

IMPACT OF DEMOGRAPHIC VARIABLES ON PATIENTS' PERCEPTION TOWARDS DOCTORS AND SUPPORTIVE STAFF OF SPECIALTY HOSPITALS IN RAJASTHAN

Maithili R.P. Singh

Professor and Head, Department of Management, Central University of Rajasthan

Jugal Kishor

Assistant Professor, Department of Management, Central University of Rajasthan

Voice of Research

Volume 7, Issue 3

December 2018

ISSN 2277-7733

Abstract

This study examines the impact of demographic variables on perception of patients towards the doctors and supporting staff of the specialty hospitals. In contrast, high-quality healthcare is a need of every patient. Certainly, if healthcare services experienced to be good, it will result in patients' satisfaction, and this will build a healthy relationship between patients and the healthcare service providers. Recently, it is obligatory to pay devotion to the factors that influence both healthcare quality and patients' satisfaction. Furthermore, the hospital can only be succeeded in the industry if the human force of the hospital is able to recognize the patient's hierarchy of preferences towards the hospital services and the administration takes decisions based on the patient's needs.

Keywords: Healthcare Services, Patients' Perception, Demographic Variables.

The healthcare structure in India is as longstanding as Indian evolution. However, the beginning of the western organization of medicine, each system had its own original medicine system, which presented medical facility to their inhabitant. Both structures expanded the trait of independency of each other. Each structure of the medical system offered its own unique way of treatment. The evidence of Ayurveda in India is most likely evident to the era of the Indus valley civilization. Jivaka, Charka, Susruta, Vagbhata, Dhanvantri were considered to be some of the medical specialists of ancient time in India. India was the first country in the time that offered to the world's first hospital service around 320 B.C., when the great ruler Ashoka built the first hospital. It was specially planned to treat some kind of diseases (Parsad, 1992). Post-independence India confronted the challenge of huge human migration from Pakistan. India inherited a devastated economy. It took a long time to recuperate from this situation (Mukherjee, 1998). After independence in 1947, democracy was established with a written constitution. The Central Government had chosen the path of a mixed economy in which both the public and private sectors could do extremely well. Planning was the essential method through which health administration was being done. Since the method of planning was commenced in India, there have been numerous five-year plans that led the health care programmes of the different state governments from time to time. The modern system of Medicine in India was introduced in the 17th Century with the arrival of European Christian missionaries in South India. In the 17th Century, the East India Company established its first hospital in 1664 at Chennai for its soldiers and in 1668 for a civilian. Medical training was initiated with the first medical college opening in Calcutta in 1835, followed by Mumbai in 1845 and in Chennai in 1850 (Khan & Khan, 2005). In the last two decades hospitals have been equipped with world class infrastructure, latest sophisticated technology, and world-class surgeons to undertake high-end procedures, Indian need not go abroad for treatment. Multimodality comprehensive treatment of cancer, heart, bone-marrow transplant, organ transplant, and treatment of almost all kind of other diseases are available with the advance diagnostic facility. Increase in the strength of the trained nursing staff, keeping pace with the changing need of the patients, more infrastructure and finance, continuous up-gradation of technology, and national or more particularly international

accreditation is required for further improvement in the quality of healthcare services. Hospitals assess their services from patients' perspective collect feedback information from patients and their relatives for further enhancement in quality. Many specialty hospitals are known for their quality of treatment and for high-end procedures like cardiac, cancer, organ transplant, orthopedic and neurosurgery. Patients inflow is increasing more and more. However, if the existing capacity is increased they can treat more number of patients. Since patients' inflow is increasing extra space, infrastructure, accommodation, and more equipment are needed, and hence more finance is required.

