Factors Influencing Buying Behaviors Towards Healthcare Services: A Study In Multispecialty Hospitals In Mumbai With Specific Reference To Cardiology Department (Services)

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By

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Introduction:

Patients Behavior is the area of patients, hospitals and the processes in hospital for the securing and disposing of services and products to fulfill the needs of patients. The various factors namely Social, Psychological, Personal and Cultural which influence the buying behaviors of patients.

1) Culture Factors: Cultural factors such as Patient culture, Subculture and Social class influence the patient behaviors.

i) Patient Culture: Basically, patient culture is important reason of patients’ needs, wants, behaviors and share of every society. The influence of patient culture on buying behavior change or varies from region to region, state to state and country to country. Therefore, multispecialty hospital should be very cautious at the time of analyzing the culture of different groups, region or even countries.

ii) Subculture: Every culture consists of various subcultures as like nationalities, religions, racial groups, geographic region etc. Hospitals can use these groups by segmenting the market into various small portions. For example, the services per the needs of a geographic group can be designed by the hospital.

iii) Social Class: Some form of social class which is important to the Multispecialty Hospitals is created by each society. Income of the people always do not determine the buying behaviors of patients for the Cardiac Services. Also, there are many factors namely wealth, education, occupation etc.
2) Social Factors: The behaviors of patients also influenced by the social factors. Reference Group, family, role and status these are the most important social factors.

i) Reference group: Reference groups have capacity in making patient attitude or behavior. The influence of reference groups change across services and brands. e.g. Friends, Healthcare Leaders include in this group

ii) Family: Member of the family strongly influence to the patient behavior. Therefore, Multispecialty Hospitals are trying to search the roles and impact of the husband, wife, children and other relatives

iii) Role and Status: Different roles and status in society depending upon the groups, clubs, family, organization are created by each patient. E.g. If Patient itself or patient ‘s relatives are the manager then per the status of the patient, he will buy services from the hospitals

3) Personal Factors: The patient behaviors are also influenced by personal factors. There are many Personal factors as like occupation, age, Economic situation, personality and self-concept.

i) Age Life Style: Age and lifestyles both are very important factors in patient ‘s behavior. Patient purchase services from the hospitals as per age and lifestyle of the patients.

ii) Occupation: Occupation is also effecting on the patient behavior. E.g. General Manager will buy services as per their occupation levels but worker or labor will buy health care services as per her or his occupation level.
iii) Economic situation: If a patient has more saving or good insurance than a patient will take good services.

iv) Personality: Personality make differences from the place to place, time to time, patients to patients. Personality is not what to wear, but it is characteristic like self-confidence, influential and aggressiveness which can be used to determine buying behaviors of Cardiology Services.

4) Psychological Factors: Psychological factors namely perception, motivation, learning, beliefs and attitudes which influence the patients’ behaviors.

i) Motivation: Motivation is most important for the patients to buy the best and correct cardiology services. In the cardiology department, Interventional Cardiologists, Physicians, Cath lab Technicians and PRO give motivation to the Patients.

ii) Perception: To select, to organize and to interpret information in the way to make the meaning experience through people of the world or organization is known as perception. Hospitals try to keep good perception from the patients. They make more marketing strategy for the perception of the patients.

iii) Belief and attitudes: Both make images or brand of the hospitals or healthcare organization. Healthcare Service is the diagnostic, prevention, and treatment of disease, injury and mental and physical impairments in a human body is known as Healthcare services. There are three types of Healthcare Services 1) Primary Healthcare Services, 2) Secondary Healthcare Services, 3) Tertiary Healthcare Services.
1) Primary Healthcare Services: It is first contact point of patients and mostly services are provided by General Practitioners. Primary healthcare services are available at every place of our country. Government is also providing Primary health care centers to all ruler area of India. Now Pharmacist, Dentists, opticians have come into Primary Health care services. Primary Health care services are very cost effectual.

2) Secondary Healthcare services: It is the second contact point between patients. It is the center where physicians of primary healthcare refer patients for the higher treatment. Secondary Healthcare services are situated at District levels.

3) Tertiary Healthcare Services: It is third contact point of patients. Primary Healthcare center and Second Healthcare Services refer patients to Tertiary Healthcare Services. Tertiary healthcare centers are Multispecialty Hospitals in the city area. Tertiary Healthcare provides all specialized consultants for the higher-level treatments. It provides separate Diagnostic services and specialized services for every disease. Also, provide intensive care for the patients’ treatments.

