processes ($Z = -2.657$, $p < 0.05$).

Table- 5.1: Relationship between Gender and Process Factor & Sub-factors.

F- 1	Gender	N	Mean	SD	Z	Result
Communication	Male	225	5.65	0.82	-3.56	***
	Female	175	5.93	0.75		
Maintenance & Medication	Male	225	6.70	0.33	-0.76	NS
	Female	175	6.72	0.36		
Consultation	Male	225	6.83	0.35	-1.60	NS
	Female	175	6.88	0.28		
Billing & Discharge	Male	225	5.20	0.98	-2.43	*
	Female	175	5.45	1.04		
Overall	Male	225	6.34	0.42	-2.66	**
	Female	175	6.45	0.38		

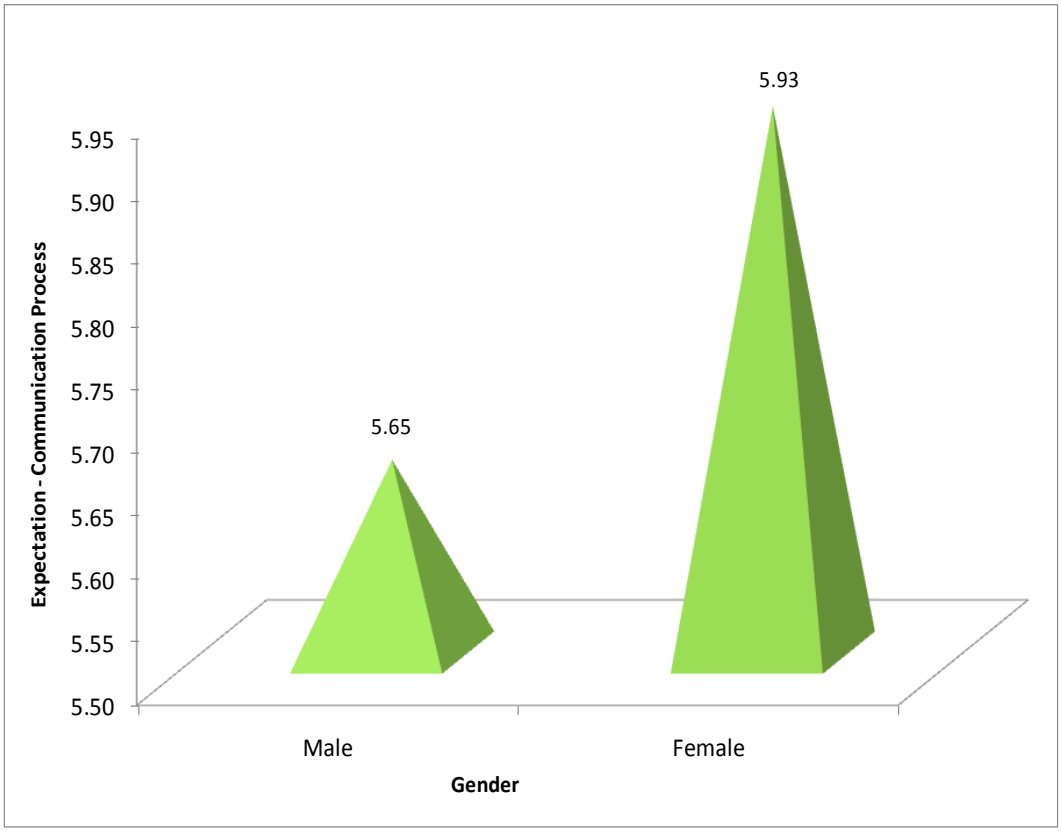


Figure 5.1: Communication Process vs. Gender

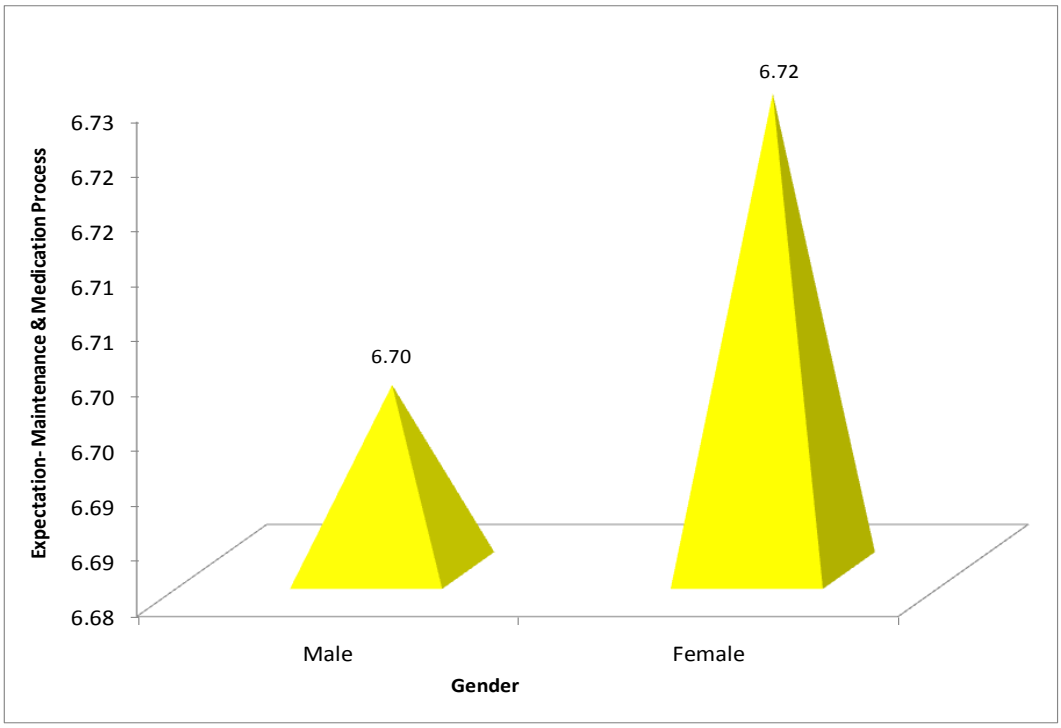


Figure 5.2: Maintenance & Medication Process vs. Gender

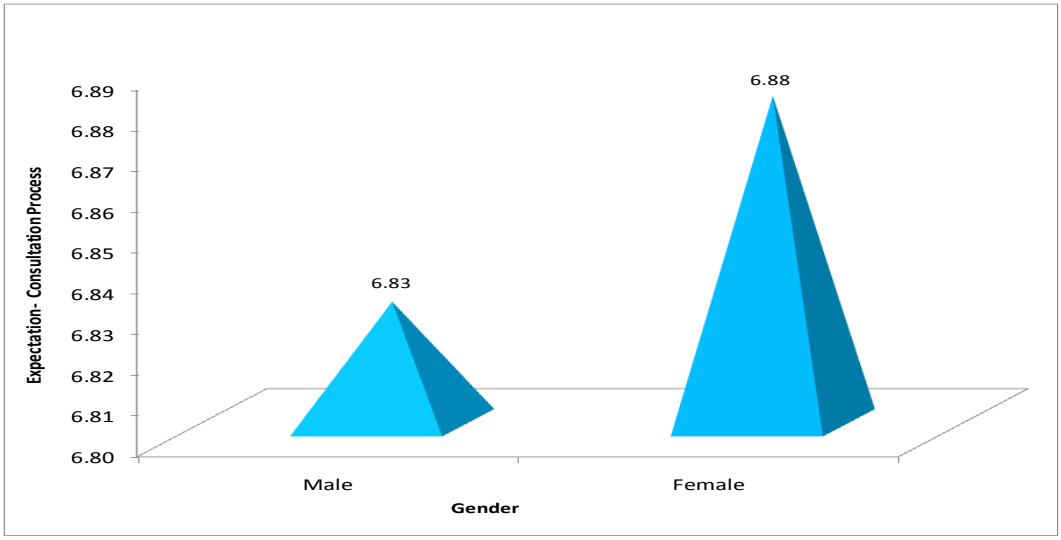


Figure 5.3: Consultation Process vs. Gender

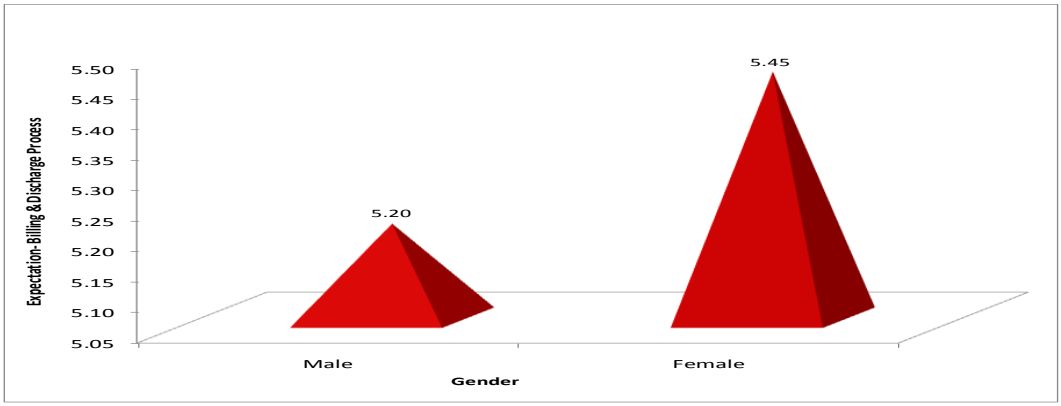


Figure 5.4: Billing & Discharge Process vs. Gender

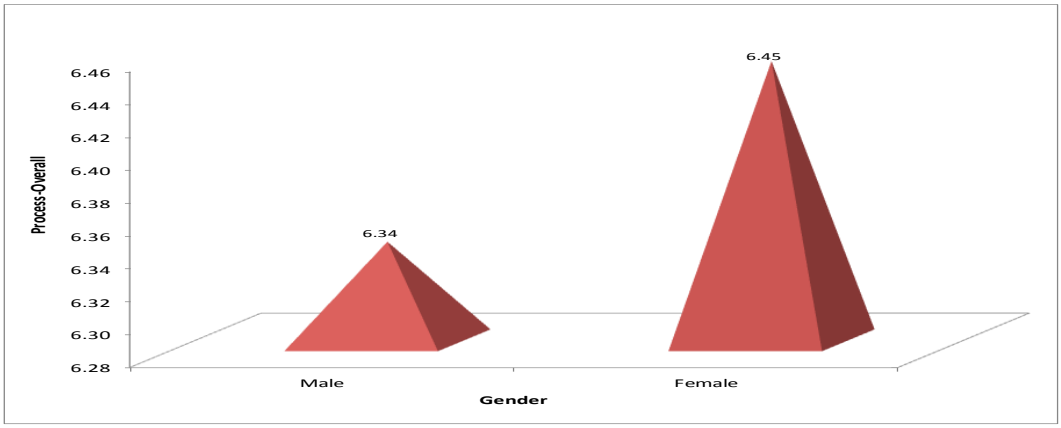


Figure 5.5: Overall Process vs. Gender

Process Factors V/s Profession

H 2: There is a non-significant difference in the expectations of Customers' of the different profession with regard to overall service process factor and its sub-factors.

The level of expectations also varies with regard to the different professions of the customers. To test the hypothesis Z- test was applied as per the requirement of data and different process sub-factors were tested for profession. The null hypothesis that there is a non- significant difference between the expectations of different profession with regard to overall service process factor and its sub-factors has been examined and the test results given below show results of the expectation level tested.

Table - 5.2: Relationship between Profession and Process Factor & Sub-factors.

F- 1	Profession	N	Mean	SD	Z	Result
Communication	Medical	16	6.31	0.76	2.89	*
	Non-medical	380	5.75	0.80		
Maintenance & Medication	Medical	16	6.69	0.42	-0.21	NS
	Non-Medical	380	6.71	0.34		
Consultation	Medical	16	6.96	0.17	2.49	*
	Non-medical	380	6.85	0.33		
Billing & Discharge	Medical	16	6.03	0.76	3.76	**
	Non-medical	380	5.29	1.02		
Overall	Medical	16	6.58	0.41	1.91	NS
	Non-medical	380	6.38	0.41		

It is clearly indicated by the results that there is a significant difference in the level of expectation regarding Communication process (Z = 2.89, p <0.05), Consultation process (Z = 2.49, p <0.05), and a highly significant regarding Billing & Discharge process factors (Z = 3.76, p <0.001). The difference in the expectation level of profession regarding Maintenance & Medication process (Z = -0.21, p <0.05) is found to be non-significant. But the overall difference in the expectation level of Medical professionals as customers and Non-medical customers, with regard to process factor is non-significant (Z = 1.91, p <0.05).Therefore, it can be concluded that the hypothesis H2 is accepted. It means that there is no significant difference between the expectations of Medical and Non-medical customers regarding healthcare services processes.

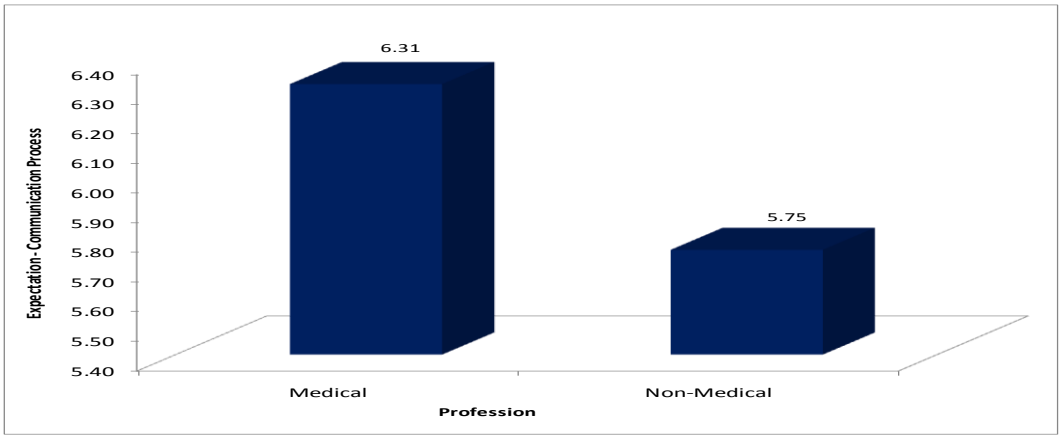


Figure 5.6: Communication Process vs. Profession

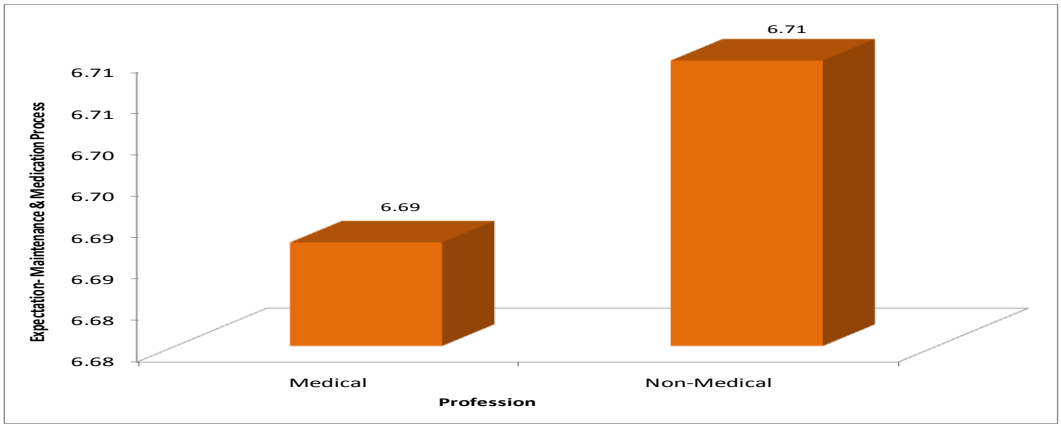


Figure 5.7: Maintenance & Medication Process vs. Profession

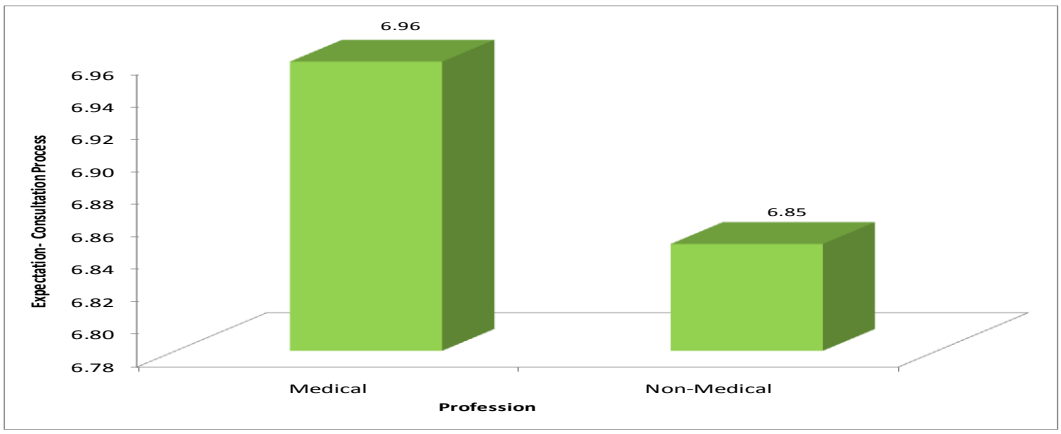


Figure 5.8: Consultation Process vs. Profession

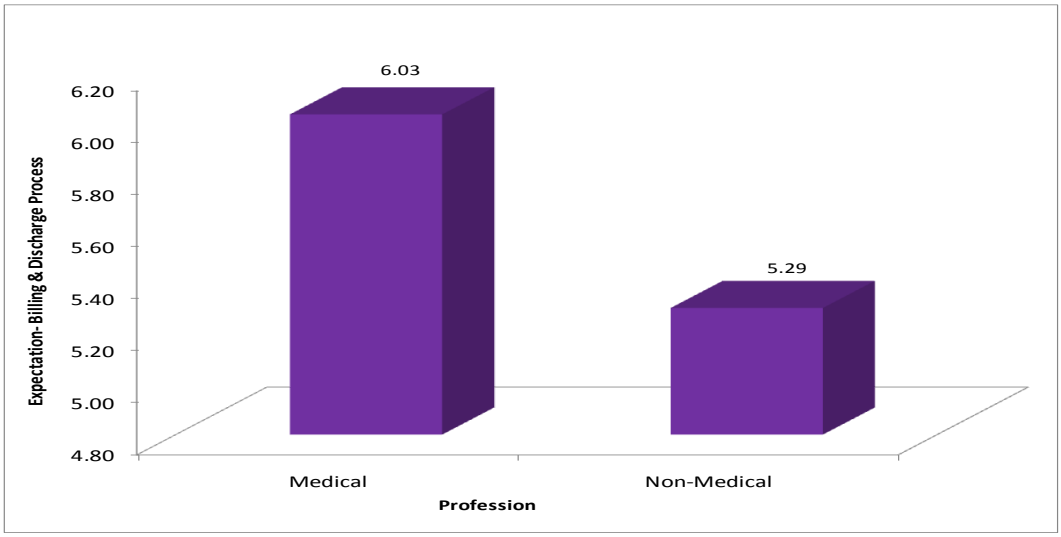


Figure 5.9: Billing & Discharge Process vs. Profession

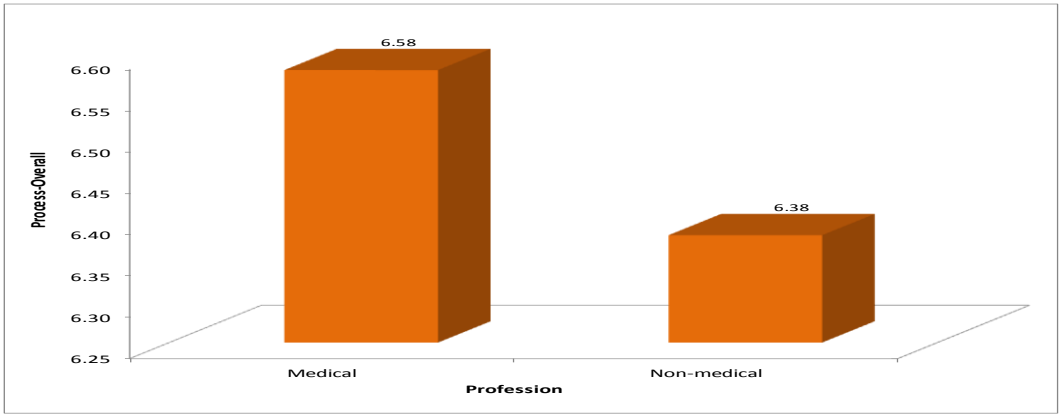


Figure 5.10: Overall Process vs. Profession

Process Factors V/s Age

H 3: There is a non-significant difference in the expectations of Customers' of the different age groups with regard to overall service process factor and its sub-factors.

Contrary to the non-significant differences in the expectations of the medical professionals and non-medical customers, age has a relatively greater impact on the expectations of the customers. The ANOVA test is applied to find, whether significant difference exists, among the different age groups regarding their expectation level with respect to process factor and its sub-factors. As per the ANOVA test, if the estimated value of ANOVA test is more than 2.39 @ 4,393df, it is significant at 5% level. If its value exceeds 3.37, it is significant at 1% level at the same degree of freedom whereas if the value exceeds 4.71 it is significant at 0.1% level. In the event of the ANOVA test being significant, it implies that there is a significant difference between the expectations of the different age groups with regard to overall service process factor and its sub-factors.

The Table- 5.3 given below shows the results of ANOVA, a non-significant difference exists among the different age groups and in their expectation level regarding Communication process factor ($F = 0.34$, $p<0.05$). Hence it can be said that the expectations of the different age groups, regarding Communication process, do not differ significantly. The test results regarding Consultation process factor shows highly significant difference in the expectation level of the different age group patients ($F = 5.38$, $p <0.001$). If we consider among all age groups the expectations regarding Consultation process factor, the expectation level of age group 31-40 years and 41-50 years age group is significantly higher than other age groups. The differences in the expectations level of the different age groups regarding Maintenance & Medication process ($F = 3.27$, $p<0.05$) and Billing & Discharge process ($F = 3.75$, $p<0.05$) factors are also found to be significant. Consequently, overall difference in the expectation level of the different age groups, with regard to process factor is also significant ($F = 2.95$, $p<0.05$).Therefore, it can be concluded that the hypothesis H3 is rejected.

Table- 5.3: Relationship between Age Groups and Process Factor & Sub-factors.

F-1	Age	N	Mean	SD	F	df	Result
Communi-cation	Up to 20 yrs	54	5.52	0.54	2.17	4, 395	NS
	21 - 30 yrs	125	5.88	0.84			
	31 - 40 yrs	83	5.74	0.89			
	41 - 50 yrs	65	5.87	0.80			
	Above 50 yrs	73	5.75	0.78			
Maintenance & Medication	Up to 20 yrs	54	6.68	0.23	3.27	4, 395	*
	21 - 30 yrs	125	6.71	0.39			
	31 - 40 yrs	83	6.70	0.36			
	41 - 50 yrs	65	6.83	0.25			
	Above 50 yrs	73	6.63	0.35			
Consultation	Up to 20 yrs	54	6.88	0.23	5.28	4, 395	***
	21 - 30 yrs	125	6.83	0.38			
	31 - 40 yrs	83	6.94	0.18			
	41 - 50 yrs	65	6.91	0.23			
	Above 50 yrs	73	6.72	0.42			
Billing & Discharge	Up to 20 yrs	54	4.95	0.91	3.75	4, 395	**
	21 - 30 yrs	125	5.53	1.07			
	31 - 40 yrs	83	5.23	0.87			
	41 - 50 yrs	65	5.43	1.02			
	Above 50 yrs	73	5.20	1.08			
Overall	Up to 20 yrs	54	6.29	0.29	2.95	4, 395	*
	21 - 30 yrs	125	6.43	0.46			
	31 - 40 yrs	83	6.38	0.41			
	41 - 50 yrs	65	6.49	0.35			
	Above 50 yrs	73	6.31	0.40			

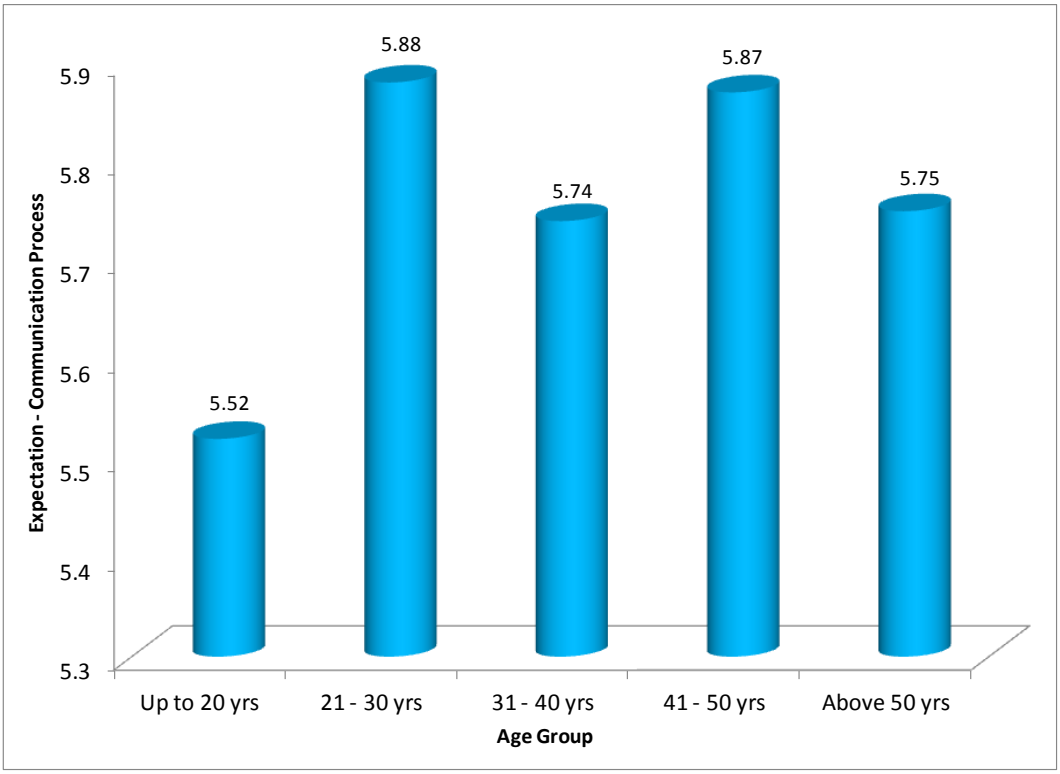


Figure 5.11: Communication Process vs. Age Groups

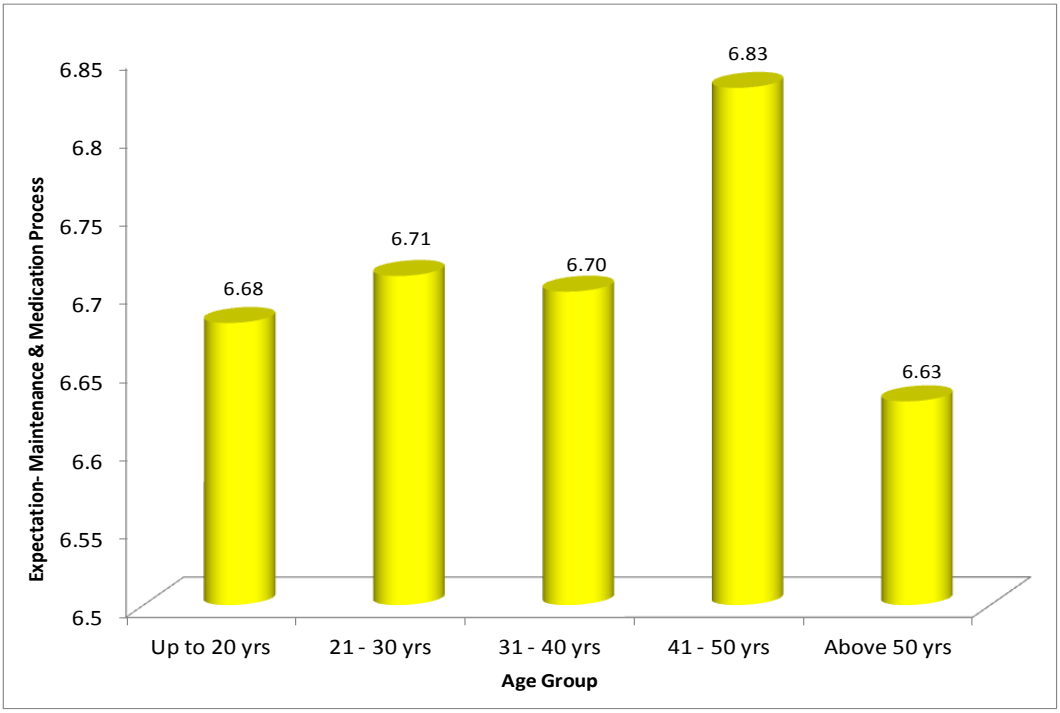


Figure 5.12: Maintenance & Medication Process vs. Age Groups

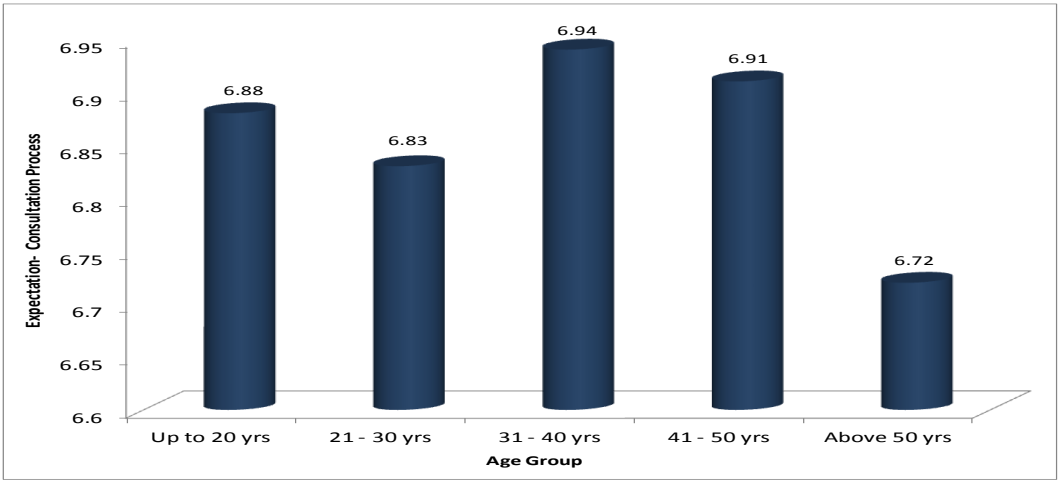


Figure 5.13: Consultation Process vs. Age Groups

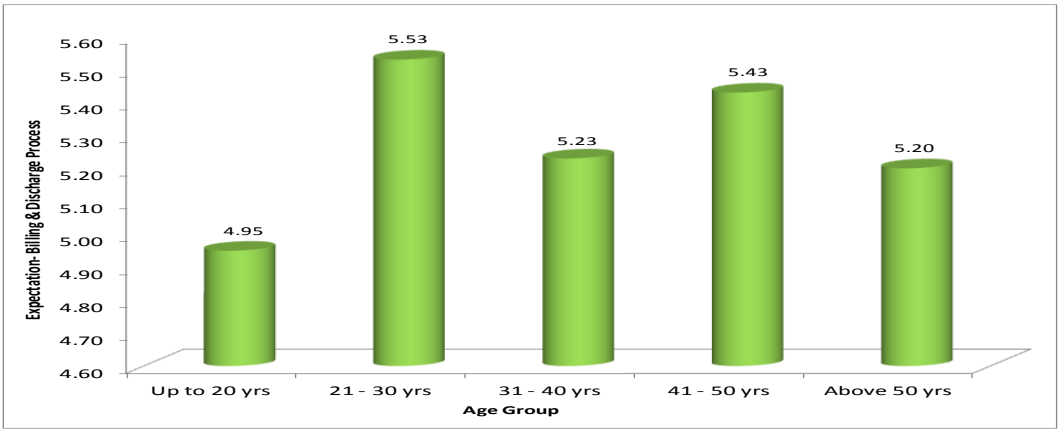


Figure 5.14: Billing & Discharge Process vs. Age Groups

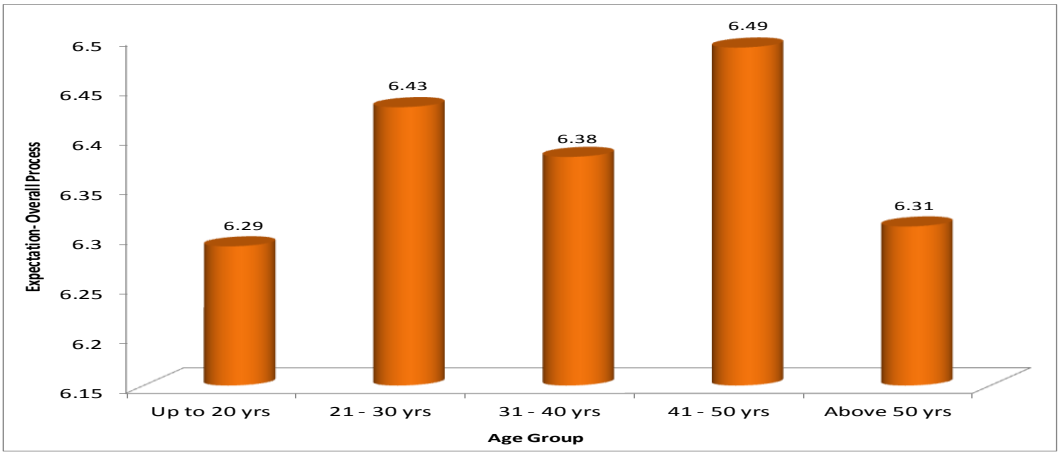


Figure 5.15: Overall Process vs. Age Groups

Process Factors V/s Education

H4: There is a non-significant difference in the expectations of Customers' of the different educational background with regard to overall service process factor and its sub-factors.