Private and charitable hospitals advertise their services and are spending an average of 5 percent of their budget on promotion/advertisement of services, while government hospitals are not spending on advertisement because they are not provided any fund for advertisement by the government. With the entry of big business houses in the healthcare sector, large corporate hospitals are being set up giving new light to the existing competition. Marketing is the business functions that identifies unfulfilled needs and wants, defines and measures their magnitude, decide which identified markets the organizations can better serve, decides products, services, and programmes to serve these markets. Marketing consists of social and managerial processes by which people can exchange the products and its value to fulfill their needs and desires (Kotler, 1990). The assimilation of marketing in the field of health care, starting with the 50's, was accompanied by a sequence of controversies produced by the ethical and moral aspects that this type of services implies, as well as by the difficulty in determining exactly the demand. The unequal access to information of participants, the regulated mechanism for the establishment of prices & rates and the intervention of the third party payer, etc. (Radulescu, Cetina & Orzan, 2009). Hospital marketing is a specialized field that deals with connecting patients, physicians, and hospitals. Nowadays, hospital marketing is considered necessary than ever before to ensure the long-term viability of hospitals on the local level and to make available the high quality of individual healthcare. We in India are in infancy regarding hospital marketing. Hospitals considered marketing as a byword for sales rather than as a means for creating awareness amid the communities for the services offered by them (Nagar, 2007). The ultimate customer of the healthcare delivery organization is the patient. Patients

demand quality care in this decade has changed the entire scenario. Due to patients' expectations and increased demand for services, more numbers of hospitals are coming up in the same geographical area; which has amplified the requirement for marketing by individual hospitals. With increasingly new healthcare providers, the gap has been reduced at least for some people who have the ability to pay (Nagar, 2007)

Malhotra (1986) envisaged that important economic, demographic and regulatory shifts during the recent years transforming the health care phenomenon. This transformation urges many hospitals in the industry to adopt marketing activities to survive in the industry. Stieber (1986) studied the budget allocation scenario for marketing activities in the hospital industry. In the nascent stage, every hospital requires a good fraction of awareness in the market and its specialty area of treatments, which further require a great bunch of promotion of the hospital to be heard in the market. The author suggests that enough amount should be allocated to every promotion activities to upsurge the reach of the hospital. Flora June A, Lefebvre R (1988) revealed that nurturing a good relationship with outsourced doctors in the form of delivering good facilities to them in exchange of quality services to the patients emerged as a key strategy to serve the existing patients of the hospitals. Sturn (1989) also recommend the growing rate of spending budget on the marketing activities in the hospital industry. Author recommend that the optimized use of marketing activities in hospital upheld the hospital to escalate the reach of the hospital in the society which ultimately result in up surged market share. De Jaegher K, Jegers M (2000) proposed that asymmetric information avoid people to cross verify the quality of service provided by the hospital. The author suggests that the advertising may influence the awareness of the hospital in the market which may result in attracting many patients. Agnes Jarlier & Suzane Charvert-protat (2000) in this observational study researchers explained the lane of marketing activities to promote the hospital and healthcare services offering by the hospital. The study reveals that the majority of the hospital engaged in marketing practices in the hospital in the form of aggressive marketing activities viz corporate tie-ups, and trade tie-up etc. Montefiori (2008) study carried out by the author recommends that social optimal quality level of the hospital is manageable at the cost of advertising and price estimation. Furthermore, the objective of advertising deals with providing the quality under the provision.

Alrubaiee, Laith and Feras Alkaa'ida (2011) demonstrate that the quality of healthcare services considered being a vital determinant of patient satisfaction and trusting as well. The study reveals that the SERVQUAL model could be helping instrument to identify many variables that may be responsible for patients' satisfaction for rendering services. Gangopadhyay, S., & Bandopadhyay, P. (2012) reveal the importance of marketing practices in the hospital in a current vibrant environment. The hospital industry in India is being a priority every passes of time due to versatile motives hence the competitive opportunity in this sector is also flourishing as per the time. Hence marketing practices of the hospital also altering their direction. Kevin D Dayaratna, (2013) portrayed that healthcare industry tends to provide the best quality of services to the patients at optimized prices. The health