Cardiology is the branch of the medicine which provides the treatment for the heart disease. It’s the most important department of the Hospital. It divides into three parts 1) Cardiology OPD 2) Cath lab.

1) Cardiology OPD: Here all patients come to check cardiac disease on the OPD basis. Patients do not get admitted in the Cardiology department. Patients come to consultant Physicians.
2) Cath Lab: Cath lab is operational theater for the Cardiac Diseases in the Hospitals. Coronary artery bypass graft (CABG), Percutaneous Transluminal Coronary Angioplasty (PTCA), Coronary angiography (CAG), these all procedures are done in the Cath lab. After procedure, patients shift to intensive care of Cath lab.

**Literature Survey:**

Literature review is done on Healthcare industry, Banking industry as well as Telecom industry

Healthcare Industry:

Avedis Donabedian and Leonard S. Rosenfeld (1961) done analyzation of some Factors Influencing Prenatal Care. In this study, Various social and cultural attributes of individuals may help indicate whether physician and patients come together for medical supervision. John G Bruhn and Raymond G Fuentes (1977) proved that Everyone’s education, religious beliefs and socioeconomic status influences everyone's attitude towards illness and health. A part in the way the Mexican American recognizes and deals with illness is played by Many facets of his life. An important role in influencing Mexican-American health practices is played by Beliefs and Customs. War let et al. (1978) did analysis present studies on patient satisfaction to withdraw indirectly a meaning of patient satisfaction. In their analysis, the characteristics of the service provider and medical services affects patient satisfaction and distinct behavior towards each of those characteristics is demonstrated by patients. Oliver (1980) said that a mental state of
emotions caused by a customer ‘s actual experience is known as customer satisfaction and behavior. Shostac (1984) stated that a process that made up of actual steps to satisfy customer requirements can regards to customer service. For studying customer assumptions and designing customer service process model is needed. A better service design gives the better solution to market favorable outcome and growth. Hanan Al-Ahmadi (1988) analyzed that factors affecting performance of hospital nurses in Riyadh city which is capital of Saudi Arabia and he examined that organizational commitment, job satisfaction and personal and professional variables positively correlate the job performance. Both job satisfaction and organizational commitment strongly predict performance of the nurses. Some personal factors, including years of experience, nationality, gender, and marital status positively relate to the job performance. The job performance of nurses negatively relates level of education. Uplekar et al. (1993) stated that despite many studies on healthcare systems in India, the public and private sector practitioners which are lacking always offer direct systematic comparisons of the nature of clinical care. Such proof is badly needed to notify policies that seek and recognize ways in which both sectors might accompaniment each other. Yesudian et al. (1994) stated that specially in the treatment of tuberculosis and malaria, bad quality and lack of public health care are observed and noted. A.M. Hoos et al. (1995) stated that in summary background variables appear to influence the communicative behaviors. Therefore, these all behaviors in their turn influence patient outcomes. In fact, every variable in summary background relates to all variables. All variables should be analyzed empirically. the development of
interventions which improve communication in the medical setting, the Doctor–Patients’ Relationship and Patient outcomes could be resulted by a theory relating these different variables. **David et al. (2013)** analyzed that factors which influence provider selection for Elective Total Joint Arthroplasty. Author suggested that physician manner and surgical results are the most significant considerations for the patients when deciding a provider for selective TJA. Cost sharing is the least significant criterion patients considered. Patients communicated high motivation to search out provider quality information but showed accessible and actionable sources of information and knowledge are lacking. Future endeavors should be guided at developing clinically relevant, easily interpretable, objective, risk-adjusted measures of physician and quality of Hospital. **Stella Artuso et al. (2013)** stated that important barriers to HCU are faced by Aboriginal cardiac patients, resulting in sub-optimal quality of care, keeping them at risk for following cardiovascular events and negative health results. To facilitate HCU amongst Aboriginal people, strategies must be implemented to improve communication on all levels and reduce systemic barriers operating within the health system must implement to facilitate HCU amongst Aboriginal people, strategies. **Webair H. H. et al. (2013)** said that the preventable childhood illnesses with presenting interventions, reliable HSB prevalence is low. Symptom type, caretakers’ education and perception of illness severity are known as the predictors of HSB. Educational development of the mothers, initiation of community based integrated management of childhood illness and in-depth research are reliable to develop mothers’ HSB. **Arjun Murti et al. (2014)** analyzed the study of the
appropriateness of quality service to develop consumer satisfaction and in the process positively influencing behavioral intentions in healthcare services. Ali Mohammad Mosadeghraf (2014) stated that a production of cooperation between the patient and the healthcare provider in a supportive environment is known as Quality in Healthcare. The healthcare service quality is affected by personal factors of the provider and the patient, factors about the healthcare organization, healthcare system and the broader environment. The supportive visionary leadership, proper planning, education and training, availability of resources, effective management of resources, employees, and processes, and collaboration and cooperation among providers can improve Healthcare quality. A.H. Hemanth Kumar et al. (2014) said that the different groups prefer or opinion differs on consumer buying behavior are implied by the small differences exist in the income. It created curiosity for researcher to search which group differing of the opinions. With the help of Post hoc, researcher analyzed that the dependent differs the thinking among other class. It may be because of the decisions are taken by youngsters. Multiple roles in their daily life, professional role and social role are played by every person. Each of these roles has a certain effect on customer buying behavior. Consumer behavior considerably depended on the status factor and every role has status in society. The marketers easily understand the factors that mainly influence in buying decision the sales can be increased a lot when the marketers easily understand the factors that significantly influence in buying decision. The study give an evaluation of the symbolic devices that celebrity and peers embrace to persuade the audience. The visual expression model is supported in that
the study guides why advertisers take celebrities of different gender and age groups and expertise areas in commercials for definite products and cultural values. **CPT Dionisio Ortiz III et al. (2014)** studied patients’ perceptions of surgeon–industry relations in a military setting. The authors concluded that most patients in the military setting had a positive view of the relationship that their surgeons had with industry, which is reflective of the data obtained in the civilian literature. **Ehsan Zarei et al. (2014)** stated that in the increasing competitive market of private hospital industry, creating a strong relationship with the customers and increasing competitive market of private hospital industry that shapes patients’ loyalty has been considered a key factor in obtaining market share. The objective of this study is to test a model of customer loyalty among patients of private hospitals in Iran. **Yong Kang Cheah (2014)** showed that drawing on a nationally representative data set of Malaysia; the present study has found that the use of health-promoting goods and services can be affected by age, income, gender, ethnicity, education, marital status, the location of residence, job characteristics and being diagnosed with hypercholesterolemia. Therefore, policymakers should take these factors into account when making population-based intervention measures. The concentrated interventions which direct benefits, motivators, and self-efficacy may enhance participation in hospital based programs and increase healthy lifestyles for hospital based clinical nurses.

