

## Factors Influencing Patient Satisfaction and Hospital Selection In Eye Care Services in Nepal.

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### ABSTRACT

This research examines the primary factors of service quality in eye care, with a focus on the factors that impact patient satisfaction. When evaluating different healthcare providers such as government, commercial, semi-private, and nonprofit institutions, the level of patient comfort plays a significant role in shaping opinions and choices. Satisfaction in healthcare is a reliable indicator of the quality of treatment, since it reflects the extent to which patient needs and preferences are fully met. This study emphasizes the importance of patient-centered care in delivering excellent eye care services. Patient-centered care encompasses accessibility, equality, safety, a pleasant environment, and effective communication.

**Purpose:** The research aimed to identify the factors influencing patient satisfaction and the criteria for choosing certain eye hospitals in Nepal, with a particular focus on five hospitals located near the Indian border.

**Major Findings:** The study revealed that the primary reason for patients seeking medical attention at the hospitals was cloudy vision. Furthermore, an overwhelming majority of over 99% of these patients were referred by their friends. Patients choose for these institutions despite being in close proximity to other hospitals due to the lower expenses, amiable staff demeanor, and exceptional surgery outcomes. Timely service, cleanliness, and well-trained staff were the key factors contributing to satisfaction. Statistically significant connections were found between satisfaction and other factors such as hospital environment, cafeteria facilities, and information availability.

**Conclusions:** Patient satisfaction and hospital selection are greatly impacted by tangible factors such as cleanliness, staff behavior, and transparent information about services. These findings underscore the need of maintaining rigorous standards in these domains in order to both attract and retain patients.

**Key words:** Eye care, Patient satisfaction, Service quality, Patient-centered care, Healthcare accessibility

### INTRODUCTION

This study focuses on five major hospitals under the umbrella of NNJS—Chhanda (Kale Babu) Narayani Eye Hospital, Geta Eye Hospital, Fateh Bal Eye Hospital, Gaur Eye Hospital, and Kedia Eye Hospital. These hospitals have been selected due to their strategic location near the Indian states of Uttarakhand, Uttar Pradesh, and Bihar. The research aims to explore why neighboring Indian patients choose these hospitals for eye care services and to identify the key factors that contribute to patient satisfaction, expectations, perceptions, and opinions regarding the quality of service. According to a 2016 report by the Global Press Journal, over 200,000 Indian patients visit Nepal annually for eye surgeries, and an additional 1.5 million seek eye treatments, making Nepal a significant destination for medical tourism, particularly in eye care. Despite the high number of patients from northern India seeking treatment in Nepal, their perceptions have not been previously analyzed or documented.

#### Geta Eye Hospital

Geta Eye Hospital, located in Dhangadhi, the district headquarters of Kailali District, Nepal, is near the border with Uttar Pradesh, India, particularly the Gauriphanta area of Lakhimpur Kheri District. Established in 1981 and fully operational by November 1982, the hospital serves the far-western region of Nepal and patients from Uttar

Pradesh and Uttarakhand in India. From 2015 to 2019, the hospital provided eye care to 0.5 million people, with 46.04% of the patients coming from neighboring Indian districts. Additionally, 79.87% of the 113,812 cataract surgeries performed during this period were on Indian patients, with a higher percentage of female patients (51.21%) receiving surgeries.

#### **Fateh-Bal Eye Hospital**

Fateh-Bal Eye Hospital (FBEH), established in 1986 with support from the Swiss Red Cross and later the Lions Club MD 102 Switzerland and Liechtenstein, began providing eye care services to Nepal's mid-west region. Since March 2001, the hospital has been operating independently after donor funding was phased out. Located in Nepalganj, near the Rupaidiha area of Uttar Pradesh, India, FBEH is a 150-bed secondary-level eye hospital offering comprehensive eye care services, particularly to the people of Karnali and Western Districts of Lumbini Province. From its inception until FY 2076/077 (2019/020 AD), the hospital treated over 2.29 million patients in its Out-patient Department (OPD) and performed more than 245,637 eye surgeries. Between 2015 and 2019, the hospital provided eye care to 0.52 million people, with 42.11% of these patients coming from neighboring districts in India. During the same period, the hospital performed 43,635 cataract surgeries, with 59.59% of the surgeries on Indian patients and a higher percentage of female patients (51.31%).

#### **Chhanda (Kalebabu) Narayani Eye Hospital**

Chhanda (Kalebabu) Narayani Eye Hospital, established in November 2004 with support from the Norwegian Association of the Blind (NABP), Norway, began as an extension of the Eye Health Program Rapti & Bahadurgunj. Initially operating as a primary eye care center with surgical facilities in a rented house, the hospital later moved to a 1.41-acre plot donated by the Shah family, and was renamed Chhanda (Kalebabu) Narayani Eye Hospital. This 100-bed hospital, located in Krishnanagar, near Barahni in Uttar Pradesh, India, primarily serves the poor and marginalized populations. From 2015 to 2019, the hospital treated 353,969 patients in its OPD, with 69.25% (245,125) coming from neighboring Indian districts, and among these Indian patients, 51.22% were female. Additionally, the hospital performed 43,555 cataract surgeries during this period, with 83.10% (36,195) of these surgeries on Indian patients, and a higher percentage of female patients (51.38%) compared to males (48.78%).

