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# SERVICE QUALITY PERCEPTION AND PATIENT SATISFACTION: A STUDY OF SGPGI IN UTTAR PRADESH

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Sanjay Gandhi Post Graduate Institute of Medical Sciences, Lucknow is a super specialty hospital and research institute in medical sciences. The Institute has been treated as a university for running medical courses and conducting medical and healthcare research besides the institute has well established super specialty hospital catering for health and medical care in the field of critical and chronic diseases including emergency services. There has been remarkable progress in the development of SGPGI over a period of about 25 years. During the period of 1996-97 to 2016-17, there has been growth of more than three fold in registration of patients. During 2017, about 109019 patients were registered while about 4.59 lakh patients were follow-up during the year. The hospital has 21 operation theatres with about 921 beds with occupancy rate of about 80 per cent. On an average, 3.69 million investigations and about 12481 major surgical procedures are performed annually in the medical institute. The present paper highlights the service quality perception and patient's satisfaction in SGPGI of Lucknow. The paper is based on primary data, collected through field survey.

# INTRODUCTION

Sanjay Gandhi Post Graduate Institute of Medical Sciences is a medical institute located in Lucknow, Uttar Pradesh. It was established in 1983. The institute is located on a 700-acre residential complex on Rae Bareli Road, about 15 km from the main city. The institute offers its degree, which is accredited by the Medical Council of India. SGPGIMS provides tertiary medical care, super-specialty teaching, training and research. It provides DM, MCH, MD, PhD, Post Doctoral Fellowship (PDF) and Post Doctoral Certificate Course (PDCC) and Senior Residency. SGPGIMS is an educational institute that provides postgraduate medical training and a working hospital which offers affordable medical care. This is a hospital which is sent to patients not only in whole of Uttar Pradesh, but also neighboring states like Bihar, Madhya Pradesh, Chhattisgarh, Uttarakhand, Orissa, West Bengal, but almost all of India and neighboring countries like Nepal, Bangladesh, Pakistan, Sri Lanka, Bhutan and Middle Eastern countries. SGPGI is also emerging as a destination for medical tourism. The institute has more than 150 faculty members in 29 academic departments. The academic departments are engaged in teaching, training, patient care and research. The institute has a hospitalwide computer network with more than 500 computers spread across hospitals and departments. Internet connection is available in all departments. E-mail facilities are provided to all faculty members, residents and students. All patient care activities are computerized, and this institution was the first in all government hospitals in India to implement the Oracle based HIS system in 1997. The old HIS is now being replaced by a

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high-potential internet-based HIS - which will be fully integrated with the packs and telemedicine network, apart from this, patients will be able to secure their medical records and reports from their homes safely and conveniently Will provide an opportunity to use. Patient will be able to consult, examine and perform surgery more easily from their home and will be able to deposit money for them.

The hospital acts as a referral hospital and attempts to work on an appointment system. Although most patients are required to get a referral slip from the referral doctor / surgeon, but even such patients who have not been referred by the doctor, but they are suffering from a disease that can be treated in SGPGIMS also welcome. Referring physicians are requested to indicate the nature of the problem of patients, in which institute they want to refer patients and mention the nature of necessary help from the institute. SGPGI is a UP government owned and operated hospital, and is some of the best trained and internationally renowned doctors on its payroll. All doctors, nurses and other workers are full-time salaried employees, and patients do not need to pay any amount as their professional fees. However, the hospital takes a highly discounted cost for all investigations, treatment, medicines, etc., which is approximately 10 percent to 25 percent of the cost in corporate / private hospitals of comparable quality comparable in India. Institute Hospital attempts to work on an appointment system. Thus, patients are expected to visit the Institute Hospital on fixed days, except in case of emergency. Once visited, an appointment is usually given for admission to any screening, external consultation, treatment and surgery. The treatment of the patient in SGPGIMS Hospital is highly systematic and all attempts are made to reduce the inconvenience of the patients, which is usually done in various government hospitals. The hospital's online health information system is synchronized with online billing system and online pharmacy. Patients are provided with all medicines, consumables, surgical materials etc. On the bedside, for which patients are paid highly discounted costs, in most cases - about 30-40 percent less than MRP. The Institute caters to emergency situations related to specialties in the institute, but not for general medical emergency situations. There is no full fledged emergency medical / trauma department, and is not ready to manage cases of severe emergency and trauma. Any such patient received at SGGGI's Emergency Receiving Station is referred to other hospitals in the city, and only first aid / assistive treatment is provided.