**Telecom Sector:**
Md. Ashaduzzaman and et al. (2011) stated that customer express different behavior before the purchase, during the purchase and after the purchase is known as Consumer behavior and that is significant to aware to make policy. Telecommunication operators’ market gives a more potentiality as mobile phone in Bangladesh has become as part of the country’s culture from top class people to lower class people at the time of connecting and making communication with the nearest ones or the associates through mobiles. Today, customers are more educated, demanding and well knowledgeable than previous. Now, the consumers watch the various types of cable channels and read the newspapers which are used to educate, to convince and to remind the consumers. Family members, friends, colleagues, relatives and by groups influence to consumers. In the Bangladesh, mobile phone has been launched in a year 1993. Now, mobile phone has become a very popular communication medium in Bangladesh. Everyone as like business people, professional persons, school students, college student uses these mobile phones with extreme concentration for their personal and occupational works. Mesay Sata (2013) stated that the research was to investigate the factors that determining the decision to purchase mobile phone devices. This study shows that most of consumers have Nokia mobile phones. Moreover, majority of Nokia mobile phone operators or users have a plan to move to other brands as like Samsung, Apple and Blackberry. Hassan Jawad Soomro et al. (2013) analyzed that the purchase the mobile phone handset with value added facilities like camera, large screen, familiar brand and low price are preferred by many respondents. The respondents or consumers also concentrated those service provider companies which give the services such as SIM at low price, free minutes, low call rates and call clarity. Inderjeet Sethi
and AS Chawla (2014) analyzed that the Social, Cultural and Marketing factors influencing on the buying behavior of the mobile users of rural, semi urban and urban area. The development in the technology has become less the difference between the recognition and consumption of mobile services in different areas. Rural, Semi Urban and urban area give the same market. The competition tough in the market have been made by the entries of the service providers. Therefore, the marketers must be aware of the factors that influence the buying behavior of the mobile phone users. They reside in Society. Therefore, the social factors influence their decisions. Social factors include family, friends, Relatives, seniors, Colleagues, role and status in the community. While choosing the services of a service provider, cultural factors and marketing factors are also considered.