#### **R.M Kedia Eye Hospital**

R.M. Kedia Eye Hospital, established in 1975 with the support of Kedia Sewa Trust, aims to serve the poor and reduce blindness in Nepal's Narayani Zone. Located in Birgunj, near the East Champaran District of Bihar, India, the hospital received additional support from the Association for Ophthalmic Cooperation to Asia (AOCA) and the 24 Hours Television Charity Committee of Japan starting in 1988, aiding infrastructure and equipment development. The hospital serves patients from Bara, Parsa, Makwanpur, and parts of Rautahat District in Nepal, as well as from North India, including Bihar, Uttar Pradesh, Bengal, Uttarakhand, and Jharkhand. From 2015 to 2019, the hospital treated 458,599 patients in its OPD, with 55% (241,559) coming from neighboring Indian districts, and 47% of these Indian patients being female. During the same period, the hospital performed 58,868 cataract surgeries, with 76% (44,818) of these surgeries on Indian patients, and a higher percentage of female patients (53%) compared to males (47%).

#### **Gaur Eye Hospital**

Gaur Eye Hospital, established in 1997 with support from the Association for Ophthalmic Cooperation to Asia (AOCA) and 24-Hour Television, Japan, began as a primary eye care center and was later upgraded from a 16-bed facility to a 100-bed hospital, with a total capacity of 125 beds. Located in Gaur Municipality, Rautahat District, Nepal, just 4 km from the Indian border at Bargenia, Bihar, the hospital operates on 14,070 square meters of land donated by the Nepal Government with the support of Mr. Sekh Idrish, the Honorable Minister of Social Welfare of Nepal. The hospital provides eye care to patients from eastern Bara and Rautahat districts in Nepal, as well as the western part of Sarlahi district, and is accessible to patients from various Indian districts including Sitamadi, Shivher, Darbhanga, Dhaka, Motihari, Kushinar, Gopalganj, and Baliya. From 2015 to 2019, the hospital treated 501,374 patients in its OPD, with 54.29% (272,177) from neighboring Indian districts, and 50.80% of these Indian patients being female. During the same period, the hospital performed 58,166 cataract surgeries, with 42.37% (24,621) of these on Indian patients, and a higher percentage of female patients (54.83%) compared to males (45.17%).

#### **LITERATURE REVIEW**

The literature review highlights the importance of patient satisfaction as a key indicator of healthcare quality, linking it to better outcomes, higher patient retention, and reduced malpractice claims. It outlines various theories and frameworks that have been developed to understand and measure patient satisfaction.

**Discrepancy and Transgression Theory** (Fox & Storms, 1981): Satisfaction depends on the alignment between

patients' expectations and the care they receive.

**Expectancy-Value Theory** (Linder-Pelz, 1982): Satisfaction is influenced by patients' expectations, beliefs, and values related to healthcare.

**Determinants and Components Theory** (Ware et al., 1983): Satisfaction is based on subjective responses to healthcare shaped by expectations and preferences.

**Manifold Models Theory** (Fitzpatrick & Hopkins, 1983): Social environments significantly impact patient expectations and satisfaction.

Donabedian (1980) emphasized that outcomes, viewed as changes in health status due to care, are indicators of service quality. Studies have linked high satisfaction with better adherence to treatment and fewer liability claims.

The review also discusses the "new public management" approach and the development of tools like the Patients' Satisfaction Index Score (Rahmqvist, 2001), highlighting factors such as age and gender in measuring satisfaction. French hospitals have mandated tracking patient satisfaction since 1998 to enhance service quality. Several tools for measuring patient satisfaction are detailed:

**Satisfaction with Physician and Primary Care Scale** (Hulka et al., 1970): An early attempt to quantify patient satisfaction.

**Patient Satisfaction Questionnaire** (Ware & Snyder, 1975): Used to evaluate satisfaction across healthcare.

**Client Satisfaction Questionnaire** (Larsen et al., 1979; 1984): Evolved into the Patient Satisfaction Scale.

**SERVQUAL** (Parasuraman et al., 1988): Measures service quality in healthcare.

### **Recent Trends in Patient Satisfaction (2017-2021)**

**Service Quality in Asian Hospitals:-** Muhammad Shafiq (2017) explored service quality in Asian hospitals using the SERVQUAL framework, identifying significant discrepancies in reliability among other quality indicators. This research underscores the need for hospital leaders to prioritize addressing these gaps to improve patient satisfaction.

