

A CROSS-SECTIONAL STUDY OF DETERMINANTS INFLUENCING HOSPITAL SELECTION FOR PATIENTS UNDERGOING ELECTIVE GENERAL SURGERY.

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Abstract

Background

For many patients, the decision to have elective surgery can be extremely difficult. A variety of things may influence their choice of hospital. To maximize service delivery and improve patient satisfaction, healthcare providers must have a thorough understanding of these aspects. This study aims to find and analyze the variables influencing hospital preference for patients receiving elective general surgery.

Materials and Methods

200 individuals who were scheduled for elective general surgery took part in this study. Demographics, hospital-related characteristics, factors related to surgeon, hospital accreditation, infrastructure and academia were all evaluated using a standardised questionnaire.

Results

The surgeon's competence (93%), attitude toward patients (90%), and cost-effectiveness (86%) were the most important variables influencing hospital choice. Additionally, significant were knowing the hospital well (73%) and prior repute of the hospital (76%). Patient choices were affected by the hospital's infrastructure (70%) and accreditation (56%).

Conclusion

The three most important factors influencing hospital choice for elective procedures are cost effectiveness, surgeon skill, and patient experience. Hospital amenities and reputation are also very important. By being aware of these elements, hospital managers can increase patient satisfaction and draw in new patients.

Recommendation

High clinical care standards, cost, and improving patient experience through better facilities and communication should be the key priorities of hospital management. It is also crucial to make an effort to establish and preserve a favourable reputation for the institution.

Keywords: Elective surgery, Hospital choice, Patient satisfaction, Healthcare quality, General Surgery, Patient decision, Factor Analysis, Patients' Preference, Surgeon's reputation.

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Introduction

When it comes to treating disorders of the GI tract, the breast, oncological surgery, and trauma, general surgery practice plays a significant role [1,2]. A significant portion of a general surgeon's workload consists of elective surgery [3]. Elective surgery may be defined as allowing the patient to decide on the procedure's timing and location or as deciding whether to have a procedure that is neither urgent nor necessary [4]. In many parts of the world, patients are free to select the hospital where they would like to get elective surgery. Finding the variables that influence a patient's decision to have elective general surgery at a hospital can improve the quality of treatment that patients get [5,6]. Additionally, in a setting where

hospitals compete with one another, hospital executives and healthcare regulators may have an advantage from acknowledging the significance of various elements and services for patients undergoing elective surgery [5,6]. The public's desire to receive treatment in the best medical environment is growing along with awareness of health-related illnesses. [7] Several investigations have revealed that patients choose different hospitals based on a variety of criteria, including their socioeconomic level, waiting times, prior hospital experiences, hospital commercials, and notoriety. [7,8, 9]. A lot of studies conducted recently have shown that patient preferences for choosing a hospital are complex. One study found that waiting time, surgeon skill, and communication abilities were the most

important contributing factors in choosing a medical facility. Additionally, they discovered that patient-experience-based information is less significant than hospital-based information and that patients may even favor patient-experience-based information over hospital-experience-based information on care delivery. For this reason, it is beneficial to include patient experience-based information with the information that is already available [10]. Another study found that the most often selected elements were a suitable clinic setting and media promotion [11]. According to a different study, having highly qualified surgeons on staff and having access to cutting-edge medical technologies were important factors in choosing a hospital for elective procedures [12]. The cost of elective surgery, including possible indirect expenses, aftercare, and prior consultations, can have a big influence on patient choices. When choosing a hospital for elective treatments, patients reportedly gave careful thought to the perceived affordability of services and out-of-pocket costs [13]. Another study revealed that the caliber of contacts with healthcare practitioners is directly related to patient happiness. Patients' experiences and preferences are greatly influenced by the interpersonal abilities and dispositions of surgeons and other medical personnel. When selecting a hospital for elective surgery, patients gave priority to attention, sympathetic communication, and the general manner of their healthcare staff, according to a study [14]. The goal of this study was to determine the variables that affect patients choosing a hospital for elective general surgery.

Materials and Methods

Study Design

This study is a descriptive cross-sectional study.

Study Setting

The study took place at the Department of Surgery, Lord Buddha Koshi Medical College and Hospital, Bihar, India, from September 2023 to September 2024. The study included 200 participants.

Inclusion Criteria

- Patients who have an elective general surgery appointment.
- Patients who are at least eighteen years old.

Exclusion Criteria

- Surgical emergencies.
- Individuals with cognitive problems that make it difficult for them to fill out the questionnaire.

Bias

Consecutive sampling was employed to reduce selection bias. By distributing the questionnaire as soon as the

elective surgery choice was made, recall bias was lessened.