Banking Sector:

Fulbag Singh et al. (2011) said that banking services are regarded as one of the significant services. Banks give financial services to the consumers. The banking industry has become the buyer's market because of the rising competition and liberalization. Banks require to create and develop the services which can give satisfaction to the consumer needs. Customer satisfaction is a very important construct in today's market is customer satisfaction. As per the earlier studies, service quality influence to customer satisfaction. Therefore, the current research study has been done to analyze the consumer perception of service quality in rural and urban bank branches and its influences on customer satisfaction. The study identifies Six service quality factors which influence customer satisfaction regarding banking services are identified by the study and it is showed by the analysis that satisfaction level of rural consumer is higher as
compared to urban consumers. Dr. Morshed Hasan Khan (2013) said that the consumers’ attitudes and purchasing intentions are influenced by the dimensions of a financial service quality. This paper primarily review the financial service quality factors in relate to the relationship between the quality of services offered and consumers buying behavior. Dr. Filzahisa et al. (2013) stated that cultural belief is a serious and critical point in the Yemeni banking system and it could be one of the important hurdles of customers to use the banking services. Therefore, results of this study may support monetary officials to start an advertising campaign to try and change cultural beliefs of people in a positive way and inform them about the advantages of financial services. Swati S Godbole et al. (2014) stated that the help of questionnaire carried out the perception of the retail investors towards gold buying. The results of the study given idea that indeed the ease at the time of purchase and high liquidity has resulted into gold being a top most favored investment avenue as against the others people. Instrumental in gold being sought after asset has instrument against inflation, high return and tax benefits. Utkarsh Gupta et al. (2015) stated that due to the requirements of residential accommodation, the demand for home loans has been increasing in India. A large amount of Indian population is availing the home loan facility. The public as well as the private sector banks offer home loan facility. It is significant for the banks offering the home loans to consider and keep a record of the factors influencing the decision of the buyers to benefit the home loan. Home loans offers advantages to the buyer not only terms of getting an asset but also in terms of a good instrument of saving and for employed ones it turns out to be initiators of tax advantages also.
**Problem Statement:**

Per the literature review, most of the research done on general factors influencing consumer behavior & also done on patient satisfaction survey, quality of the services and on patients’ behaviors towards other departments of hospitals. But research has not been done on particularly cardiology department for the factors influencing buying behavior. Therefore, patients are not getting excellent Cardiac services in the multispecialty hospitals. They are facing problem at the time of purchasing the cardiology services. E.g. sometime patients & his relatives cannot get the excellent stent in Angioplasty. But Because of this study hospital can provide excellent or good stents in Angioplasty services. Also, Hospital can improve the angiography services & also consultation services from the cardiology department.

**Research Gap:**

As per above literature reviews (research) and discussions, this Ph.D. study is unique. Still, research has not been done on "factors influencing buying behaviors towards Healthcare Services, A study in Multispecialty Hospitals in Mumbai with specific reference to the Cardiology Department (Services)." However, studies have been done on patient satisfaction on department or quality of the services of the Department. This study will very useful to determine factors influencing buying towards Cardiology Department of Multispecialty Hospitals in Mumbai. Due to this study, Cardiology Department of Multispecialty Hospitals can improve the quality of the cardiology services in Mumbai. Because of this study cardiology department can understand influencing customers and customers’ needs for the patients’ satisfaction.
This study analyzes most important factors influencing buying behaviors in the Mumbai area. All Hospitals should focus on most important factors to improve the quality of the Cardiology Department. This study analyzes 1) Social factors includes Family, Friends and Reference group 2) Personal factors includes economic situation, lifestyle, age, occupation, personality and Self-concept. 3) Psychological factors consist of motivation, perception, learning, beliefs and attitudes. 4) Cultural factors consist of subculture, patient culture and Social class. Therefore, if all Multispecialty Hospitals do focus on the most important influencing factor’s requirements or needs then Cardiac service of the multispecialty Hospital will enhance. Because of this study, Cardiology Department can provide better services to the patients in Mumbai Area.