In the present study, it is found that educational status seemed to certainly affect the expectations of the customers, as a significant difference has been seen for overall service process factor. The ANOVA test is applied to find, whether a significant difference exists, among the different educational background regarding their expectation level with respect to process factor and its sub-factors. As per the test result if the estimated value of the test is more than 2.63 @ 3, 393df, it is significant at 5% level. If its value exceeds 3.83, it is significant at 1% level at the same degree of freedom whereas if the value exceeds 5.53 it is significant at 0.1% level. In the event of the test being significant, it implies that there is a significant difference between the expectations of the different education background with regard to the overall service process factor and its sub-factors.

The Table-5.4 given below shows the results of ANOVA, a non-significant difference exists among the different education background and in their expectation level regarding communication process factor ($F = 0.82$, $p<0.05$). Hence it can be said that the expectation level of the different education groups regarding Communication process factor do not differ significantly. Similarly the test results from the table clearly indicate that a non-significant difference exists among the different education background and in their expectation level regarding Maintenance & Medication process and Billing & Discharge process factors ($F = 2.15$, $p<0.05$; $F = 0.04$, $p<0.05$). Hence it can be said that the expectation level of the different education groups regarding Maintenance & Medication process and Billing & Discharge process factors do not differ significantly. The test results regarding Consultation process factor show a significant difference in the expectation level of the different education level of the respondents ($F = 2.75$, $p <0.05$). Similarly, the test results regarding overall factor show a highly significant difference in the expectation level of the different education level of

the respondents (F = 4.09, p <0.01). Hence it can be said that the expectation level of different education groups regarding the overall process factor differs significantly.

Table- 5.4: Relationship between Education Level and Process Factor & Sub-factors.

F-1	Education	N	Mean	SD	F	df	Result
Communication	Illiterate	9	5.83	0.59	0.82	3, 393	NS
	Below Graduate	86	5.66	0.62			
	Graduate	134	5.83	0.93			
	Post Graduate & Above	168	5.79	0.79			
Maintenance & Medication	Illiterate	9	6.91	0.16	2.15	3, 393	NS
	Below Graduate	86	6.71	0.32			
	Graduate	134	6.74	0.28			
	Post Graduate & Above	168	6.67	0.40			
Consultation	Illiterate	9	6.82	0.24	2.75	3, 393	*
	Below Graduate	86	6.92	0.19			
	Graduate	134	6.87	0.27			
	Post Graduate & Above	168	6.80	0.41			
Billing & Discharge	Illiterate	9	5.39	0.93	0.04	3, 393	NS
	Below Graduate	86	5.30	0.75			
	Graduate	134	5.29	1.04			
	Post Graduate & Above	168	5.32	1.13			
Overall	Illiterate	9	6.51	0.28	4.09	3, 393	**
	Below Graduate	86	6.37	0.33			
	Graduate	134	6.42	0.39			
	Post Graduate & Above	168	6.36	0.46			

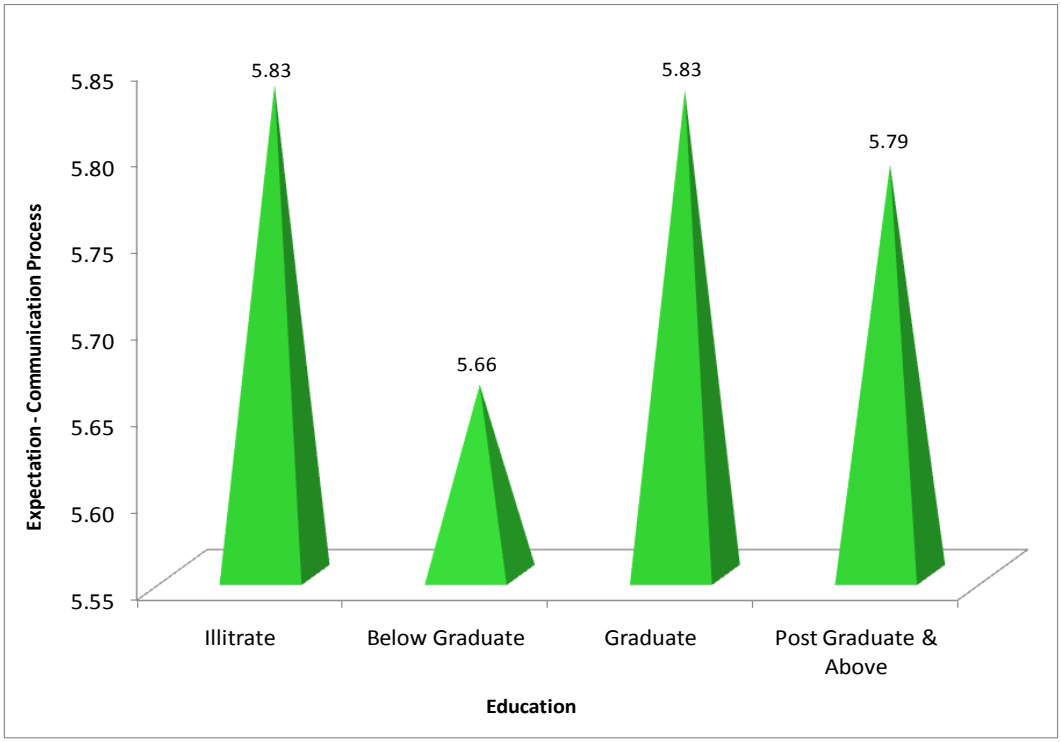


Figure 5.16: Communication Process vs. Education Level

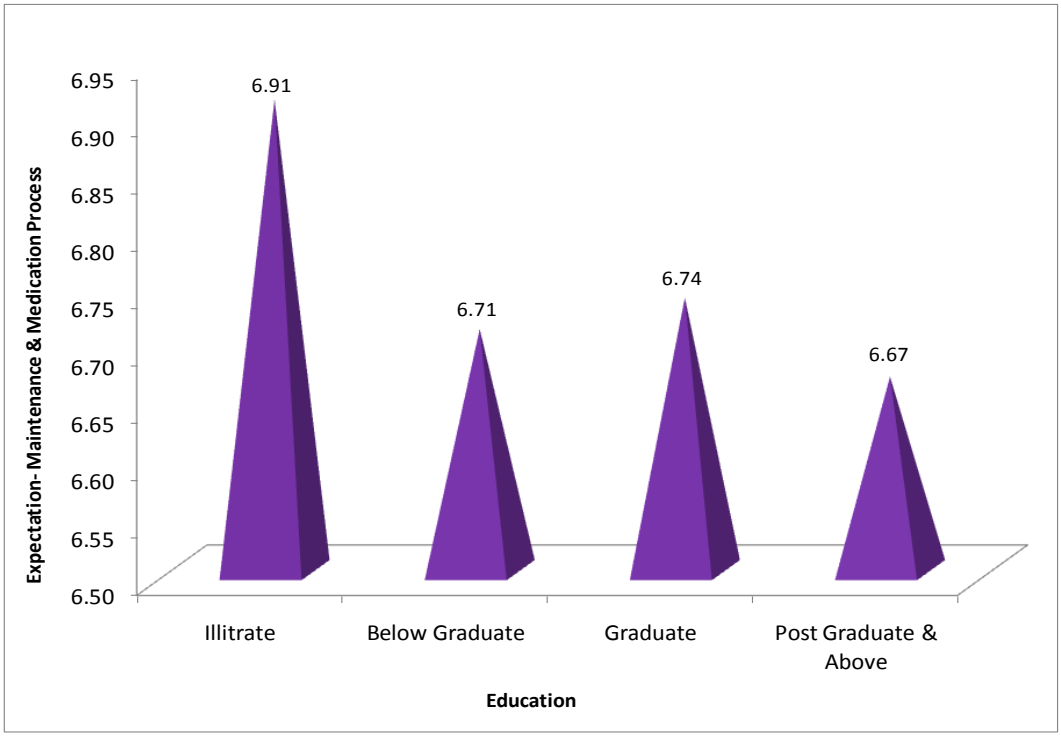


Figure 5.17: Maintenance & Medication Process vs. Education Level

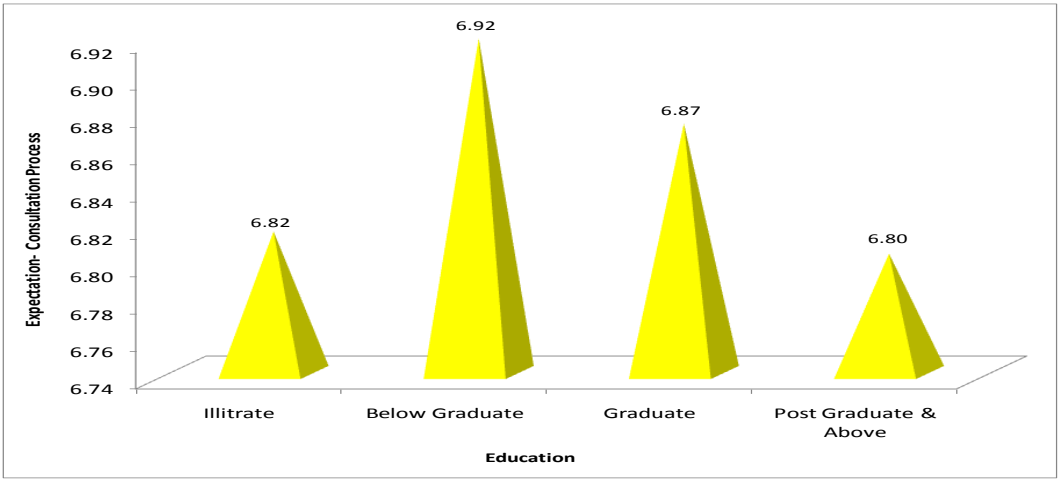


Figure 5.18: Consultation Process vs. Education Level

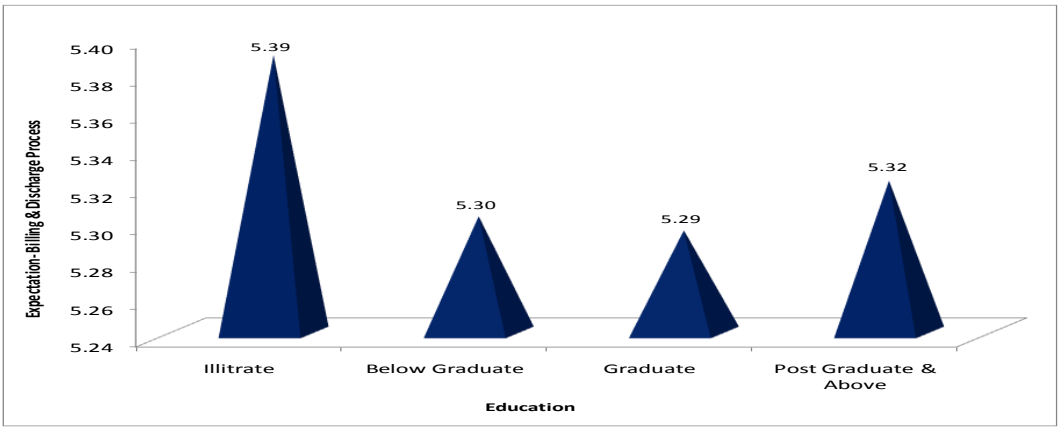


Figure 5.19: Billing & Discharge Process vs. Education Level

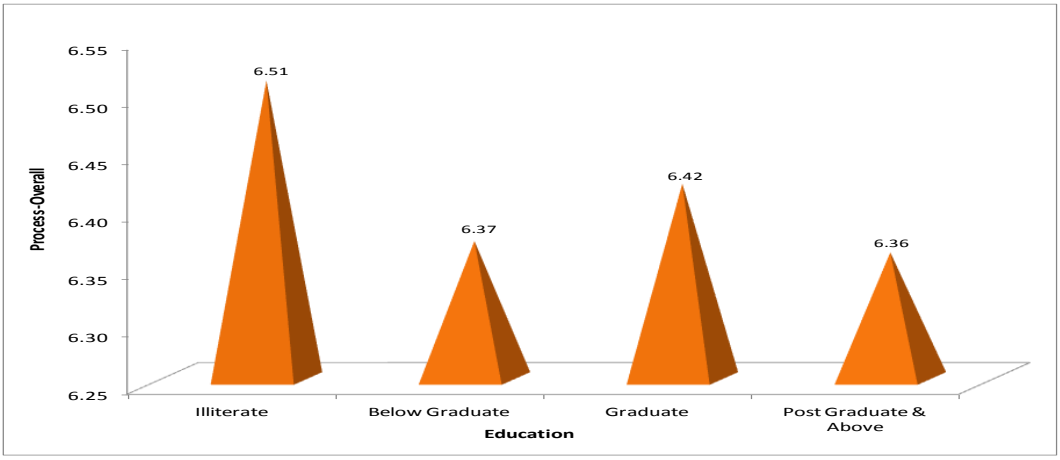


Figure 5.20: Overall Process vs. Education Level

Process Factors V/s Occupation

H5: There is a non-significant difference in the expectations of Customers' of the different Occupation with regard to overall service process factor and its sub-factors.

Demographic variable – Occupation and difference in the expectation level of the respondents is analysed next using the ANOVA test (Table – 5.5). The test is applied to find, whether significant difference exists, among the different occupation groups regarding their expectation level with respect to Process factor and its sub-factors. As per the test result if the estimated value of the test is more than 2.24 @ 5, 394df, it is significant at 5% level. If its value exceeds 3.06, it is significant at 1% level at the same degree of freedom whereas if the value exceeds 4.20 it is significant at 0.1% level. In the event of the test being significant, it implies that there is a significant difference between the expectations of the different occupation with regard to the overall service process factor and its sub-factors.

The table 5.5 given below shows the results of ANOVA, a non-significant difference exists among the different occupation and in their expectation level regarding Consultation process factor ($F = 2.12$, $p<0.05$). Hence it can be said that the expectation level of the different occupation groups regarding Consultation process do not differ significantly. But the test results from the table clearly indicate that a significant difference exists among different occupation and in their expectation level regarding Communication process ($F = 3.88$, $p <0.001$), Maintenance & Medication process ($F = 2.57$, $p <0.05$) and Billing & Discharge process factors ($F = 2.77$, $p <0.05$). Therefore, it can be said that the expectation level of different occupation regarding these process factors differ significantly. Similarly, the test results regarding overall factor shows highly significant difference in the expectation level of different occupation of the respondents ($F = 4.09$, $p <0.01$). Hence it can be said that the expectation level of different education groups regarding overall process factor differs significantly. Therefore the hypothesis H5 is rejected.

Table- 5.5: Relationship between Occupation and Process Factor & Sub-factors.

F-1	Occupation	N	Mean	SD	F	df	Result
Communication	Business	25	6.00	1.05	3.88	5, 394	**
	Service (Govt.)	24	5.74	0.77			
	Service (Private)	136	5.76	0.80			
	Self-Employed	59	5.77	0.79			
	House-wife	70	6.06	0.78			
	Unemployed/Student	86	5.53	0.71			
Maintenance & Medication	Business	25	6.72	0.32	2.57	5, 394	*
	Service (Govt.)	24	6.77	0.18			
	Service (Private)	136	6.69	0.34			
	Self-Employed	59	6.71	0.38			
	House-wife	70	6.82	0.27			
	Unemployed/Student	86	6.63	0.38			
Consultation	Business	25	6.84	0.31	2.12	5, 394	NS
	Service (Govt.)	24	6.92	0.23			
	Service (Private)	136	6.88	0.30			
	Self-Employed	59	6.80	0.39			
	House-wife	70	6.92	0.22			
	Unemployed/Student	86	6.78	0.39			
Billing & Discharge	Business	25	5.14	1.12	2.77	5, 394	*
	Service (Govt.)	24	5.50	0.85			
	Service (Private)	136	5.37	0.95			
	Self-Employed	59	5.15	1.04			
	House-wife	70	5.61	1.01			
	Unemployed/Student	86	5.09	1.07			
Overall	Business	25	6.42	0.43	4.09	5, 394	**
	Service (Govt.)	24	6.44	0.30			
	Service (Private)	136	6.38	0.40			
	Self-Employed	59	6.36	0.44			
	House-wife	70	6.55	0.34			
	Unemployed/Student	86	6.26	0.43			

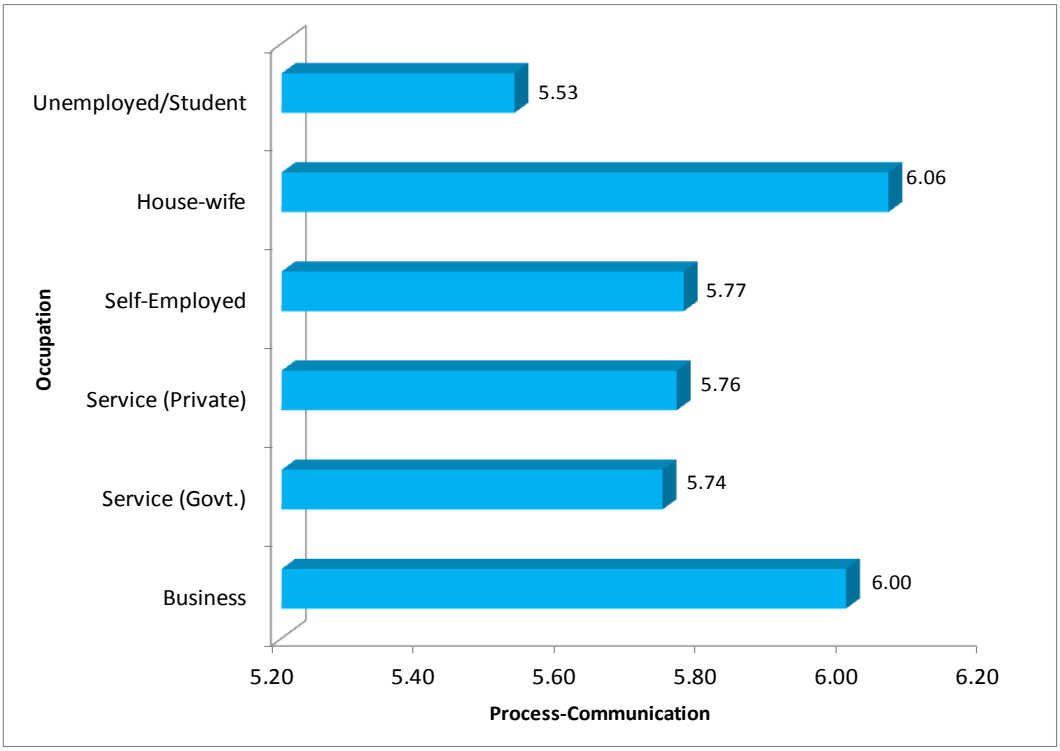


Figure 5.21: Communication Process vs. Occupation

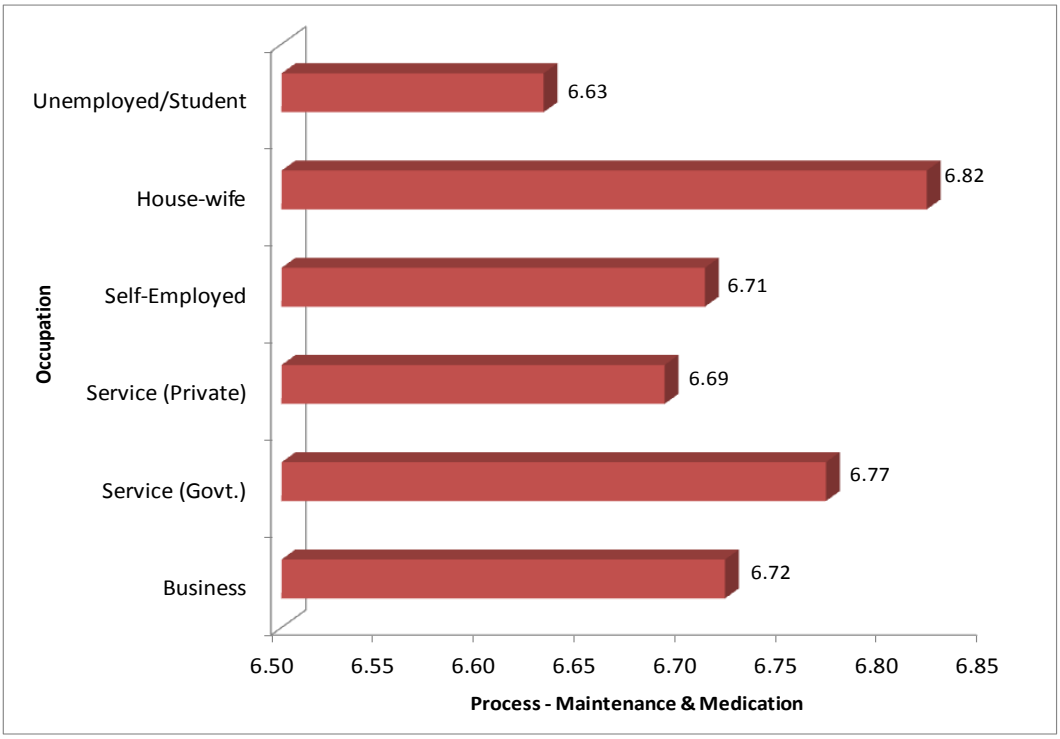


Figure 5.22: Maintenance & Medication Process vs. Occupation

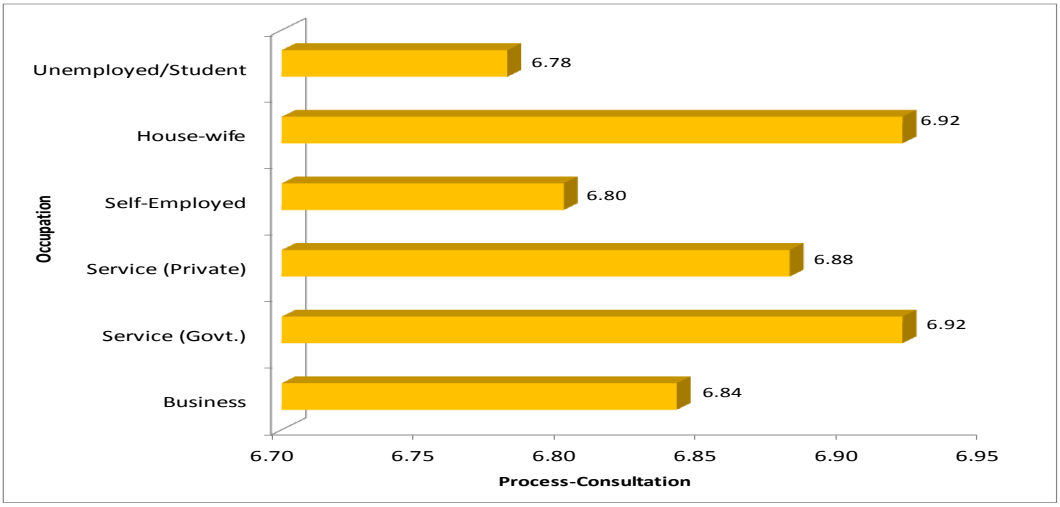


Figure 5.23: Consultation Process vs. Occupation

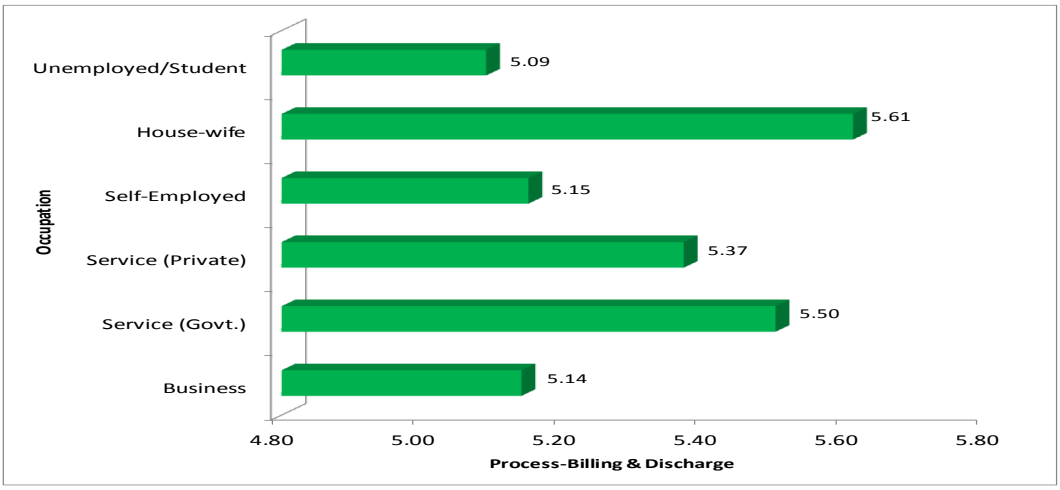


Figure 5.24: Billing & Discharge Process vs. Occupation

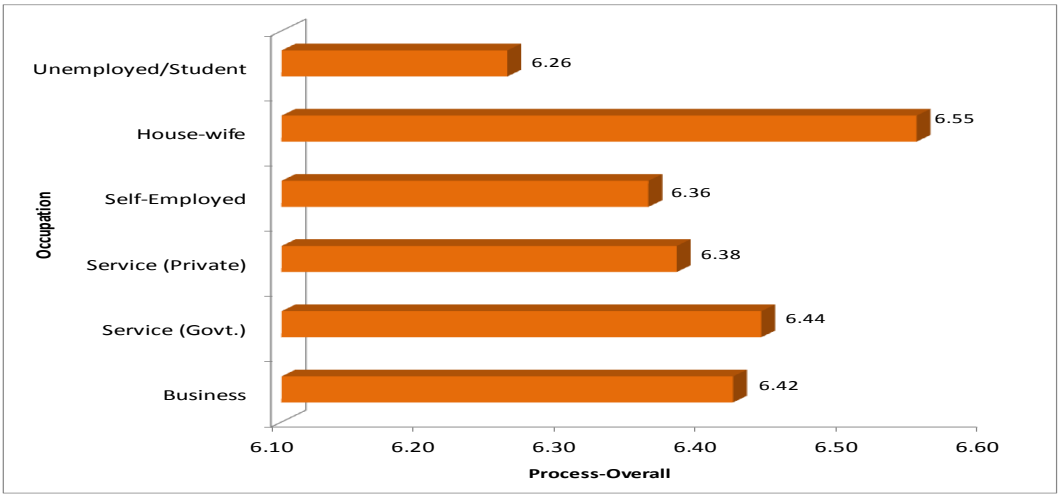


Figure 5.25: Overall Process vs. Occupation

Process Factors V/s Income

H6: There is a non-significant difference in the expectations of Customers' of the different income groups with regard to overall service process factor and its sub-factors.

The expectation levels of the different income groups with regard to overall service process factor and its sub-factors have been analyzed next. It has been found that income affect the expectation levels of the customers as a significant difference was seen for overall service process factor and many of its sub-factors. The ANOVA test is applied to find it and as per the test result if the estimated value of the test is more than 2.24 @ 5, 392df, it is significant at 5% level. If its value exceeds 3.06 it is significant at 1% level at the same degree of freedom whereas if the value exceeds 4.20 it is significant at 0.1% level. In the event of the test being significant, it implies that there is a significant difference between the expectations of different education background with regard to overall service process factor and its sub-factors.

The Table-5.6 given below shows the results of ANOVA, a non-significant difference exists among the different income groups and in their expectation level regarding Consultation process ($F = 2.15$, $p<0.05$) and Billing & Discharge process factors ($F = 1.03$, $p<0.05$). Hence it can be said that the expectation level of the different income groups regarding Consultation process and Billing & Discharge process factors do not differ significantly.

But the test results from the table clearly indicate that a significant difference exists among the different income groups and their expectation level regarding Communication process ($F = 3.39$, $p<0.01$) and Maintenance & Medication process factors ($F = 3.53$, $p<0.01$). Hence it can be said that the expectation level of the different income groups regarding Communication process and Maintenance & Medication process factors are significantly different. Similarly, the test results regarding the overall process factor shows a significant difference in the expectation level of the different income level of the respondents ($F = 3.63$, $p <0.01$). Hence it can be said that the expectation level of the different income groups regarding the overall process factor differs significantly.

Table- 5.6: Relationship between Income and Process Factor & Sub-factors.