benefit offering by the hospital must reach the expected patients using the best promotion practices within the rim of the capacity of the hospital. Bobeica Ana Amaria (2013) described in this research work regarding the impact of marketing practices executed in the hospital on the hospital reach in the market. Further, research findings suggest that marketing practices incorporated assure customer satisfaction concerning the services rendered by the patients. Rajabipoor-Meybodiet al., (2009) described in their study regarding patient satisfaction toward the services offered by the hospital. They analyzed that patient satisfaction is a crucial element for the hospital to survive, and hospital administration understand the scenario that their progress in accomplishing vision proportional to the patient satisfaction. Gronroos (2007) investigated the importance of service quality factors which make services reliable and standardize. Since in developing countries service providing sectors are supposed to compete on more service quality and less on price. Therefore, it becomes the critical scenario for hospital administrators to comprehend all factors that urge to improve the quality of service. Bjorngaard *et al.*, (2007) authors in this study described the distinctive approaches of patients as well as administrators of the hospital to perceive the service quality. Based on data evidence researchers recommend that patients and administrators opinions are equally important to evaluate service quality thoroughly. Douglas and Judge (2001) recommended in their study that as a healthcare provider all hospital must apply recent efficient and scientific management technique in all fields of operations to offer quality services to cure and restore patient health. Along with the same line practicing innovative management methods in hospital technical as well as human facet bring the patient satisfaction. Cheng Lim and Tang, (2000) describe that a hospital can only be succeeded in the industry if the human force of the hospital is able to recognize the patients' hierarchy of preferences towards the hospital services and the administration takes decisions based on the patient's needs. It has been estimated that patients are the most central customers of the hospital. Administrators of the hospital could recognize potential improvement departments by analyzing the hierarchy of patient's preferences and customizing the services accordingly. Harrison *et al.*, (2014) the authors represent the variegated management methods used in hospital functioning to assess and identify the priority of the patients about the services offered by the hospital. Consequently, these techniques found to be helpful to the administration in policy making and updating services. Mina Bahrapour, *et al.* (2018) in their study elucidated the many variables responsible for delivering and measuring the hospital service quality. Based on the data evidence they recommended that physical examination estimated to be a key attribute to patient satisfaction and preferable element, followed by cleanliness, followed by training after discharge, followed by medical staff attention, followed by waiting for admission, and staff attitude toward the patient.

Research Design

The objective of the study is to explore the impact of demographic variables on patients' perception regarding the doctors and supportive staff of specialty hospitals in Rajasthan, India. On the ground of review of literature author proposed the following hypotheses: H₀1: There is no significant difference in perception of patients towards



doctors' attributes on the basis of gender, hospital type, and age. H₀2: There is no significant difference in perception of patients towards supporting staffs' attributes on the basis of gender, hospital type, and age. The current study was conducted on the specialty hospitals of the Rajasthan using stratified random sampling technique. The study covers total twenty-five hospitals (government and private). The current research was conducted on a total of 500 patients (20 patients from each of the hospital). The current research is nurtured on the primary data, which was collected using a structured questionnaire. The statistical tools, independent t-test and ANOVA were incorporated at 5% significance level to test the proposed hypotheses.

Result and Discussions

The table (Table-1) below represent the patients' gender composition in the study, which reveals that 73% of male patients and 27% of female patients were included in this study.

Table 1 - Gender

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	365	73.0	73.0	73.0
Female	135	27.0	27.0	100.0
Total	500	100.0	100.0	

Source: Primary data

The table (Table-2) below represent the types of hospital with regard to patient. Table below shows that the number of patients included in this study from govt. hospital were 24% and patients included in this study from private hospital were 76%.

Table 2 - Hospital type

	Frequency	Percent	Valid Percent	Cumulative Percent
Govt.	120	24.0	24.0	24.0
Private	380	76.0	75.8	99.8
Total	500	100.0	100.0	

Source: Primary data

The table (Table-3) below describes the age profile of the patients in years. Data reveal that majority of the patients were from the age group of 45 to 60years followed by 24% of the patients were from 30 to 45 years, followed by 14.6% of the patients were from the age group of 15 to 30 years, followed by 12.8% of the patients were from more than 60 years, followed by 4.2% from less than 15 years.

Table 3 - Patients' Age

	Frequency	Percent	Valid Percent	Cumulative Percent
Less than 15 years	21	4.2	4.2	4.2
Between 15 and 30 years	73	14.6	14.6	18.8
Between 30 to 45 years	120	24.0	24.0	42.8
Between 45 to 60 years	222	44.4	44.4	87.2
More than 60 years	64	12.8	12.8	100.0
Total	500	100.0	100.0	

Source: Primary data

Hypotheses testing

Hypothesis one was framed to investigate the patients' degree of differences in their opinion based on gender regarding doctors' behavior and attitude towards patients. The test result showed (table-4) that p-value observed to be less than the significance level which directs to reject the null hypothesis. Based on data analysis relevant to patients' opinion regarding doctors' attitude trait one can interpret that male and female patient had a different point of view to assess the attitude of doctors toward the patients.