But this study is only for the Mumbai area If same study is done in the pan India then definitely will get help to improve Cardiology Department of Multispecialty Hospitals in Pan India.

**Objectives:**

1) To study factors influencing buying behaviors in Multispecialty Hospitals in Mumbai with specific reference to Cardiology Department.

2) To analyze cultural factors Vis-a-Vis buying behaviors in Multispecialty Hospitals in Mumbai with specific reference to Cardiology Department.

3) To evaluate Social factors vis-à-vis buying behaviors in Multispecialty Hospitals in Mumbai with specific reference to Cardiology Department.
4) To identify Personal factors vis-à-vis buying behaviors in Multispecialty Hospitals in Mumbai with specific reference to Cardiology Department.

5) To examine Psychological factors vis-à-vis buying behaviors in Multispecialty Hospitals in Mumbai with specific reference to Cardiology Department.

6) To survey Service Availability in the Cardiology Department in Multispecialty Hospitals in Mumbai.

**Hypothesis:**

$H_{01}$: The factors viz. Culture/Social/Personal/Psychological does not have any association vis-à-vis buying behaviors in Multispecialty Hospitals in Mumbai with specific reference to Cardiology Department..

$H_{a1}$: The factors viz. Culture/Social/Personal/Psychological have association vis-à-vis buying behaviors in Multispecialty Hospitals in Mumbai with specific reference to Cardiology Department.

$H_{02}$: Culture Factors Viz. Nationality, Geographic Region and Wealth w.r.t proportions of people who are influential vis-à-vis buying behaviors in multispecialty Hospitals in Mumbai with specific reference to Cardiology Department.

$H_{a2}$: Culture Factors Viz. Nationality, Geographic Region and Wealth w.r.t proportions of people who are not influential vis-à-vis buying behaviors in multispecialty Hospitals in Mumbai with specific reference to Cardiology Department.
H₀₃: Social Factors viz. role and status, reference group and family w.r.t proportions of people who are influential vis-à-vis buying behaviors in Multispecialty Hospitals in Mumbai with specific reference to Cardiology Department.

Hₐ₃: Social Factors viz. role and status, reference group and family w.r.t proportions of people who are not influential vis-à-vis buying behaviors in Multispecialty Hospitals in Mumbai with specific reference to Cardiology Department.

H₀₄: Personal Factors viz. age and lifestyle, economic situation, occupation, and personality w.r.t proportions of people who are influential vis-à-vis buying behaviors in Multispecialty Hospitals in Mumbai with specific reference to Cardiology Department.

Hₐ₄: Personal Factors viz. age and lifestyle, economic situation, occupation, and personality w.r.t proportions of people who are not influential vis-à-vis buying behaviors in Multispecialty Hospitals in Mumbai with specific reference to cardiology Department.

H₀₅: Psychological factors viz. motivation, perception, belief, and attitude w.r.t proportions of people who are influential vis-à-vis buying behaviors in Multispecialty Hospitals in Mumbai with specific reference to Cardiology Department.

Hₐ₅: Psychological factors viz. motivation, perception, belief, and attitude w.r.t proportions of people who are not influential vis-à-vis buying behaviors in Multispecialty Hospitals in Mumbai with specific reference to cardiology Department.
H₀₀: Service availability in Cardiology Department of Multispecialty Hospitals in Mumbai is Excellent.

Hₐ₀: Service availability in Cardiology Department of Multispecialty Hospitals in Mumbai is not Excellent.

**Methodology:**

1) Research Question:

In this study the questionnaires have been constructed in the three categories namely, 1) Patient and Patients Relatives and Friends 2) Doctors and Paramedical Staff 3) Marketing Person. Questionnaires have been constructed for three categories as these three types of population involves in the buying behaviors towards Cardiology Department (Services.) all questions are framed by identifying the main question and sub questions.

2) Research Objectives:

Research objectives has been made as per the literature survey and all research objectives correlates to the Hypothesis of the study.