F-1	Income	N	Mean	SD	F	df	Result
Commu-nication	Below Rs. 20,000	68	5.75	0.76	3.39	5, 392	**
	Rs. 20,001 - Rs. 40,000	84	5.77	0.82			
	Rs. 40,001 - Rs. 60,000	106	5.83	0.77			
	Rs. 60,001 - Rs. 80,000	56	5.50	0.95			
	Rs. 80,001 - Rs. 1,00,000	36	6.18	0.46			
	Above Rs. 1,00,000	48	5.71	0.84			
Mainte-nance & Medication	Below Rs. 20,000	68	6.81	0.37	3.53	5, 392	**
	Rs. 20,001 - Rs. 40,000	84	6.70	0.41			
	Rs. 40,001 - Rs. 60,000	106	6.72	0.26			
	Rs. 60,001 - Rs. 80,000	56	6.68	0.25			
	Rs. 80,001 - Rs. 1,00,000	36	6.74	0.36			
	Above Rs. 1,00,000	48	6.55	0.36			
Consult-ation	Below Rs. 20,000	68	6.91	0.20	2.15	5, 392	NS
	Rs. 20,001 - Rs. 40,000	84	6.81	0.43			
	Rs. 40,001 - Rs. 60,000	106	6.90	0.26			
	Rs. 60,001 - Rs. 80,000	56	6.78	0.36			
	Rs. 80,001 - Rs. 1,00,000	36	6.90	0.30			
	Above Rs. 1,00,000	48	6.80	0.32			
Billing & Discharge	Below Rs. 20,000	68	5.40	0.65	1.03	3, 392	NS
	Rs. 20,001 - Rs. 40,000	84	5.45	1.07			
	Rs. 40,001 - Rs. 60,000	106	5.33	0.92			
	Rs. 60,001 - Rs. 80,000	56	5.10	1.05			
	Rs. 80,001 - Rs. 1,00,000	36	5.69	0.61			
	Above Rs. 1,00,000	48	4.85	1.49			
Overall	Below Rs. 20,000	68	6.45	0.36	3.63	5, 392	**
	Rs. 20,001 - Rs. 40,000	84	6.39	0.51			
	Rs. 40,001 - Rs. 60,000	106	6.42	0.34			
	Rs. 60,001 - Rs. 80,000	56	6.28	0.44			
	Rs. 80,001 - Rs. 1,00,000	36	6.54	0.29			
	Above Rs. 1,00,000	48	6.23	0.39			

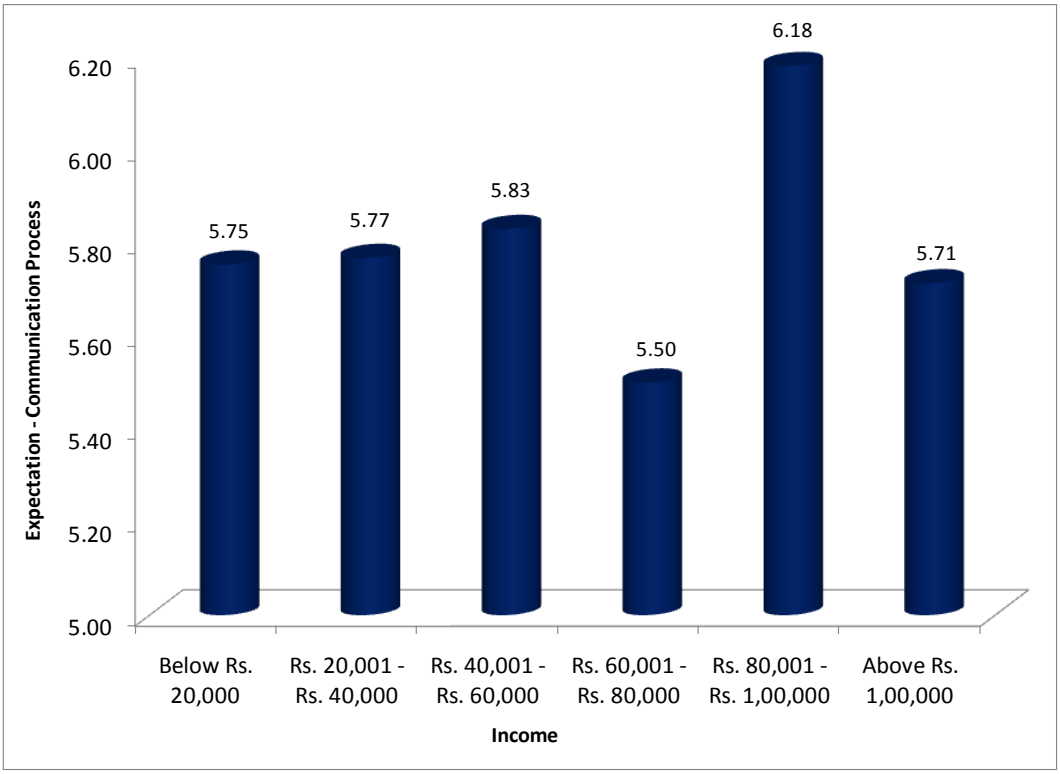


Figure 5.26: Communication Process vs. Income Groups

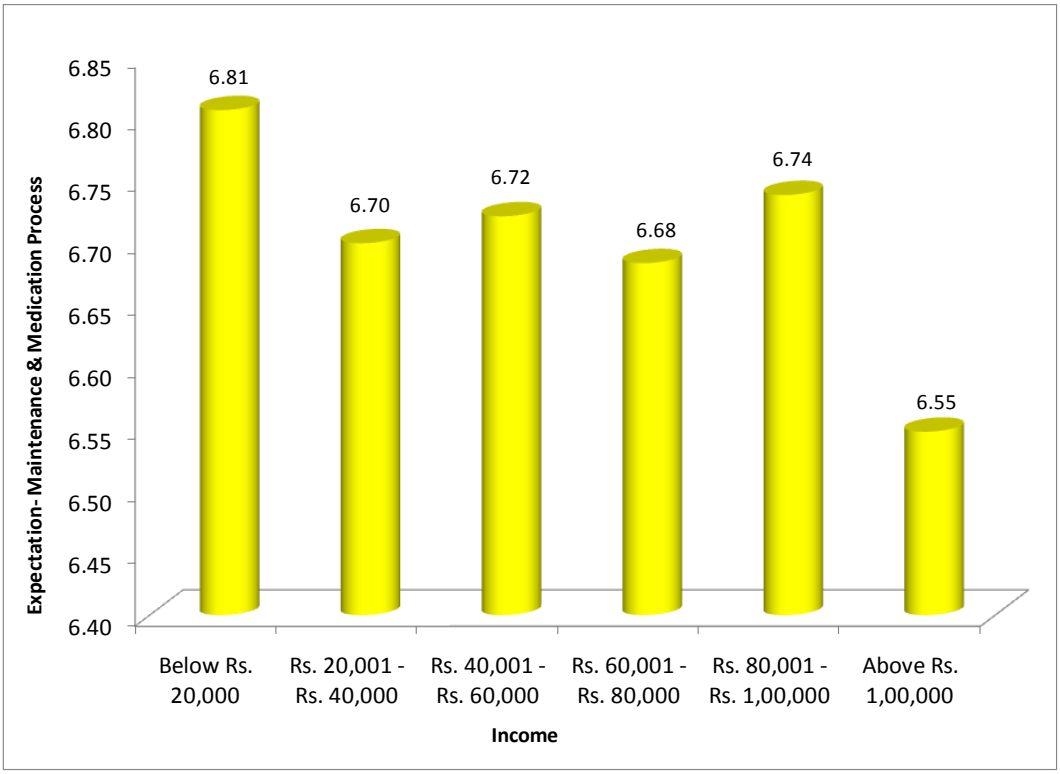


Figure 5.27: Maintenance & Medication Process vs. Income Groups

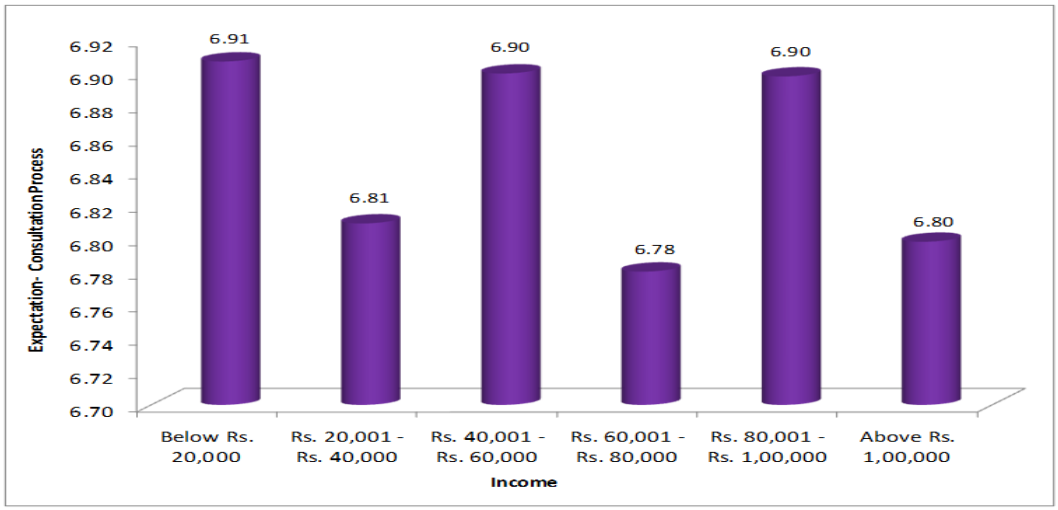


Figure 5.28: Consultation Process vs. Income Groups

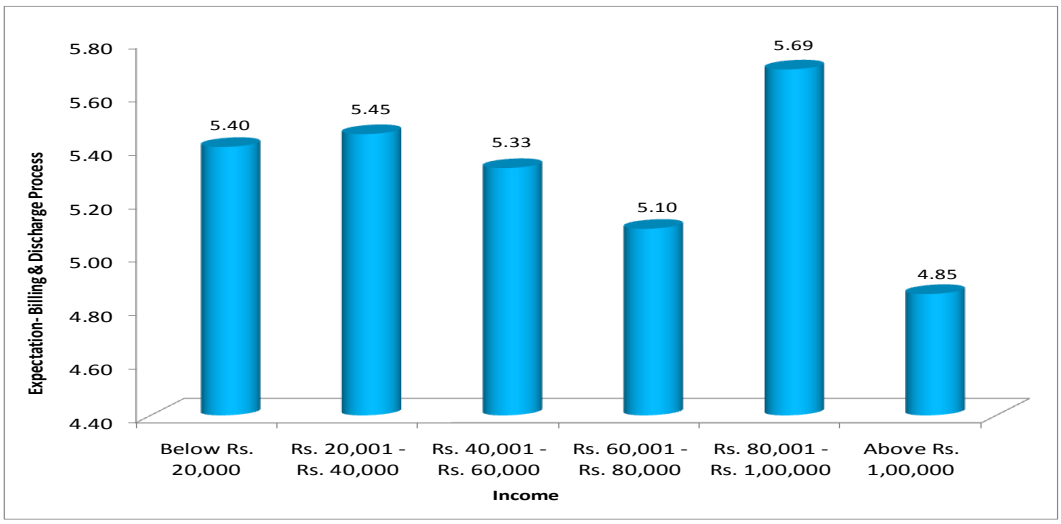


Figure 5.29: Billing & Discharge Process vs. Income Groups

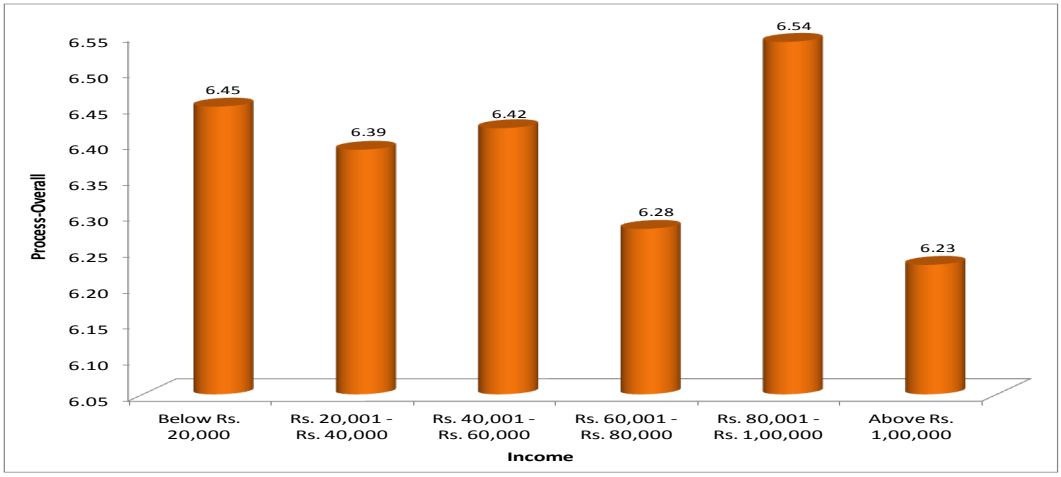


Figure 5.30: Overall Process vs. Income Groups

5.1.2 Physical Environment Factor

Physical Environment Factors V/s Gender

H7: There is a non-significant difference in the expectations of Customers' of the different gender with regard to overall physical environment factor and its sub-factors.

To identify whether the level of expectations regarding various physical environment factor and its sub-factors varies with demographic variables, various tests have been applied as per the requirement of the data. First of all the sub-factors of physical environment have been tested for gender. To compare the expectation level with regard to various sub-factors of physical environment factor, the test for difference of means i.e. Z-test has been applied. The description of each test is given below. The null hypothesis that there is a non- significant difference between the expectations of the different gender with regard to overall service physical environment factor and its sub-factors has been statistically tested. The statistical significance has been examined by using Z-statistic. If the estimated value of Z-statistic is greater than 1.96 and less than 2.58, it is significant at 5% level. If its value exceeds 2.58, it is significant at 1% level. In the event of the Z-statistic being significant, it implies that there is a significant difference between the expectations of the different gender with regard to overall service physical environment factor and its sub-factors.

The table 5.7 given below shows the results of the expectation level tested against gender. The results clearly indicate that there is a highly significant difference in the level of expectation regarding Waiting Lounge physical environment factor ($Z = -4.43$, $p < 0.001$), as well as the difference in the expectation level regarding Medical & Diagnostic Facilities factor ($Z = 1.97$, $p < 0.05$). Contrary to this, differences in the expectations of two genders, with regard to Canteen & Other Facilities ($Z = -0.96$, $p<0.05$), Patient's Room Facilities ($Z =-1.35$, $p<0.05$) and Staff Appearance ($Z = 0.12$, $p < 0.05$) sub-factors of physical environment are non-significant. But the overall expectation level of female customers is found to be higher than the expectation level of male customers ($Z = -2.20$, $p < 0.05$).

Therefore, it can be concluded that there is a significant difference between the expectations of Female and Male customers related to healthcare services physical environment and its sub-factors. Contrary to this, differences in the expectations of two genders, with regard to Canteen & Other Facilities (Z = -0.96, p<0.05), Patient's Room Facilities (Z = -1.35, p<0.05) and Staff Appearance (Z = 0.12, p <0.05) sub-factors of physical environment are non-significant.

Table-5.7: Relationship between Gender and Physical Environment Factor & Sub-factors.

F- 2	Gender	N	Mean	SD	Z	Result
Waiting Lounge	Male	225	6.12	0.73	-4.43	***
	Female	175	6.43	0.62		
Medical & Diagnostic Facilities	Male	225	6.89	0.20	1.97	*
	Female	175	6.84	0.36		
Canteen & Other Facilities	Male	225	5.79	0.49	--0.96	NS
	Female	175	5.85	0.60		
Patient's Room Facilities	Male	225	6.40	0.61	-1.35	NS
	Female	175	6.48	0.64		
Staff Appearance	Male	225	6.50	0.49	0.12	NS
	Female	175	6.49	0.61		
Overall	Male	225	6.28	0.32	-2.20	*
	Female	175	6.36	0.37		

But the overall expectation level of female customers is found to be higher than the expectation level of male customers (Z = -2.20, p <0.05). Therefore, it can be concluded that there is a significant difference between the expectations of Female and Male customers related to healthcare services physical environment and its sub-factors. But the overall expectation level of female customers is found to be higher than the expectation level of male customers (Z = -2.20, p <0.05). Therefore, it can be concluded that there is a significant difference between the expectations of Female and Male customers related to healthcare services physical environment and its sub-factors.

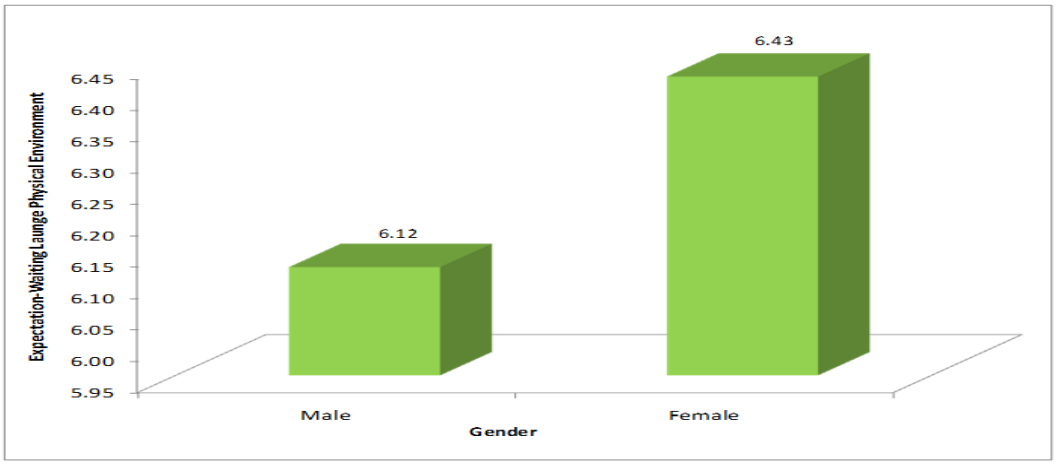


Figure 5.31: Waiting Lounge Physical Environment Factor vs. Gender

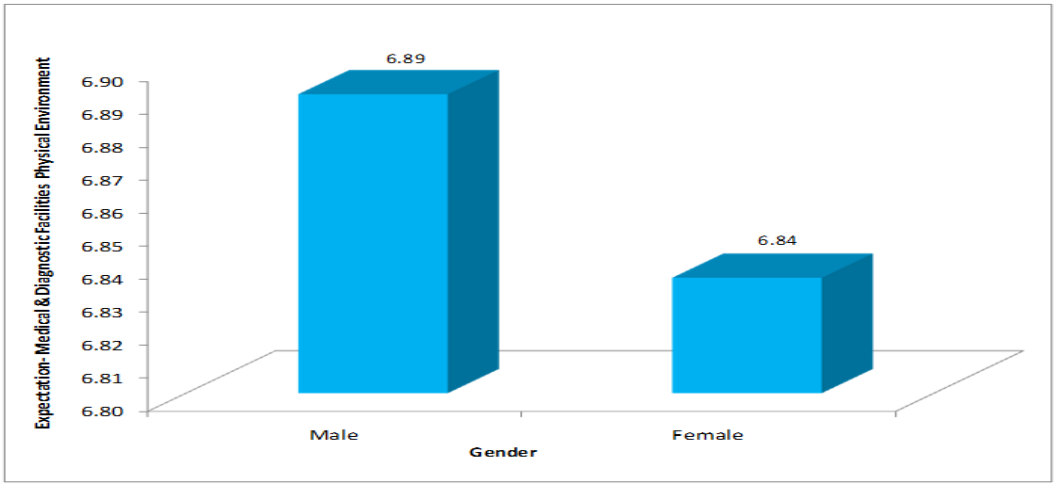


Figure 5.32: Medical & Diagnostic Facilities Physical Environment Factor vs. Gender

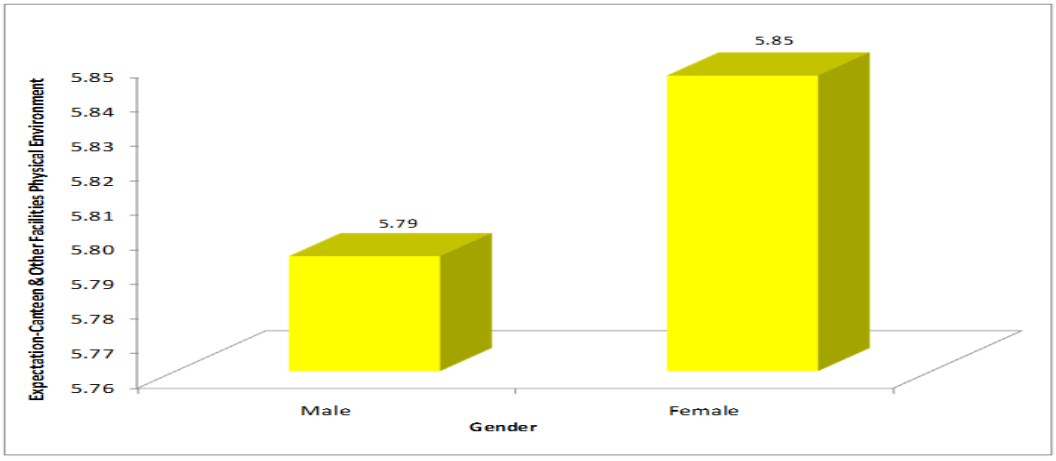


Figure 5.33: Canteen & Other Facilities Physical Environment Factor vs. Gender

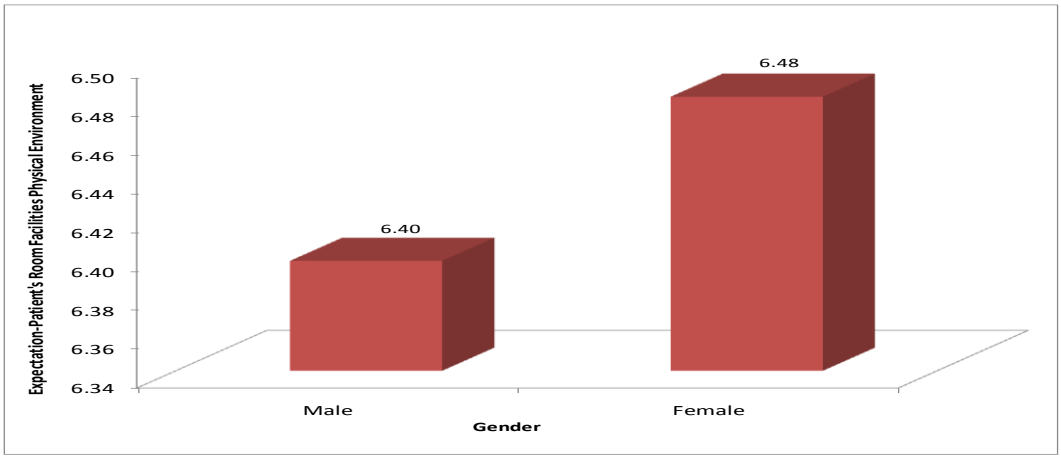


Figure 5.34: Patient's Room Facilities Physical Environment Factor vs. Gender

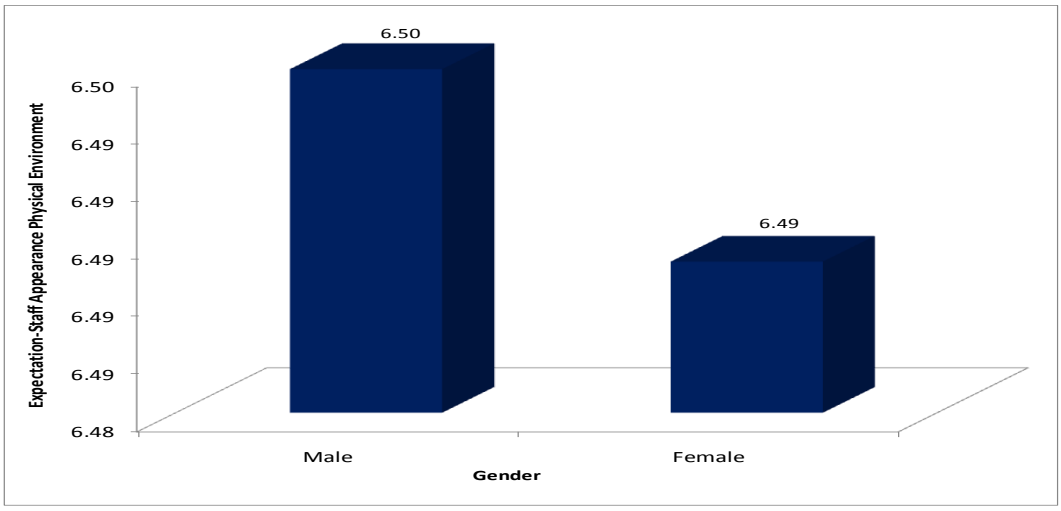


Figure 5.35: Staff Appearance Physical Environment Factor vs. Gender

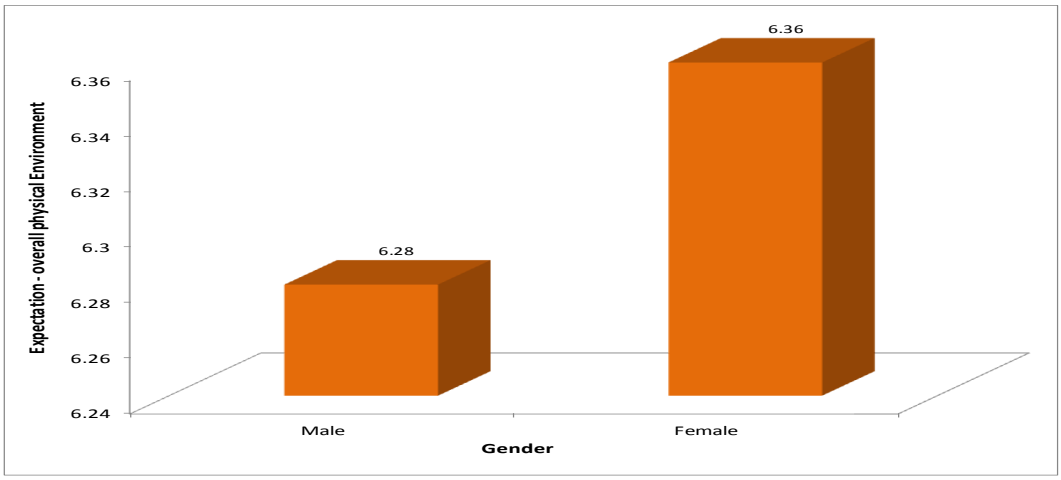


Figure 5.36: Overall Physical Environment Factor vs. Gender

Physical Environment Factors V/s Profession

H8: There is a non-significant difference in the expectations of Customers' of the different profession with regard to overall physical environment factor and its sub-factors.

The level of expectations may also vary with regard to the different professions of the customers. To test the hypothesis, the Z- test has been applied as per the requirement of data and the different physical environment sub-factors have been tested for profession. If the estimated value of Z-statistic is greater than 1.96 and less than 2.58, it is significant at 5% level. If its value exceeds 2.58, it is significant at 1% level. In the event of the Z-statistic being significant, it implies that there is a significant difference between the expectations of the different gender with regard to overall service physical environment factor and its sub-factors.

The null hypothesis that there is non- significant difference between the expectations of the different profession with regard to overall physical environment factor and its sub-factors has been examined and the test results given below show the expectation level of customers. It is clearly indicated by the results that there is no significant difference in the level of expectation of the different profession regarding Waiting Lounge physical environment factor ($Z = 1.11$, $p < 0.001$), Medical & Diagnostic Facilities factor ($Z = -1.28$, $p < 0.05$). It means healthcare customers don't notice much about ambiance of waiting lounge and medical and diagnostic facilities whether they are Medical professionals as customers and Non-medical customers.

It is also depicted by the results that there is no significant difference in the level of expectation of Medical professionals as customers and Non-medical customers, regarding Canteen & Other Facilities ($Z = -0.51$, $p<0.05$), Patient's Room Facilities ($Z = -0.41$, $p<0.05$) and Staff Appearance ($Z = 0.66$, $p < 0.05$) sub-factors of physical environment. The respondents of the different profession do not view and expect differently from Canteen & Other Facilities, Patient's Room Facilities and Staff Appearance sub-factors of physical environment Even overall difference

in the expectation level of Medical professionals as customers and Non-medical customers, with regard to physical environment factor is non-significant (Z = 0.45, p <0.05).Therefore, it can be concluded that the hypothesis H8 is accepted. It means that there is no significant difference between the expectations of Medical and Non-medical customers regarding healthcare physical environment.

Table-5.8: Relationship between Profession and Physical Environment Factor & Sub-factors.

F- 2	Gender	N	Mean	SD	Z	Result
Waiting Lounge	Medical	16	6.44	0.80	1.11	NS
	Non-Medical	380	6.24	0.69		
Medical & Diagnostic Facilities	Medical	16	6.78	0.42	-1.28	NS
	Non-Medical	380	6.87	0.28		
Canteen & Other Facilities	Medical	16	5.75	0.55	-0.51	NS
	Non-Medical	380	5.82	0.54		
Patient's Room Facilities	Medical	16	6.37	0.70	-0.41	NS
	Non-Medical	380	6.44	0.62		
Staff Appearance	Medical	16	6.58	0.61	0.66	NS
	Non-Medical	380	6.49	0.54		
Overall	Medical	16	6.37	0.44	0.45	NS
	Non-Medical	380	6.31	0.34		

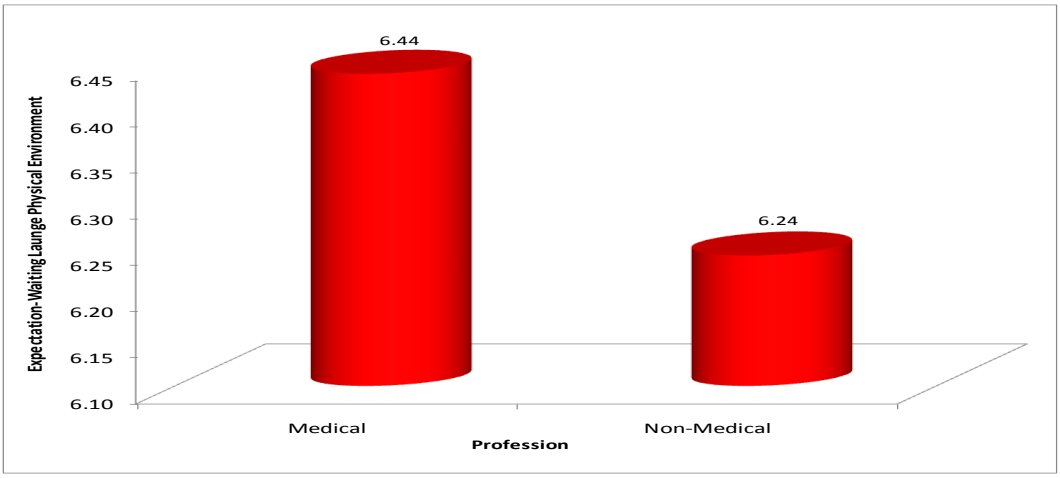


Figure 5.37: Waiting Lounge Physical Environment Factor vs. Profession

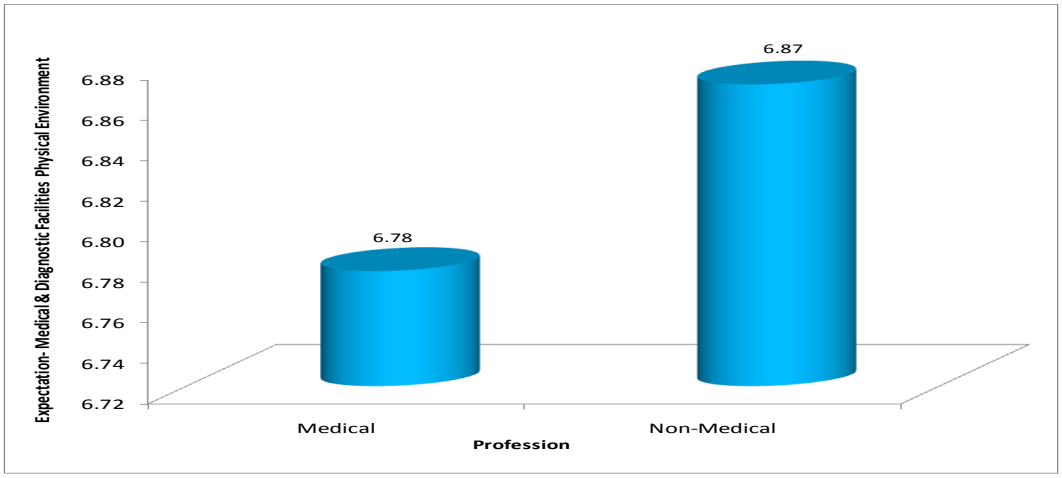


Figure 5.38: Medical & Diagnostic Facilities Physical Environment Factor vs. Profession

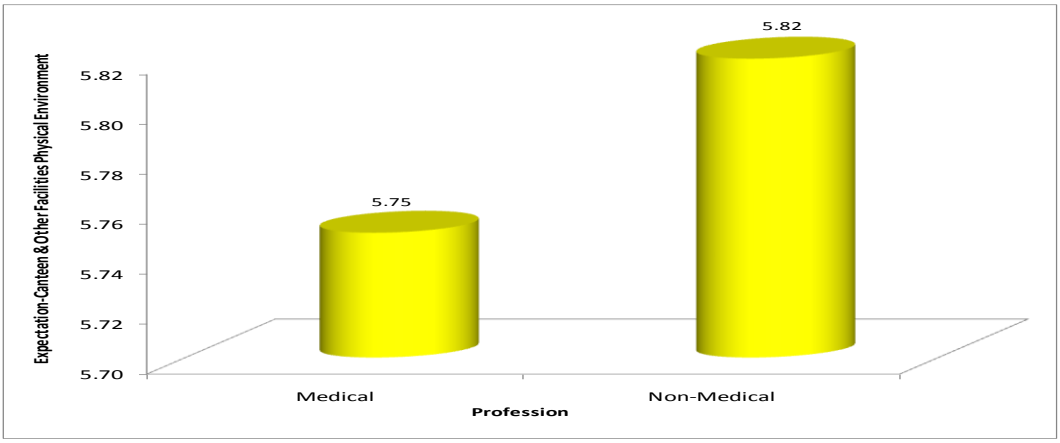


Figure 5.39: Canteen & Other Facilities Physical Environment Factor vs. Profession