Table 4 - Independent T-test-Gender

Test value	d. f.	p-value
2.139	498	.033

Source: Primary data

Furthermore, the hypothesis one was also framed to investigate the patients' degree of differences in their opinion based on hospital type regarding doctors' behavior and attitude towards patients. The test result showed (table-5) that p-value (.125) observed to be greater than the significance level which directs not to reject the null hypothesis. Based on data analysis relevant to patients' opinion regarding doctors' attitude trait one can interpret that patients had a different point of view to assess the attitude of doctors toward the patients based on hospital type.

Table 5 - Independent T-test-Hospital type

Test value	d. f.	p-value
1.538	498	.125

Source: Primary data

Furthermore, hypothesis one was framed to check the difference of opinion of patients regarding the doctors' attributes viz supportiveness, politeness, attentiveness, and communication to the patients. Finally, to test this hypothesis ANOVA was applied to investigate the opinion differences of patients based on their age. Test outcome (Table-6) represent that data results (p=.023) was enough to reject the proposed null hypothesis. On the ground of data analysis, one can interpret that there were opinion differences among the patients based on their age regarding the doctors' attitude and behavior towards the patients.

Table 6 - ANOVA-Age wise

	Sum of squares	d.f.	Mean square	F-statistic	p-value
Between groups	.081	4	.020	2.875	.023
Within groups	3.501	495	.007		
Total	3.582	499			

Source: Primary data

Hypothesis two was derived to inspect the patients' degree of perception regarding supportive staffs' attitude and behavior toward patients based on their gender. The data evidence (Table-7) depicts that the p-value (.014) was observed to be less than the significance level. It urges to reject the null hypothesis on the ground of data evidence. Therefore, one can interpret on the basis of data evidence that male and female patients had varied perception regarding the staffs attitude and behavior toward the patients.

Table 7 - Independent T-test-Gender

Test value	d. f.	p-value
2.473	498	.014

Source: Primary data

Furthermore, hypothesis two was derived to inspect the patients' degree of perception regarding supportive staffs' attitude and behavior toward patients based on hospital type. The data evidence (Table-8) depicts that the p-value (.00) was observed to be less than the significance level. It urges to reject the null hypothesis on the ground of data evidence. Therefore, one can interpret on the basis of data evidence that patients had varied perception regarding the staffs attitude and behavior toward the patients based on hospital type.

Table 8 - Independent T-test-Hospital type

Test value	d. f.	p-value
7.209	498	.000

Source: Primary data

Furthermore, hypothesis two was framed to check the difference of opinion of patients regarding the supportive staffs' attributes viz supportiveness, politeness, attentiveness, and communication to the patients. Finally,

to test this hypothesis ANOVA was applied to investigate the opinion differences of patients based on their age. Test outcome (Table-9) represent that data results ($p=.220$) was enough to reject the proposed null hypothesis. On the ground of data analysis, one can interpret that there were opinion differences among the patients based on their age regarding the supportive staff attitude and behavior towards the patients.

Table 9 - ANOVA-Age wise

	Sum of squares	d. f.	Mean square	F-statistic	p-value
Between groups	1.305	4	.326	1.438	.220
Within groups	112.315	495	.227		
Total	113.621	499			

Source: Primary data

Conclusion

The purpose of this section is to highlight the results of the study, analyzed by the application of the statistical techniques to test the proposed hypotheses. A great spectrum of work encompasses to healthcare services make the available upright quality of theoretical and practical school of thoughts into this potential developing healthcare industry. Conversely, patients are still suffering from a lack of appropriate services in this industry especially in the cities included in this study. The inclusion of numbers of private healthcare services in this medical profession brought up the need for understanding the need of patients in this expanding necessity industry. This study is focused on this need and its outcome will contribute a significant input for both private and government hospital to optimize their services according to the patients' need. As it is evident from the study that there is significant impact of all the demographic variables, gender, hospital type, and age on the patients' perception, of healthcare services of specialty hospitals of selected cities in Rajasthan; healthcare service providers are suggested to develop an effective pricing strategy and promotion techniques of their services keeping in view the demographic variables of the patients. Furthermore, findings of the study frame a foundation to help the healthcare service provider to strive at a constant pace to achieve better patients' satisfaction and nurture a better relationship with the patients that will lead to delighted patients.

