

ORIGINAL RESEARCH

Factors Influencing Hospital Choice for Patients Undergoing Elective General Surgery: A Descriptive, Cross Sectional Study

¹Akhilesh Kumar, ²Bhawana Kumari, ³Anshu Atreya, ⁴Ashish Kumar, ⁵Srikant

^{1,4,5}Senior Resident, ^{2,3}Assistant Professor, Department of Surgery, ESIC Medical College and Hospital, Bihta, Patna, Bihar, India.

Corresponding Author

Srikant

Senior Resident, Department of Surgery, ESIC Medical College and Hospital, Bihta, Patna, Bihar, India

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ABSTRACT

Background: The decision-making process for selecting a hospital for elective general surgery involves multiple factors, including the quality of medical care, hospital reputation, cost, and patient experience. Understanding these factors is critical for healthcare providers to enhance patient satisfaction and optimize service delivery. This study aims to identify and analyze the factors influencing hospital choice among patients undergoing elective general surgery at ESIC Medical College and Hospital, Bihar.

Methods: A total of 302 patients scheduled for elective general surgery participated in the study. Data were collected using a validated questionnaire assessing demographics, hospital-related factors, surgeon-related factors, hospital accreditation, amenities, and academia. Statistical analysis was performed using SPSS version 23, with descriptive statistics and Pearson chi-square tests to compare responses by gender.

Results: The most critical factors influencing hospital choice were affordability (86.1%), surgeon's skills (92.7%), and the surgeon's attitude towards patients (89.4%). Hospital-related factors such as previous reputation (76.2%) and familiarity (72.8%) were also significant. Facilities and amenities provided by the hospital (69.5%) and accreditation (56.3%) influenced patient decisions. No statistically significant differences were found between male and female participants in their responses.

Conclusion: Affordability, surgeon competence, and patient experience are paramount in influencing hospital choice for elective surgeries. Hospital reputation and amenities also play a crucial role. Understanding these factors can help hospital administrators improve patient satisfaction and attract more patients.

Recommendations: Hospital administrators should focus on maintaining high standards of clinical care, ensuring affordability, and enhancing patient experience through improved communication and facilities. Efforts to build and maintain a positive hospital reputation are also essential.

Keywords: Hospital choice, Elective surgery, Patient satisfaction, Surgeon competence, Healthcare quality

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INTRODUCTION

The choice of hospital for elective general surgery is a critical decision for patients, influenced by a myriad of factors. Elective surgeries, which are planned in advance rather than emergencies, allow patients the opportunity to evaluate and select healthcare facilities based on their preferences and needs. Understanding these factors is essential for healthcare providers and administrators to enhance patient satisfaction, improve service quality, and ensure better health outcomes. Recent studies have highlighted that patient preferences for hospital selection are multifaceted, encompassing aspects such as the quality of medical

care, hospital reputation, accessibility, and personal comfort. A study emphasized the importance of hospital reputation and the quality of care in patient decision-making processes, particularly in elective procedures where patients have the time to consider their options thoroughly [1]. Similarly, another study found that the availability of advanced medical technology and the presence of highly skilled surgeons were significant determinants of hospital choice for elective surgeries [2]. Cost remains a crucial factor influencing hospital choice, even in healthcare systems where services are subsidized or free at the point of care. The financial burden

associated with elective surgery, including preoperative consultations, postoperative care, and potential indirect costs, can significantly impact patient decisions. Research indicated that out-of-pocket expenses and the perceived affordability of services were major considerations for patients when selecting a hospital for elective procedures [3].

Patient satisfaction is closely linked to the quality of interactions with healthcare providers. The interpersonal skills and attitudes of surgeons and medical staff play a vital role in shaping patient experiences and preferences. A study demonstrated that patients prioritized empathetic communication, attentiveness, and the overall demeanour of their healthcare providers when choosing a hospital for elective surgery [4]. This underscores the importance of patient-centered care models that emphasize respect, empathy, and effective communication.