There are 21 operation theatres and 921 beds in the hospital. On an average about 12481 major surgical procedures and about 3.69 million investigations are performed annually in the hospital. The hospital occupancy rate has been reported to be about 80 per cent with new registration of about 109019 patients per annum besides, about 0.45 million follow-ups are added annually in OPD of hospital. There has been phenomenon growth in registration and follow-up of patients in SGPGI during the period of 1996-97 to 2013-14. Overall, registration of patients in SGPGI has grown by 338.54 per cent during the corresponding period while this was reported much higher in case of follow-up of patients (367.69 per cent) as compared to new registration of patients (251.76 per cent). During 2017-18, new registrations were reported to be 109019 while follow-up cases were recorded 459032. Thus, total numbers of cases were 5.68 lakhs. During the period

of 2010-11 to 2017-18, the cases of registration increased by 72.20 per cent. There has been increase of 34.33 per cent in new registration of patients during 2008-9 to 2012-13. During 2012-13, the highest numbers of patients were registered in the Department of Neurology followed by Gastroenterology, Cardiology, Urology, Endocrinology, Immunology and General Hospital. During 2017-18, highest numbers of patients were registered in the department of neurology, cardiology, gastroenterology and nephrology. There has been remarkable progress in the cases of surgery and diagnosis during 2008 to 2013. The growth was reported higher in case of Investigations and diagnosis while there has been growth of 16.52 per cent in case of Renal Transplants and 13.72 per cent in cases of surgery. There has been significant increase in the cases of surgery and diagnosis in the institute over the period of 2014 to 2017. The numbers of cases of surgery registered an increase of 35.46 per cent while cases of investigation increased by 30.69 per cent over the corresponding period.

SGPGI has emerged as one of the national level premiere institute in the field of medical sciences. The institute provides education, training and research in medical sciences besides providing healthcare services in critical fields of medical sciences. The institute has emerged as centre of excellence as it has provided cost-effective treatment in critical areas of illness. The institute also caters patients coming from various states and neighbouring countries. The physical and financial performance of the institute has been praiseworthy as it has shown increasing and progressive trend over the period.

# **REVIEW OF LITERATURE**

Sambhaishan and Vanilashri (2018) think that the patient is most important in a hospital because hospitals depend on patients for their survival. Most patients choose hospitals based on the recommendation of other patients or their friends and relatives. Patient satisfaction is important for the successful health organization. Health organizations face challenges in customer behaviour, which inspect quality as the basic criteria to isolate the services they provide. Therefore, keeping a patient satisfied, a hospital can ensure its success. Kulkarni (2018) said that the patient's satisfaction is an important target of any health system. The health sector in India is a public health sector and private sector. The effectiveness of the health system depends on the quality of the services. Patients are using public health services, although a large part of them is not satisfied. Patient satisfaction depends on many factors. Quality of diagnostic services provided, availability of medicines, behaviour of doctors and other health workers, cost of services, hospital infrastructure, physical comfort, emotional support and respect for patient's priorities. Mishra and Mishra (2014) said that the hospital has developed as a separate health care unit with five star facilities. Patients and their relatives coming to the hospital hope that world class treatment and other facilities will be available for their stay in the hospital. This change has resulted in perspectives and expectations due to commercialization and improvement in health care facilities. In the global and liberalized business environment, the service sector is facing tough competition to meet the requirements of profitable business practices. It is reflected in the existence of an organization in the form of return on investment, customer retention, acceptance of

service and service properties, development and development of brand image etc. It appears that the driving force is a distribution of high quality service to success in the service business (Thompson et.al. 1985). In view of the growing competition, the quality of service has increased and its measurement has emerged as one of the important issues for increasing efficiency and business (Anderson and Zeithelle 1984, Bebacus and Boler, 1992 and Gervin, 1983).