Further Research

Although the study expands the knowledge of healthcare services provided by specialty hospitals in Rajasthan, India, viable prospects for future research still remains. Future research efforts may concentrate in carrying out the study on all India basis, so it may give clearer picture of impact of demographic variables on the patients' perception towards doctors and supporting staff of healthcare services providers in other parts of the country, as well as a comparative study between India and developed countries can be carried out.

References

Alrubaiee, L., &Alkaa'ida, F. (2011). "The mediating effect of patient satisfaction in the patients' perceptions of healthcare quality-patient trust relationship", *International Journal of Marketing Studies*, 3(1), 103.

Amaria, B. A. (2013). "Marketing Planning In Healthcare Industry. Marketing", 1009, 30.

Bjorngaard, J. H., Ruud, T., Garratt, A. and Hatling, T. (2007), "Patients' experiences and clinicians' ratings

of the quality of outpatient teams in psychiatric care units in Norway", *Psychiatric Services*, Vol. 58 No. 8, pp.1102-1107.

Cheng lim, P. and Tang, N. K. (2000), "A study of patients' expectations and satisfaction in Singapore hospitals", *International Journal of Health Care Quality Assurance*, Vol. 13 No. 7, pp.290-299.

Craig Lefebvre, R., & Flora, J. A. (1988). "Social marketing and public health intervention. *Health education quarterly*", 15(3), 299-315.

Dayaratna, K. D. (2013). "Competitive markets in health care: the next revolution", *Background*, 2833(August), 1-16.

De Jaegher, K., &Jegers, M. (2000). "A model of physician behaviour with demand inducement", *Journal of Health Economics*, 19(2), 231-258.

Douglas, T. J. and Judge, W. Q. (2001), "Total quality management implementation and competitive advantage: the role of structural control and exploration", *Academy of Management Journal*, Vol. 44 No. 1, pp.158-169.

Gronroos, C. (2007). "Service management and marketing: customer management in service competition", 3rd ed., John Wiley and Sons Inc, Hoboken, New Jersey.

Gangopadhyay, S., &Bandopadhyay, P. (2012). "Hospital Advertising: Myth or Reality?", *Indian Journal of Marketing*, 42(6), 47-52.

Harrison, M., Rigby, D., Vass, C., Flynn, T., Louviere, J. and Payne, K. (2014), "Risk as an attribute in discrete choice experiments: a systematic review of the literature", *The Patient-Patient-Centered Outcomes Research*, Vol. 7 No. 2, pp.151-170.

Jarlier, A., &Charvet-Protat, S. (2000). "Can improving quality decrease hospital costs?", *International Journal for Quality in Health Care*, 12(2), 125-131.

Montefiori M. "Information vs advertising in the market for hospital care", *Int J Health Care Finance Econ* 2008;8:145-62.

Malhotra, N. K. (1986). "Hospital marketing in the changing health care environment", *Journal of health care marketing*, 6(3), 37.

Mina Bahrapour, Abbas Bahrapour, mohammadreza Amiresmaili, mohsenbarouni, (2018) "Hospital service quality – patient preferences - a discrete choice experiment", *International Journal of Health Care Quality Assurance*, <https://doi.org/10.1108/IJHCQA-01-2017-0006>

Rajabipoor Meybodi, A., Farid, D. and RajabipoorMeybodi, T. (2009), "Evaluation of remedial services quality of hospitals by using Servqual scale (case study: educating hospitals dependence to medicine university of Yazd", *Journal of Urmia Nursing and Midwifery Faculty*, Vol. 7 No. 4, pp.0-0.

Palm, K.S, "Hospitals should devote more time, money to marketing before gauging results-survey", *Modern Healthcare* 17, no.23.

Steiber, S.R (1986). "Billion Spent on Hospital marketing in 1986", *Hospitals*, 60:22.

Sturn, A., Jr., "Cutting Marketing During Recession can Brew Trouble", *Modern Healthcare* 19, no.19.