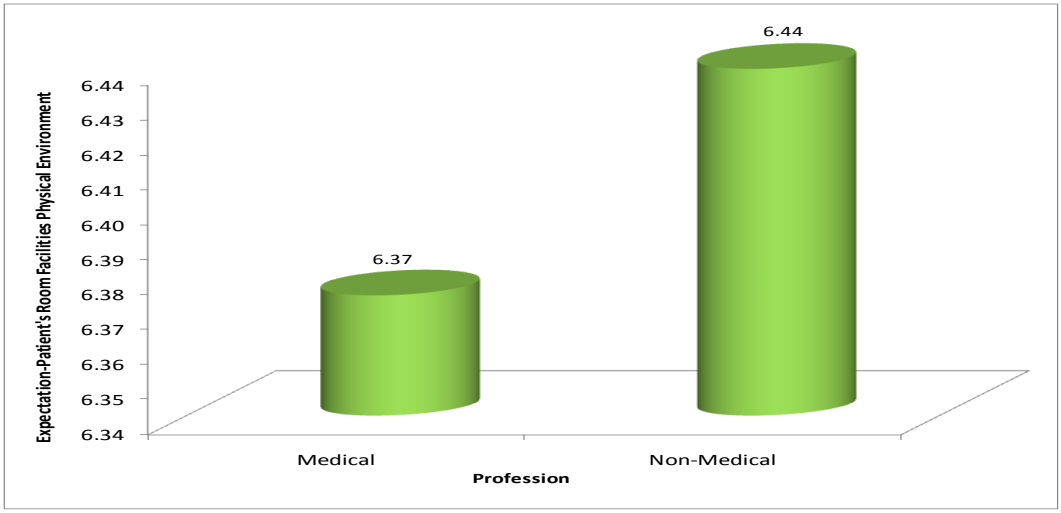


Figure 5.40: Patient's Room Facilities Physical Environment Factor vs. Profession

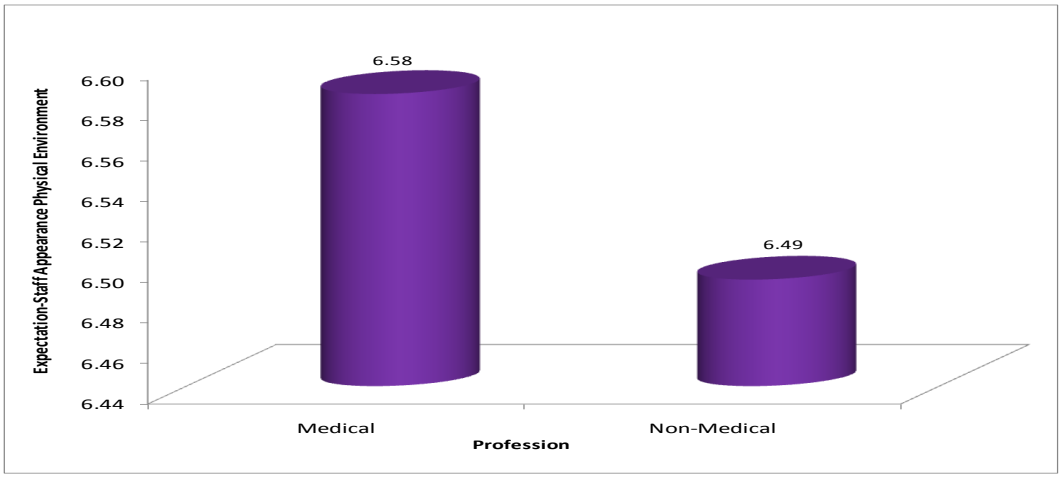


Figure 5.41: Staff Appearance Physical Environment Factor vs. Profession

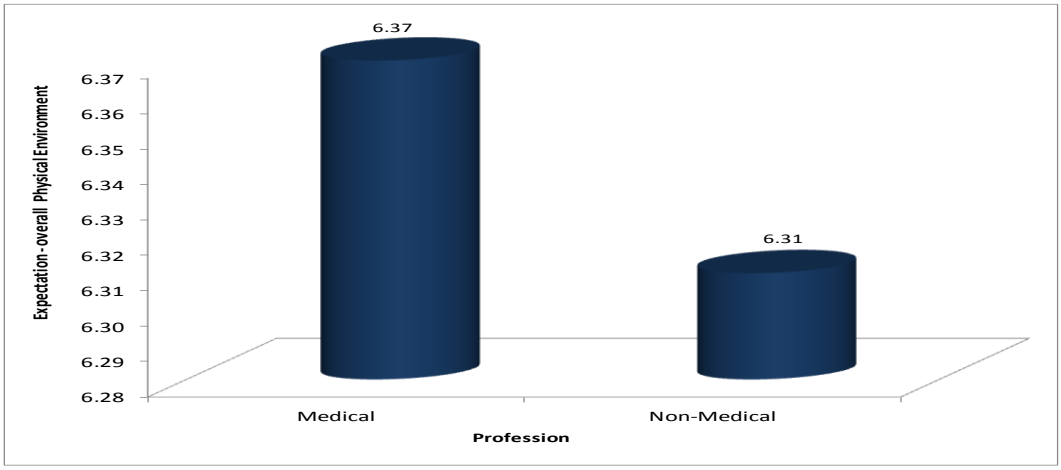


Figure 5.42: Overall Physical Environment Factor vs. Profession

Physical Environment Factors V/s Age Groups

H9: There is non-significant difference in the expectations of Customers' of the different age groups with regard to overall physical environment factor and its sub-factors.

Contrary to the non-significant differences in the expectations of the medical professionals and non-medical customers, Age has a relatively greater impact on the expectations of the customers. The ANOVA test is applied to find, whether a significant difference exists, among the different age groups regarding their expectation level with respect to physical environment factor and its sub-factors. As per the ANOVA test result if the estimated value of ANOVA test is more than 2.39 @ 4,393df, it is significant at 5% level. If its value exceeds 3.37, it is significant at 1% level at the same degree of freedom whereas if the value exceeds 4.71 it is significant at 0.1% level. In the event of the ANOVA test being significant, it implies that there is a significant difference between the expectations of different age groups with regard to the overall physical environment factor and its sub-factors.

The Table-5.9 given below shows test results of ANOVA, a non-significant difference exists among the different age group in their expectation level regarding Waiting Lounge ($F = 0.71$, $p<0.05$), Canteen & Other Facilities($Z = 1.95$, $p<0.05$) and Staff Appearance ($F = 2.30$, $p<0.05$) physical environment factors. Hence it can be said that the expectation level of the different age groups regarding Waiting Lounge, Canteen & Other Facilities and Staff Appearance physical environment factors do not differ significantly.

The test result regarding Medical & Diagnostic Facilities physical environment factor shows a highly significant difference in the expectation level of the different age group customers ($F = 3.67$, $p <0.01$). If we consider among all age groups the expectations regarding Patient's Room Facilities physical environment factor, the result indicates a significant difference among the expectation levels of the different age groups ($F = 3.93$, $p <0.01$). In the same lines, it is found that a significant difference exists among the expectation level of the different age group

regarding overall physical environment factor (F = 2.95, p<0.05). Therefore the hypothesis i.e. there is a non-significant difference in the expectations of customers of the different age groups with regard to the overall physical environment factor and its sub-factors" is rejected.

Table-5.9: Relationship between Age Groups and Physical Environment Factor & Sub-factors.

F-1	Age	N	Mean	SD	F	df	Result
Waiting Lounge	Up to 20 years	54	6.18	0.72	0.71	4, 393	NS
	21 - 30 years	125	6.25	0.67			
	31 - 40 years	83	6.27	0.69			
	41 - 50 years	65	6.36	0.65			
	Above 50 years	71	6.19	0.78			
Medical & Diagnostic Facilities	Up to 20 years	54	6.92	0.14	3.67	4, 393	**
	21 - 30 years	125	6.89	0.28			
	31 - 40 years	83	6.85	0.36			
	41 - 50 years	65	6.91	0.18			
	Above 50 years	71	6.76	0.32			
Canteen & Other Facilities	Up to 20 years	54	5.74	0.46	1.95	4, 393	NS
	21 - 30 years	125	5.87	0.51			
	31 - 40 years	83	5.85	0.53			
	41 - 50 years	65	5.89	0.58			
	Above 50 years	71	5.69	0.61			
Patient's Room Facilities	Up to 20 years	54	6.20	0.74	3.93	4, 393	**
	21 - 30 years	125	6.45	0.62			
	31 - 40 years	83	6.60	0.49			
	41 - 50 years	65	6.46	0.63			
	Above 50 years	71	6.35	0.61			
Staff Appearance	Up to 20 years	54	6.48	0.37	2.30	4, 393	NS
	21 - 30 years	125	6.55	0.56			
	31 - 40 years	83	6.43	0.56			
	41 - 50 years	65	6.59	0.53			
	Above 50 years	71	6.36	0.61			
Overall	Up to 20 yrs	54	6.29	0.29	2.95	4, 395	*
	21 - 30 yrs	125	6.43	0.46			
	31 - 40 yrs	83	6.38	0.41			
	41 - 50 yrs	65	6.49	0.35			
	Above 50 yrs	73	6.31	0.40			

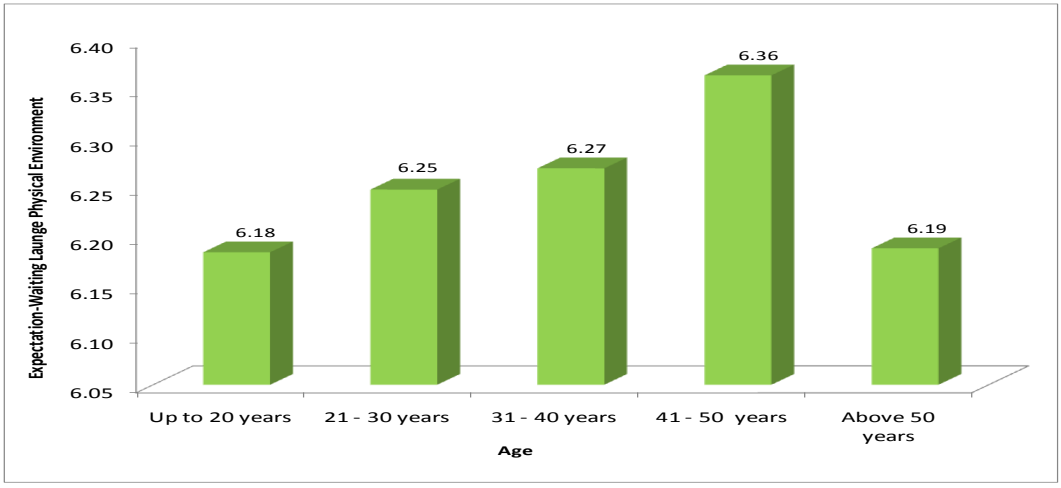


Figure 5.43: Waiting Lounge Physical Environment Factor vs. Age Groups

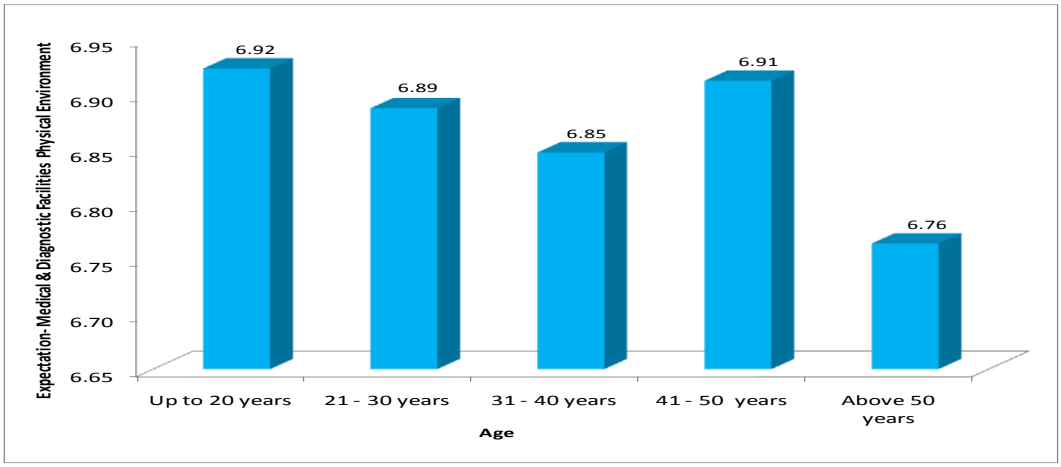


Figure 5.44: Medical & Diagnostic Facilities Physical Environment Factor vs. Age Groups

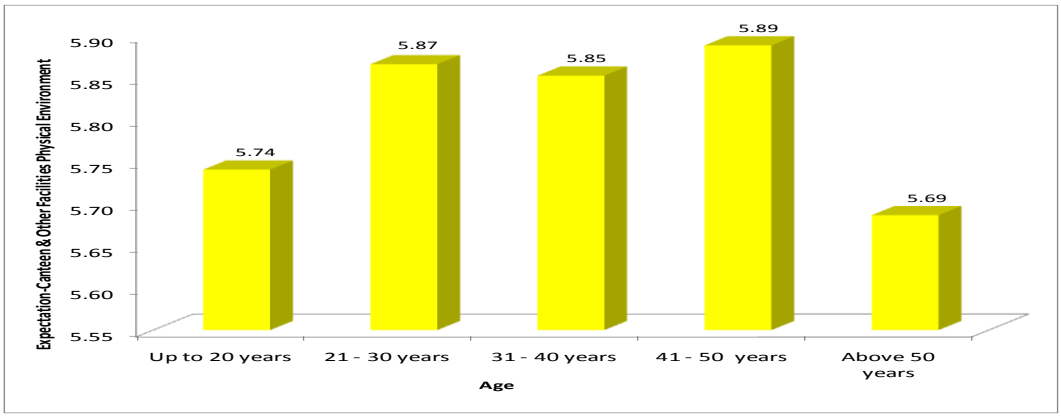


Figure 5.45: Canteen & Other Facilities Physical Environment Factor vs. Age Groups

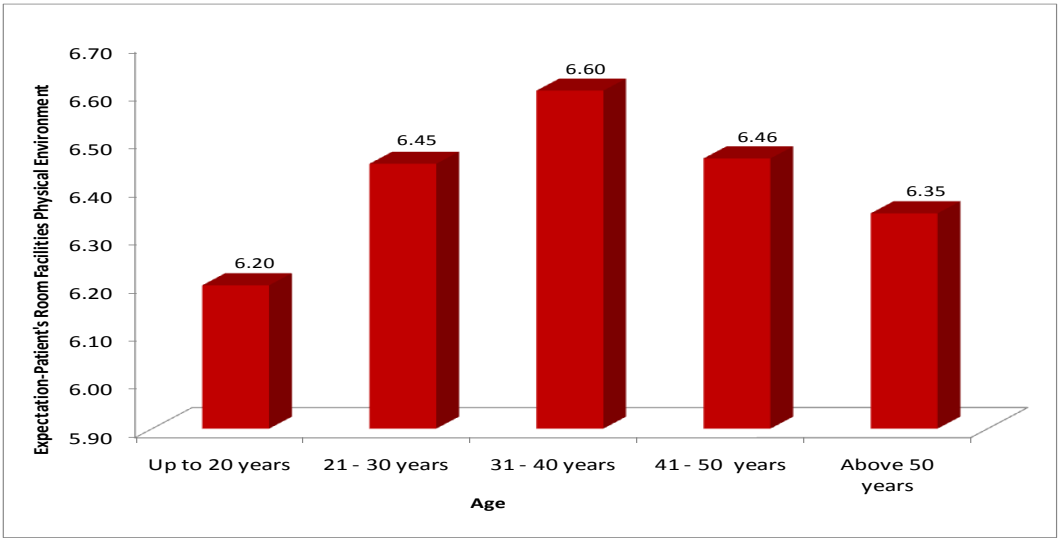


Figure 5.46: Patient's Room Facilities Physical Environment Factor vs. Age Groups

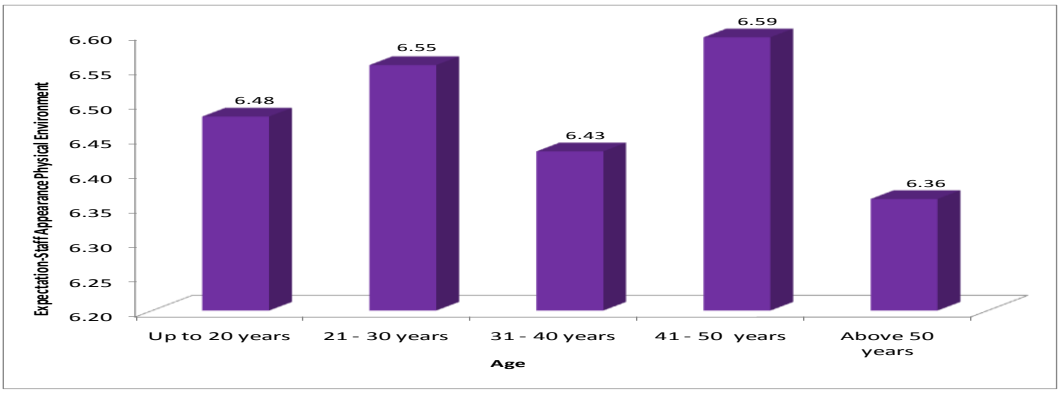


Figure 5.47: Staff Appearance Physical Environment Factor vs. Age Groups

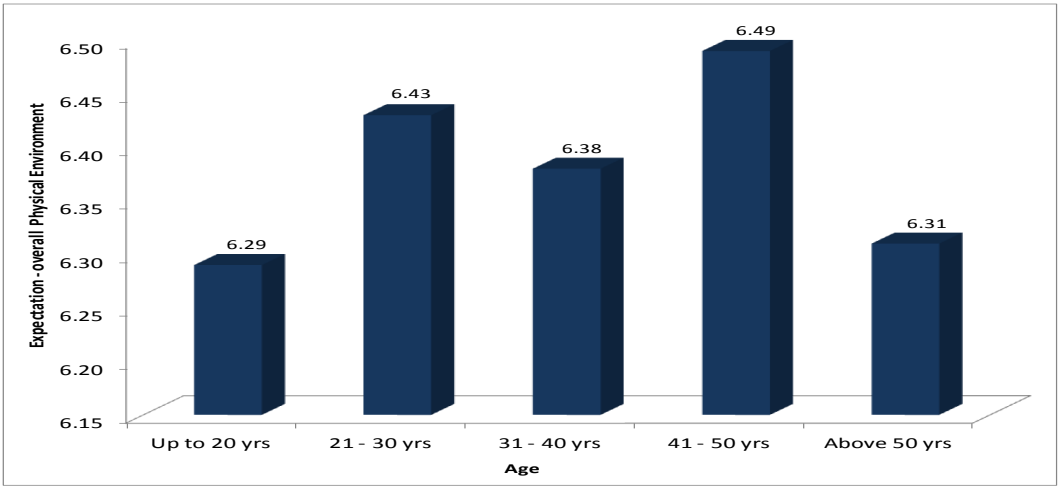


Figure 5.48: Overall Physical Environment Factor vs. Age Groups

Physical Environment Factors V/s Education Groups

H10: There is a non-significant difference in the expectations of Customers' of the different educational background with regard to overall physical environment factor and its sub-factors.

As per the results of the test with regard to physical environment factor, Educational status seemed to significantly affect the expectations of the customers. A significant difference has been observed among the different education groups regarding their expectation level with respect to physical environment factor and its sub-factors. As per the test result if the estimated value of the test is more than 2.63 @ 3, 393df, it is significant at 5% level. If its value exceeds 3.83, it is significant at 1% level at the same degree of freedom whereas if the value exceeds 5.53 it is significant at 0.1% level. In the event of the test being significant, it implies that there is a significant difference between the expectations of the different education background with regard to overall service physical environment factor and its sub-factors.

The Table-5.10 given below shows a non-significant difference exists among the education background and in the expectation level regarding Waiting Lounge physical environment factor ($F = 2.50$, $p<0.05$), Patient's Room Facilities ($F = 2.56$, $p<0.05$) and Staff Appearance physical environment factor ($F = 0.32$, $p<0.05$). Hence it can be said that the expectation level of the different education groups regarding these physical environment sub-factors do not differ significantly.

But the test results from the table clearly indicate that a highly significant difference exists among the different education background and in their expectation level regarding Canteen & Other Facilities physical environment factors ($F = 13.03$, $p<0.05$). Similarly, it is found that the expectation level of the different education groups regarding Medical & Diagnostic Facilities physical environment factor ($F = 4.96$, $p<0.05$) also differs significantly. The test result regarding overall factor shows significant difference in the expectation level of the different education level of the respondents ($F = 4.96$, $p <0.01$). Hence it can be

said that the expectation level of the different education groups regarding overall physical environment factor differs significantly.

Table-5.10: Relationship between Education Group and Physical Environment Factor & Sub-factors.

F-1	Education	N	Mean	SD	F	df	Result
Waiting Lounge	Illiterate	9	6.70	0.31	2.50	3, 393	NS
	Below Graduate	86	6.22	0.77			
	Graduate	134	6.17	0.65			
	Post Graduate & Above	168	6.32	0.71			
Medical & Diagnostic Facilities	Illiterate	9	6.98	0.05	4.96	3, 393	**
	Below Graduate	86	6.92	0.18			
	Graduate	134	6.90	0.27			
	Post Graduate & Above	168	6.81	0.33			
Canteen & Other Facilities	Illiterate	9	6.83	0.25	13.03	3, 393	***
	Below Graduate	86	5.87	0.59			
	Graduate	134	5.76	0.45			
	Post Graduate & Above	168	5.76	0.53			
Patient's Room Facilities	Illiterate	9	6.93	0.22	2.56	3, 393	NS
	Below Graduate	86	6.34	0.68			
	Graduate	134	6.44	0.64			
	Post Graduate & Above	168	6.45	0.59			
Staff Appearance	Illiterate	9	6.45	0.62	.32	3, 393	NS
	Below Graduate	86	6.49	0.48			
	Graduate	134	6.52	0.56			
	Post Graduate & Above	168	6.46	0.57			
Overall	Illiterate	9	6.73	0.17	4.63	3, 393	**
	Below Graduate	86	6.33	0.35			
	Graduate	134	6.31	0.28			
	Post Graduate & Above	168	6.30	0.39			

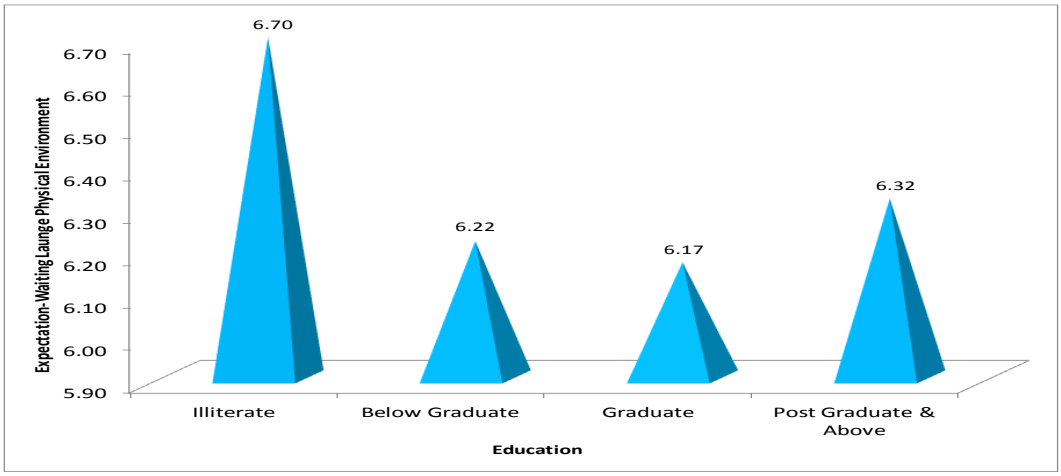


Figure 5.49: Waiting Lounge Physical Environment Factor vs. Education Group

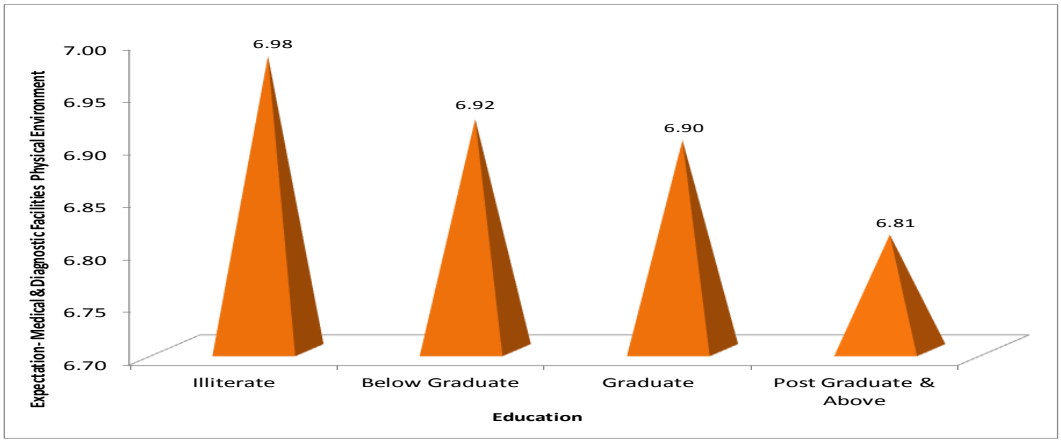


Figure 5.50: Medical & Diagnostic Facilities Physical Environment Factor vs. Education Group

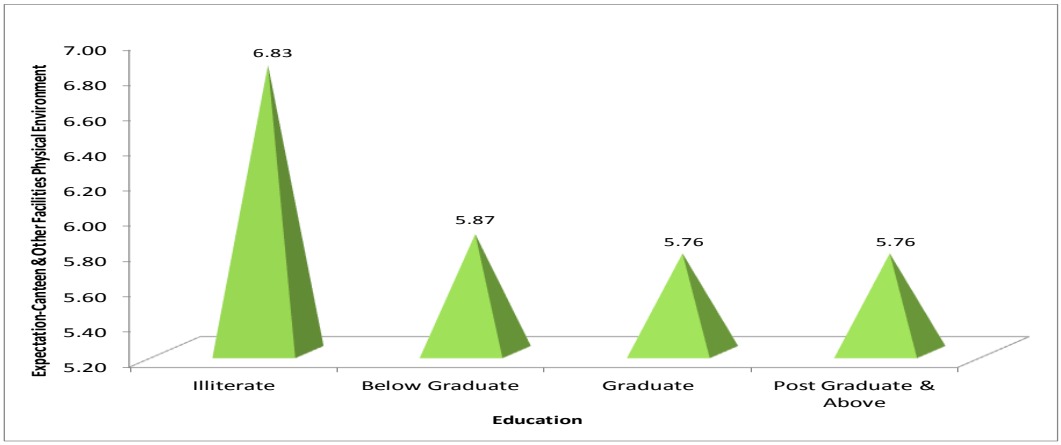


Figure 5.51: Canteen & Other Facilities Physical Environment Factor vs. Education Group

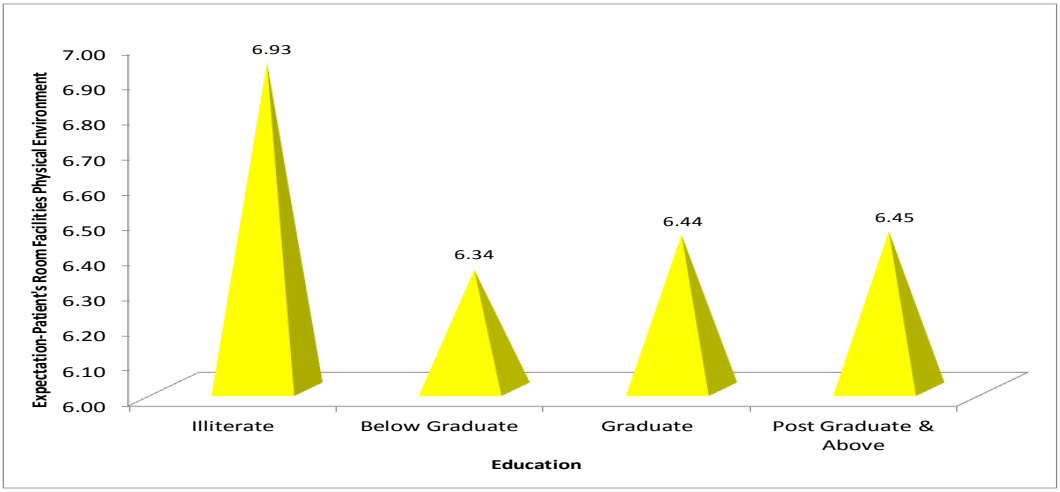


Figure 5.52: Patient's Room Facilities Physical Environment Factor vs. Education Group

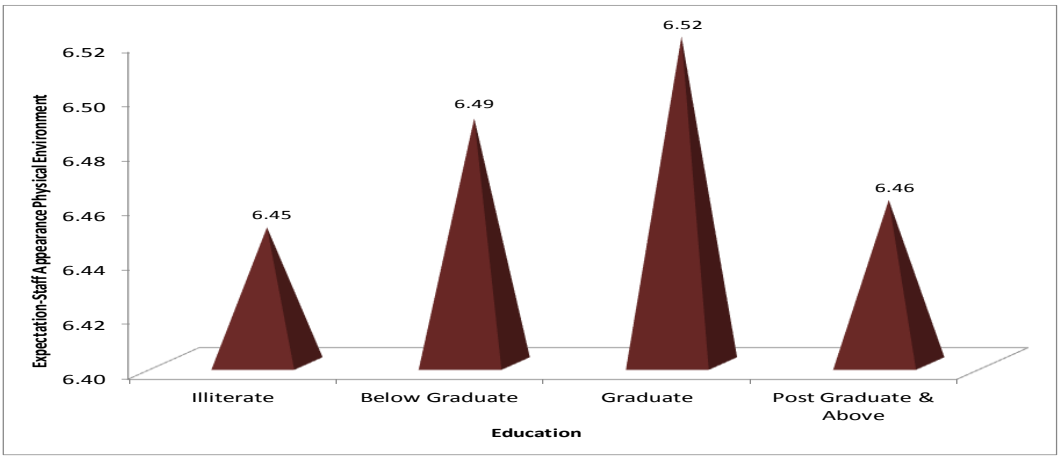


Figure 5.53: Staff Appearance Physical Environment Factor vs. Education Group

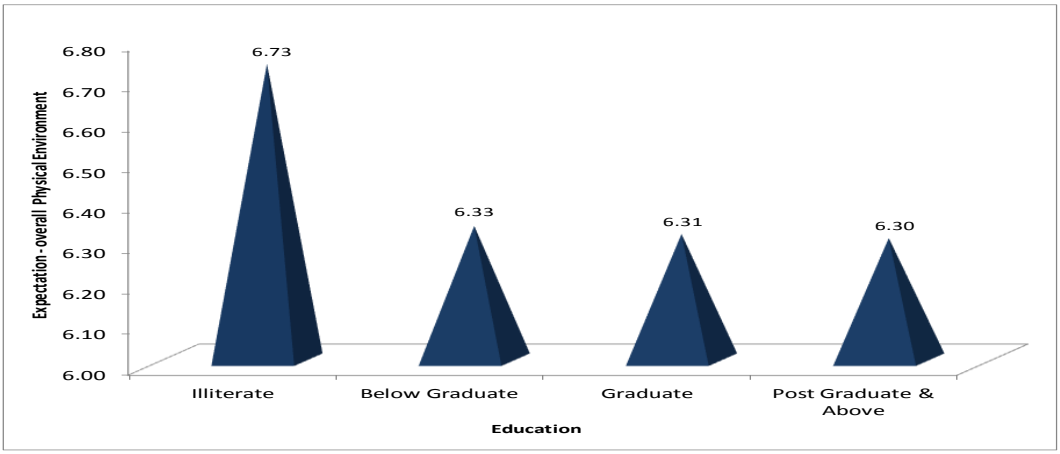


Figure 5.54: Overall Physical Environment Factor vs. Education Group

Physical Environment Factors V/s Occupation

H11: There is a non-significant difference in the expectations of Customers' of the different occupation with regard to overall physical environment factor and its sub-factors.

Demographic variable – Occupation and difference in the expectation level of the respondents has been analyzed next using the ANOVA test. As per the test result if the estimated value of the test is more than 2.24 @ 5, 394df, it is significant at 5% level. If its value exceeds 3.06, it is significant at 1% level at the same degree of freedom whereas if the value exceeds 4.20 it is significant at 0.1% level. In the event of the test being significant, it implies that there is a significant difference between the expectations of the different occupation with regard to the overall service physical environment factor and its sub-factors.