According to Oliver (1980), quality improvement is important because it affects customer satisfaction and enhances the intent of buying between consumers in both the service and manufacturing industries (Oliver, 1980). Some other thinkers also believe that quality is the key determinant of consumer satisfaction (Omar and Shifman, 1995, Grammler et al., 2001, Radwin, 2000). Many companies are highlighting quality issues of service to run high level customer satisfaction (Kumar et.al., 2008). According to Price Waterhouse Coopers (2007), the health care industry is one of the largest areas of employment in the revenue and services sector, which is growing rapidly. However, quality of service of health care is found to be pathetic and generally, health outcomes are not satisfactory in India (Bajpai and Goyal, 2004). Therefore, the Government of India has introduced a policy of health care reform for achieving health securities for all and providing quality healthcare for all (John, 2010). Customer satisfaction is also an important issue in health care sector in other service areas (Shabbir et.al. 2010). A health care organization can achieve patient satisfaction by providing quality services, considering the expectations of patients and continued improvement in health care services (Zineldin, 2006)

Satisfaction is a psychological concept that can be defined in various ways. Sometimes gratification is considered as the decision of individuals about any object or event, which collects some experiences over time. Satisfaction is a cognitive response, while some others consider satisfaction as an emotional attachment to the individual. Howard and Sheth (1969) explained customer satisfaction as a cognitive response to the customers. Hunt (1977) defined consumers' satisfaction on the basis of experience of consumption. Churchill and Serpent (1982) defined consumer satisfaction based on the cognitive and emotional dimensions of the concept. Oliver (1997) highlights definitions on customer satisfaction which recognizes the emotional inclination of the consumer towards the desired products or services. Mutwa et. al (2006) has mentioned that the service or product itself is one of the main factors of customer satisfaction. He defined as a system that the customer passes to get value for money. Newman et.al. (2001) said that customer service is a condition for customer satisfaction. Healthcare is the fastest growing service in both developing and developing countries (Day et. al. 2006). Patients are now considered as healthcare customers, recognizing that individuals intentionally make the choice to buy those services and providers who meet their health needs (Wadhwa, 2002). In relation to this, the quality of health care and the patient's satisfaction are two important health consequences and quality measurements (Yagge and Ernitz, 2001 and Jackson et al. 2001; Zineldin 2006). Some thinkers believe that satisfaction is in the form of a super-ordinate creation and it is believed that the quality of service is considered as the predecessor of satisfaction (Cronin, Brady & Halt, 2000; Cronin and

Taylor, 1994). In some studies on health care service, there was a causal relationship between the quality of the perceived service and the patient's satisfaction (Woodside et.al., 1989, Choi et.al.2004). In fact, to meet the needs of the patient and to achieve high quality (Ramachandran and Cram 2005), making health standards mandatory is mandatory. Therefore, the patient is the center of health care quality agenda (Badri et. al., 2007). Scotty, Harmon and Beasan (2007) did a study that supports the argument that the perceived quality is one of the determinants of patient satisfaction.