Variables

It included factors that affected the choice of hospital, demographics, hospital-related factors, surgeon-related factors, academic prestige, hospital accreditation, and facilities.

Data Collection

The specifics of the study were explained to each participant. Determining the characteristics influencing hospital choice among patients receiving elective surgery at our institution was the main outcome of interest.

Ethical considerations

All subjects provided written informed permission, and the Ethics Committee approved the study protocol.

Procedure

We created a questionnaire based on the findings of multiple published research after reviewing the literature. Additionally, we sought advice from a panel of specialists who used personal judgments to verify the questionnaire's face validity and substance by making sure no important dimensions were overlooked. A questionnaire intended to gauge the relative significance of the elements the patients took into account while selecting a hospital for elective general surgery was filled out by the patients. On a Likert scale ranging from 1 (unimportant) to 5 (extremely important), they were asked to rank the significance of the surgeon, the hospital, hospital accreditation, facilities, and academia about their hospital preference. There were 33 questions total, broken down into four sections of the survey. Demographics, including gender, age, marital status, education, household income, and place of residence were the main emphasis of the first section. The surgeon's popularity, abilities, status as a faculty member, gender, age, and attitude toward the patient were the main topics of the second section. The third section concentrated on hospital-related characteristics, including waiting times, affordability, prior hospital reputation, and whether it was the only hospital they knew. Finally, the fourth section addressed aspects of hospital accreditation, amenities, and academia, including the hospital's research accomplishments, local recognition, accreditation, marketing, and amenities (air conditioning, parking, and decor). Before the full-scale investigation, a pilot survey of 20 elective patients was used to validate the questionnaire. These patients' feedback prompted changes to remove any unclear or ambiguous questions.

Results

A total of 200 patients who had elective general surgery were included in the study. Table 1 provides a summary of the participants' demographic attributes. 40% of

participants were between the ages of 31 and 50, and 30% were between the ages of 18 and 30. Of the participants, 53.0% were men and 47.0% were women. The majority of participants were married (60%) and had a high level

of education (42%). Sixty-seven percent of the participants lived in cities, and half of them made between 20,000 and 50,000 Indian rupees each month (50 %).

Table 1: Demographic Characteristics

Characteristic	Frequency (n)	Percentage (%)
<i>Age Group</i>		
18-30 years	60	30
31-50 years	80	40
51-70 years	46	23
>70 years	14	7
<i>Gender</i>		
Male	106	53
Female	94	47
<i>Marital Status</i>		
Single	62	31
Married	120	60
Divorced/Widowed	18	9
<i>Education Level</i>		
No Formal Education	10	5
Primary Education	40	20
Secondary Education	66	33
Higher Education	84	42
<i>Place of Residence</i>		
Urban	134	67
Rural	66	33
<i>Household Income</i>		
Less than 20,000 INR/month	52	26
Between 20,000 and 50,000INR/month	100	50
More than 50,000INR/month	48	24

The importance of each aspect impacting the participants' choice of hospital was ranked. Tables 2, 3, and 4 provide summaries of the results. Of the surgeon-related characteristics (Table 2), 93% of participants said that the

surgeon's skills were very significant, followed by the surgeon's patient-centered approach (90%) and popularity (60%). The participants placed less weight on other variables, such as age, gender, and faculty membership.

Table 2: Significance of factors related to surgeons

Factors related to surgeon	More significant (n, %)	Less Significant (n, %)
Age	80(40%)	120(60%)
Gender	66(33%)	134(67%)
Skills	186(93%)	14(7%)
Popularity	120(60%)	80(40%)
Attitude towards patients	180(90%)	20(10)
Faculty membership	106(53%)	94(47%)

The results showed that the most important factors related to hospital were cost effectiveness (86%), prior repute of the hospital (76%), and knowing the hospital well (73%). Waiting period was also considered important by a significant majority (70%) (Table 3).

Table 3: The significance of factors related to hospitals

Factors related to hospitals	More significant (n, %)	Less Significant (n, %)
Waiting period	140(70%)	60(30%)
Knowing the hospital well	146(73%)	54(27%)
Cost-effectiveness	172(86%)	28(14%)
Prior repute of the hospital	152(76%)	48(24%)

Hospital accreditation (56%) and infrastructure provided by the hospital (70%) were considered crucial by the majority of participants. The hospital's research accomplishments and local popularity were less significant to most participants (Table 4).

Table 4: Significance of Amenities, Academia and Hospital Accreditation.