**Factors Influencing Patient Choice:** Several studies during this period focused on the factors influencing patient choice in healthcare settings. Malik (2017) and Bucatariu & George (2017) found that professionalism, personal factors, and clinical effectiveness are primary determinants of patient choices, particularly in international hospital settings. These findings highlight the importance of maintaining high standards of care and communication to attract and retain patients.

**Technological Advancements and Patient Satisfaction:** Technological advancements and their impact on patient satisfaction were also explored during this period. Zmil (2017) found that patients in private hospitals often reported higher satisfaction due to the availability of advanced medical technology and innovative care practices. This suggests that investment in technology can be a key driver of patient satisfaction in modern healthcare settings.

**Gender and Healthcare Preferences:-** Research by Vijayalakshmi (2018) explored health-seeking behavior by gender, noting that men were more likely than women to seek medical help. This finding indicates that healthcare providers need to consider gender differences in their service delivery and outreach efforts to ensure equitable access to care.

**Patient Satisfaction in Public vs. Private Hospitals:-** The ongoing comparison between public and private hospitals revealed that patients generally reported higher satisfaction with private healthcare services. Studies in Jordan, Nepal, and Bangladesh indicated that private hospitals often provide better quality care, shorter wait times, and more personalized services, leading to higher patient satisfaction. However, cost and access remain significant barriers for many patients in these settings.

**Challenges in Resource-Limited Settings:-** In resource-limited settings, patient satisfaction is often influenced by factors such as healthcare infrastructure, staff behavior, and service accessibility. Research in countries like Ghana and Southern India highlighted the importance of addressing these challenges to improve patient satisfaction. Ensuring that healthcare providers are well-trained, facilities are adequately resourced, and services are accessible to all patients is critical for enhancing satisfaction in these contexts.

**Patient Feedback as a Tool for Improvement:-** The use of patient feedback as a tool for continuous improvement has become increasingly important in recent years. Studies by Ibanga et al. (2017) and Adhikari et al. (2021) emphasized the need for healthcare institutions to actively seek and incorporate patient feedback into

their quality improvement processes. By doing so, healthcare providers can better understand patient needs and preferences, leading to higher satisfaction and better health outcomes.

## RESEARCH GAP

The research highlights a gap in existing literature regarding how patients perceive and select eye care providers. Despite extensive studies on patient satisfaction and service quality, few apply theoretical or conceptual frameworks specifically to this context. This study aims to fill this gap by evaluating the difference between expected and perceived service quality in eye care, as well as assessing patient satisfaction levels. The findings are expected to enhance the understanding of patient needs and improve service quality in Nepalese eye hospitals.

## RATIONAL OF THE STUDY

This study is significant for advancing patient-centered approach and improving eye care services in Nepal. Its findings and recommendations could lead to enhancements such as prompt, courteous, and effective treatment, investment in modern technology, and adoption of best practices. Key areas for improvement include reducing wait times, enhancing communication, and addressing issues in human resources, funding, logistics, and internal processes. The study aims to help healthcare professionals elevate service quality, attract more patients, and address deficiencies in health services.

## OBJECTIVE

To ascertain the level of patient satisfaction related to different parameter of quality eye care service in selected eye hospitals of Nepal.

## HYPOTHESIS

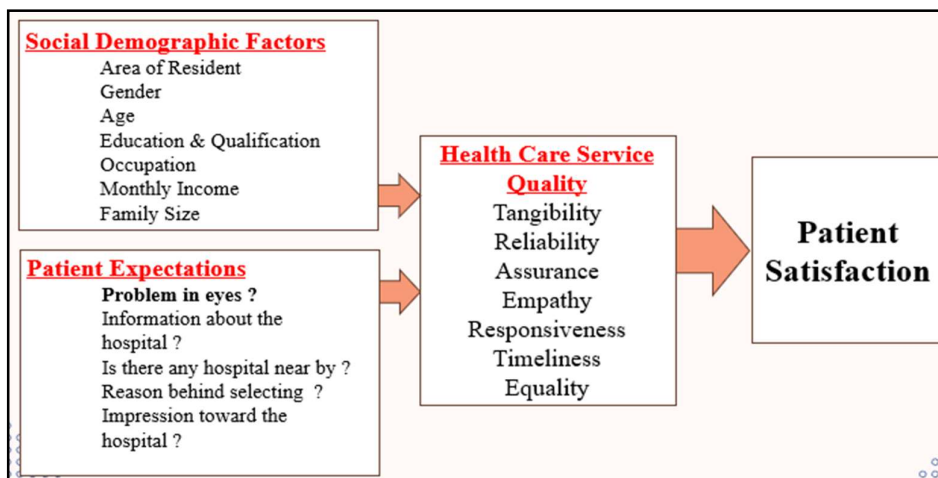
Null Hypothesis (H0): There are no significant differences in the level of patient satisfaction across different parameters of quality eye care services in selected eye hospitals in Nepal.