3) Data Collection Method:

The study was descriptive. The Area of the study was Mumbai. The sample size was 500 respondents and it was obtained from sample formula. The Respondents were in three different categories 1) Patient and Patients' relative and Friend 2) Doctors and Paramedical Staffs 3) Marketing persons. Four Multispecialty Hospitals were selected for the data collection in Mumbai. Name of the Hospitals are 1) Cumballa Hill Hospital and Heart Institute, South Mumbai, 2) Kohinoor Hospital, Kurla, Mumbai 3) Fortis Hospital Mulund,
Mumbai, 4) Dr. L.H. Hiranandani Hospital, Powai, Mumbai. These multisciplinary hospitals are situated in South, Central, West and North area of Mumbai. Because of this data was collected from all over Mumbai. The primary data were obtained via questionnaires. Three different questionnaires were designed for the 1) patients, patients relative and Friends 2) Doctors and Paramedical Staffs 3) marketing Persons. The secondary data were obtained from websites, Research Journals, Books, etc.

4) Questionnaire Design:

The total respondents were 500 in four multispecialty hospitals in Mumbai. The questionnaires were prepared in the three categories 1) Patients and patients relatives and friends 2) Doctors and Paramedical staff 3) Marketing person. As per reference to the Main question and sub-questions, three questionnaires were made for the three categories. Pilot study shows that all three questionnaires are reliable for data collection for the study. After questionnaire designing, reliability and validity test done in this study. It shows that prepared questionnaires are reliable and valid for the study. Max 16 to 19 questions are included in each questionnaire.

5) Administering the questionnaire:

The same questionnaire was prepared for all four hospitals namely Fortis Hospital, Mulund, Mumbai, Kohinoor Hospital, Kurla, Mumbai, Dr. L.H. Hiranandani Hospital, Powai, Mumbai and Cumballa Hill Hospital and Heart Institute, Mumbai. After seeking permission of the management of all four hospitals, prepared questionnaires were given to the respondents for the appropriate data filing. Because
of the managerial instructions of all hospitals, Doctors and paramedical staff read the questions carefully and marked suitable options in the questionnaires. But sometimes questionnaires, forms are rejected by patients. Sometimes receptionist and Paramedical staff helped to collect data from the OPD patients and IPD patients. Some questionnaire is filled up by face to face interview of the cardiac patients.

6) **Sample Frame:**

This study covered the IPD as well as OPD patients as a respondent. But data covered in the Dr. L. H. Hiranandani Hospitals which from the Doctors and Paramedical staff. Data of Patients and their relatives and Friends was covered in the Kohinoor Hospital, Mumbai, Fortis Hospital, Mumbai. Cumballa Hill Hospital and Heart Institute, Mumbai. Such type total 500 Respondents data were covered in this study.

7) **Sample Size:**

The sample size is a representation of a population of patients, doctors, paramedics and marketing persons. The sample size for patients depends on the number of patients admitted to the hospitals per day. And the length of time required for collection of data was about 6 months. The formula for the sample size, \( n = \frac{N}{1 + Ne^2} \). Sample size was 500 Respondents.

8) **Sampling Method:**

The sample of the study is represented by the patients and Patients Relative and friends, Doctors and Paramedical staff and Marketing persons in the Multi-Specialty Hospitals in
Mumbai. Simple Random Sample Method is used for this study as there was Population of patients, patients’ relatives and Friends, Doctors and Paramedical Staffs, Marketing Persons. Therefore, everyone will have same probability of being chosen for the sample. Simple random technique is an unbiased technique.

9) Sample Location:

Sampling data are collected in the four Multispecialty Hospitals in Mumbai. Namely Fortis Hospital Mulund, Kohinoor Hospital, Kurla, Dr. L. H. Hiranandani Hospital, Powai, and Cumballa Hill Hospital and Heart Institute, Mumbai.

10) Analysis Technique:

Data is the quantitative type, hence statically tools are used. It was collected in the form of questionnaires and then tabulated and classified using Excel. Statistical techniques applied in the analysis are performed using three statistical packages - 1) R software 2) Microsoft Excel 3) SPSS.

The statistical tools were used include frequency tables, bar and column diagrams, pie charts, descriptive statistics, and cross-tabulations. Before proceeding with the primary analysis, exploratory (graphical) analysis and reliability tests (such as Cronbach's alpha value and correlation) have been performed. Hypothesis testing covers tests such as:

1) Chi-squared test of independence

2) Two sample proportion tests

3) Cochran-Mantel-Haenszel test

4) Chi-squared tests for association
5) Friedman test.