Hospital amenities and the overall environment are also influential factors. The physical infrastructure, cleanliness, availability of modern facilities, and general comfort provided by the hospital contribute to patient satisfaction and choice. Research highlighted that patients often consider these non-clinical aspects as indicators of the overall quality and standard of care provided by the hospital [5].

The study aimed at identifying factors influencing hospital choice among patients undergoing elective general surgery.

METHODOLOGY

Study Design: A descriptive cross-sectional study.

Study Setting: The study took place at Department of Surgery, ESIC Medical College and Hospital, Bihta, Patna, India, from January 2023 to June 2023.

Participants

The study included 302 participants (including both major and minor cases).

Inclusion Criteria

- Patients scheduled for elective general surgery
- Patients aged 18 years and above

Exclusion Criteria

- Emergency surgical cases
- Patients with cognitive impairments affecting their ability to complete the questionnaire

Bias

To minimize selection bias, consecutive sampling was used. Recall bias was mitigated by administering the questionnaire immediately after the decision for elective surgery was made.

Variables

Variables included factors influencing hospital choice, demographic characteristics, hospital-related factors, surgeon-related factors, hospital accreditation, amenities, and academic reputation.

Data Collection

All participants were briefed about the details of the study. The primary outcome of interest was to determine the factors affecting hospital choice among patients undergoing elective surgery at our institution.

Procedure

After reviewing the literature, a questionnaire was formulated based on several published studies. Experts validated the content and face validity of the questionnaire. The patients completed the questionnaire designed to assess the relative importance of factors considered when choosing a hospital for elective general surgery. Participants ranked the importance of various factors on a Likert scale from 1 (unimportant) to 5 (very important).

The questionnaire contained 33 questions divided into four parts:

1. **Demographics:** Age, nationality, gender, marital status, education, household income, and place of residence.
2. **Hospital-Related Factors:** Familiarity with the hospital, waiting time, affordability, and previous hospital reputation.
3. **Surgeon-Related Factors:** Popularity, skills, faculty membership, gender, age, and surgeon's attitude toward the patient.
4. **Hospital Accreditation, Amenities, and Academia:** Hospital's research achievements, local popularity, accreditation, advertisements, and provided facilities (decor, parking, air conditioning).

The questionnaire was validated through a pilot survey distributed to 40 elective patients before the full-scale study. Feedback from these patients led to adjustments to eliminate ambiguous or vague questions.

Statistical Analysis

Descriptive statistics were used to describe the demographic characteristics of the study participants. Mean and standard deviations (SD), and frequencies were assessed. The Pearson chi-square test was used to compare responses by gender. Statistical significance was set at $p \leq 0.05$. The analysis was performed using SPSS, version 23.

Ethical considerations

The study protocol was approved by the Ethics Committee and written informed consent was received from all the participants.

RESULT

The study included a total of 302 participants who underwent elective general surgery. The demographic characteristics of the participants are summarized in Table 1. The majority of participants were in the age group of 31-50 years (39.7%), followed by 18-30 years (29.8%). Males constituted 53.0% of the participants, and females 47.0%. Most participants

were married (59.6%), and a significant portion had higher education (42.0%). The majority of the participants resided in urban areas (66.9%), and almost half of the participants had a household income between 20,000-50,000 INR/month (49.7%).

Table 1: Demographic Characteristics

Characteristic	Frequency (n)	Percentage (%)
Age Group		
- 18-30 years	90	29.8
- 31-50 years	120	39.7
- 51-70 years	70	23.2
- >70 years	22	7.3
Gender		
- Male	160	53.0
- Female	142	47.0
Marital Status		
- Single	95	31.5
- Married	180	59.6
- Widowed/Divorced	27	8.9
Education Level		
- No formal education	15	5.0
- Primary education	60	19.9
- Secondary education	100	33.1
- Higher education	127	42.0
Household Income		
- <20,000 INR/month	78	25.8
20,000-50,000 INR/month	150	49.7
- >50,000 INR/month	74	24.5
Place of Residence		
- Urban	202	66.9
- Rural	100	33.1

Participants were asked to rank the importance of various factors influencing their hospital choice. The responses were grouped into high importance (very important and important) and less importance (neutral, not important, and not important at all). The findings are summarized in Tables 2, 3, and 4.