Alternative Hypothesis (H1): There are significant differences in the level of patient satisfaction across different parameters of quality eye care services in selected eye hospitals in Nepal.

## STATISTICAL TOOLS

There are various research methods or statistical tools that can be used depending on the nature of the problem and study. Different types of research methods or tools are employed in research. Descriptive research aims to systematically explain a research problem, phenomenon, or service, or provide information about a community or population, or describe attitudes towards a subject. This type of research describes, interprets, and clarifies the current situation. It is typically conducted through surveys, observations, questionnaires, or schedules. Descriptive research includes various types of surveys and fact-finding inquiries. The main purpose of descriptive research is to provide a description of the current status of the problem.

## RESEARCH DESIGN



### Social Demographic Factors:

**Area of Resident:** Affects access to healthcare and patient satisfaction.

**Gender:** Influences patient perspectives and interactions with healthcare.

**Age:** Alters healthcare needs, impacting patient satisfaction.

**Education & Qualification:** Affects understanding of healthcare, influencing satisfaction.

**Occupation:** Impacts comprehension and use of healthcare, affecting satisfaction.

**Monthly Income:** Determines affordability of healthcare services.

**Family Size:** Influences healthcare decisions and responsibilities, affecting satisfaction.

#### Patient Expectations:

**Problem in Eyes:** Meeting specific eye care needs boosts satisfaction.

**Information about the Hospital:** Affects expectations and overall satisfaction.

**Proximity to a Hospital:** Accessibility impacts patient satisfaction.

**Reasons for Selecting a Hospital:** Understanding these helps meet expectations.

**Impression towards the Hospital:** Significantly influences satisfaction.

#### Healthcare Service Quality:

**Tangibility:** Facilities and equipment shape perceptions of care quality.

**Reliability:** Consistent services build trust and satisfaction.

**Assurance:** Confidence in healthcare professionals enhances satisfaction.

**Empathy:** Compassionate care improves patient satisfaction.

**Responsiveness:** Timely responses improve healthcare quality.

**Timeliness:** Reducing wait times enhances the patient experience.

**Equality:** Fair treatment is crucial for satisfaction across all social backgrounds.

#### Patients Satisfaction:

A patient-centered approach in healthcare involves integrating various theoretical frameworks while considering each patient's unique background and expectations. This approach ensures that patients feel valued, heard, and respected throughout their healthcare journey, leading to higher patient satisfaction and improved health outcomes.

#### SAMPLING SIZE

The study is a survey and descriptive in nature with both qualitative and quantities approach. The sample size will be limited to 500 respondents (especially neighboring patients of India) from all five Eye Hospitals (100 patients from each eye hospitals).

#### SAMPLING TECHNIQUE

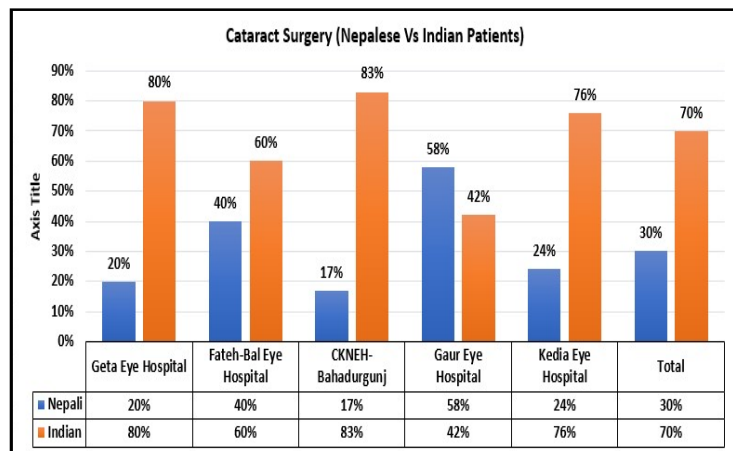
Judgmental sampling, also known as purposive or subjective sampling, was employed in this study. We utilized our judgment and expertise based on the hospital's data. According to hospital records, approximately 70% of the total patient population consists of Indian patients, with the remaining 30% being Nepalese patients. Therefore, the study focuses on the population of patients from neighboring regions in India.

#### METHOD USED FOR THE STUDY

The SERVQUAL questionnaire comprises a set of statements, with data collected using both questionnaires and interviews. This data collection method is widely used, especially for large-scale inquiries, and is adopted by healthcare providers, private individuals, researchers, organizations, and even governments. By applying the SERVQUAL method on a Likert scale, a questionnaire was developed, and each patient was interviewed and asked to respond to the questions.