# **OBJECTIVES AND METHODOLOGY**

Present paper is based on major research study. The paper aims to study the availability, accessibility and utilization of health care and allied services by indoor and outdoor patients and also to examine the satisfaction of the availability, quality and delivery of health care, medical and allied services to indoor and outdoor patients in SGPGI, Lucknow. The present study is empirical in nature and is based on quantitative techniques. On the basis of statistical instruments and techniques to analyze visual perceptions of patients and service providers, exploratory and descriptive research design has also been considered. Overall, 288 patients from SGPGI were randomly selected for field survey. The survey was conducted with the help of structured interview schedule/

# **DISCUSSION OF RESULTS:**

SGPGI, being a super specialty hospital and medical institute attracts a large number of indoor and outdoor patients for receiving health care and medical treatment. Majority of the cases are being referred by other government and non-government hospitals and medical institutions to SGPGI for diagnosis, health care and medical treatment. Therefore, there is increasing number of outdoor and indoor patients in the institute and thus, the health care and medical facilities and infrastructure are over stressed. SGPGI also provides cost-effective medical treatment for some of the major diseases and operations. It has also promoted medical tourism to the greater extent. A large number of patients are coming for the diagnosis, health care and medical treatment from faraway places. Catering health care and medical treatment to the patients is the prime motto of the institute. The patients and their relatives facilitating to them in the hospital and the institute are also availing health care services besides allied services while visiting and staying to the institute. It is imperative to examine the status of health care and allied services to the patients. The satisfaction of patients regarding the access, availability and utilization of health care and allied services is of paramount importance for a medical institute and hospital. Availability, access and utilization of health care services by the patients will highlight the scope for further improvement in delivery of services, efficiency of system and quality.

More than half of the respondents were from urban areas while 20 per cent respondents were from semi-urban areas. More than  $1/4^{th}$  respondents were from rural areas. Most of the respondents were indoor patients. Majority of the respondents were

from Uttar Pradesh. However, about 16 per cent respondents were from other states. This was found more pronouncing for indoor patients (19.6 per cent) as compared to outdoor patients (7.6 per cent). Slightly less than  $1/3^{\rm rd}$  respondents reported that their annual family income is more than Rs. 2.5 lakhs. This was found more pronouncing for outdoor patients (41.8 per cent). About 22 per cent respondents revealed that their annual family income is less than Rs. 50,000 while about 16 per cent respondents reported that their annual family income is in between Rs. 50,000 to Rs. 1 lakh. About 57 per cent patients were males while about  $2/5^{\rm th}$  patients were males. The proportion of female respondents was recorded slightly high for outdoor patients.

About  $1/3^{rd}$  respondents reported that private physicians and doctors referred them to SGPGI. About 27 per cent respondents further reported that private hospitals and nursing homes referred them to SGPGI. Thus, government hospitals accounted for more than  $1/3^{rd}$  in patient's referral to SGPGI. It is to be noted that SGPGI is a referral hospital and without dereference or emergency case, patients are not allowed to be entertained in the hospital (Chart1).

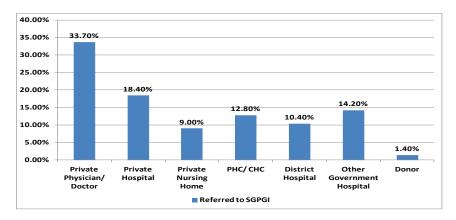


Chart: 1: Who Referred to SGPGI

The indoor patients were mainly referred by private physicians/doctors; private hospitals and private nursing homes while higher per cent of outdoor patients were referred by government hospitals. About 57 per cent patients admitted that they were normal at the time of their referral. This was found more pronouncing in case of outdoor patients as compared to indoor patients. About 29 per cent respondents reported that they were serious at the time of their referral. This was found more pronouncing in case of indoor patients. About 17 per cent indoor patients reported that they were critical at the time of their referral ( Chart 2).