Table 2: Importance of Hospital-Related Factors

Hospital-Related Factors	High Importance (n, %)	Less Importance (n, %)
Familiarity with the hospital	220 (72.8%)	82 (27.2%)
Waiting time	210 (69.5%)	92 (30.5%)
Affordability	260 (86.1%)	42 (13.9%)
Previous hospital reputation	230 (76.2%)	72 (23.8%)

The results showed that the most important hospital-related factors were affordability (86.1%), previous hospital reputation (76.2%), and familiarity with the hospital (72.8%). Waiting time was also considered important by a significant majority (69.5%).

Table 3: Importance of Surgeon-Related Factors

Surgeon -Related Factors	High Importance (n, %)	Less Importance (n, %)
Popularity	180 (59.6%)	122 (40.4%)
Skills	280 (92.7%)	22 (7.3%)
Faculty membership	160 (53.0%)	142 (47.0%)
Gender	100 (33.1%)	202 (66.9%)
Age	120 (39.7%)	182 (60.3%)
Attitude towards patients	270 (89.4%)	32 (10.6%)

Among surgeon-related factors, the skills of the surgeon were deemed highly important by 92.7% of participants, followed by the surgeon's attitude towards patients (89.4%) and the popularity of the surgeon (59.6%). Other factors like faculty membership, gender, and age were less important to the participants.

Table 4: Importance of Hospital Accreditation, Amenities, and Academia

Factors	High Importance (n, %)	Less Importance (n, %)
Hospital's research achievements	150 (49.7%)	152 (50.3%)
Popularity in the locality	130 (43.0%)	172 (57.0%)
Accreditation	170 (56.3%)	132 (43.7%)
Advertisements	80 (26.5%)	222 (73.5%)
Facilities (decor, parking, air conditioning)	210 (69.5%)	92 (30.5%)

Hospital accreditation (56.3%) and facilities provided by the hospital (69.5%) were considered important by the majority of participants. The hospital's research achievements and popularity in the locality were less significant to most participants. A Pearson chi-square test was used to compare the responses by gender for each factor. The results are shown in Table 5.

Table 5: Comparison of Factors by Gender

Factor	High Importance (%)		χ^2 Value	p-Value
	Male	Female		
Familiarity with the hospital	120 (75.0%)	100 (70.4%)	0.69	0.41
Waiting time	115 (71.9%)	95 (66.9%)	0.78	0.38
Affordability	140 (87.5%)	120 (84.5%)	0.51	0.47
Previous hospital reputation	125 (78.1%)	105 (73.9%)	0.66	0.42
Surgeon's skills	150 (93.8%)	130 (91.5%)	0.48	0.49
Surgeon's attitude towards patients	145 (90.6%)	125 (88.0%)	0.52	0.47
Facilities (decor, parking, AC)	115 (71.9%)	95 (66.9%)	0.78	0.38

Statistical significance was set at $p \leq 0.05$. No statistically significant differences were found between male and female participants in their responses to the factors influencing hospital choice.