#### WHY SERVQUAL MODEL

SERVQUAL is a widely recognized paradigm for evaluating and quantifying service quality across various industries. Developed by Zeithaml, Berry, and Parasuraman, it identifies seven key dimensions of service quality:



1. **Tangibles:** Physical elements that can be seen and touched, such as buildings, equipment, personnel, and communication materials.
2. **Reliability:** The ability to deliver the promised service accurately and dependably.
3. **Responsiveness:** A commitment to assisting service users and providing prompt service.
4. **Assurance:** The ability of a company to convey trust and confidence through the knowledge and courtesy of its employees.
5. **Empathy:** Providing care and individual attention to service users.
6. **Timeliness:** Delivering services without delay, including same-day service, reports, and minimizing waiting times.
7. **Equality:** Ensuring that services are provided equally, without discrimination based on nationality, race, religion, gender, income level, or other factors.

#### DATA COLLECTION

The data was collected by trained volunteers, specifically Ophthalmic Assistants, who participated in the data collection process. Patients were given a structured questionnaire, which was translated into their native language, Hindi. To minimize potential bias, interviews were conducted directly with the patients. From the total combined patient population (both Indian and Nepali), 500 Indian patients were selected—100 from each of three hospitals—using a combination of stratified and judgmental sampling.

#### DATA ANALYSIS

The collected data was organized and recorded using Microsoft Excel, a spreadsheet program well-suited for data management and analysis.

The Statistical Package for the Social Sciences (SPSS) is widely utilized for data analysis and interpretation, employing appropriate statistical techniques.

#### ETHICAL CONSIDERATION

**Confidentiality:** Participants' privacy was strictly protected by coding or obscuring their names to prevent identification in the reported results.

**Respect for Autonomy:** Participants were free to express themselves during the interviews without any coercion.

**Non-Discrimination:** All participants were treated equally, irrespective of age, sex, gender, ethnicity, socioeconomic status, nationality, or any other relevant factor.

**Beneficence:** The focus was on ensuring that participants received maximum benefits from the research while minimizing harm. The research aimed to positively impact the development of healthcare facilities and community satisfaction.

**Transparency:** Clear communication about the research process, methodologies, and potential conflicts of interest was maintained. Participants and stakeholders were fully informed about the study's purpose and goals.

**Approval from Ethics Committee:** The research was approved by the Department Research Advisory Committee of Jagannath University after reviewing the synopsis and SERVQUAL questionnaire. Written approvals were obtained from each hospital, and verbal consent was secured from patients for interviews and questionnaire completion.

**Continuous Monitoring:** Regular monitoring of the data collection and entry processes was conducted throughout the research.

#### DATA ANALYSIS

Data was collected from 500 respondents across five hospitals: Chhanda - Kalebabu Narayani Eye Hospital, Geta Eye Hospital, Fateh Bal Eye Hospital, Gaur Eye Hospital, and Kedia Eye Hospital, as detailed in the methodology chapter. The questionnaire included sections on personal information and questions regarding their hospital visit, including reasons for visiting and satisfaction with the services provided. The data was analyzed using descriptive statistics and the Chi-Square test to examine the associations between personal profiles, reasons for visiting the hospital, and satisfaction levels.

General Information	Category	N	n	%
Problem in eyes	Blurred vision	500	386	77.2
	Not able to see	500	81	16.2
	Others	500	33	6.6
Awareness of current hospital	Friends, Neighbors and Relatives	500	493	98.6
	Advertisement	500	7	1.4
	Doctor reference	500	0	0
Nearby eye hospital	Yes	500	328	65.6
	No	500	170	34.0
	Don't Know	500	2	0.4
Distance of eye hospital	< 5 km	500	44	8.8
	5 to 10 km	500	74	14.8
	> 10 km	500	382	76.4
Reason for not selecting nearby hospital	No quick service	500	225	45
	No good outcome after surgery	500	175	35
	High fees	500	100	20
Reason for selecting current hospital	Low fees	500	107	21.4
	Staff behavior	500	153	30.6
	Good outcome after surgery	500	240	48.0
Post surgery impression	Very good	500	207	41.4
	Good	500	289	57.8
	Bad	500	4	0.8
No. of visits in last two years	1	500	245	49.0
	2	500	142	28.4
	≥ 3	500	113	22.6

More than three-fourths of the patients came with complaints of blurred vision, while 16.2% were unable to see. Despite 328 out of 500 patients living near an eye hospital, nearly 99% were referred to the hospital by friends, neighbors, and relatives. The main reasons for not choosing a nearby hospital included high fees (20%), delayed service (45%), and poor post-surgery outcomes (35%). In contrast, the top four reasons for selecting a hospital in Nepal were low fees (20%), staff behavior (31%), and good visual outcomes after surgery (48%). Among the patients, 289 out of 500 (57.8%) had a good impression, and 207 out of 500 (41%) had a very good impression after surgery. Notably, nearly half of the patients (57.8%) were visiting the hospital for the first time, driven by their expectations of a positive surgical outcome.