**Findings:**

In the overall analysis percentages of factors viz. Social, Psychological, Personal, Cultural were 59 per cent, 29 per cent, 9 per cent, 3 per cent respectively. Therefore, Social factors were most influencing buying behaviors in Multispecialty Hospitals in Mumbai with specific reference to Cardiology Department. Ranking score of Influencing Factors Viz. Social, Psychological, Personal and Cultural were 1.93, 2.16, 2.58 and 3.33 respectively. So, lowest value indicates most influential factors on Buying behaviors. Therefore, Social factors were most influencing buying behaviors in Multispecialty Hospitals in Mumbai with specific reference to Cardiology Department.

As per Hypothetical analysis factors viz. Social, Psychological, Personal and cultural have association vis-à-vis buying behavior in multispecialty Hospitals in Mumbai with specific reference to Cardiology Department. In the social factors, 42 per cent of respondents for reference group, 42 per cent of respondents for family and 16 per cent of respondents for role and status. Therefore, reference group and family were considered equally influential social factors in buying behavior in multispecialty hospitals with specific reference to Cardiology Department. In the personal factors, 28 per cent of respondents for age, 42 per cent for Economic situation, 6 per cent for occupation and 23 per cent for personality. Therefore, economic situation and age were not equally influential personal factors on buying behavior in multispecialty hospitals in Mumbai with specific reference Cardiology Department. In the psychological factors, 41 per cent of respondents for motivation, 19 per cent for perception, 27
per cent for belief and 13 per cent for attitude. Therefore, motivation was most influential psychological factor on buying behaviors in multispecialty hospitals in Mumbai. Culture factors were least influential on buying behaviors in multispecialty Hospitals in Mumbai area with specific reference to the Cardiology Department. Service Availability in Mumbai is Excellent as well as good because both the remarks are almost equal in the hypothetical analysis.

**Scope for the Future:**

This study was done in the Mumbai area. Therefore, results of this study were for only Mumbai area. Four Hospitals were chosen in the different areas of Mumbai. Therefore, this study brought information about the Mumbai area. In future, if researcher does another study for the pan India then it will be very helpful to improve Cardiac Services of the pan India. Research will get more information about the Pan India.

**Conclusion:**

The factors viz. cultural have association Vis-à-vis buying behavior in Multispecialty hospitals in Mumbai with specific reference to Cardiology Department as asymptotic significance, i.e., p-value is small, the null hypothesis is rejected.

The factors viz. Social have association vis-à-vis buying behavior in Multispecialty Hospitals in Mumbai with specific reference to Cardiology Department (Services) as asymptotic significance, i.e., p-value is small, the null hypothesis is rejected.
The factors viz. Personal have association vis-à-vis buying behavior in Multispecialty Hospitals in Mumbai with specific reference to cardiology Department (Services) as p-value is very small, the study accepts the alternative hypothesis.

The factors viz. Psychological have association vis-à-vis buying behavior in Multispecialty Hospitals in Mumbai with specific reference to Cardiology Department (Services) as p-value is extremely small, the null hypothesis is rejected at 1% level of significance.

The differences in ranking of the four main factors influencing buying behavior in Multispecialty Hospitals in Mumbai with specific reference to Cardiac Services as p-value is small; the null hypothesis is rejected. The factor with the lowest score is considered as the most influential. Hence the Social factors are the most contributing factors that influence buying behavior in multispecialty hospitals and the next most influential is Psychological factors. Personal factors are second last influential vis-à-vis buying behaviors in Multispecialty hospitals in Mumbai with specific reference to Cardiology Department (Services). Cultural factors are last influential on the ranking.

The reference group and family are considered equally influential social factors on buying behavior in multispecialty hospitals with specific reference to Cardiology Department as p-value being very high, So, this study fail to reject the null hypothesis.

The economic situation and age are not equally influential personal factors with respect to influence on buying behavior in multispecialty hospitals in Mumbai with the specific
reference Cardiology Department as p-value being very small (<0.0001), So study rejects the null hypothesis.

The Psychological Factors Viz. Belief w.r.t proportions of people who are not most influential vis-à-vis buying behaviors in multispecialty Hospitals in Mumbai with specific reference to cardiology Department (Services) as p-value is very small (<0.0001), Therefore, study reject the null hypothesis at 1% level of significance.

Service availability in Cardiology Department of multispecialty hospitals in Mumbai is not Excellent as p-value is less than 0.05; therefore, null hypothesis is rejected at 5% level of significance. Therefore, finally this study shows that Service Availability in Mumbai is Excellent as well as good because both the remarks are almost equal.