The table 5.11 given below shows the results of ANOVA, a non-significant difference exists among the different occupation and in their expectation level regarding Medical & Diagnostic Facilities ($F = 0.96$, $p<0.05$), Canteen & Other Facilities ($F = 2.24$, $p<0.05$) and Staff Appearance ($F = 1.09$, $p<0.05$) physical environment factors. Hence it can be said that the expectation level of the different occupation groups regarding these physical environment sub-factors do not differ significantly.

But the test results from the table clearly indicate that a significant difference exists among the different occupation and in their expectation level regarding Waiting Lounge ($F = 4.07$, $p <0.001$) and Patient's Room Facilities ($F = 3.70$, $p <0.05$) factors. Hence it can be said that the expectation level of the different occupation regarding these physical environment factors differ significantly.

Similarly, the test results regarding the overall physical environment factor show a highly significant difference in the expectation level of the different occupation of the respondents ($F = 4.12$, $p <0.01$). Hence it can be said that the expectation level of the different occupation regarding overall physical environment factor differs significantly. Therefore the hypothesis H11 is rejected.

Table-5.11: Relationship between Occupation and Physical Environment Factor & Sub-factors.

F-2	Occupation	N	Mean	SD	F	df	Result
Waiting Lounge	Business	25	6.21	0.77	4.07	5, 394	**
	Service (Govt.)	24	6.49	0.49			
	Service (Private)	136	6.20	0.75			
	Self-Employed	59	6.20	0.64			
	House-wife	70	6.54	0.54			
	Unemployed/Student	86	6.10	0.72			
Medical & Diagnostic Facilities	Business	25	6.88	0.24	0.96	5, 394	NS
	Service (Govt.)	24	6.92	0.17			
	Service (Private)	136	6.83	0.35			
	Self-Employed	59	6.88	0.18			
	House-wife	70	6.89	0.30			
	Unemployed/Student	86	6.88	0.23			
Canteen & Other Facilities	Business	25	5.98	0.61	2.24	5, 394	NS
	Service (Govt.)	24	5.78	0.47			
	Service (Private)	136	5.75	0.56			
	Self-Employed	59	5.89	0.47			
	House-wife	70	5.94	0.59			
	Unemployed/Student	86	5.74	0.48			
Patient's Room Facilities	Business	25	6.23	0.57	3.70	5, 394	**
	Service (Govt.)	24	6.72	0.40			
	Service (Private)	136	6.40	0.58			
	Self-Employed	59	6.43	0.62			
	House-wife	70	6.62	0.65			
	Unemployed/Student	86	6.31	0.70			
Staff Appearance	Business	25	6.67	0.46	1.09	5, 394	NS
	Service (Govt.)	24	6.45	0.56			
	Service (Private)	136	6.48	0.58			
	Self-Employed	59	6.45	0.53			
	House-wife	70	6.58	0.56			
	Unemployed/Student	86	6.45	0.50			
Overall	Business	25	6.30	0.37	4.12	5, 394	**
	Service (Govt.)	24	6.43	0.18			
	Service (Private)	136	6.28	0.36			
	Self-Employed	59	6.31	0.34			
	House-wife	70	6.46	0.33			
	Unemployed/Student	86	6.24	0.34			

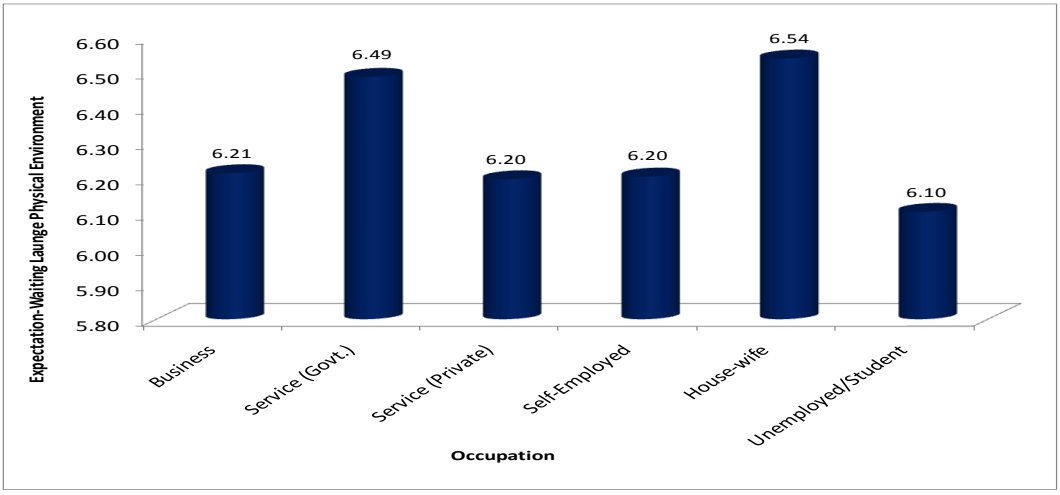


Figure 5.55: Waiting Lounge Physical Environment Factor vs. Occupation

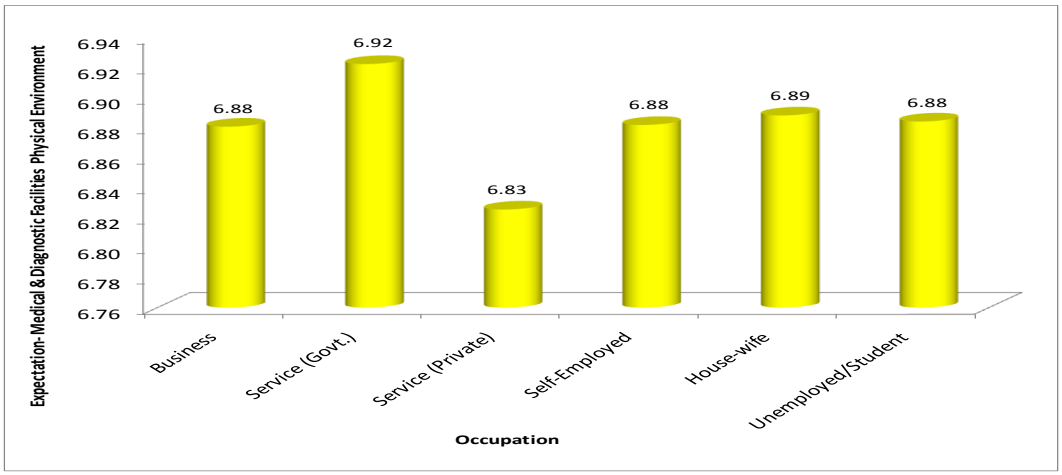


Figure 5.56: Medical & Diagnostic Facilities Physical Environment Factor vs. Occupation

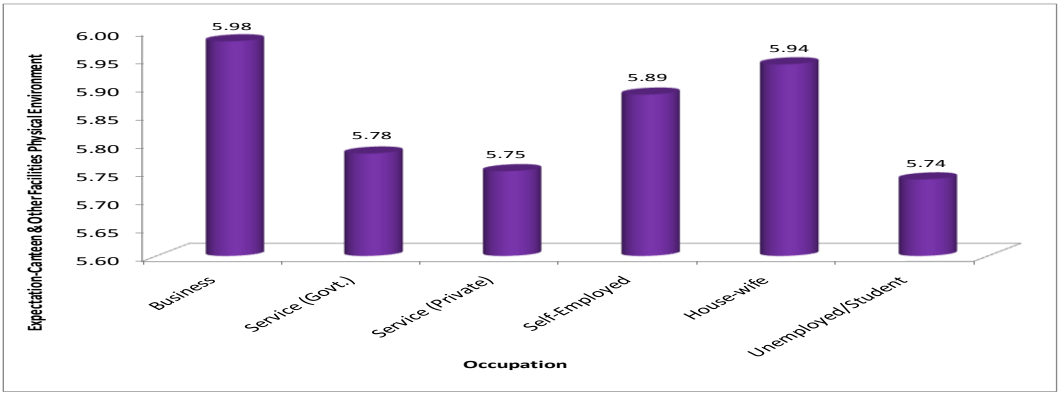


Figure 5.57: Canteen & Other Facilities Physical Environment Factor vs. Occupation

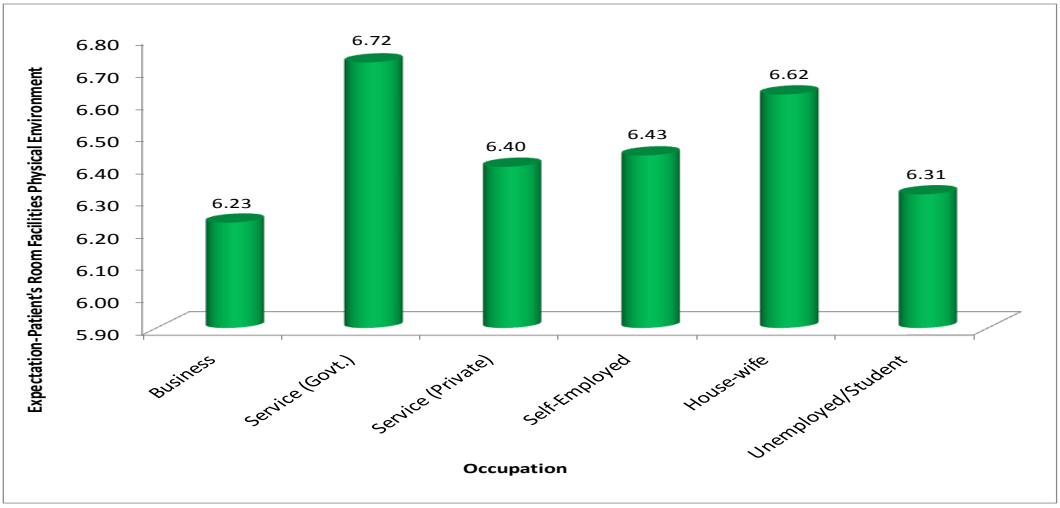


Figure 5.58: Patient's Room Facilities Physical Environment Factor vs. Occupation

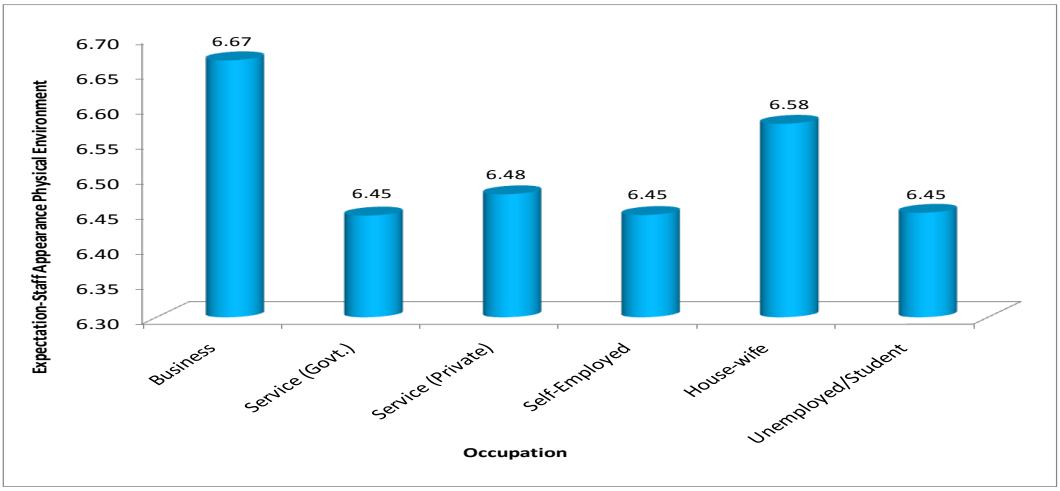


Figure 5.59: Staff Appearance Physical Environment Factor vs. Occupation

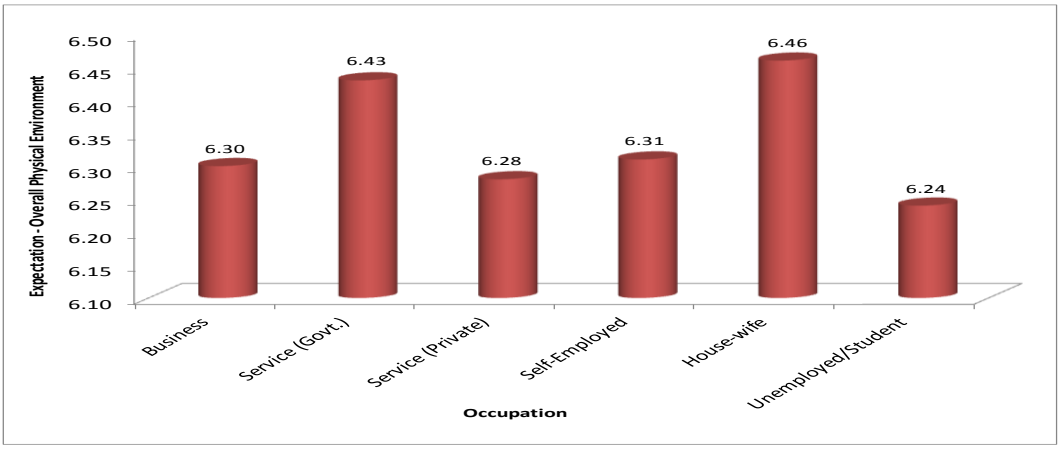


Figure 5.60: Overall Physical Environment Factor vs. Occupation

Physical Environment Factors V/s Income Group

H12: There is a non-significant difference in the expectations of Customers' of the different income groups with regard to overall physical environment factor and its sub-factors.

The expectation levels of the different income groups with regard to the overall physical environment factor and its sub-factors have been analyzed next. It has been found that income seemed to significantly affect the expectation levels of the customers. The ANOVA test is applied to find it and as per the test result if the estimated value of the test is more than 2.24 @ 5, 392df, it is significant at 5% level. If its value exceeds 3.06 it is significant at 1% level at the same degree of freedom whereas if the value exceeds 4.20 it is significant at 0.1% level. In the event of the test being significant, it implies that there is a significant difference between the expectations of the different education background with regard to the overall physical environment factor and its sub-factors.

The Table-5.12 given below shows the results of ANOVA, a non-significant difference exists among the different income groups and in their expectation level regarding Patient's Room Facilities ($F = 1.78$, $p<0.05$). But it can be seen that this is the only sub-factor which shows a non-significant difference, other sub-factor i.e. Canteen & Other Facilities ($F = 7.20$, $p<0.001$) exhibits a highly significant difference.

Similarly, the test results from the table clearly indicate that a significant difference exists among the different income groups and their expectation level regarding Waiting Lounge ($F = 3.96$, $p <0.001$), Medical & Diagnostic Facilities ($F = 3.88$, $p<0.05$) and Staff Appearance ($F = 3.03$, $p<0.01$) physical environment factors. Hence it can be said that the expectation level of the different income groups regarding Waiting Lounge, Medical & Diagnostic Facilities and Staff Appearance physical environment factors are significantly different. Similarly, the test results regarding the overall physical environment factor show significant difference in the expectation level of the different income level of the respondents ($F = 3.63$, $p <0.01$). Hence the hypothesis H12 is rejected.

Table-5.12: Relationship between Income Groups and Physical Environment Factor & Sub-factors.

F-2	Income	N	Mean	SD	F	df	Result
Waiting Lounge	Below Rs. 20,000	68	6.45	0.70	3.96	5, 392	**
	Rs. 20,001 - Rs. 40,000	84	6.01	0.74			
	Rs. 40,001 - Rs. 60,000	106	6.27	0.74			
	Rs. 60,001 - Rs. 80,000	56	6.25	0.53			
	Rs. 80,001 - Rs. 1,00,000	36	6.18	0.78			
	Above Rs. 1,00,000	48	6.43	0.50			
Medical & Diagnostic Facilities	Below Rs. 20,000	68	6.90	0.35	3.88	5, 392	**
	Rs. 20,001 - Rs. 40,000	84	6.91	0.20			
	Rs. 40,001 - Rs. 60,000	106	6.91	0.18			
	Rs. 60,001 - Rs. 80,000	56	6.81	0.35			
	Rs. 80,001 - Rs. 1,00,000	36	6.81	0.31			
	Above Rs. 1,00,000	48	6.74	0.32			
Canteen & Other Facilities	Below Rs. 20,000	68	6.13	0.61	7.20	5, 392	***
	Rs. 20,001 - Rs. 40,000	84	5.79	0.49			
	Rs. 40,001 - Rs. 60,000	106	5.79	0.49			
	Rs. 60,001 - Rs. 80,000	56	5.74	0.53			
	Rs. 80,001 - Rs. 1,00,000	36	5.74	0.48			
	Above Rs. 1,00,000	48	5.59	0.48			
Patient's Room Facilities	Below Rs. 20,000	68	6.60	0.70	1.78	5, 392	NS
	Rs. 20,001 - Rs. 40,000	84	6.42	0.66			
	Rs. 40,001 - Rs. 60,000	106	6.36	0.60			
	Rs. 60,001 - Rs. 80,000	56	6.36	0.62			
	Rs. 80,001 - Rs. 1,00,000	36	6.36	0.54			
	Above Rs. 1,00,000	48	6.53	0.54			
Staff Appearance	Below Rs. 20,000	68	6.52	0.63	3.03	5, 392	*
	Rs. 20,001 - Rs. 40,000	84	6.52	0.47			
	Rs. 40,001 - Rs. 60,000	106	6.60	0.46			
	Rs. 60,001 - Rs. 80,000	56	6.35	0.46			
	Rs. 80,001 - Rs. 1,00,000	36	6.54	0.59			
	Above Rs. 1,00,000	48	6.29	0.71			
Overall	Below Rs. 20,000	68	6.45	0.36	3.63	5, 392	**
	Rs. 20,001 - Rs. 40,000	84	6.39	0.51			
	Rs. 40,001 - Rs. 60,000	106	6.42	0.34			
	Rs. 60,001 - Rs. 80,000	56	6.28	0.44			
	Rs. 80,001 - Rs. 1,00,000	36	6.54	0.29			
	Above Rs. 1,00,000	48	6.23	0.39			

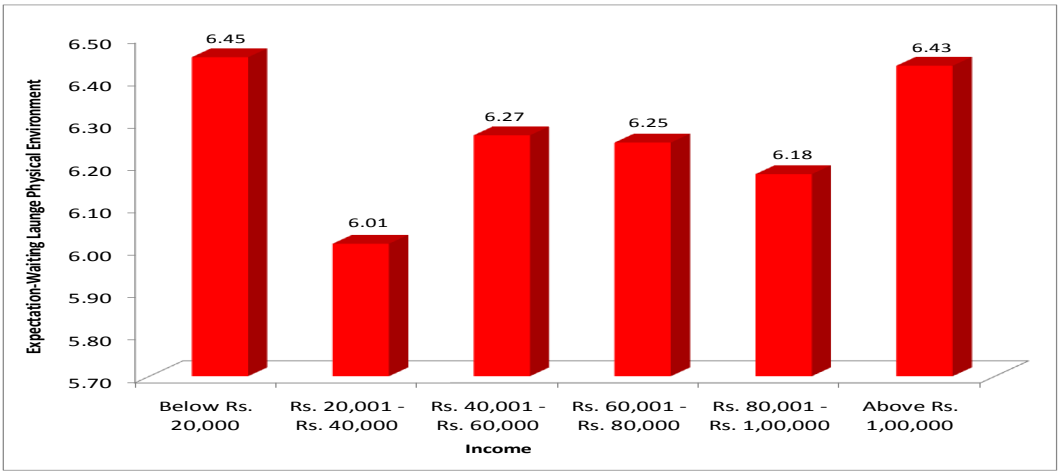


Figure 5.61: Waiting Lounge Physical Environment Factor vs. Income Groups

Figure 5.62: Medical & Diagnostic Facilities Physical Environment Factor vs. Income Groups

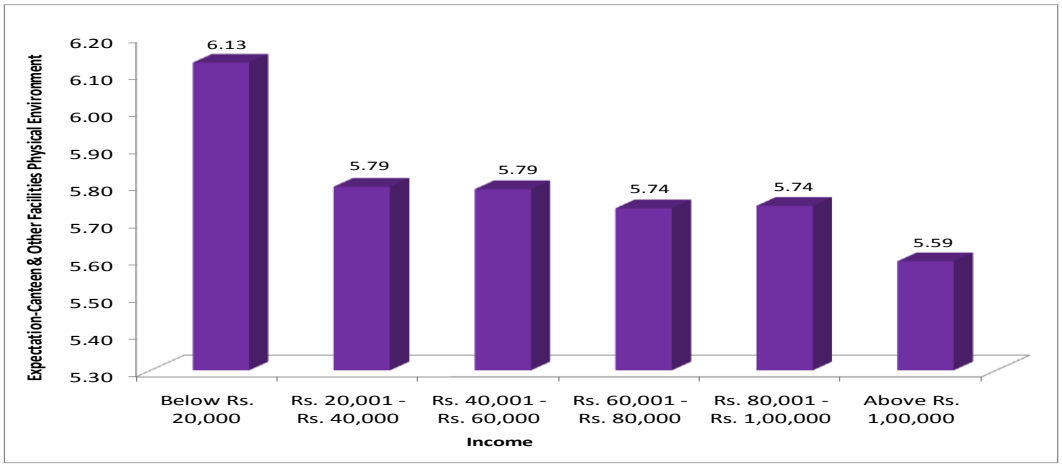


Figure 5.63: Canteen & Other Facilities Physical Environment Factor vs. Income Groups

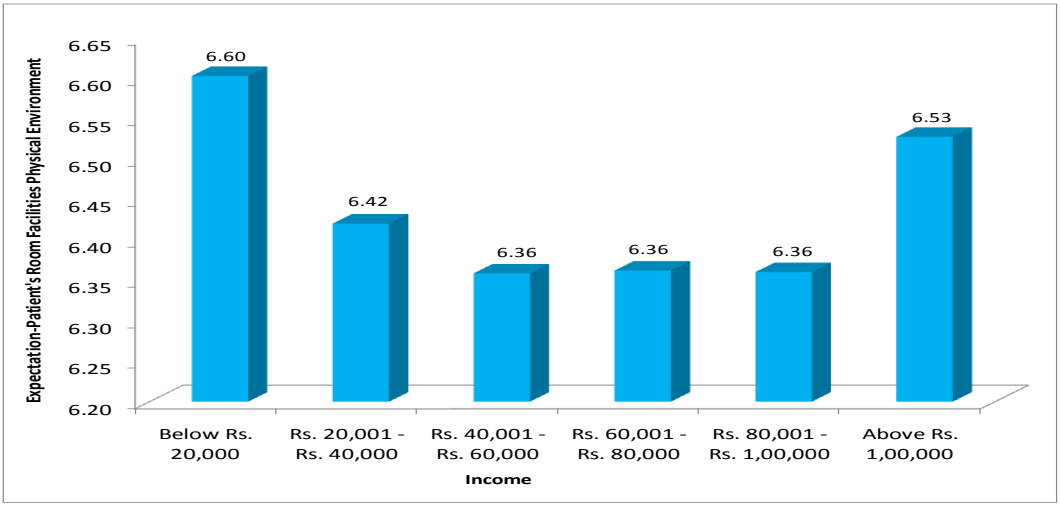


Figure 5.64: Patient's Room Facilities Physical Environment Factor vs. Income Groups

Figure 5.65: Staff Appearance Physical Environment Factor vs. Income Groups

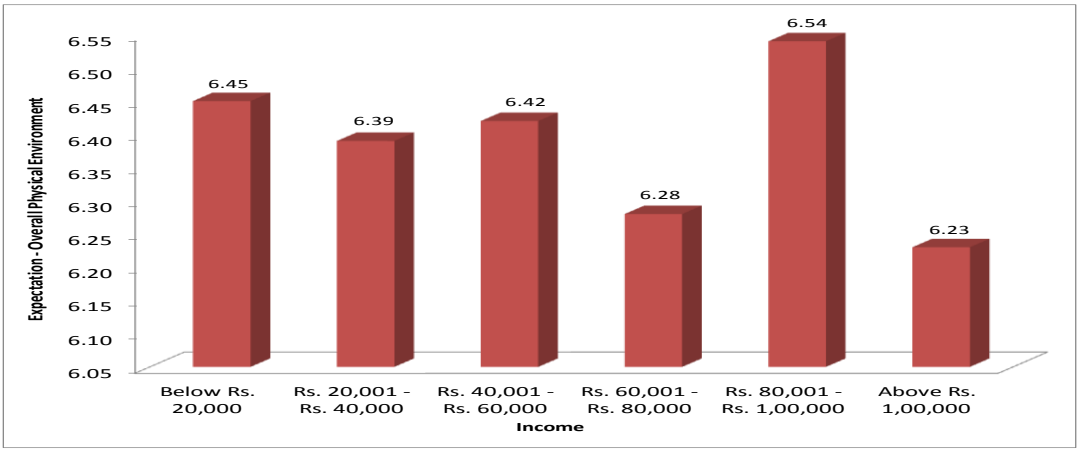


Figure 5.66: Overall Physical Environment Factor vs. Income Groups

5.1.3 Process Factor, Sub-factors and Expectations

Process Sub-factors and Expectations

H13: There is a high influence of healthcare Communication process on customer's expectations in health care services.

H14: There is a high influence of healthcare Maintenance and medication process on customer's expectations in health care services.

H15: There is a high influence of Consultation process on customer's expectations in health care services.

H16: There is a high influence of Billing and Discharge process on customer's expectations in health care services.

The regression is calculated by taking the Process sub-factors and Expectations using SPSS 24 software. In this examination, Process sub-factors are taken as independent variables and Expectation is a dependent variable. Then regression analysis is done by taking dependent and independent variables.

Table 5.13: Regression Analysis of Expectations and Process Sub-factors Factor

Model Summary & ANOVA Results

	Sum of Squares	**df**	**Mean Square**	**F**	**Result**	**R^2**
Regression	135.654	4	33.914	102.709	***	0.510
Residual	130.426	395	0.330			
Total	266.080	399				

Table 5.14: Regression Analysis of Expectations and Process Sub-factors Factor

Coefficients

Variable	b	SE	t	Result
Constant	-4.033	0.693	-5.822	***
Communication Process	0.331	0.052	6.318	***
Maintenance and Medication	0.265	0.106	2.489	*
Consultation Process	0.466	0.112	4.171	***
Billing and Discharge Process	0.210	0.040	5.291	***

In linear regression, the model specification is that the dependent variable, Y is a linear combination of the parameters e.g. in simple linear regression for modelling four data points there are four independent variables X,

$$Y = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + E$$

Here Y = Expectation

And,

X_1 = Communication Process Factor

X_2 = Maintenance and Medication Process Factor

X_3 = Consultation Process Factor

X_4= Billing and Discharge Process Factor

By taking the calculated values from the above table –

Expectation = -4.033+ 0.331(Communication Process Factor) + 0.265 (Maintenance and Medication Process) + 0.466 (Consultation Process) + 0.210 (Billing and Discharge Process)+ S.E.

Regression analysis has been applied to observe the relationship between customers' expectation and various process factors. Regression analysis has revealed a significant influence of the process sub factors on customers'

expectations. The overall model is found significant (F = 14.83, p<0.001) explaining 51% variation in the expectations. Regression coefficient shows that all the process variables have significant positive relationship with expectations. Communication process (p<0.001), Maintenance and Medication process (p<0.05), Consultation process (p<0.001) and Billing and Discharge process (p<0.001), all the four process sub-factors are found to be significantly affecting customers' expectations, which shows that customers actually expect from healthcare service providers to maintain good communication process, better maintenance and medication, efficient consultation process and billing and discharge process. Hence our hypotheses that H13, H14, H15, H16 are accepted.

Process Factor and Expectations

H17: Customers' expectations are significantly related to service process factors and its sub-factors.

To find out the influence of the overall Process Factors on Customers' Expectations, the regression is calculated by taking the total of overall Process factor and Expectations. In this examination, the Process factor is an independent variable and the Expectations as a dependent variable. Then regression analysis is done by taking a dependent and independent variables.

Table 5.15: Regression Analysis of Expectations and Process Factor

Model Summary[b] & ANOVA Results

	Sum of Squares	df	Mean Square	F	Result Sig.	R^2
Regression	127.78	1	127.78	367.721	.000[a]	0.480
Residual	138.30	398	0.347			
Total	266.08	399				

a. Predictors: (Constant), Process Factor

b. Dependent Variable: Expectations

Table 5.16: Regression Analysis of Expectations and Process Factor Coefficients

Variable	b	SE	t	Result Sig.
Constant	-4.926	0.464	-10.606	.000
Process Factor	1.391	0.073	19.176	.000

$$Y=a + b\,x + error$$

Here Y = Expectation

And X = Process Factor

By taking the calculated values from the above table –

Expectation = -4.926+ 1.391(Process Factor) +S.E.

The value of F is 367.721 which are significant at 0% level and the value of t is 19.176 which is also significant at 0% level. R square value is 0.480 indicates 48% of variance explained by Process Factor towards Expectation.

It shows relationship between Process Factor as an independent variable and the Expectation as a dependent variable is significant.

Thus, Regression analysis applied shows that the overall process factor has a significant impact on customers' expectations ($F = 19.176$, $p<0.001$).

The results given above shows that overall regression model has been significant ($F = 367.721$, $p <0.001$) and 48% variation has been explained by the overall process factor on customers' expectations.

5.1.4 Physical Environment Factor, Sub-factors and Expectations

Physical Environment Sub-factors and Expectations

H18: There is a high influence of healthcare Waiting lounge physical process factor on customer's expectations in health care services is disproved or rejected.

H19: There is a high influence of healthcare Medical and Diagnostic Facilities physical process factor on customer's expectations in health care services is disproved or rejected.

H20: There is a high influence of healthcare Canteen physical process factor on customer's expectations in health care services is proved or accepted.

H21: There is a high influence of healthcare Patient's room physical process factor on customer's expectations in health care services is proved or accepted.

H22: There is a high influence of healthcare Staff's Appearance physical process factor on customer's expectations in health care services is disproved or rejected.

To find out the impact of the different physical environment sub-factors on customers' expectations, the regression analysis is done. In this examination, the different physical environment sub-factors are taken as independent variables and the expectation as a dependent variable. Then the regression is calculated by taking a dependent and independent variables to prove H18, H19, H20, H21, H22 hypotheses.

Table 5.17: Regression Analysis of Expectations and Physical Environment Sub-factors
Model Summary & ANOVA Results

	Sum of Squares	df	Mean Square	F	Result	R^2
Regression	42.133	4	8.427	14.825	***	0.158
Residual	223.947	394	0.568			
Total	266.080	399				

Table 5.18: Regression Analysis of Expectations and Physical Environment Sub-factors

Coefficients

Variable	b	SE	t	Result
Constant	0.111	0.962	0.115	NS
Waiting Lounge	0.118	0.063	1.874	NS
Medical and Diagnostic Facilities	-0.125	0.164	-0.760	NS
Canteen & Other facilities	0.333	0.081	4.083	***
Patient's Room facilities	0.222	0.074	3.009	**
Staff Appearance	0.093	0.090	1.035	NS

In linear regression, the model specification is that the dependent variable, Y is a linear combination of the parameters e.g. in simple linear regression for modelling five data points there are five independent variables X,

$$Y = b_0 + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5X_5 + E$$

Here Y = Expectation

And

X_1 = Waiting Lounge Factor

X_2 = Medical and Diagnostic Facilities Factor

X_3 = Canteen & Other facilities Factor

X_4 = Patient's Room facilities Factor

X_5 = Staff Appearance Factor

By taking the calculated values from the above table –

Expectation = 0.111+ 0.118 (Waiting Lounge Factor) + -0.125(Medical and Diagnostic Facilities Factor) + 0.333 (Canteen & Other facilities Factor) + 0.222 (Patient's Room facilities Factor) + 0.093 (Staff Appearance Factor) + S.E.

Regression analysis has been applied to observe the relationship between customers' expectation and various Physical Environment Sub-factors. Regression analysis has revealed that all the physical environment sub-factors do not have a significant influence on customers' expectations. Though the overall model was significant ($F = 14.83$, $p<0.001$) but only 15.8% variation in expectation is explained by these physical environment factors. Regression coefficient shows that only Canteen facilities and Patient's room facilities physical process factors have a significant positive relationship with the expectations. Canteen and other facilities ($p<0.001$), and Patient's room facilities significantly influence customers' expectations, whereas other factors like Waiting Lounge ($p<0.05$), Medical and Diagnostic facilities ($p<0.05$) and Staff Appearance ($p<0.05$) has not been found to be significantly influencing customers' expectations. In other words, it can be said that customers' do not expect much from Waiting Lounge, Medical Diagnostics facilities and Staff Appearance physical environment factors but they expect good Canteen facilities and Patient's Room facility in physical environment factors. Hence our hypotheses H18, H19 and H22 are rejected, whereas H20 and H21 are accepted.