Equality	Category	N	n	%
No discrimination on nationality	Highly Dissatisfied	500	4	0.8
	Dissatisfied	500	4	0.8
	Neutral	500	0	0
	Satisfied	500	362	72.4
	Highly Satisfied	500	130	26.0
No discrimination on language	Highly Dissatisfied	500	4	0.8
	Dissatisfied	500	4	0.8

	<b>Neutral</b>	500	1	0.2
	<b>Satisfied</b>	500	363	72.6
	<b>Highly Satisfied</b>	500	128	25.6
<b>No discrimination on religion and race</b>	<b>Highly Dissatisfied</b>	500	4	0.8
	<b>Dissatisfied</b>	500	4	0.8
	<b>Neutral</b>	500	1	0.2
	<b>Satisfied</b>	500	364	72.8
	<b>Highly Satisfied</b>	500	127	25.4
<b>No discrimination on economic status</b>	<b>Highly Dissatisfied</b>	500	4	0.8
	<b>Dissatisfied</b>	500	5	1.0
	<b>Neutral</b>	500	1	0.2
	<b>Satisfied</b>	500	363	72.6
	<b>Highly Satisfied</b>	500	127	25.4
<b>Equal service opportunity</b>	<b>Highly Dissatisfied</b>	500	4	0.8
	<b>Dissatisfied</b>	500	11	2.2
	<b>Neutral</b>	500	11	2.2
	<b>Satisfied</b>	500	347	69.4
	<b>Highly Satisfied</b>	500	127	25.4

Approximately 97% of patients were satisfied, and 98% were highly satisfied with the services and prompt delivery of test reports. However, 31.2% expressed dissatisfaction with the promise of same-day surgery. Most patients found the doctors to be punctual, with only 2% reporting dissatisfaction in this regard.



Tangibility	Category	Reason for not selecting nearby hospital		
		No quick service	No good outcome after surgery	High fees
		N = 225 n (%)	N = 175 n (%)	N = 100 n (%)
Infrastructure	Highly Dissatisfied	0 (0.0)	0 (0.0)	0 (0)
	Dissatisfied	0 (0.0)	2 (1.1)	0 (0)
	Neutral	1 (0.4)	0 (0.0)	0 (0)
	Satisfied	187 (83.1)	140 (80.0)	79 (79)
	Highly Satisfied	37 (16.4)	33 (18.9)	21 (21)
Convenient transportation	Highly Dissatisfied	0 (0.0)	2 (1.1)	0 (0)
	Dissatisfied	3 (1.3)	2 (1.1)	3 (3)
	Neutral	7 (3.1)	11 (6.3)	1 (1)
	Satisfied	191 (84.9)	144 (82.3)	87 (87)
	Highly Satisfied	24 (10.7)	16 (9.1)	9 (9)
Convenient parking facility	Highly Dissatisfied	5 (2.2)	4 (2.3)	1 (1)
	Dissatisfied	13 (5.8)	17 (9.7)	11 (11)
	Neutral	30 (13.3)	37 (21.1)	17 (17)
	Satisfied	155 (68.9)	110 (62.9)	68 (68)
	Highly Satisfied	22 (9.8)	7 (4.0)	3 (3)
Convenient place to stay	Highly Dissatisfied	0 (0.0)	0 (0.0)	0 (0)
	Dissatisfied	3 (1.3)	13 (7.4)	5 (5)
	Neutral	50 (22.2)	74 (42.3)	38 (38)
	Satisfied	161 (71.6)	83 (47.4)	54 (54)
	Highly Satisfied	11 (4.9)	5 (2.9)	3 (3)
Canteen facilities	Highly Dissatisfied	0 (0.0)	3 (1.7)	1 (1)
	Dissatisfied	41 (18.2)	51 (29.1)	43 (43)
	Neutral	33 (14.7)	33 (18.9)	17 (17)
	Satisfied	146 (64.9)	84 (48.0)	38 (38)
	Highly Satisfied	5 (2.2)	4 (2.3)	1 (1)
Available water and toilet	Highly Dissatisfied	1 (0.4)	4 (2.3)	0 (0)
	Dissatisfied	9 (4.0)	3 (1.7)	2 (2)
	Neutral	6 (2.7)	9 (5.1)	2 (2)
	Satisfied	191 (84.9)	140 (80.0)	84 (84)
	Highly Satisfied	18 (8.0)	19 (10.9)	12 (12)
Security and Safety	Highly Dissatisfied	2 (0.9)	3 (1.7)	0 (0)
	Dissatisfied	1 (0.4)	2 (1.1)	0 (0)
	Neutral	2 (0.9)	0 (0.0)	1 (1)
	Satisfied	155 (68.9)	135 (77.1)	79 (79)
	Highly Satisfied	65 (28.9)	35 (20.0)	20 (20)
Cleanliness of hospital surroundings	Highly Dissatisfied	1 (0.4)	4 (2.3)	1 (1)
	Dissatisfied	5 (2.2)	8 (4.6)	3 (3)
	Neutral	7 (3.1)	4 (2.3)	3 (3)
	Satisfied	179 (79.6)	127 (72.6)	73 (73)
	Highly Satisfied	33 (14.7)	32 (18.3)	20 (20)
Cleanliness of toilet/patient ward	Highly Dissatisfied	2 (0.9)	3 (1.7)	1 (1)
	Dissatisfied	9 (4.0)	16 (9.1)	6 (6)
	Neutral	6 (2.7)	2 (1.1)	1 (1)
	Satisfied	181 (80.4)	125 (71.4)	75 (75)
	Highly Satisfied	27 (12.0)	29 (16.6)	17 (17)
Cleanliness of patient bed	Highly Dissatisfied	1 (0.4)	3 (1.7)	0 (0)
	Dissatisfied	7 (3.1)	11 (6.3)	3 (3)
	Neutral	7 (3.1)	3 (1.7)	2 (2)
	Satisfied	181 (80.4)	125 (71.4)	78 (78)
	Highly Satisfied	29 (12.9)	33 (18.9)	17 (17)