Factors	More significant (n, %)	Less Significant (n, %)
Accreditation	112(56%)	88(44%)
Infrastructure (air conditioning, parking, and décor)	140(70%)	60(30%)
Local popularity	86(43%)	114(57%)
Research accomplishments of the hospital	100(50%)	100(50%)
Advertisements	54(27%)	146(73%)

Discussion

For many patients, choosing between options during elective surgery can be difficult. Patients throughout the world like to select the hospital in which they wish to get

their elective surgery done. Health care services can be enhanced by identifying the factors that influence patient's hospital choices for elective general surgery. A broad age distribution and a generally balanced gender

representation were among the 200 participants in the analysis. The bulk of participants lived in cities and were between the ages of 31 and 50, suggesting that elective procedures are more common among younger, city populations. The findings indicated that the surgeon's skills, friendliness towards patients, and pricing were the most important factors determining hospital choice. 86% of participants said cost-effectiveness was significant, underscoring the importance of economic factors in healthcare decisions, even in situations where hospital treatments are provided without charge. This implies that patient choices may still be influenced by extra expenses like prescription drugs, and postoperative care, or indirect expenses like lodging and transportation. 90% of participants valued the surgeon's approach towards patients, and 93% of people rated the surgeon's skills as vital, indicating that factors relating to the surgeon were highly prioritized. These results highlight how crucial healthcare personnel's perceived competence and interpersonal abilities are in influencing patient preferences. Another important element, albeit a smaller one, was the surgeon's popularity, suggesting that people can base their healthcare decisions on mouth-to-mouth referrals and reputation. Hospital-related characteristics were also significant, such as knowing the hospital well (73%) and prior hospital repute (76%). This illustrates how trust and satisfying past experiences play a part in a patient's decision-making. For 70% of participants, the waiting period was a significant consideration, indicating the necessity of effective scheduling and hospital operations systems to satisfy patient expectations. Remarkably, a sizable percentage of participants (56% and 70%, respectively) also cited hospital accreditation and infrastructure like air conditioning, parking, and decor as important factors. This implies that in addition to the clinical features, patients also like the hospital's general atmosphere and facilities. However, the hospital's research accomplishments and marketing campaigns were less significant, suggesting that when patients are making decisions, pragmatic reasons take precedence over marketing initiatives and academic status. Overall, the study emphasizes how important patient experience, surgeon skill, and cost are when choosing a hospital for elective surgery. Hospital managers and legislators ought to concentrate on these crucial areas to improve patient satisfaction and draw in new patients. To satisfy patient expectations and enhance hospital selection results, it is imperative to maintain superior clinical care standards, ensure affordability, and enhance the hospital atmosphere. Selecting a hospital for elective general surgery requires several considerations, from the facility's amenities to the surgeon's experience. In one of the studies, 95% of respondents said that the surgeon's reputation for expertise was the main factor determining their choice of hospital for elective surgery. The experience and training of the surgeon were additional important considerations. On the other hand, advertisements and hospital certification had

less of an impact [15]. An analysis of the frequency of preoperative anemia in patients undergoing elective surgery using a retrospective cohort study revealed a strong correlation between anemia and increased mortality and postoperative complications. This emphasizes that to enhance surgical results, anemia must be managed before surgery [16].

In order to reduce the risk of surgery, a systematic review investigated whether patients are willing to go farther. It was discovered that while older age and poorer educational attainment were linked to a preference for local hospitals, many patients are ready to travel farther for safer surgical outcomes [17]. Socioeconomic deprivation has been linked to poorer postoperative outcomes, such as increased mortality and non-home release rates, according to research. Hospital features like trauma center status or safety-net status did not significantly lessen this effect [18].

According to a cross-sectional study, patients' choice of hospital was greatly influenced by their cultural background, with the gender of the doctor playing a considerable role. Family and friend recommendations were less important when making decisions [19]. Many patients preferred general anesthesia to prevent sensory sensations during surgery, according to a study that looked at factors influencing anesthesia method preference. These choices were impacted by surgical kind and educational attainment [20].

Conclusion

The study found that the most significant factors influencing hospital choice among patients undergoing elective general surgery were affordability, surgeon skill, and patient attitude. By concentrating on these important areas, hospital administrators and legislators can use these findings to increase patient happiness.

Limitations

This study's cross-sectional design and brief time frame resulted in a small sample size and raised the likelihood that the answers were not typical of all patients treated at our hospital. Furthermore, it should be emphasized that these considerations only applied to patients having elective general surgery and did not take into account the larger range of services our facility offers. Additionally, the results of this study are limited by the absence of a comparison group.

Recommendation

High clinical care standards, cost, and improving patient experience through better facilities and communication should be the key priorities of hospital management. It is also crucial to make an effort to establish and preserve a favourable reputation for the institution.

Acknowledgment

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Data Availability

Page | 6 Data is available upon request.

Author contributions

RR contributed to the design of the research, collected and analyzed the data. He also wrote and edited the manuscript.

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Conflict of interest

The authors affirm that this study has no conflicts of interest.

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