Physical Environment Factor and Expectations

H23: Customers' expectations are significantly related to Physical environment factors and its sub-factors.

To find out the impact of the overall Physical Environment Factors on Customers' Expectations, the regression is calculated by taking the total of overall physical environment factor and Expectations using SPSS software. In this examination is physical environment factor is taken as an independent variable and the expectation as a dependent variable. Then regression is calculated by taking a dependent and independent variables. By equation -

$$Y=a + b\,x + error$$

Here Y = Expectation

And

X = Physical Environment Factor

Table 5.19: Regression Analysis of Expectations and Physical Environment Factor

Model Summary & ANOVA Results

	Sum of Squares	df	Mean Square	F	Result	R^2
Regression	66.786	1	66.786	133.374	***	0.251
Residual	199.294	398	0.501			
Total	266.08	399				

a. Predictors: (Constant), Physical Environment Factor

b. Dependent Variable: Expectations

Table 5.20: Regression Analysis of Expectations and Physical Environment Factor

Coefficients

Variable	b	SE	F	Result
Constant	-3.466	0.644	-5.381	***
Physical Environment Factor	1.176	0.102	11.549	***

By taking the calculated values from the above table –

Expectation = -3.466+ 1.176 (Physical Environment Factor) +S.E.

The value of F is 133.374 which are significant at 0% level and the value of t is 11.549 which are also significant at 0% level. R square value is 0.251 which indicates 25% of variance explained by physical environment factor towards the expectation. It shows the relationship between physical environment factor as an independent variable and the expectation as a dependent variable is non-significant. Thus, Regression analysis shows that the overall physical environment factor has significant impact on customers' expectations ($F = 11.549$, $p<0.001$). The results given above shows that the overall regression model has been

significant (F = 133.374, p <0.001) and but only 25% variation has been explained by the overall physical environment factor on customers' expectations.

5.2 Expectations in Healthcare Services and Price Dimension

H24: There are no significantly high expectations of healthcare customers' regarding various Price factors.

To find about the customers' expectations related to price of healthcare services few statements regarding price factors have been given to the customers of these selected private healthcare units. To understand the extent of their expectations regarding various factors of price in healthcare services, the test for difference of means is applied by taking the assumed mean of population at a threshold level of 4. It is analyzed, whether their expectation regarding prices of healthcare services are significantly low or high from the threshold level. The statistical significance has been examined by using Z-statistic. If the estimated value of Z-statistic is greater than 1.96 and less than 2.58, it is significant at 5% level. If its value exceeds 2.58, it is significant at 1% level. In the event of the Z-statistic being significant, it implies that the hypothesis is rejected, which means there are significantly high expectations of healthcare customers' regarding various prices factors. The test result shows (table-5.21) that the customers' expectations are significantly high regarding prices of the services should be more economical (Z = 20.97, p<0.001). Thus they expect that private healthcare service provider should offer their service at economical prices. The customers' expectations are significantly high that price with complete details should be given (Z = 23.46, p <0.001). It means that private healthcare service provider should provide details of the prices of services to their customer at the initial stage. The customers' highly expect that service should be given at lower prices (Z = 25.64, p <0.001).

Regarding price discrimination there is a highly significant difference in the expectation with a negative value which shows that customers expect that price discrimination should not be there (Z = -3.39, p<0.001). Regarding services offered at very high prices patients significantly deviate from threshold level (Z =

13.97, p<0.001) means it can be said that they agree that service are offered at very high prices.And lastly they think that prices are not appropriate seeing the quality of services that are provided in healthcare units (Z = -2.03, p<0.05) and they highly expect that quality of services that are provided should match with prices that are charged by health care centers (Z = -2.03, p<0.001).

Thus customers' expectations are significantly high regarding prices of the services should be more economical. Customers expect that private healthcare service provider should provide details of the prices of services to their customer at the initial stage and price discrimination should not be there. Hence, the hypothesis that "there are no significantly high expectations of healthcare customers' regarding various Price factors" is rejected.

Table 5.21: Expectation and Prices of Healthcare Services

Statement	N	Mean	SD	Z	Result
Services should be more economical (Economical Pricing)	400	5.44	1.37	20.97	***
Price with complete details should be given (Detailed Pricing)	400	5.66	1.42	23.46	***
Service should be given at lower prices (Low Pricing)	400	5.71	1.34	25.64	***
Price discrimination in healthcare services (Discriminative Pricing)	400	3.67	1.98	-3.39	***
Services are offered at very high prices (High Pricing)	400	5.05	1.51	13.97	***
Prices are appropriate considering quality of services (Qualitative Pricing)	400	3.83	1.65	-2.03	*

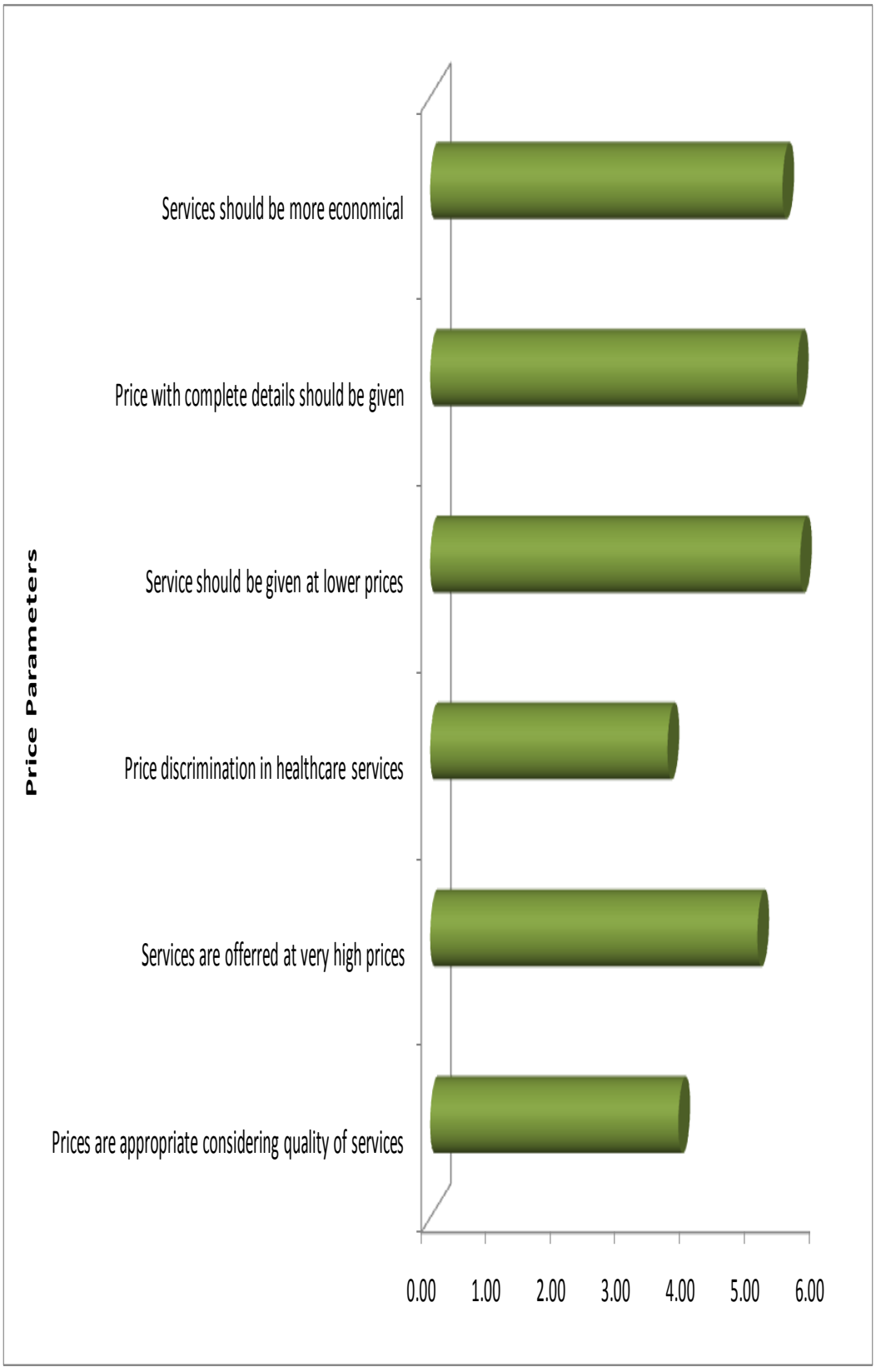


Figure 5.67: Expectation and Prices of Healthcare Services

5.3 Modern IT technology and Expectations in Healthcare Services

In the present study, when the respondents have been asked about the use of Mobile and Internet in their day to day activities, a majority of them agreed to its direct access. To see the impact of modern IT technology on healthcare services, the respondents have been asked about what type of information they would want and how quickly they would want this information to get updated. Major technology-oriented expectations in healthcare services, as identified in the present study are as discussed below-

In the healthcare service sector, very few super specialty and multi-specialty service providers are making online information available. If they are providing any information on-line it is just basic information about their address, contact numbers, total capacity, facilities and medical services available and a list of founders etc. Besides that most of the web sites are providing information that hasn't been updated since long.

Table 5.—shows the expectations related to the availability of information from the private healthcare service providers on their web sites. It also identifies the gap between the information available on the web sites of the service providers and the expected information on the web site.

5.3.1 Web Site and Expectations

H25: Customers' expectations are significantly related to the availability of information on the Websites of healthcare service providers.

While analyzing the data, it has been found that most of the people expect that they should get as much information as possible, as quickly as possible with the help of updated websites. The healthcare customers feel that they should get information through updated web sites, whenever they need it.

But in the present study, it has been found that very few private healthcare service providers have created their own websites and even on those few web sites very less and pathetically updated information is available.

Table 5.22: Information Available on Websites and Expectation

Website Information	Available		Expected	
	N	%	N	%
1. Details of hospitals like Address, Contact Number etc.	206	51.50	398	99.50
2. Services offered by the hospital	32	8.00	345	86.25
3. Panel of Doctors existing in the hospital	32	8.00	337	84.25
4. Consultation timing of the Doctors	51	12.75	308	77.00
5. Number of Beds available	56	14.00	389	97.25
6. Charges of different facilities available	41	10.25	331	82.75
7. Feedback of the customers	24	6.00	357	89.25
8. Consulting timings	51	12.75	371	92.75
9. Information regarding availability of a particular Doctor	45	11.25	358	89.50

Out of 400 respondents, 99.50% (Almost 100%) respondents want that they should get details of healthcare service provider like address, contact number of responsible people etc. but only 51.50% respondents find this information on the healthcare service provider's website. In the study, 86.25% respondents want that they should get information about services provided by the hospital on the website, but only 8% respondents have been able to find it on the websites. Similarly, 84.25% respondents say that they want the list of the panel of doctors in the hospital on the website, but only 8% have been able to find it. It is also found that 77% respondents want that the consultation timing of doctors should be available on the web sites, but only 12.75% respondents have been able to find it on the websites. Likewise 97.25% respondents want that the information

regarding number of beds available in the hospital should be available on the Internet, but only 14% respondents have been able to find it on the websites. So it can be said that most of the customers expect that updated information should be made available on the web sites of the private healthcare service providers, but few customers have got the information. Hence it can be said that the hypothesis, "Customers' expectations are significantly related to the availability of information on the Websites of healthcare service providers" is accepted. The effective use of the modern IT technology for providing information regarding this essential service would be a welcome change and help in rendering quality services.

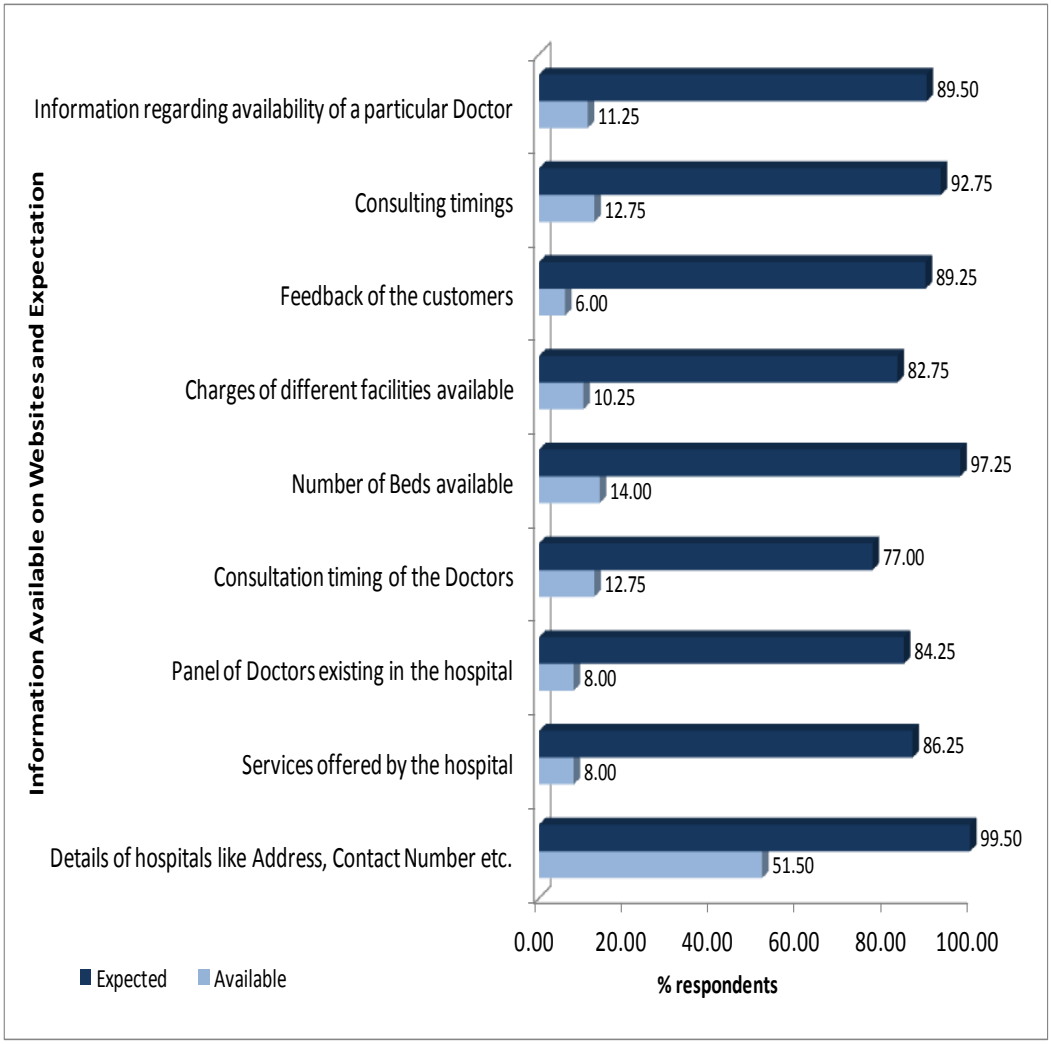


Figure 5.68: Expectation and Information Available on Websites

5.3.2 SMS Services and Expectations

H26: Customers' expectations are significantly related to the availability of information through SMS services by healthcare service providers.

Sending SMS related to recent reports, probable expenses, availability of doctors and their delayed arrival as well as waiting status, could be a very effective development in healthcare service units. When the respondents have been asked about their expectation related to SMS services, it is found that a good number of mobile users are now looking forward to get details by SMS. They expect to know about waiting time, discharge timings, arrival timings of the doctors, availability of doctors on their seats, availability of beds, probable expenses, billing details of the day, pathology reports and required medicines for the patient.

In the present study, it is observed that customers want to get up-to-date information whenever need arise through SMS. As per the table 5.22, the respondents expect to know how much waiting time is required (80.25%), what will be discharge timing (73.25%), arrival time of doctors (78.75%), availability of doctor on seat (75%), availability of bed (44.25%), estimated expenses (65.75%), billing details of the day (81%), pathology report (77.75%) and required medicine for patient (84.50%).

It proves that healthcare customers' have high expectation related to availability of SMS related information from the healthcare service providers. Hence, the hypothesis that " Customers' expectations are significantly related to the availability of information through SMS services by healthcare service providers is accepted. Private healthcare service customers are expecting to get all these details to be made available through SMS, but not a single healthcare service provider is making this information available through SMS. Though problems related to implementation and expenses of applying SMS services are not analyzed and studied here, yet providing such services could certainly make healthcare service providers more efficient in communication and provide the higher level of satisfaction to the customers.

Table 5.23: SMS Services and Expectation

SMS Service	Existing		Expecting	
	N	%	N	%
1. SMS related to waiting time	0	0.00	321	80.25
2. Discharge timings	0	0.00	293	73.25
3. Arrival timings of the doctors	0	0.00	315	78.75
4. Availability of doctors on their seats	0	0.00	300	75.00
5. Availability of beds	0	0.00	177	44.25
6. Probable expenses	0	0.00	263	65.75
7. Billing details of the day	0	0.00	324	81.00
8. Pathology reports	0	0.00	311	77.75
9. Required medicines for the patient	0	0.00	338	84.50

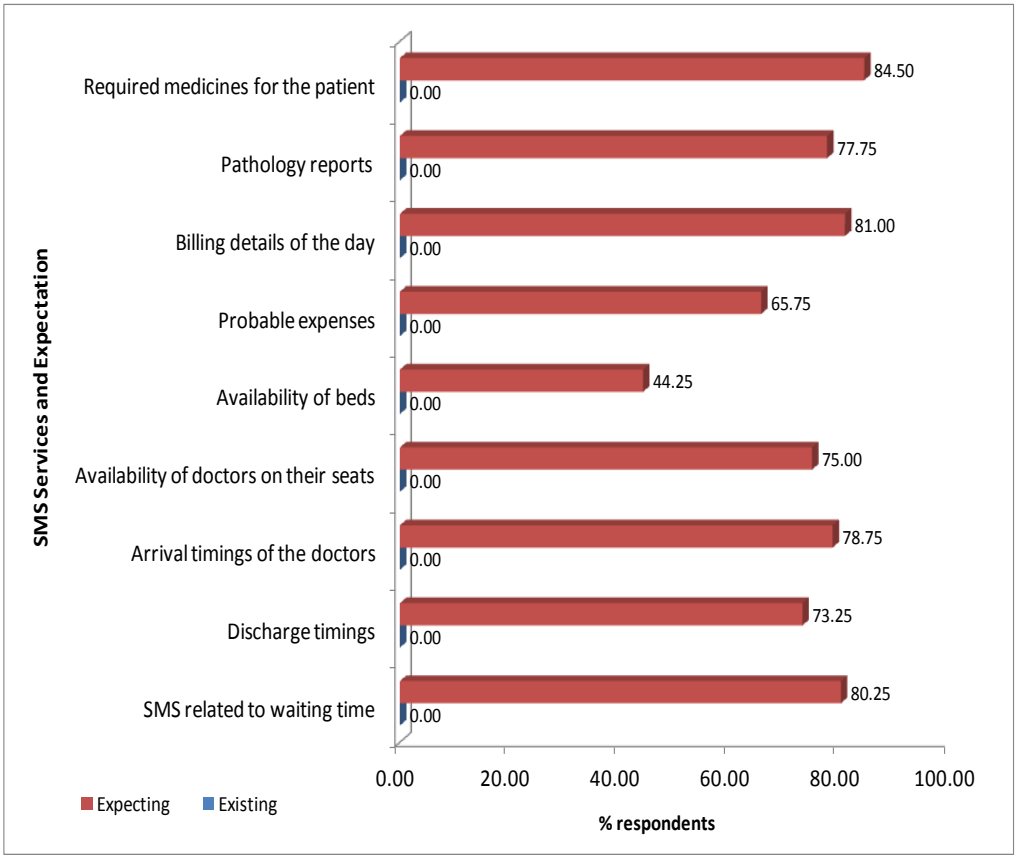


Figure 5.69: Expectation and SMS Services

Hence, the hypothesis that Customers' expectations are significantly related to the availability of information through SMS services by healthcare service providers is accepted and it can be concluded that customers' expectations are on the rise with the advancement of these services and with their wide reach and easy accessibility.

5.4 Customers' Preferences and Different Sources of Information

H27: Customers' preferences vary significantly with regard to the different sources of information related to healthcare service providers.

The respondents have been asked to give their preference to the different sources of information they relied upon to choose health care service providers for their own treatment. The table 5.24 given below, shows percentage distribution of respondents, according to the preference given by them to the different sources of information. From the table, it is clear that people give the first preference to friends, relatives or family members. Next they rely upon health professionals (Rank II).

The third preference they give to various other sources. Again it can be seen from the table that the least preference people give to books, magazines or news articles or advertisements of hospitals or information given by hospitals in their information booklets or brochures. Hence from the above table it is very clear that people don't believe on the claims made by hospitals in advertisements, or other print media.

People rely least on books, magazines or news articles or advertisements of hospitals or information given by hospitals in their information booklets or brochures. Hence, it is very clear that people only believe on word of mouth publicity which provides first hand and considerably believable, true information about any healthcare service provider. People only believe on word of mouth publicity which provides actual and true information about any organization or institution.

Table 5.24: Preference given to Different Sources of Information

Inform-ation → Source / Rank ↓	From other health professi-onals	Books, magazi-nes or news articles	Hospital advertis-ements	Friends, relatives or family members	Health care service provider's brochure or other printed information	Any other (please specify)
I	5.50	0.00	0.00	93.50	0.50	5.75
II	82.00	0.00	1.25	2.00	3.50	16.50
III	7.00	1.50	6.25	0.50	6.25	4.50
IV	1.00	0.00	1.25	0.00	1.00	0.75
V	0.25	1.25	0.00	0.00	0.00	0.00
VI	0.00	0.00	0.00	0.00	0.00	0.00
No Response	4.25	97.25	91.25	4.00	88.75	72.50
Final Rank	2	6	5	1	4	3

The test results given below show a highly significant difference in the ranks given by the respondents to the different sources of information on which the customers of healthcare services rely before selecting their healthcare service provider (χ^2 =20.90, p<0.001).

Table 5.25: Different Sources of Information- Friedman Test

Parameters	Mean Rank	Rank	Chi Sqr	df	Result
From other health professionals	4.25	2	20.90	5	***
Books, magazines or news articles	1.67	6			
Hospital advertisements	2.42	5			
Friends, relatives or family members	6.00	1			
Health care service provider's brochure or other printed information	2.83	4			
Others	3.83	3			

The table reveals that people give first preference to Friends and Relatives or family members, then health professionals. The least preference is given to information published in books, magazines and websites and hospital websites hence it can be said that people rely more on people. They trust on testimonials of those who have actually experienced the services of a particular hospital. Hence, the hypothesis that Customers' preferences vary significantly with regard to the different sources of information related to healthcare service providers is accepted.

Finding, Conclusions & Suggestions

The purpose of the chapter is to highlight the outcomes of the study, resulted by the application of statistical tools for testing the hypothesis. A wide spectrum of researches related to healthcare services provides a good combination of theoretical and practical insight into various dimensions of this developing necessity-based industry. But Customers are still neglected in this industry especially in India; probable reasons could be the wide gap between demand and supply or legal rights of patients which were very limited. The introduction of the COPRA (Consumer Protection Act) in 1993 in the medical profession and growing number of private healthcare service providers have brought a burning need to learn more about customers' need in this rapidly expanding essential sector. The present study is based on this purpose and its findings will have a significant bearing for both private healthcare service providers and for their customers. On the one hand, healthcare service providers would be able to develop effectiveness in their pricing and promotion, efficiency in their processes and suitability in their physical environment. On the other hand, customers of these services could become more realistic in their expectations and finally, they could be catered in a better way. In this chapter, findings related to overall expectations of customers with respect to the different dimensions of healthcare services of few multi-specialty private healthcare service providers have been presented.

The findings of the study are therefore informative for the private healthcare service providers to implement strategies that effectively deal with problems related to the fulfilment of these expectations. The healthcare service providers should constantly strive to fulfil them to achieve higher satisfaction and build better customer relationship which will ultimately lead to delighted consumers.

FINDINGS

- The distribution of respondents, according to gender shows that there are 56.25% male respondents and 43.75% female respondents in the survey. A bird's eye view of the distribution of respondents, according to age shows that the respondents are almost equally distributed in the different age groups from the young generation to old age groups (up to 60 yrs), though maximum respondents are in 21-30 years age group. Only 2 respondents (0.5%) did not reveal their age. The distribution of respondents according to their educational qualification reveals that there are only 2.25% respondents who are illiterate, 21.5% undergraduates are part of this study whereas literate respondents dominate the sample of the study i.e. 97.75% respondents in the survey.
- A bird's eye view shows that the respondents are almost equally distributed in the different occupational groups from business class to unemployed/students, though maximum respondents are from private services group. Housewives and students are eager to discuss their expectations from healthcare service providers and they consist 38% of the sample. The distribution of respondents according to their profession clearly shows that there are 95.96% non-medical in the survey and only 4.04 % medical professionals are respondents in the study.
- It is clearly visible from the data of the respondents that they are almost equally distributed in the different income groups from Below 20,000 rupees to Above 1, 00,000 rupees monthly income. The maximum respondents are from the income group which has income between 40,001 to 60, 000 rupees per month i.e. 26.50%. Income groups of Rs. 60,001 - Rs. 80,000, Rs. 80,001 - Rs. 1,00,000 and Above Rs. 1,00,000 income groups consist 14%, 9% and 12% of the sample.
- The Kaiser- Meyer – Olkin (KMO) Test is used to measure the sampling adequacy (determines if the responses given with the sample are adequate or not) and its value is more than 0.5 for a satisfactory factor analysis to proceed. The Kaiser-Meyer-Olkin (KMO) measure verified the sampling adequacy for the present analysis, which is 0.807. It is considered 'great'.

- The Bartlett's test, which is another indication of the strength of the relationship among variables is also found significant (Approx. Chi-Square = 9627.972, df703; Sig. 0. 00) indicating that correlations between items were sufficiently large for the Exploratory Factor Analysis.
- Factor analysis based on principal component extraction followed by Varimax rotation was employed to examine the structure within the 39-item scale, as the KMO value and Bartlett's test of sphericity examined and identified sampling adequacy and the strength of relationship among the factors.
- The Exploratory Factor Analysis, a data reduction and factor identification technique produced Nine sub-factors having Eigen value more than 1. Factor rotation produced rotated component matrix and what these nine components represent. Identified factors and sub-factors, based on the statements that correlate the highest with it. The first four sub-factors were identified as Communication processes, Medication and maintenance processes, Consultation process and Billing & discharge processes related to Process dimension. Remaining five sub-factors related to Physical environment dimension were identified as Waiting Lounge, Medical & Diagnostic Facilities, Canteen & Other Facilities, Patient's Room Facilities and Staff Appearance factors.
- Cronbach's Alpha Reliability Test has been used to check whether data is reliable or not. The data has the internal consistency or not. In the present study, the Cronbach's alpha values have ranged from 0.857 to 0.650 for the sub-factors. The reliability was the highest for "Communication process" (0.857) and the lowest for "Canteen & other facilities" (0.650). In this study, overall six calculated reliability values of Cronbach's Alpha test are higher than 0.7 which is acceptable value whereas three values are below but near to 0.7, which shows that questionnaire is reliable.
- After testing the validity and reliability of the construct, with the application of statistical tools like the KMO test, Bartlett's test of Sphericity, Exploratory Factor Analysis, the Cronbach's Alpha test, the set hypotheses are tested.

H 1: There is a non-significant difference in the expectations of patient's of different gender with regard to overall service process factor and its sub-factors.

- The null hypothesis that there is non- significant difference between the expectations of the different gender with regard to overall service process factor and its sub-factors has been examined by using Z-statistic. The test results clearly indicate that there is a highly significant difference in the level of expectation regarding Communication process ($Z = -3.56$, $p < 0.001$) and Billing & Discharge process factors ($Z = -2.43$, $p < 0.05$). Contrary to differences in expectations among the two genders, with regard to Communication and Billing & Discharge processes, there is no significant difference in the expectation level of female and male customers with regard to Maintenance & Medication process ($Z = -0.76$, $p<0.05$) and Consultation process($Z = -1.60$, $p<0.05$). But overall expectation level of female customers is found to be significantly higher as compared to the expectation level of male customers. Therefore, it can be concluded that there is a significant difference between the expectations of Female and Male customers related to healthcare services processes ($Z = -2.657$, $p < 0.05$).

H 2: There is a non-significant difference in the expectations of patient's of the different profession with regard to overall service process factor and its sub-factors.

- The null hypothesis that there is non- significant difference between the expectations of different profession with regard to overall service process factor and its sub-factors has been examined and the test results clearly indicate that there is a significant difference in the level of expectation regarding Communication process ($Z = 2.89$, $p < 0.05$), Consultation process ($Z = 2.49$, $p < 0.05$), and a highly significant regarding Billing & Discharge process factors ($Z = 3.76$, $p < 0.001$). The difference in the expectation level regarding Maintenance & Medication process ($Z = -0.21$, $p < 0.05$) is found to be non-significant. But the overall difference in the expectation level of Medical professionals as customers and Non-medical customers, with regard

to process factor is non-significant (Z = 1.91, p <0.05).Therefore, it can be concluded that the hypothesis H2 is accepted. It means that there is no significant difference between the expectations of Medical and Non-medical customers regarding healthcare services processes.

H 3: There is a non-significant difference in the expectations of patient's of the different age groups with regard to overall service process factor and its sub-factors.

- The ANOVA test is applied to find, whether a significant difference exists, among different age groups regarding their expectation level with respect to process factor and its sub-factors. The test results of ANOVA show that a non-significant difference exists among the different age groups and in their expectation level regarding Communication process factor (F = 0.34, p<0.05). Hence it can be said that the expectations of the different age groups, regarding Communication process, do not differ significantly. The test results regarding Consultation process factor show a highly significant difference in the expectation level of the different age group patients (F = 5.38, p <0.001). The differences in the expectations level of the different age groups regarding Maintenance & Medication process (F = 3.27, p<0.05) and Billing & Discharge process (F = 3.75, p<0.05) factors are also found to be significant. Consequently, the overall difference in the expectation level of the different age groups, with regard to Process factor is also significant (F = 2.95, p<0.05).Therefore, it can be concluded that the hypothesis H3 is rejected. It means that there is a significant difference between the customers' expectations of the different age groups regarding healthcare services processes.

H 4: There is a non-significant difference in the expectations of patient's of the different educational background with regard to overall service process factor and its sub-factors.

- The ANOVA test is applied to find, whether a significant difference exists, among the different educational background regarding their expectation level

with respect to process factor and its sub-factors. The results of ANOVA show that a non-significant difference exists among the different education background and in their expectation level regarding Communication process factor ($F = 0.82$, $p<0.05$). Hence it can be said that the expectation level of the different education groups regarding Communication process factor do not differ significantly. Similarly, the test results from the table clearly indicate that a non-significant difference exists among the different educational background and in their expectation level regarding Maintenance & Medication process ($F = 2.15$, $p<0.05$) and Billing & Discharge process factors ($F = 0.04$, $p<0.05$). Hence it can be said that the expectation level of the different educational groups regarding Maintenance & Medication process and Billing & Discharge process factors do not differ significantly. The test results regarding consultation process factor show a significant difference in the expectation level of the different educational level of the respondents ($F = 2.75$, $p <0.05$). Similarly, the test result regarding the overall factor shows a highly significant difference in the expectation level of the different educational level of the respondents ($F = 4.09$, $p <0.01$). Hence it can be said that the expectation level of the different education groups regarding overall process factor differs significantly.

H5: There is a non-significant difference in the expectations of customers of the different Occupation with regard to overall service process factor and its sub-factors.

- Demographic variable - Occupation and difference in the expectation level of the respondents was analyzed next using the ANOVA test, the results of ANOVA show that a non-significant difference exists among the different occupation and in their expectation level regarding Consultation process factor ($F = 2.12$, $p<0.05$). Hence it can be said that the expectation level of the different occupation groups regarding Consultation factor do not differ significantly. But the test results from the table clearly indicate that a significant difference exists among different occupation and in their expectation level regarding Communication process ($F = 3.88$, $p <0.001$),

Maintenance & Medication process ($F = 2.57$, $p < 0.05$) and Billing & Discharge process factors ($F = 2.77$, $p < 0.05$). Therefore, it can be said that the expectation level of the different occupation regarding these process factors differs significantly. Similarly, the test results regarding overall factor show a highly significant difference in the expectation level of the different occupation of the respondents ($F = 4.09$, $p < 0.01$). Hence it can be said that the expectation level of the different occupation groups regarding the overall process factor differs significantly and the hypothesis is rejected.