<b>Info. on facilities and charges</b>	<b>Highly Dissatisfied</b>	33 (14.7)	21 (12.0)	12 (12)
	<b>Dissatisfied</b>	29 (12.9)	36 (20.6)	6 (6)
	<b>Neutral</b>	7 (3.1)	17 (9.7)	9 (9)
	<b>Satisfied</b>	144 (64.0)	88 (50.3)	67 (67)
	<b>Highly Satisfied</b>	12 (5.3)	13 (7.4)	6 (6)
<b>Pharmacy and Spectacle services</b>	<b>Highly Dissatisfied</b>	0 (0.0)	4 (2.3)	1 (1)
	<b>Dissatisfied</b>	3 (1.3)	3 (1.7)	0 (0)
	<b>Neutral</b>	17 (7.6)	19 (10.9)	8 (8)
	<b>Satisfied</b>	186 (82.7)	135 (77.1)	83 (83)
	<b>Highly Satisfied</b>	19 (8.4)	14 (8.0)	8 (8)
<b>Good looking environment</b>	<b>Highly Dissatisfied</b>	1 (0.4)	4 (2.3)	0 (0)
	<b>Dissatisfied</b>	1 (0.4)	3 (1.7)	0 (0)
	<b>Neutral</b>	3 (1.3)	1 (0.6)	0 (0)
	<b>Satisfied</b>	132 (58.7)	128 (73.1)	75 (75)
	<b>Highly Satisfied</b>	88 (39.1)	39 (22.3)	25 (25)
<b>Well trained employees</b>	<b>Highly Dissatisfied</b>	2 (0.9)	3 (1.7)	0 (0)
	<b>Dissatisfied</b>	1 (0.4)	3 (1.7)	0 (0)
	<b>Neutral</b>	2 (0.9)	3 (1.7)	2 (2)
	<b>Satisfied</b>	130 (57.8)	125 (71.4)	73 (73)
	<b>Highly Satisfied</b>	90 (40.0)	41 (23.4)	25 (25)
<b>Information board</b>	<b>Highly Dissatisfied</b>	30 (13.3)	27 (15.4)	9 (9)
	<b>Dissatisfied</b>	53 (23.6)	60 (34.3)	14 (14)
	<b>Neutral</b>	78 (34.7)	37 (21.1)	27 (27)
	<b>Satisfied</b>	55 (24.4)	43 (24.6)	44 (44)
	<b>Highly Satisfied</b>	9 (4.0)	8 (4.6)	6 (6)
<b>Detailed charge list</b>	<b>Highly Dissatisfied</b>	29 (12.9)	27 (15.4)	11 (11)
	<b>Dissatisfied</b>	56 (24.9)	58 (33.1)	16 (16)
	<b>Neutral</b>	26 (11.6)	22 (12.6)	20 (20)
	<b>Satisfied</b>	101 (44.9)	61 (34.9)	46 (46)
	<b>Highly Satisfied</b>	13 (5.8)	7 (4.0)	7 (7)

## INTERPRETATION OF DATA

Level of patient satisfaction related to different parameter of quality eye care service in selected eye hospitals of Nepal. The research report provides insights into the level of patient satisfaction related to various parameters of quality eye care services in selected eye hospitals of Nepal. Here is a summary of patient satisfaction based on different quality parameters:

### Convenient place to stay:

P-value < 0.001

The association between satisfaction with the place to stay and the reason for selecting the hospital is highly statistically significant ( $p < 0.001$ ).

### Canteen facilities:

P-value = 0.002

The association between satisfaction with canteen facilities and the reason for selecting the hospital is statistically significant ( $p < 0.05$ ).

### Available water and toilet:

P-value = 0.004

The association between satisfaction with available water and toilet facilities and the reason for selecting the hospital is statistically significant ( $p < 0.05$ ).

### Security and Safety:

P-value = 0.034

The association between satisfaction with security and safety and the reason for selecting the hospital is statistically significant ( $p < 0.05$ ).