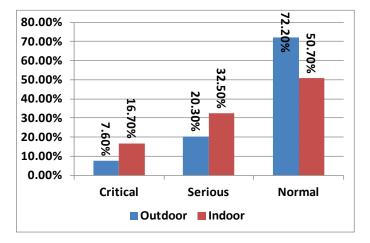


Chart 2: Condition of Patient at the Time of Referral

More than half of the respondents reported that they got the appointment in SGPGI through registration while 37 per cent respondents reported that they directly approached to Reception for appointment in SGPGI. About 11 per cent outdoor patients reported that they got appointments through telephone. Most of the respondents reported that they require direct approach to Reception and registration for getting appointment in SGPGI. The role of information technology particularly in appointment through telephone has been reported to be low (7.3 per cent). Majority of the respondents admitted that they get timely appointment with concerned doctors. This was found more pronouncing in case of outdoor patients (92.4 per cent) as compared to indoor patients (85.6 per cent). About 14 per cent indoor patients reported that they could not get timely appointment with concerned doctors. This is to be noted that SGPGI is overcrowded super specialty hospital and therefore, availability of doctors is difficult. About 2/5th respondents admitted that they face problems in getting appointments with doctors. This was found more pronouncing in case of indoor patients (46.4 per cent) as compared to outdoor patients (26.6 per cent).

A large segment of respondents reported that their health problem is related with gastroenterology, cardiology, urology, immunology and neurosurgery. Higher proportion of indoor patients reported that their health problem is related with gastroenterology, immunology, urology neurosurgery and cardiology while about  $1/4^{\rm th}$  outdoor patients reported that their health problem is related with gastroenterology. Slightly less than  $3/4^{\rm th}$  respondents were indoor patients while about 27 per cent respondents were outdoor patients. The indoor patients were reported mainly from other states (87.2 per cent) while about 70 per cent respondents from Uttar Pradesh were indoor patients.

About half of the indoor patients reported that they are in hospital for less than one week. This was found more pronouncing for the patients coming from rural areas (55.4 per cent). About 20 per cent respondents further reported that they are in hospital for

last 1-2 weeks. This was found more pronouncing for patients coming from semi-urban and urban areas. About 19 per cent indoor patients reported that they are in hospital for more than 1 month.

About  $2/3^{\rm rd}$  respondents reported that they are regularly visiting the hospital. This was found more pronouncing for indoor patients (77 per cent) as compared to outdoor patients (39.2 per cent). About  $1/3^{\rm rd}$  respondents revealed that they are occasionally visiting the hospital. This was found more pronouncing in case of outdoor patients (60.8 per cent) as compared to indoor patients (21.5 per cent). About 56 per cent respondents reported that their relatives are living with them in the hospital compound. This was reported more pronouncing for indoor patients (72.7 per cent) as compared to outdoor patients (11.4 per cent).

About half of the respondents living in hospital compound reported that their relatives are living in Patient's Relative Accommodation. This was found more pronouncing for indoor patients (49.3 per cent) as compared to outdoor patients (33.3 per cent). About 15 per cent respondents further reported that their relatives are living in Private Accommodations. This was found more pronouncing for outdoor patients. About 15 per cent respondents further reported that their relatives are living in hotels nearby hospital. The main reason for selecting accommodation for relatives has been reported to be facilities (37.8 per cent), proximity to hospital (33.7 per cent) and cost effective (14.6 per cent). Facilities and proximity to hospital were the main reasons for selecting accommodation for relatives for indoor patients while cost effectiveness and facilities were the main reasons for outdoor patients for selecting accommodation for their relatives.

The respondents were further asked that whether they availed private/semi-private ward. About  $1/4^{th}$  respondents admitted that they availed private/sei-private ward. This was found more pronouncing for indoor patients (31.1 per cent) as compared to outdoor patients (3.8 per cent). The respondents were asked that whether their diagnosis and treatment are subsidized or free. About  $1/3^{rd}$  respondents admitted that their diagnosis and treatment are subsidized or free. This was found more pronouncing for indoor patients.