H6: There is a non-significant difference in the expectations of Customers' of the different income groups with regard to overall service process factor and its sub-factors.

- When the expectation levels of the different income groups with regard to overall service process factor and its sub-factors were analyzed next. The results of ANOVA shows that a non-significant difference exists among the different income groups and in their expectation level regarding Consultation process ($F = 2.15$, $p<0.05$) and Billing & Discharge process factors ($F = 1.03$, $p<0.05$). Hence it can be said that the expectation level of the different income groups regarding Consultation process and Billing & Discharge process factors do not differ significantly. But the test results from the table clearly indicate that a significant difference exists among the different income groups and their expectation level regarding Communication process ($F = 3.39$, $p<0.01$) and Maintenance & Medication process factors ($F = 3.53$, $p<0.01$). Similarly, the test results regarding overall process factor show a significant difference in the expectation level of different income level of the respondents ($F = 3.63$, $p < 0.01$). Hence it can be said that the expectation level of the different income groups regarding overall process factor differs significantly.

H7: There is a non-significant difference in the expectations of Customers' of the different gender with regard to overall physical environment factor and its sub-factors.

- First of all the sub-factors of the physical environment were tested for gender. The results clearly indicate that there is a highly significant difference in the level of expectation regarding Waiting Lounge ($Z = -4.43$, $p < 0.001$), as well as the difference in the expectation level regarding Medical & Diagnostic Facilities ($Z = 1.97$, $p < 0.05$) physical environment factors. Contrary to this, differences in expectations of two genders, with regard to Canteen & Other Facilities ($Z = -0.96$, $p < 0.05$), Patient's Room Facilities ($Z = -1.35$, $p < 0.05$) and Staff Appearance ($Z = 0.12$, $p < 0.05$) sub-factors of the physical environment are non-significant. But the overall expectation level of female customers is found to be higher than the expectation level of male customers ($Z = -2.20$, $p < 0.05$). Therefore, it can be concluded that there is a significant difference between the expectations of Female and Male customers related to healthcare services the physical environment and its sub-factors.

H8: There is a non-significant difference in the expectations of Customers' of the different profession with regard to overall physical environment factor and its sub-factors.

- It is clearly indicated by the results that there is no significant difference in the level of expectation of different profession regarding Waiting Lounge physical environment factor ($Z = 1.11$, $p < 0.001$), Medical & Diagnostic Facilities factor ($Z = -1.28$, $p < 0.05$), Canteen & Other Facilities($Z = -0.51$, $p < 0.05$), Patient's Room Facilities($Z = -0.41$, $p < 0.05$) and Staff Appearance ($Z = 0.66$, $p < 0.05$) sub-factors of the physical environment. Even, the overall difference in the expectation level of Medical professionals as customers and Non-medical customers, with regard to the physical environment factor is non-significant ($Z = 0.45$, $p < 0.05$).Therefore, it can be concluded that the hypothesis H8 is accepted. It means that there is no significant difference between the expectations of Medical and Non-medical customers regarding healthcare physical environment.

H9: There is a non-significant difference in the expectations of Customers' of the different age groups with regard to overall physical environment factor and its sub-factors.

- The results of ANOVA indicate that a non-significant difference exists among different age group in their expectation level regarding Waiting Lounge physical environment factor ($F = 0.71$, $p<0.05$), Canteen & Other Facilities($Z = 1.95$, $p<0.05$) and Staff Appearance physical environment factor ($F = 2.30$, $p<0.05$). The test results regarding Medical & Diagnostic Facilities physical environment factor show a highly significant difference in the expectation level of the different age group customers ($F = 3.67$, $p <0.01$). The result of the expectations regarding Patient's Room Facilities physical environment factor also indicates a significant difference among the expectation levels of the different age groups ($F = 3.93$, $p <0.01$). In the same lines, it is found that a significant difference exists among the expectation level of the different age group regarding overall physical environment factor ($F = 2.95$, $p<0.05$). Therefore the hypothesis i.e. there is a non-significant difference in the expectations of customers of the different age groups with regard to overall physical environment factor and its sub-factors" is rejected.

H10: There is a non-significant difference in the expectations of patient's of the different educational background with regard to the overall service physical environment factor and its sub-factors.

- As per the results of the test with regard to the physical environment factor, Educational status seemed to affect the expectations of the customers. Though, a non-significant difference exists among the different education background and in the expectation level regarding Waiting Lounge ($F = 2.50$, $p<0.05$), Patient's Room Facilities ($F = 2.56$, $p<0.05$) and Staff Appearance ($F = 0.32$, $p<0.05$) physical environment factors, yet a highly significant difference exists among the different education background and in their expectation level regarding Canteen & Other Facilities ($F = 13.03$, $p<0.05$) and Medical & Diagnostic Facilities ($F = 4.96$, $p<0.05$) physical environment factors. The test result regarding the overall factor shows a significant difference in the expectation level of the different education level of the respondents ($F = 4.96$, $p <0.01$). Hence it can be said that the expectation level of the different

education groups regarding the overall physical environment factor differs significantly.

H11: There is a non-significant difference in the expectations of Customers' of the different occupation with regard to overall physical environment factor and its sub-factors.

- Occupation of the respondents seemed to affect the expectations of the customers as a significant difference was seen for the overall service physical environment factor. The results of ANOVA, a non-significant difference exists among the different occupation and in their expectation level regarding Medical & Diagnostic Facilities ($F = 0.96$, $p<0.05$), Canteen & Other Facilities ($F = 2.24$, $p<0.05$) and Staff Appearance ($F = 1.09$, $p<0.05$) physical environment factors. But a significant difference exists among the different occupation and in their expectation level regarding Waiting Lounge ($F = 4.07$, $p <0.001$) and Patient's Room Facilities ($F = 3.70$, $p <0.05$) factors. Similarly, the test results regarding the overall factor show a highly significant difference in the expectation level of the different occupation of the respondents ($F = 4.12$, $p <0.01$). Hence it can be said that the expectation level of the different occupation regarding the overall physical environment factor differs significantly. Therefore the hypothesis i.e. There is a non-significant difference in the expectations of customers of the different occupation with regard to the overall service physical environment factor and its sub-factors" is rejected.

H12: There is a non-significant difference in the expectations of Customers' of the different income groups with regard to the overall physical environment factor and its sub-factors.

- It was found that income seemed to affect the expectation levels of the customers as a significant difference was seen for the overall service physical environment factor and many of its sub-factors. A non-significant difference exists among the different income groups and in their expectation level regarding Patient's Room Facilities ($F = 1.78$, $p<0.05$). But other sub-factors

i.e. Canteen & Other Facilities (F= 7.20, p<0.001), Waiting Lounge (F = 3.96, p <0.001), Medical & Diagnostic Facilities (F = 3.88, p<0.05) and Staff Appearance (F = 3.03, p<0.01) show a significant difference. Similarly, the test results regarding the overall physical environment factor show a significant difference in the expectation level of the different income level of the respondents (F = 3.63, p <0.01). Hence it can be said that the expectation level of the different income groups regarding the overall physical environment factor differs significantly.

H13: There is a high influence of healthcare Communication process on customer's expectations in healthcare services.

H14: There is a high influence of healthcare Maintenance and medication process on customer's expectations in healthcare services.

H15: There is a high influence of Consultation process on customer's expectations in healthcare services.

H16: There is a high influence of Billing and Discharge process on customer's expectations in healthcare services.

- When regression analysis was applied to observe the relationship between the customers' expectations and various process factors, it revealed a significant influence of process sub- factors on customers' expectations. The overall model is found to significant (F = 14.83, p<0.001) explaining 51% variation in expectation. Regression coefficient shows that all the process variables have a significant positive relationship with expectations. Communication process (p<0.001), Maintenance and Medication process (p<0.05), Consultation process (p<0.001) and Billing and Discharge process (p<0.001), all the four process sub-factors are found to be significantly affecting customers' expectations, which show that our hypotheses that H13, H14, H15, H16 are accepted.

H17: Customers' expectations are significantly related to service process factors and its sub-factors.

- When regression analysis is applied and calculated by taking a dependent and an independent variable, the value of F is 367.721 which are significant at 0% level and the value of t is 19.176 which are also significant at 0% level. R square value is 0.480 indicates 48% of variance explained by Process Factor towards Expectation. It shows the relationship between Process Factor as the independent variable and Expectation as the dependent variable is significant.

H18: There is a high influence of healthcare Waiting lounge physical process factor on customers' expectations in healthcare services.

H19: There is a high influence of healthcare Medical and Diagnostic Facilities physical process factor on customers' expectations in healthcare services.

H20: There is a high influence of healthcare Canteen physical process factor on customers' expectations in healthcare services.

H21: There is a high influence of healthcare Patient's room physical process factor on customers' expectations in healthcare services.

H22: There is a high influence of healthcare Staff's Appearance physical process factor on customers' expectations in healthcare services.

- To find out the influence of the different physical environment sub-factors on Customers' Expectations, the regression is calculated by taking different physical environment sub-factors as independent variables and Expectation as a dependent variable. When regression is calculated by taking a dependent and independent variables to prove H18, H19, H20, H21, H22 hypotheses, the analysis revealed that all the physical environment sub-factors do not have a significant influence on customers' expectations. Though the overall model was significant ($F = 14.83$, $p<0.001$) but only 15.8% variation in the expectation is explained by these physical environment factors. Regression coefficient shows that only Canteen facilities and Patient's room facilities physical environment factors have a significant positive relationship with expectations. Canteen and other facilities ($p<0.001$), and Patient's room

facilities significantly influence customers' expectations whereas other factors like Waiting lounge ($p<0.05$), Medical and diagnostic facilities ($p<0.05$) and Staff appearance ($p<0.05$) did not influence customers' expectations significantly. Hence our hypotheses H18, H19 and H22 are rejected, whereas H20 and H21 are accepted.

H23: Customers' expectations are significantly related to the physical environment factors and its sub-factors.

- To find out the impact of the overall physical environment factor on Customers' Expectations, the regression is calculated by taking the total of overall physical environment factor as an independent variable and Expectations as dependent variable. The analysis shows that the overall physical environment factor has a significant impact on customers' expectations ($F = 11.549$, $p<0.001$). The results given above shows that overall regression model was significant ($F = 133.374$, $p <0.001$) and but only 25% variation was explained by the overall physical environment factor on customers' expectations.

H24: There are no significantly high expectations of healthcare customers' regarding various Price factors.

- The test result shows that the customers' expectations are significantly high regarding Economical pricing ($Z = 20.97$, $p<0.001$), Detailed Pricing ($Z = 23.46$, $p <0.001$), Low Pricing ($Z = 25.64$, $p <0.001$), Discriminative Pricing ($Z = -3.39$, $p<0.001$), High Pricing ($Z = 13.97$, $p<0.001$) and Qualitative Pricing ($Z = -2.03$, $p<0.05$). It means that private healthcare service provider should provide details of the prices of services to their customer at the initial stage, services should be given at lower prices, price discrimination should not be there, service are offered at very high prices and they think that prices are not appropriate seeing the quality of services that are provided in healthcare units. Hence, the hypothesis that "there are no significantly high expectations of healthcare customers' regarding various Price factors" is rejected.

H25: Customers' expectations are significantly related to the availability of information on the Websites of healthcare service providers.

- Major technology-oriented expectations in healthcare services, as identified in the present study are the expectations related to the availability of information from the private healthcare service providers on their web sites. While analyzing data it is revealed that most of the people expect that they should get as much information as possible, as quickly as possible with the help of updated websites. The respondents want that they should get details of healthcare service provider like address, contact number of responsible people etc., get information about services provided by the hospital want the list of the panel of doctors in hospitals and consultation timing of doctors, to be available on the web sites.

  Out of 400 respondents, 99.50% (Almost 100%) respondents want that they should get details of healthcare service provider like address, contact number of responsible people etc., 86.25% respondents want that they should get information about services provided by the hospital on the website, 84.25% respondents say that they want the list of the panel of doctors in the hospital on the website, 77% respondents want that the consultation timing of doctors should be available on the web sites, 97.25% respondents want that the information regarding number of beds available in the hospital. It proves that healthcare customers' have high expectation related to websites of hospitals. Hence, the hypothesis that "customers' expectations are significantly related to the availability of information on the Websites of healthcare service providers" is accepted.

H26: Customers' expectations are significantly related to the availability of information through SMS services by healthcare service providers.

- It is also found that respondents are now looking forward to get details by SMS. They expect to know about waiting time, discharge timings, arrival timings of the doctors, availability of doctors on their seats, availability of beds, probable expenses, billing details of the day, pathology reports and

required medicines for the patient etc. using SMS Services. It is observed that customers want to get up-to-date information whenever need arise through SMS. They expect to know information like 80.25% waiting time, 73.25% discharge timing, 78.75% arrival time of doctors, 75% availability of doctor on seat, 44.25% availability of bed, 65.75% estimated expenses, 81% billing details of the day, 77.75% pathology report and 84.50% required medicine for patient. It proves that healthcare customers' have high expectation related to availability of SMS related information from the healthcare service providers. Hence, the hypothesis that "Customers' expectations are significantly related to the availability of information through SMS services by healthcare service providers" is accepted.

H27: Customers' preferences vary significantly with regard to the different sources of information related to healthcare service providers.

- When the respondents were asked to give their preference to the different sources of information they relied upon to choose health care service providers for their own treatment, it is clear that people give first preference to friends, relatives or family members, and then they rely on health professionals. It is also observed that people rely poorly on books, magazines or news articles or advertisements of hospitals or information given by hospitals in their information booklets or brochures. The Friedman test results show a highly significant difference in the ranks given by the respondents to the different sources of information on which the customers of healthcare services rely, before selecting their healthcare service provider (χ^2 =20.90, $p<0.001$). Hence, the hypothesis H27 is accepted.

CONCLUSIONS

This research tries to identify manifest expectations of the customers and add to the existing understanding of customers' expectations in healthcare services. Since expectations play a significant role in determining customer perceptions and satisfaction, service providers seek to manage customers' service expectations. Surprisingly the information about the customer expectations in the healthcare sector is very limited. This research tries to explore significant dimensions of healthcare services including price, promotion, processes and physical environment and find importance of the different components of these dimensions, which may affect customer satisfaction. Managing customer expectations will affect healthcare service industry immensely. This study has examined specific components of customer expectations in this complicated but fast growing essential service.

- From the demographic analysis of the respondents, it can be concluded that in the study male respondents are slightly higher than the female respondents comprising 56.25% of the sample. According to age, the respondents are almost equally distributed in different age groups from the young generation to old age groups (up to 60 yrs), though maximum respondents are in 21-30 years age group. The distribution of respondents according to their educational qualification reveals literate respondents dominate the sample of the study with 97.75%. In the sample of the study, as per different occupational groups, from business class to unemployed/students, the maximum respondents are from private services group. Housewives and students are eager to discuss their expectations from healthcare service providers and they consist 38% of the sample. According to the profession, there are non-medical people dominates the sample group with 95.96%. It can also be concluded that more respondents are from income group which has income between 40,001 to 60, 000 rupee per month i.e. 26.50%. Rest of the income groups are almost equally distributed as per the different income groups.

- It can be concluded from the findings that the sample size and techniques are adequate as the sampling adequacy for the present analysis, by the Kaiser-Meyer-Olkin (KMO) Test is 0.807, which is considered 'great'.
- The correlations between items of the construct are sufficiently large for Exploratory Factor Analysis as the Bartlett's test, which is another indication of the strength of the relationship among variables, is also found significant.
- It is concluded that four sub-factors identified as communication processes, medication and maintenance processes, consultation process and billing & discharge processes are related to Process dimension as they have Eigen value more than 1 and found by Exploratory Factor Analysis, a data reduction and factor identification technique. Remaining five sub-factors, which have Eigen value more than 1 can be related to Physical environment dimension and identified as Waiting Lounge, Medical & Diagnostic Facilities, Canteen & Other Facilities, Patient's Room Facilities and Staff Appearance factors.
- The questionnaire is reliable and consistent internally. In the present study, the instrument has internal consistency as the Cronbach's alpha values have ranged from 0.857 to 0.650 for the sub-factors, which higher than 0.7 the acceptable value or near to 0.7.

<u>After testing the set hypotheses following conclusions are drawn -</u>

- The null hypothesis that there is a non- significant difference between the expectations of the different gender with regard to the overall service process factor and its sub-factors has been rejected by using Z-statistic. Therefore, it can be concluded that there is a significant difference between the expectations of Female and Male customers related to healthcare services processes and its sub-factors.
- The null hypothesis that there is a non- significant difference between the expectations of the different profession with regard to the overall service process factor and its sub-factors has been accepted. Therefore, it can be concluded that the hypothesis H2 is correct. It means that there is a no significant difference between the expectations of Medical and Non-medical customers regarding healthcare services processes.

- The hypothesis H3 is rejected. It means that there is a significant difference between the customers' expectations of the different age groups regarding healthcare services processes. It can be concluded from the analysis that Age group 30-40 and 41-50 year have significantly higher expectations from healthcare services providers related to healthcare services processes.
- The hypothesis that there is a non-significant difference in the expectations of patient's of the different educational background with regard to the overall service process factor and its sub-factors, is rejected based on the findings of the test. Hence it can be said that the expectation level of different education groups regarding overall process factor differs significantly.
- When the Demographic variable – occupation and difference in expectation level of respondents is analyzed, the results show that a significant difference exists among different occupation and in their expectation level regarding overall process factor. Hence it can be said that the expectation level of the different occupation groups regarding overall process factor differs significantly.
- The hypothesis that there is a non-significant difference in the expectations of Customers' of the different income groups with regard to overall service process factor and its sub-factors, is also rejected. The results show that a significant difference exists among the different income groups and in their expectation level regarding Communication process, Maintenance & Medication process factors as well as overall process factors. Though a non-significant difference exists in the expectation level of the different income level of the respondents and Consultation process and Billing & Discharge process factors. But it can be concluded that the expectation level of the different income groups regarding process factors differ significantly.
- When the sub-factors of the physical environment are tested for gender, it is clear that there is a highly significant difference in the level of expectation regarding Waiting Lounge physical environment factor and Medical & Diagnostic Facilities factor are significant. But Canteen & Other Facilities, Patient's Room Facilities and Staff Appearance sub-factors of physical environment are non-significant. But the overall expectation level of female

customers is found to be higher than the expectation level of male customers, so the hypothesis is rejected. Therefore, it can be concluded that there is a significant difference between the expectations of Female and Male customers related to healthcare services physical environment and its sub-factors.

- It is clearly indicated by the results that there is no significant difference in the level of expectation of different profession regarding Waiting Lounge, Medical & Diagnostic Facilities, Canteen & Other Facilities, Patient's Room Facilities and Staff Appearance sub-factors of physical environment. Even overall difference in the expectation level of Medical professionals as customers and Non-medical customers, with regard to the physical environment factor is non-significant.
- It is concluded that there is a significant difference in the expectations of customers of different age groups with regard to overall physical environment factor and its sub-factors. As the results indicate that a non-significant difference exists among different age group in their expectation level regarding Waiting Lounge physical environment factor, Canteen & Other Facilities and Staff Appearance physical environment factors. The result of expectations regarding Medical & Diagnostic Facilities, Patient's Room Facilities physical environment factors and overall physical environment factor indicate a significant difference among the expectation levels of different age groups.
- It is found that a non-significant difference exists among different education background and in the expectation level regarding Waiting Lounge, Patient's Room Facilities and Staff Appearance physical environment factors. But a highly significant difference exists among the different education background and in their expectation level regarding Canteen & Other Facilities and Medical & Diagnostic Facilities physical environment factors as well as the overall physical environment factor. Hence it can be said that the expectation level of the different education groups regarding the overall physical environment factors differs significantly.
- The results show a non-significant difference among different occupation and in their expectation level regarding Medical & Diagnostic Facilities, Canteen

& Other Facilities and Staff Appearance physical environment factors. But a significant difference exists among different occupation and in their expectation level regarding Waiting Lounge, Patient's Room Facilities and regarding overall factor. Hence, it can be said that the expectation level of different occupation regarding overall physical environment factors differs significantly.

- It can be concluded that income affects the expectation levels of the customers, as a significant difference is seen for the overall physical environment factor and many of its sub-factors and expectations. Though there is a non-significant difference exists among the different income groups and in their expectation level regarding Patient's Room Facilities, yet other sub-factors i.e. Canteen & Other Facilities, Waiting Lounge, Medical & Diagnostic Facilities and Staff Appearance physical environment factors show a significant difference. Even, the test results regarding overall physical environment factor show a significant difference in the expectation level of the different income level of the respondents.
- It is also found that healthcare Communication process, Maintenance and Medication process, Consultation process and Billing and Discharge process have a high influence of on customer's expectations in healthcare services, as the overall model of regression analysis is found significant, explaining 51% variation in expectation. It can be concluded that customers actually expect from healthcare service providers to maintain good communication process, better maintenance and medication, efficient consultation process and billing and discharge process.

- The regression model is found significant with R square value 0.480 when it is applied and calculated by taking Expectation as dependent and Overall Process Factor as the independent variable, it indicates 48% variance. It shows a relationship between Process Factor as the independent variable and Expectation as the dependent variable is significant.

- It is found that Waiting lounge, Medical and Diagnostic Facilities, Canteen and other facilities, Patient's room facilities and Staff's Appearance physical

environment factors have a non-significant influence of on customers' expectations in healthcare services, as the overall model of regression analysis is found insignificant, only 15.8% variation in the expectations is explained by these physical environment factors. In other words, it can be said that customers do not expect much from waiting lounge, medical diagnostics facilities and staff appearance but they expect good canteen facilities and patient's room facility in physical environment factors.

- It can also be concluded that overall Physical Environment factor has a significant impact on customers' expectations, as the overall regression model is significant, but only 25% variation is explained by overall physical environment factor on customers' expectations.

- It can also be concluded that the customers' expectations are significantly high regarding prices of the services should be more economical they expect that private healthcare service provider should offer their service at economical prices or at lower prices. They also expect that private healthcare service provider should provide details of the prices of services to their customer at the initial stage and price discrimination should not be there. It can be said that they agree that service are offered at very high prices and they highly expect that quality of services that are provided should match with prices that are charged by health care centers.

- From the present study, it is also found that the customers' expectations related to the availability of information from the private healthcare service providers on their web sites are on the rise. Most of the customers expect that they should get updated information related to the timings of the consulting doctor, the list of available doctors, the number of beds available in different categories and types with their current status, the tariff of different types of rooms and ICU beds etc. Healthcare service customers want up-to-date information to be available on the Internet so that they can see it anytime.

- It can be concluded that customers are becoming technology savvy and expect healthcare service providers to reach to them effectively by utilizing modern

information technology. Customers are now looking forward to get details by SMS. They expect to know about waiting time, discharge timings, arrival timings of the doctors, the availability of doctors on their seats, the availability of beds, probable expenses, billing details of the day, pathology reports and required medicines for the patient etc. using SMS Services.

- It is also found that people give first preference to friends, relatives or family members, and then they rely on health professionals, when it comes to get information regarding a healthcare service provider. It is also observed that people rely least on books, magazines or news articles or advertisements of hospitals or information given by hospitals in their information booklets or brochures. Hence, it is very clear that people only believe on word of mouth publicity which provides first hand and considerably believable, true information about any healthcare service provider.

On the basis of the present study the research has built a comprehensive model to understand and identify different factors related to healthcare service dimensions which affect customers' expectations. The model describes the relationship between these dimensions and their relation with expectations.

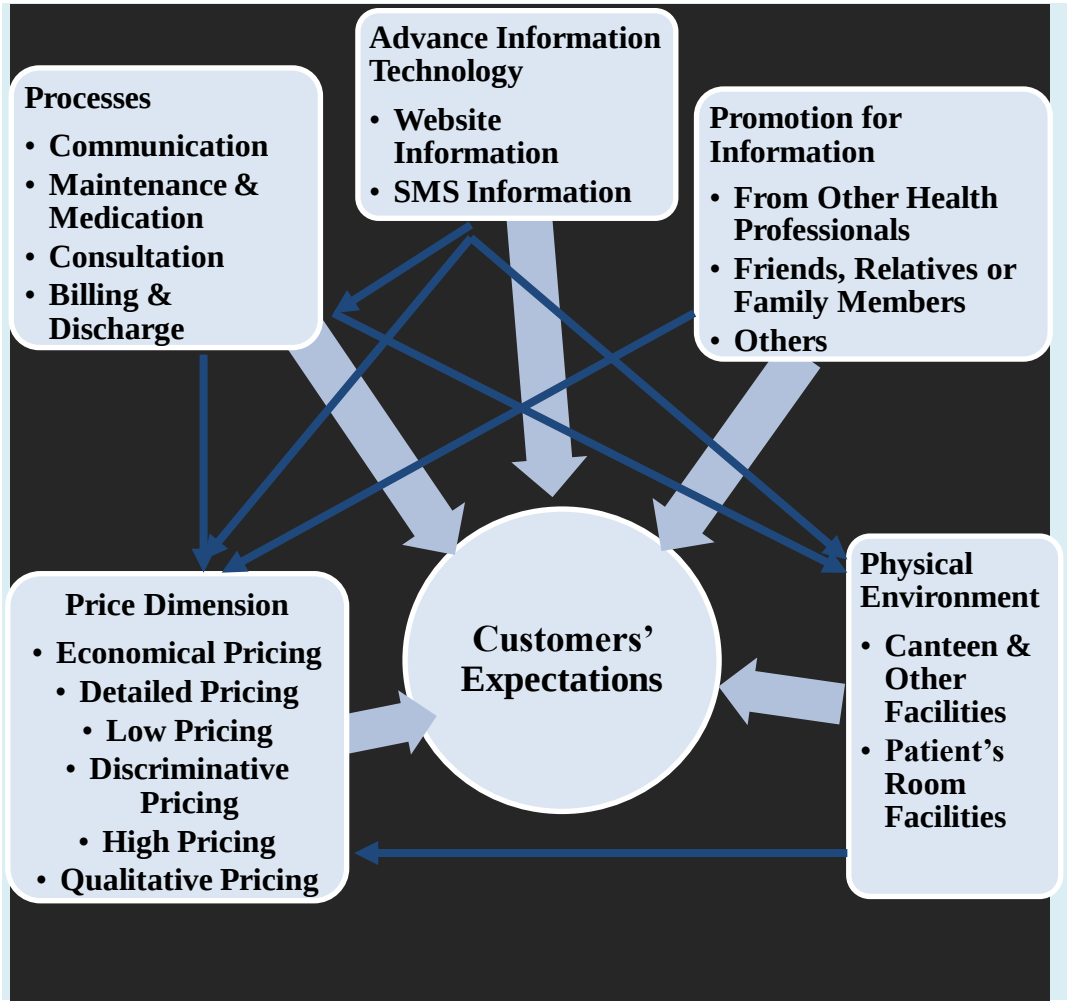


Figure 6.1: Model of Customers' Expectations in Healthcare Services

The model depicts clearly that customers' expectations are significantly related to Pricing, Processes, Advance technology and Physical environment. Promotion of healthcare services doesn't affect expectations directly as they believe more on word of mouth publicity which is not a direct promotional tool. Similarly, Canteen & Other Facilities, with Patient's Room Facilities are two Physical environment factors which are directly related with customers' expectations. Customers have high expectations related to advance information technology.

SUGGESTIONS

On the basis of the present research, following suggestions are made-

Suggestions for Private Healthcare Service Providers

1. It is suggested that different healthcare service processes are significantly related to the expectations of healthcare customers, therefore private healthcare service providers need to make their different processes more efficient, smoother and better.

2. There is a significant difference between the expectations of female and male customers related to healthcare services processes and its sub-factors, therefore private healthcare services providers need to become more sensitive to the needs of female customers while performing consulting, communicating, giving medication and performing billing and discharge processes.

3. The expectations of Medical and Non-medical customers regarding healthcare services processes do not vary significantly, so private healthcare services providers need not make a change in overall processes while treating medical or non-medical customers.

4. Private healthcare services providers require dealing differently with the different age groups regarding healthcare services processes, as it is found that age group 30-40 and 41-50 year have significantly higher expectations related to healthcare services processes. These age groups are generally attendants or cost bearers of the healthcare service expenses, so the private healthcare services providers should be careful while dealing with these customers.

5. Similarly, the expectation level of different education groups regarding the overall process factor differs significantly. Illiterate customers have high expectations from private healthcare service providers regarding healthcare service processes, so while dealing with such customers private healthcare service providers should be careful.

6. While serving the different occupation groups, private healthcare service providers should be very careful as a significant difference exists among different occupation and in their expectation level regarding process factors. Businessmen and Housewives especially have very high expectations regarding communication, consultation and maintenance & medication processes, so they should pay more attention to these customers.

7. The customers of the different income groups have different expectations regarding Communication process, Maintenance & Medication process factors. The higher the levels of income, the higher are the expectations. Therefore private healthcare service providers should communicate effectively, give medication attentively as well as perform maintenance processes carefully while dealing with the customers of higher income groups. Though private healthcare service providers have the different type of rooms, the different types of facilities as per the cost level, yet there is a growing need to perform the processes more efficiently and carefully.

8. Private healthcare services providers are suggested to give training to their staff regarding communication skills because along with treatment the customers are also expecting them to communicate effectively about the condition of the patient, which in turn will put them at ease.

9. Female customers are more observant and attentive than male customers about the physical ambience of the healthcare unit. Therefore, private healthcare service providers should be more careful about the expectations of female customers. Though bringing a complete change in all the physical facilities of the unit is not possible, yet in the case of Waiting Lounge and Medical & Diagnostic Facilities healthcare service providers should try to be more comforting and suitable for female customers.

10. Private healthcare services providers require catering differently for the different age groups regarding physical environment and facilities of the unit. Age groups 21-30 years and 41-50 years have significantly higher expectations related to Medical & Diagnostic Facilities and Patient's Room Facilities.

Therefore, private healthcare service providers need to improve these facilities to suit the need of these age groups.

11. Similarly, Canteen & Other Facilities and Medical & Diagnostic Facilities, which are considered the physical environment factors of a healthcare unit, should be planned carefully because the different education groups have different expectations related to these facilities. Surprisingly illiterate and below graduate groups have high expectations related to these two factors regarding physical environment.

12. While serving the different occupation groups, private healthcare service providers should be very careful regarding Waiting Lounge, Patient's Room Facilities and regarding the overall physical environment factor as a significant difference exists among different occupation and in their expectation level. Employees in government service and Housewives especially have very high expectations regarding Waiting Lounge, Patient's Room Facilities and regarding the overall physical environment factor, so they should pay more attention to these customers.

13. The customers of the different income groups have different expectations regarding the overall physical environment factor and many of its sub-factors i.e. Canteen & Other Facilities, Waiting Lounge, Medical & Diagnostic Facilities and Staff Appearance physical environment factors. The higher the levels of income, the higher are the expectations. Therefore private healthcare service providers should make these facilities available carefully while dealing with the customers of higher income groups. Though private healthcare service providers have different layers in their system related to the physical ambience as per the cost level, yet this differentiation is limited to deluxe, semi-deluxe and general wards etc. There is a probability of finding a new segment in healthcare services which is driven by services, facilities, quality and performance efficiency, not by cost.

14. Private healthcare service providers need to make their Communication process, Maintenance and Medication process, Consultation process and

Billing and Discharge processes very efficient, easy, customer-oriented and smooth, as they affect 51% variation in expectations. The present study suggests that achieve high satisfaction level among its customers, services providers need to maintain good communication process, better maintenance and medication, efficient consultation process and billing and discharge process.

15. It is a recent trend in this industry that private players are paying a lot of attention to the physical environment of their units. But this study suggests that except proper canteen facilities and patient's room facility, customers do not expect much from physical environment factors. Even variation in the expectation is very low i.e. 25 percent due to various Physical Environment factors. So it is suggested that private healthcare service providers need to concentrate more on improved and flawless processes than enhancing the physical environment. Though expectations are on the rise regarding physical environment factors, yet the overall influence of these factors is not very high.