### Cleanliness of hospital surroundings:

P-value = 0.022

The association between satisfaction with the cleanliness of hospital surroundings and the reason for selecting the hospital is statistically significant ( $p < 0.05$ ).

**Cleanliness of toilet/patient ward:**

P-value = 0.044

The association between satisfaction with the cleanliness of toilets/patient wards and the reason for selecting the hospital is statistically significant ( $p < 0.05$ ).

**Cleanliness of patient bed:**

P-value = 0.003

The association between satisfaction with the cleanliness of patient beds and the reason for selecting the hospital is statistically significant ( $p < 0.05$ ).

**Info. on facilities and charges:**

P-value = 0.004

The association between satisfaction with information on facilities and charges and the reason for selecting the hospital is statistically significant ( $p < 0.05$ ).

**Pharmacy and Spectacle services:**

P-value < 0.001

The association between satisfaction with pharmacy and spectacle services and the reason for selecting the hospital is highly statistically significant ( $p < 0.001$ ).

**Good looking environment:**

P-value = 0.028

The association between satisfaction with the environment and the reason for selecting the hospital is statistically significant ( $p < 0.05$ ).

**Well-trained employees:**

P-value = 0.002

The association between satisfaction with well-trained employees and the reason for selecting the hospital is statistically significant ( $p < 0.05$ ).

**Information board:**

P-value < 0.001

The association between satisfaction with information boards and the reason for selecting the hospital is highly statistically significant ( $p < 0.001$ ).

**Detailed charge list:**

P-value < 0.001

The association between satisfaction with detailed charge lists and the reason for selecting the hospital is highly statistically significant ( $p < 0.001$ ).

In summary, many of the tangibility factors show statistically significant associations with the reasons for selecting the eye hospital, indicating the importance of these factors in patient satisfaction and hospital choice.

**FINDINGS**

The research supports the alternative hypothesis (H1) that significant differences exist in patient satisfaction across various quality parameters of eye care services in Nepalese hospitals. This suggests that factors such as infrastructure, staff behavior, clinical outcomes, and operational efficiency have differing impacts on overall patient satisfaction, highlighting areas where improvements could enhance service quality and patient experience.

**RECOMMENDATION**

To ensure the program's sustainability and patient satisfaction, the study emphasizes the following key areas for hospital management, clinicians, administrators, and volunteers:

1. **Cost Management:** Maintain affordable service fees through financial assistance, subsidies, or flexible payment plans.
2. **Service Timeliness:** Improve appointment scheduling, staff workflows, and overall time management to reduce waiting times.
3. **Post-Surgery Outcomes:** Enhance surgical quality by reviewing outcomes, gathering patient feedback, and investing in staff training.
4. **Amenities Enhancement:** Upgrade canteen and parking facilities to improve the patient experience.
5. **Communication and Counseling:** Strengthen communication and counseling before and after surgery to ensure patients understand their treatment.
6. **Affordable Healthcare Access:** Develop programs for affordable or free treatment, partnering with stakeholders to increase accessibility.
7. **Discount Programs:** Optimize and clearly communicate discount programs to meet patient expectations.

8. **Non-Discrimination Policies:** Enforce non-discrimination practices and train staff to ensure respectful treatment for all patients.
9. **Nearby Hospital Collaboration:** Partner with nearby hospitals to share best practices and improve regional care quality.
10. **Patient Feedback Mechanism:** Implement a system for collecting and analyzing feedback to address patient concerns.
11. **Continuous Staff Training:** Invest in staff training focused on interpersonal skills and patient-centered care.
12. **Accessibility Improvement:** Enhance hospital accessibility, including parking and transportation.
13. **Public Awareness Campaigns:** Educate the community about the hospital's services, focusing on quality, affordability, and patient satisfaction.

## CONCLUSION

This study evaluates patient satisfaction with eye care services in several prominent Nepalese hospitals, focusing on factors like hospital reputation, specialist availability, treatment costs, and proximity. Patients generally reported high satisfaction with the medical care, particularly appreciating the professionalism and communication skills of the staff. While wait times were a concern, hospitals were praised for maintaining reasonable access and cleanliness standards. The study recommends improving appointment scheduling, reducing wait times, and expanding specialized services. It concludes that by meeting patient expectations and investing in technology and best practices, Nepalese eye hospitals can enhance service quality, patient outcomes, and their overall reputation.

## LIMITATION OF THE STUDY

- 1) The sample size was limited to 500 respondents, specifically neighboring patients from India, with 100 patients selected from each of the five Eye Hospitals. As a result, the findings and feedback obtained from this study may not necessarily be applicable to other hospitals of a similar nature.
- 2) This study focused solely on the patients' perspective and did not take into account the perception of service providers. This limitation should be noted, as the providers' viewpoint may differ from that of the patients.
- 3) The study did not include patients from Nepal.

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## CONFLICT OF INTEREST

There is no any conflict of interest

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