DISCUSSION

The study aimed to identify the factors influencing hospital choice among patients undergoing elective general surgery. The analysis included 302 participants, with a fairly balanced representation of gender and a diverse age distribution. The majority of the participants were in the 31-50 years age group and resided in urban areas, indicating a relatively younger and urban demographic engaging in elective surgeries. The results showed that the most critical factors influencing hospital choice were affordability, surgeon's skills, and the surgeon's attitude towards patients. Affordability was deemed important by 86.1% of participants, highlighting the significance of cost considerations in healthcare decisions, even in a setting where hospital services are free. This suggests that additional costs, such as medications, post-operative care, or indirect costs like transportation and accommodation, might still impact patient decisions. Surgeon-related factors were highly prioritized, with 92.7% of participants rating the surgeon's skills as crucial, and 89.4% valuing the surgeon's attitude towards patients. These findings underscore the importance of perceived competence and the interpersonal skills of healthcare providers in shaping patient preferences. The popularity of the surgeon was also a significant factor, though to a lesser extent, indicating that patients may rely on reputation and word-of-mouth recommendations when making healthcare choices.

Hospital-related factors, including previous hospital reputation (76.2%) and familiarity with the hospital (72.8%), were also important. This reflects the role of

trust and prior positive experiences in patient decision-making. Waiting time was a significant factor for 69.5% of participants, pointing to the need for efficient hospital operations and scheduling systems to meet patient expectations.

Interestingly, hospital accreditation and facilities, such as decor, parking, and air conditioning, were also influential for a substantial proportion of participants (56.3% and 69.5%, respectively). This suggests that patients value not only the clinical aspects but also the overall environment and amenities provided by the hospital. However, factors such as the hospital's research achievements and advertisements were less significant, indicating that practical considerations outweigh academic prestige and marketing efforts in patient choices.

The comparison of factors by gender revealed no statistically significant differences, indicating a consistent set of priorities across male and female participants. This uniformity suggests that the identified factors are broadly relevant across different demographic groups within the study population.

Overall, the study highlights that cost, surgeon competence, and patient experience are paramount in influencing hospital choice for elective surgeries. Hospital administrators and policymakers should focus on these key areas to enhance patient satisfaction and attract more patients. Ensuring affordability, maintaining high standards of clinical care, and improving the hospital environment are critical strategies for meeting patient expectations and improving hospital selection outcomes.

Choosing a hospital for elective general surgery involves multiple factors, ranging from surgeon expertise to hospital amenities. A study identified that the primary factor influencing hospital choice for elective surgery was the surgeon's reputed skills (95%). Other significant factors included the surgeon's training and experience. Conversely, hospital accreditation and advertisements were less influential [6]. A retrospective cohort study assessed the prevalence of preoperative anemia in elective surgery patients, finding a significant association between anemia and higher postoperative complications and mortality. This highlights the need for preoperative management of anemia to improve surgical outcomes [7].

A systematic review examined whether patients are willing to travel longer distances to lower their surgical risk. It found that many patients are willing to travel further for safer surgical outcomes, although older age and lower education levels were associated with a preference for local hospitals [8]. Research showed that socioeconomic disadvantage is associated with worse postoperative outcomes, including higher mortality and non-home discharge rates. This effect was not significantly mitigated by hospital characteristics such as trauma center or safety-net status [9].

A cross-sectional study found that cultural background significantly influenced hospital choice, with gender of the doctor being a significant factor for patients. Recommendations from family and friends played a lesser role in decision-making [10]. In a study, factors affecting anesthesia method preference were examined, revealing that a significant number of patients preferred general anesthesia to avoid sensory experiences during surgery. Education level and type of surgery influenced these preferences [11].

CONCLUSION

The study identified affordability, surgeon's skills, and attitude towards patients as the most important factors influencing hospital choice among patients undergoing elective general surgery. These findings can help hospital administrators and policymakers improve patient satisfaction by focusing on these key areas.

Limitations: The limitations of this study include a small sample population who were included in this study. Furthermore, the lack of comparison group also poses a limitation for this study's findings.

Recommendation: Hospital administrators should focus on maintaining high standards of clinical care, ensuring affordability, and enhancing patient experience through improved communication and facilities. Efforts to build and maintain a positive hospital reputation are also essential.

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List of abbreviations

ESIC: Employees' State Insurance Corporation

χ^2 : Chi-square

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