16. Private healthcare service providers are advised to make the services as economical as possible because the customers' expectations are significantly high regarding economical pricing of the services. They also expect that price discrimination should not be there in healthcare services. Although multi-specialty hospitals generally don't use such discriminatory practices, yet customers feel that price discrimination is there. So service providers are suggested that they should clearly state the prices and avoid misconceptions regarding prices.

17. The service providers should offer their services at economical prices or at lower prices. It is suggested to the private healthcare service providers that they should develop a transparent pricing policy. In case of other services a list of price of the different services which are offered by the service provider are openly stated or displayed. Similar practices should be implemented by the healthcare service providers and they should display price of different services and facilities with complete details. It is also required that private players

should match quality of services provided with prices as customers have high expectations regarding qualitative pricing.

18. It is needed that private healthcare service providers update, upgrade and enhance the availability of information on their web sites. As most of the customers expect that they should get updated information related to the timings of the consulting doctor, the list of available doctors, the number of beds available in different categories and types with their current status, the tariff of different types of rooms and ICU beds etc. should be made available on the Internet so that they can see it anytime.

19. Similarly, as customers are becoming technology savvy so the private healthcare service providers should become more easily approachable to them by utilizing modern information technology. Customers are now looking forward to get details by SMS. The private healthcare service providers should let them know about waiting time, discharge timings, arrival timings of the doctors, the availability of doctors on their seats, the availability of beds, probable expenses, billing details of the day, pathology reports and required medicines for the patient etc. using SMS Services.

20. It is also advised to private healthcare service providers that they should work harder to improve the effectiveness of their processes and physical environment as customers while collecting information to choose healthcare service providers for their own treatment, chiefly rely on their friends, relatives or family members. These friends, relatives or family members are the previous satisfied customers only. From the present study, it is very clear that people believe highly on word of mouth publicity which provides first hand and considerably believable, true information about any healthcare service provider. This publicity can be easily attained and achieved by delighting a customer and that could be done only by understanding their expectations and fulfilling them.

Suggestions for Customers

21. It is suggested to all the customers of healthcare services that they should have realistic expectations from healthcare service providers, as the prime concern of healthcare service providers is to improve the health of the patients.
22. The customers of healthcare services are suggested to become better informed about their health conditions and healthcare processes as it will ease the burden on the healthcare providers and they could cater to customer needs efficiently and fulfill the higher level of expectation.
23. It is suggested that all the customers of healthcare services should try to understand the different Medication and maintenance processes performed in the hospital and adhere to the instructions given by the staff members. It will make the processes more efficient and smoothen the functioning of healthcare processes.
24. The customers of healthcare services are required to understand the significance of their roles in Communication processes to make it more effective. Especially in Indian scenario where the healthcare service providers are functioning with a shortage of manpower and lack of infrastructure, their expectations related to communication processes should be more realistic.
25. Illiterate customers should be made aware of the complex and critical nature of healthcare processes and physical environment factors so that they could understand them better and should not naturally expect higher from the private healthcare service providers.
26. The customers of healthcare services are required to understand the significance of healthcare services pricing and cost of these services to accept the different pricing policies.

Thus, this study identifies significant factors affecting customers' expectations related to the different dimensions of healthcare services, which enables the service providers to become better equipped to render quality services to their customers. Furthermore it suggests that the higher level of understanding of customer expectations related to these dimensions of healthcare services warrants greater level of quality care and higher efficiency in providing that care.

BIBLIOGRAPHY

Books

- A. V. Srinivasan, Managing a Modern Hospital by Sage Publications
- Bapu P. George (2006); "Marketing of Healthcare Services"; Abhijeet Publications, Delhi, First Edition, 2006.
- Byer S. Manag, Patient-Based Surveying: A Cost-Effective Approach for Reaching Large Markets, 1995.
- Cengiz Haksever, Barry Rander, Roberta S. Russell, Robert G. Murdick, Service Management and Opearations by Pearson Education.
- Christopher Lovelock, Jayanta Chatterjee, Services Marketing – People, Technology, Strategy, Ed. VI .
- Dr. Pradeep B. Salgaonkar (2006); "Marketing of Healthcare Services"; Abhijeet Publications, Delhi, First Edition, 2006.
- Dr. G. Krishna Mohan & Dr. C. N. Krishna Naik (2006); "Healthcare Marketing"; Discovery Publishing House, New Delhi; First Edition, 2006.
- http://phfi.org/
- Kenneth E. Clow, David L. Kurtz, Services Marketing 2e by Biztantra
- Kickbusch IS. Health literacy: addressing the health and education divide. Health Promotion International. 2001;
- Kotler Philip, Clarke Roberta N, Marketing for Healthcare Organization by Prentice-Hall, New Jersey.
- P. Kotler, Andreason, Strategic Marketing for Non-Profit Organisation by Prentice Hall Publication
- Patient Experience Management for In-Patient CABG Cases submitted to Apollo Institute of Hospital Administration, Hyderabad July 2006
- Paul Oliver, Writing Your Thesis by Sage South-Asia edition
- Ravi Shankar,Services Marketing – The Indian Perspetive by Excel Books
- S. M. Jha, Services Marketing by Himalaya Publishing House
- U.V.N Das, Communication Methods in Apollo Hospital, Hyderabad, Project report

Journals and Publications

- Aditi Naidu (2009), "Factors affecting patient satisfaction and healthcare quality", International Journal of Healthcare Quality Assurance, Vol. 22 No. 4.
- Amit Mookim, article (2013) on the Union Budget 2013.
- Andaleeb, S.S. (1998), "Determinants of customer satisfaction with hospitals: a managerial model", International Journal of Health Care Quality Assurance, Vol. 11 No. 6.
- Baalbaki, I., Ahmed, Z.U., Pashtenko, V.H. and Makarem, S. (2008), "Patient Satisfaction with healthcare delivery systems", International Journal of Pharmaceutical and Healthcare Marketing, Vol. 2
- Baron-Epel O, Dushenat M, Freidman N (2001), Evaluation of the Consumer Model; relationship between patients expectation, perceptions and satisfaction with care, International Journal for Quality in Healthcare.
- Bedi, Dr Sona, Dr Sanjay Arya, Prof RK Sarma (2004), Patient Expectation Survey - A Relevant Marketing Tool for Hospitals, Journal of the Academy of Hospital Administration, Vol. 16.
- Bandura, A. (1977), "Toward a Unifying Theory of Behavioral Change," Psychological Review, 84.
- Bandura, A. (2005), 'The Primacy of Self-Regulation in Health Promotion', Applied Psychology: An International Review, 54(2).
- Bhati, Divya Kanwar. "Impact of Technology on Primary Healthcare Information Management: A Case of North India" *Perspectives in Health Information Management* (International issue, May 2015).
- Boshoff, C. and Gray, B. (2004), "The relationships between service quality, customer satisfaction and buying intentions in the private hospital industry", South African Journal Business Management, Vol. 35.
- Claudia Steinke (2008), "Examining the Role of Service Climate in Healthcare: An Empirical Study of Emergency Departments", International Journal of Service Industry Management, Vol. 19 No. 2.
- Cronin, J. and Taylor, A. (1992), "Measuring service quality: a re-examination and extension", Journal of Marketing, Vol. 56.

- Coye, R.W. (2004), “Managing customer expectations in the service encounter”, International Journal of Service Industry Management, Vol. 15 No. 1.
- Damani, Gaurang (2013), The problems of healthcare system in India and how it can be overcome, http://www.moneylife.in/article/
- Davidow, William H. and Bro Uttal (1989), "Service Companies: Focus or Falter," Harvard Business Review, 67, 77-85.
- Das, J. and Hammer, J. (2007), “Which doctor? Combining vignettes and item-response to measure doctor quality”, Journal of Development Economics, Vol. 78.
- Dr. Ranajit Chakraborty and Anirban Majumdar(2011), “Measuring Consumer Satisfaction in Healthcare Sector: The Applicability of SERVQUAL” Journal of Arts, Science & Commerce, www.researchsworld.com, Vol.– II, Issue –4.
- Dr Sona Bedi, Dr Sanjay Arya, Prof. R. K. Sharma (2006), “Patient expectation survey - a relevant marketing tool for hospitals”, Journal of the Academy of Hospital Administration, Vol. 16, No. 1.
- Dr. Wathek S Ramez (2012), “Patients' Perception of Healthcare Quality, Satisfaction and Behavioral Intention: An Empirical Study in Bahrain”, International Journal of Business and Social Science, Special Issue 8, Vol. 3 No. 1.
- Duggirala, M., Rajendran, C. and Anantharaman, R.N. (2008), “Patient-perceived dimensions of total quality service in healthcare”, benchmarking: An International Journal, Vol. 15.
- Drew, N.C., P. Salmon, and L. Webb (1989), Mothers’, Midwives’ and Obstetricians’ Views on the Features of Obstetric Care which Influence Satisfaction with Childbirth’, British Journal of Obstetrics and Gynecology.
- Dr. Shyama S. Nagrajan (2007); “Healthcare grading - An advanced Tool”; Express healthcare Management; February 2007, PP. 18 & 19; (www.expresshealthcaremgmt.com).

- Dr. Anil Kumar (2006); "Knowledge Management In Managed Healthcare"; Express Healthcare Management, June 2006, Page No. 24; (www.expresshealthcaremgmt.com).
- Edworthy, S. M., "Telemedicine in Developing Countries." British Medical Journal, vol.323, no. 7312, pp 524-25, 2001.
- Gronroos, C. (1984), "A service quality model and its marketing implications", European Journal of Marketing, Vol. 18 No. 4.
- Haddad, S., Fournier, P. and Potvin, L. (1998), "Measuring lay people's perceptions of the quality of primary health care services in developing countries. Validation of a 20-item scale", International Journal for Quality in Health Care, Vol. 10 No. 3.
- Imad Baalbaki, Zafar U. Ahmed, Valentin H. Pashtenko, Suzanne Makarem. (2008). Patient satisfaction with healthcare delivery systems. International Journal of Pharmaceutical and Healthcare Marketing, 2(1), 47 – 62.
- Jayesh P. Aagja, Renuka Garg (2010). Measuring perceived service quality for public hospitals (PubHosQual) in the Indian context International Journal of Pharmaceutical and Healthcare Marketing, Vol. 4 No. 1.
- J. Rama Krishna Naik, Dr Byram Anand and Irfan Bashir (2013), Healthcare Service Quality and word of mouth: Key drivers to achieve Patient Satisfaction. Pacific Business Review International Vol. 5 No. 12.
- Jain, V. K. (2008, January 13). Private Sector participation in Health care in Rajasthan. Retrieved from http://www.indianmba.com/ Occasional_Papers/OP169/ op169.html
- Kamran Sulaimani (2007); "Hospitals Queue up for Multi-Speciality Centers"; The Economic Times, January 8th 2007.
- Kenagy JW, Berwick DM, Shore MF (1999), Service quality in health care. JAMA.
- Kenneth Randall Russ (2006), Consumer expectation formation in healthcare services: a psycho-social model, for the degree of Doctor of Philosophy, B.S., Louisiana State University.

- Khomba Singh (2007); “Healthcare Biggies Eyeing Insured Overseas Patients”; The Economic Times, July 9th 2007.
- Krishnan, A., B. Nongkynrih, K. Yadav, S. Singh, and V. Gupta. “Evaluation of Computerized Health Management Information System for Primary Health Care in Rural India.” BMC Health Services Research, vol.10, pp. 310, 2010.
- K. Vidhya, Dr. C.Samudhra Rajakumar, Dr. K. Tamizhjyothi (2006), in “An Empirical Study on Patient Delight and the Impact of Human and Non-Human Factors of Service Quality on Patient Satisfaction in Private Hospitals”, International Journal of Quality Health Care Vol. 18 No. 6.
- Lewis, R.C. and Booms, B.H. (1983), “The marketing aspects of service quality”, American Marketing Association, Chicago, IL.
- L. Pui-Mun, “IT-enhanced service quality in the healthcare industry,” International Journal of the Computer, the Internet and Management, vol.12, no.3, pp. 96-103, September-December 2004.
- Manning, Martha M. and Thomas L. Wright (1983), "Self-Efficacy Expectancies, Outcome Expectancies, and the Persistence of Pain Control in Childbirth," Journal of Personality and Social Psychology, 45, 2.
- Manjunath, Usha, Bhimaraya A. Metri and Shalini Ramachandran (2007), “Quality management in a healthcare organisation: a case of South Indian hospital”, The TQM Magazine Vol. 19 No. 2, Emerald Group Publishing Limited.
- Mark J. Kay (2007), “Healthcare Marketing: What is salient?” International Journal of Pharmaceutical & Healthcare Marketing.
- Ministry of Health and Family Welfare, Government of India, http://www.mohfw.nic.in/
- Mohsin Muhammad Butt and Ernest Cyril de Run(2010), “Private healthcare quality: applying a SERVQUAL model”, International Journal of Healthcare Quality Assurance, Vol. 23 No. 7.
- Malvinder Mohan Singh (2007); “A Sea Change in Healthcare Consumer Behaviour”; The Economic Times, April 3rd 2007.

- M.V. Ramana Murthy2008," Mobile based Primary Health Care System for Rural India**",** Available at https://www.w3.org/2008/02/MS4D_ WS/papers/cdac-mobile-healthcare-paper.pdf (accessed August 30, 2014).
- Nandita Kapadia-Kundu , Tara M. Sullivan , Basil Safi , Geetali Trivedi & Sanjanthi Velu, "Understanding Health Information Needs and Gaps in the Health Care System in Uttar Pradesh, India", *Journal of Health Communication,* vol. 17, no 2, pp. 30-45,2012.
- National Health Profile 2010-11. Retrieved from http://citeseerx. ist.psu.edu/ viewdoc/ download/
- National Knowledge Commission http://www.knowledgecommission .gov.in
- Norazah Mohd Suki, Jennifer Chiam Chwee Lian, & Norbayah Mohd Suki (2011), "Do patients' perceptions exceed their expectations in private healthcare settings?", International Journal of Healthcare Quality Assurance, Vol. 24 No. 1, Emerald Group Publishing Limited
- Oliver, Richard L., and Russell S. Winer (1987), "A Framework for the Formation and Structure of Consumer Expectations: Review and Propositions," Journal of Economic Psychology.
- Pakdil, F. and Harwood, T.M. (2005), "Patient satisfaction in a pre-operative assessment clinic: an analysis using SERVQUAL dimensions", Total QualityManagement, Vol. 16.
- Palmer, R.H. (1991), "Considerations in defining quality of care", in Palmer, R.H. (Ed.), Striving for Quality in Health Care: An Inquiry into Policy and Practice, Health Administration Press, Ann Arbor, MI.
- Panchapakesan Padma, Chandrasekharan Rajendran and Prakash Sai Lokachari (2010), "Service quality and its impact on customer satisfaction in Indian hospitals Perspectives of patients and their attendants", Benchmarking: An International Journal Vol. 17 No. 6, Emerald Group Publishing Limited.
- Parasuraman, A., Berry, L.L. and Zeithaml, V.A. (1993), "More on improving service quality measurement", Journal of Retailing, Vol. 69 No. 1, pp. 140-7.

- Potter, C., Morgan, P. and Thompson, A. (1994), "Continuous quality improvement in an acute hospital: a report of an action research project in three hospital departments", International Journal of Health Care Quality Assurance, Vol. 7 No. 1.
- Rajashri Sengupta (2006); "Healthcast 2020 : Creating A Sustainable Future"; Express Healthcare Management, July, 2006, Page No. 23 ; (www.expresshealthcaremgmt.com).
- Ramaiah Itumalla, "Information Technology and Service Quality in Health Care: An Empirical Study of Private Hospital in India", *International Journal of Innovation, Management and Technology,* Vol. 3, No. 4, August 2012.
- Raman Sharma, Meenakshi Sharma (2011), "The patient satisfaction study in a multispecialty tertiary level hospital", PGIMER, India, Vol. 24 No. 1, Emerald Group Publishing Limited
- Ramani, K.V. (2014), "The India Healthcare Sector: Governance and Management Challenges", Advances in Social Sciences Research Journal, Vol. 1, No. 1
- Ramesh, M. and Wu, X. (2008), "Realigning public and private healthcare in southeast Asia", The Pacific Review, Vol. 21 No. 2.
- Rao, K.D., Peters, D.H. and Bandeen-Roche, K. (2006), "Towards patient-centered health services in India – a scale to measure patient perceptions of quality", International Journal for Quality in Healthcare, Vol. 18, pp. 414-21.
- Ritu Narang (2010), "Measuring perceived quality of healthcare services in India", International Journal of Healthcare Quality Assurance, Vol. 23 No. 2, Emerald Group Publishing Limited.
- Ritu Narang (2011), "Determining quality of public healthcare services in rural India", Clinical Governance: An International Journal, Vol. 16 No. 1, Emerald Group Publishing Limited.
- Rohini, R. and Mahadevappa, B. (2006), "Service quality in Bangalore hospitals – an empirical study", Journal of Services Research, Vol. 6, pp. 59-85.

- Ross, Caroline K., Gayle Frommelt, Lisa Hazelwood, and Rowland W. Change (1987), "The Role of Expectations in Patient Satisfaction with Medical Care," Journal of Health Care Marketing.
- Schneider, B. and White, S. (2004), Service Quality: Research Perspectives, Sage Publications, Thousand Oaks, CA.
- Sanjaya Singh Gaur, Yingzi Xu, Ali Quazi and Swathi Nandi (2011), "Relational impact of service providers' interaction behavior in healthcare", Managing Service Quality Vol. 21 No. 1, Emerald Group Publishing Limited
- Sarbadhikari SN., The state of medical informatics in India: A roadmap for optimal organization. Journal of Medical Systems. 2005; 29(2)
- Sarbin, Theodore R. and Vernon L. Allen (1968), "Role Theory," in the Handbook of Social Psychology, 2nd ed., Vol. 1, Gardner Lindsey and Elliot Aronson, Reading, MA: Addison-Wesley Publishing Company.
- Singh, A. K., K. Moidu, E. Trell, and O. Wigertz. "Impact on the Management and Delivery of Primary Health Care by a Computer-based Information System." *Computer Methods and Programs in Biomedicine, vol.*37, no. 1, pp. 55-64, 1992.
- Sheenu Jhawar (2006); "Global Healthcare In A Local Framework"; Express Healthcare Management, February, 2006, Page No. 23 ; (www.expresshealthcaremgmt.com).
- Smith, Ruth Ann and Michael J. Houston (1985), "A Psychometric Assessment of Measures of Scripts in Consumer Memory," Journal of Consumer Research, 12 (September).
- S. Lunde, "The mhealth case in india," Industry white paper of Wipro Council for Industry Research (WCIR), Available at https://www.wipro.com/documents/the-mHealth-case-inIndia.pdf. (assessed on April 2016).
- Solomon, Michael R. and Surprenant, Carol F. and (1987), "Prediction and Personalization in the Service Encounter," Journal of Marketing, 51 (April).

- Steele, David J., Barry Blackwell, Mary C. Gutman, and Thomas C. Jackson (1987), "The Activated Patient: A Review of the Active Patient Concept," Patient Education and Counseling, 10, 3-23.
- Suzana Markovic, Dina Lončarić and Damir Lončarić (2014), "Service Quality and Customer Satisfaction in the Healthcare Industry - Towards Health Tourism Market", Tourism & Hospitality Management, Vol. 20, No. 2, 2014.
- Techspirit, "Technology and Its Potential to Transform Healthcare Systems in India," Available at http://accessh.org/resource/technology-and-its-potential-to-transform-healthcare-systems-in-india-techspirit. (assessed on July 2016).
- Thompson DA, Yarnold PR (1995), Relating Patient Satisfaction to Waiting Time Perceptions and Expectations: The Disconfirmation Paradigm , Acad Emerg Med..
- UN, 2008, International Standards Industrial Classification of all Economic Activities. Statistical papers, unstats.un.org/unsd/publication/ seriesm_4rev4e.pdf; Last accessed on 14 Oct, 2013.
- V. Srinivasan, Managing a Modern Hospital by Sage Publications.
- Verma, Sanjeev and Chaudhuri, Ranjan(2009), 'An study on effect of CRM on CS in service sector in India', Journal of Marketing & Communication, Vol. 5 No.2.
- Vivek Shukla (2006); "Ironies of the Healthcare Industry"; Express healthcare Management; July 2006, PP. 31 & 33; (www.expresshealthcaremgmt.com).
- Vroom, Victor H. (1964), Work and Motivation. New York: Wiley.
- WHO 2011, World Health Statistics 2011, Health workforce, infrastructure and essential medicines.
- World Bank. Challenges and World Bank Support for India's Health Sector: http://www.worldbank.org.in
- World Health Organization (WHO). *58th World Health Assembly Report*. Geneva: WHO, 2005.

- World Health Organization(WHO), Partnership for Maternal, Newborn and Child Health. “Millennium Development Goals 4 and 5.” Available at http://www.who.int/pmnch/about/about_mdgs/en/index.html (accessed August 30, 2014).
- World Health Organization (WHO), “eHealth and Innovation in Women’s and Children’s Health: A Baseline Review”, Based on the Findings of the 2013 Survey of CoIA Countries by the WHO Global Observatory for eHealth. Geneva, Switzerland: WHO, 2014.
- Zeithaml, V.A., Parasuraman, A. and Berry, L.L. (1988), “SERVQUAL: a multiple-item scale for measuring consumer perceptions of service quality”, Journal of Retailing, Vol. 64 No. 1.
- Zeithaml, Valerie A., Parasuraman, A. & Berry, Leonard L. (1990) Delivering Quality Service, The Free Press, New York, N.Y
- Zeithaml, Valerie A., Parasuraman, A. & Berry, Leonard L. (1991), “Understanding customer expectations of service”, Sloan Management Review, Vol. 32.
- Zeithaml, V.A., Berry, L.L. and Parasuraman, A. (1993), “The nature and determinants of customer expectations of service”, Journal of the Academy of Marketing Science, Vol. 21 No. 1.
- Zeithaml, Valerie A., Berry, Leonard L. & Parasuraman, A. (1996) “The behavioral consequences of service quality,” Journal of Marketing, vol. 60(2).
- Zeithaml, Valerie A. & Bitner, Mary J. (1996) Services Marketing, McGraw-Hill, New York, N.Y
- Zeithaml, Valerie A. & Bitner, Mary J. (2000) Services Marketing: Integrating customer focus across the firm, 2nd ed., Irwin/ McGraw-Hill, Boston, M.A

Websites

- http://articles.economictimes.indiatimes.com/2013-12-02/news/
- http://ehealth.eletsonline.com/2015/05/healthcare-in-rajasthan/sthash.dI6fnGnF.dpuf.
- http://www.healthliteracy.in/wcm/node/2
- http://healthsummit.eletsonline.com/2015/Rajasthan/healthcare-in-rajasthan/
- http://www.indianmba.com/Occasional_Papers/OP169/op169.html.
- http://phfi.org/
- http:// www.searo.who.int/EN/Section313/Section1519_10852.htm
- http://www.thehindubusinessline.com/economy/budget/healthcare-needs-a-critical-push/article6925795.ece
- http://www.indianmba.com/Occasional_Papers /OP169/ op169. Html, Jain, V. K. (2013)
- http://sudhahospitalkota.com/about-us/
- https://www.justdial.com/Kota-Rajasthan/
- http://kotaheart.in/Aboutus.aspx
- http://site.operahospital.com/opera/
- www.bvpindia.com/kota_hospital.htm
- http://www.apexhospital.in/about.asp
- http://ehealth.eletsonline.com/2015/05/healthcare-in- ajasthan/#sthash.
- http:// www.wockhardt.com/
- http://www.apollohospitals.com
- http://www.fortishealthcare.com
- http://www.carehospitals.com
- http://www.lotuseye.org
- http://www.narayanahealth.org
- www.amritt.com/healthcarepp.html
- www.emeraldinsight.com
- www.expresshealthcare.org
- www.hospitalimpact.org

- www.instantmedicalcare.com
- www.researchmarkets.com
- www.squidoo.com/hospitalmarketing
- National Health Profile 2010-11.
- http://www.carehealtcare services providers.com.
- https://www.healthcare services providerkhoj.com

COVERING LETTER

Customer Expectations in Healthcare Services: An Assessment of Selected Private Healthcare Units

By Anamika Sharma

A Doctoral Research Project of University of Kota, Kota (Raj.)

Dear Respondent,

I'm conducting a comprehensive survey on the above stated topic to support my Doctoral Research work from University of Kota, Rajasthan under the Department of Faculty of Management Studies. Kindly participate for making a positive contribution to the research.

You are requested to fill the enclosed questionnaire. I, assure you that your response will be kept strictly confidential and shall be used only for the academic purpose. Your cooperation in this regard may enable the researcher to conduct a worthwhile research.

Thanking you in anticipation.

Sincerely,

Anamika Sharma

Research Scholar

Customer Expectation in Healthcare Services: An Assessment of Selected Private Healthcare Units

Q 1. Name of Respondent:

……

Q 2. Gender:

1. Male		2. Female	

Q 3. Age: ……..…… years

Q 4. Education :

1. Illiterate		2. Below Graduate	
3. Graduate		4. Post Graduate	
5. Above PG		6. Others	
Pls. mention others:			

Q 5. Occupation:

1. Business		2. Service (Govt.)	
3. Service (Private)		4. Self-Employed	
5. Housewife		6. Unemployed/Student	
7. Others:		Pls. mention other:	

Q 6. Profession:

1. Medical		2. Non-Medical	

Q 7. Monthly Income(of patient's head of the house on which he/she is dependent) :

1. Below 20,000		2. Rs. 20,001 – Rs. 40,000	
3. Rs. 40,001 – Rs. 60,000		4. Rs. 60,001 – Rs. 80,000	
5. Rs. 80,001 – Rs. 1,00,000		6. Above Rs. 1,00,000	

Q 8. Name of Hospital: ……

……

Q 9. Number of days of stay in the hospital: ……

Q 10. Listed below are several sources of information you may have relied upon to learn about the healthcare service providers. Please rate that how important each source has been to you in finding suitable healthcare service provider.

Source of Information	Tick
1. Other health professionals	
2. Books, magazines or news articles	
3. Hospital advertisements	
4. Friends, relatives or family members	
5. Healthcare service provider's brochure or other printed information	
6. Any other (please specify)	

Q 11. In the present question some statements related to healthcare services are given. Please tell us that, to what extent following services were able to meet your expectations form the hospital? The ratings are follows -

1. To a Very great extent	2. To a great extent
3. To some extent	4. Average
5. To little extent	6. To a Very Little extent
7. Not at all	

Statement	1	2	3	4	5	6	7
1. Consulting with relevant doctor was easy and comfortable							
2. Discharge and billing process was easy and accurate							
3. Immediate attention was given to patient when get admitted in the hospital							
4. All the required diagnostic facilities were available at the hospital							

1. To a Very great extent	2. To a great extent
3. To some extent	4. Average
5. To little extent	6. To a Very Little extent
7. Not at all	

Statement	1	2	3	4	5	6	7
5. All the diagnostic equipments were well maintained.							
6. Diagnostic test results were good and accurate							
7. Services provided at the hospital were prompt							
8. Emergency situation / unforeseen conditions are handled quickly							
9. Hospital's visiting hours were appropriate							
10. Behaviour of doctors was friendly and soothing							
11. Nursing staff was well trained.							
12. Nursing staff was supportive and caring							
13. Hospital's supportive staff was courteous and helpful							
14. Clean and Hygiene was maintained always by the hospital							
15. Required medicines were available in the hospital							
16. Necessary medical equipments were in proper working condition							
17. Life support facilities like ventilator, oxygen cylinder etc. were available at							

1. To a Very great extent	2. To a great extent
3. To some extent	4. Average
5. To little extent	6. To a Very Little extent
7. Not at all	

Statement	1	2	3	4	5	6	7
the hospital for critical conditions							
18. Doctors and Nursing staff was always available at the time of our need							
19. Patient's ward or rooms were cleaned everyday							
20. Patient's bed sheets, pillow cover etc. were clean and hygienic and were maintained every day.							
21. Patient's room/ward were properly ventilated and provision of fresh air was there							
22. Proper seating arrangement was there for patient's attendants and visitors							
23. Proper light arrangement was there in the wards / rooms							
24. Provisions of safety and security were there in the hospital administration							
25. No fear of theft and personal belongings at the hospital							
26. Proper response was given to any query by the hospital administration							
27. Waiting area for the patients was properly maintained							
28. Proper seating arrangement was there for patients and his/her attendants at							

1. To a Very great extent	2. To a great extent
3. To some extent	4. Average
5. To little extent	6. To a Very Little extent
7. Not at all	

Statement	1	2	3	4	5	6	7
waiting area							
29. Waiting time for consulting with doctor was not more than 30 minutes.							
30. Privacy and confidentiality of patient was properly maintained by the hospital							
31. Information about approximate waiting time was properly provided.							
32. Clear instructions and the options related to cost were specified at the time of admission in the hospital.							
33. The staff informed initially about the day medication							
34. Billing process was systematic and quick.							
35. Ambulance services were available							
36. Canteen facility was available with quality food							
37. All the staff members were properly dressed and neat &clean							
38. Wheel chair /stretcher were available quickly							
39. Waiting lounge was properly ventilated & with sufficient sitting capacity.							

Q 12. In the present question some statements are given please tell that to what extents following services were able to meet your expectations from this hospital? The ratings are as follows -

1. To a Very great extent	2. To a great extent
3. To some extent	4. Average
5. To little extent	6. To a Very Little extent
7. Not at all	

Statement	1	2	3	4	5	6	7
1. Healthcare services providers should make services more economical							
2. I would like to know the price with complete details							
3. I would like to get services at lower price							
4. I feel the price discrimination is there in healthcare services							
5. I think the services provided are offered at very high price							
6. The price are appropriate considering the quality of service							

Q 13. In this question a list of information is given, please tick the information you found on the website of your hospital and the information you want to be made available on the website.

Information	Information Available	Information Expected
1. Details of hospitals like Address, Contact No. etc.		
2. Services offered by the hospital		
3. Panel of Doctors existing in the hospital		
4. Consultation timing of the Doctors		
5. Number of Beds available		
6. Charges of different facilities available		
7. Feedback of the customers		
8. Consulting timings		
9. Information regarding availability of a particular Doctor		

Q 14. In the present question, a list of information is given, please tick the information you get through SMS on you mobile phone from your hospital and the information you expect to be made available through SMS.

SMS Service	Exists	Expect
1. SMS related to waiting time		
2. Discharge timings		
3. Arrival timings of the doctors		
4. Availability of doctors on their seats		
5. Availability of beds		
6. Probable expenses		
7. Billing details of the day		
8. Pathology reports		
9. Required medicines for the patient		

Q 15. To what extent this hospital has been able to meet your expectation regarding overall hospital services?

1. To a Great Extent		2. To Certain Extent	
3. To some extent (Average)		4. To a Little Extent	
5. Negligible Extent			

Q 16. Will you come again to this hospital to avail its services?

1. Certainly		2. Possibly	
3. Think over it/Undecided		4. Little possibility	
5. Never			

Q 17. Would you recommend this hospital for treatment to others?

1. Certainly		2. Possibly	
3. Think over it/Undecided		4. Little possibility	
5. Never			

Q 18. What other services you expect from the hospital please mention it along with priority?

Suggestions
1.
2.
3.

Thanks for Your Co-operation

Published and Presented Works

- Assessing Quality of University Examination System using SERVQUAL Model: Viewpoints of Technical Undergraduate Students in Rajasthan. IJSRD - International Journal for Scientific Research & Development| Vol. 5, Issue 04, 2017 | ISSN (online): 2321-0613

- Customer-orientated Research & Private Healthcare Services: A Literature Review. IJSRD - International Journal for Scientific Research & Development| Vol. 5, Issue 04, 2017 | ISSN (online): 2321-0613. IJSRD/Vol. 5/Issue 04/2017/187.

- Published article in 'MIMT Journal of IT & Management Research' ISSN No. 2229-7626, on 'Healthcare Services Strategies: An Indian Perspective'.

- Contributed 7 units on other subjects of Management to Vardhaman Mahaveer Open University, Kota for MBA Course.

- Contributed to Question Bank Repository in Management Studies at Vardhaman Mahaveer Open University, Kota for MBA Course.

- Presented a paper, "Customer-oriented Research and Private Healthcare Services: A Literature Review" in National Conference on Global Business Management, Commerce, Economics, Humanities, Tourism and Information Technology (NC- GBMCEHTIT 2016) organized by Excel Research Management Association, Gwalior.