The respondents were asked that whether the attitude and behavior of staff is friendly towards them. About 63 per cent respondents reported that the attitude and behavior of staff towards them is cooperative. This was found more pronouncing for outdoor patients as compared to indoor patients. More than  $1/4^{th}$  respondents further reported that the attitude and behavior of staff towards them is friendly. About 12 per cent indoor patients admitted that the attitude and behavior of staff towards them is non-cooperative (Chart 3).

Chart 3: Whether the Attitude and Behavior of Staff is Friendly Towards You

Satisfaction with charges and authenticity of pathology report is shown in Chart 4). Most of the respondents were found satisfied and very satisfied with the charges and authenticity of pathology reports in the hospital.

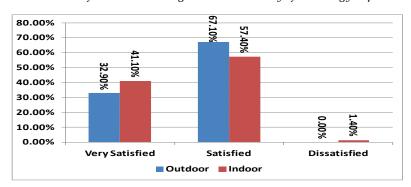


Chart 4: Satisfaction with Charges and Authenticity of Pathology Reports

Most of the respondents were found satisfied and very satisfied with the Satisfaction with the health care and medical treatment b the doctors and paramedical staff (Chart 5).

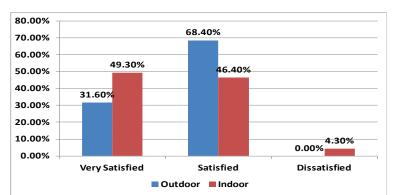


Chart 5: Satisfaction with the Health Care and Medical Treatment by the Doctors and Paramedical Staff

Majority of the respondents reported that the attitude and behaviour of paramedical staff towards them has been cooperative and friendly. However, about 10 per cent indoor patients reported that the attitude and behavior of paramedical staff towards them is not cooperative. Majority of the respondents were found satisfied and very satisfied with the quality and quality of snacks and food served to the admitted patients. However, about 9 per cent respondents were found dissatisfied with the quality and quality of snacks and food served to the admitted patients. It is to be noted that the snacks and food served to the admitted patients are being provided on the recommendation of concerned doctors and dieticians as the primary motive of food stuff is suitability to the patient's health. The level of satisfaction regarding the quality of services was recorded high for cafeteria, Patients Relatives Accommodation, shops for drugs and medical consumables, pathology, radiology, bank services and vishramalaya. However, the dissatisfaction level was reported slightly higher for postal services, vishramalaya, cafeteria, Patients Relatives Accommodation and functioning of ATMs.

Most of the respondents reported that sanitation and hygiene are well maintained however; about 30 per cent respondents reported that sanitation and hygiene are not well maintained. This was found more pronouncing in case of private rooms followed by bathroom and toilets. Most of the respondents were found satisfied and very satisfied with health care and medical services in the hospital. However, the dissatisfaction level was recorded significant in case of transport within the campus (17.4 per cent), registration (14.6 per cent), appointment with doctors (13.9 per cent), reception and guidance (12.8 per cent), chemotherapy / radiotherapy (12.2 per cent), operaton and surgery (11.1 per cent), payment/cash counter (10.8 per cent).

# **CONCLUSION:**

Overall analysis of health care and medical services in SGPGI demonstrates that SGPGI has emerged as one of the super specialty hospitals in the state. The hospital is providing health care and medical services besides, introducing welfare measures for the comfort and special care for the patients. Being the only super specialty and refereed hospital, the hospital is overcrowded with the patients and their relatives. This causes the inconvenience and difficulties in registration, appointment with doctors, diagnosis and treatment of patients. However, a majority of the patients were found satisfied with the quality of health care and medical services. Increased public health expansion should improve the infrastructure in sub-centers, primary health centers, community health centers and district hospitals. These health centers have an urgent need to provide a large room to accommodate pregnant mothers, so that they stay in the health facility, where they deliver at least 36-48 hours. To meet the demand of distance education in health education, training, faculty development, tele-consultation etc., medical colleges and other tertiary care centers should be added through tele-networking.

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