Adequacy of Information Communicated Pre-General Surgery A cross-sectional study in BJ Medical College & Sassoon General Hospital and District Hospital Pune

2023 - 24

Population Research Centre
(Established by Ministry of Health and Family Welfare)
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(Deemed to be University u/s 3 of the UGC Act. 1956)
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Report submitted to

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Executive Summary

This report presents a comprehensive analysis of the socio-economic and demographic characteristics of patients undergoing surgical procedures, highlighting key aspects such as patient communication, informed consent, pre-surgery diagnostics, post-surgery care, and awareness of hospital infrastructure.

Socio-Economic Characteristics: The study highlights the socio-economic characteristics of participants, revealing a diverse demographic profile. A majority (54.7%) reside in rural areas, with men forming the predominant group (67.5%). Most participants are married (85.3%) and primarily affiliated with Hinduism (77.2%). Educational levels indicate a significant illiteracy rate (22.6%). Employment stands at 56.8%, although many are engaged in lower-income occupations. Income distribution shows a concentration in the ₹5,001–10,000 range (34.1%). Notably, 78.8% of participants belong to Below Poverty Line (BPL) households, and 99% lack health insurance.

The data underscores considerable economic variability and challenges, particularly for sole earners, with a heavy reliance on BPL status despite income disparities. Significant variations in residence, gender, age, marital status, religion, caste, education, employment, income, and access to essential resources further emphasize the diverse and vulnerable socio-economic status of the participants.

Meetings with Surgeon: The overall findings reveal that nearly half of the respondents (49.5%) met with the surgeon 3-5 times, closely followed by 42.7% who met with the surgeon fewer than 2 times. The variability in the frequency of pre-surgery meetings with the surgeon, emphasizes the importance of timely and sufficient consultations for surgical patients. Across all groups, clarification needs remained relatively low, with specific demographics, such as lower education and middle-aged participants, more likely to seek further clarification on surgery.

Quality of Meeting: Surgeons spent 5-10 minutes explaining surgery-related details as reported by 87.4% of patients, with 91.6% among them not requiring further clarification. The need for additional clarification varied slightly based on patients' age, gender, education, and household income. The findings reveal that 98.2% of patients were examined by surgeons during their first meeting, and 75.2% were informed about the need for surgery at that time.

Details of Information Communicated to the Participants: The study findings show awareness of the expected surgery date was high, with 77% of patients knowing their scheduled date. Most patients received information about their ailments (51.3%) and diagnosis (87.4%), while preventive measures (25.4%) and possible complications (22.5%) were less frequently discussed. Less than 3% of patients received information related to alternatives to surgery, adequacy of the physical infrastructure, human resources, emergency care, the referral system, and post-operative care. Regarding the adequacy of infrastructure and human resources, many patients came from socio-economically poor backgrounds and had limited options to explore, likely resulting in less information being provided. As for alternatives to surgery, most patients requiring surgery were referred or were respondents who were certain about undergoing surgery, hence the lower percentage. Concerning the availability of the referral system, it is understood that Sassoon Hospital, being a tertiary care hospital, handles most major surgeries directly.

Additionally, 17.8% of patients received information about the surgical procedure, 11.8% received information about the recovery period, and 10.7% were informed about dietary restrictions. The background characteristics of patients/relatives, such as age, gender, education, and household income, influenced the level of information received. These findings underscore the importance of clear and thorough communication between healthcare providers and patients, ensuring that patients have all necessary information and feel confident and well-informed about their surgical procedures. It is crucial for surgeons and other healthcare professionals to proactively address potential questions and concerns, fostering an environment where patients feel comfortable seeking clarification when needed.

Patient Communication Regarding Informed Consent: The findings revealed only 34.6% of participants confirming receipt of informed consent 52.5% did not, and 13% were unaware. Explanation rates varied by age, gender, education, and household income, highlighting the need for improved communication strategies and targeted education efforts to ensure proper comprehension and informed decision-making. Among 122 participants, 89.3% received a single IC form, while 68.0% received it within 0-1 days of admission. The majority (68.9%) were provided the form by staff nurses. However, only 36.1% received an explanation of the IC form, while **51.6% did not** and **12.3% were unaware**. highlighting the need for timely delivery, clear communication, and proper explanation to ensure informed decision-making in healthcare settings.

Understanding level of patient Regarding Informed Consent: Among 122 participants, **10.8%** reported reading every point in the informed consent (IC) form, while **69.9%** did not, **4.8%** partially read it, and **14.5%** were unsure. Among those who read the IC form, **72.2%** fully understood it, **16.6%** partially understood, and **11.2%** did not understand or were unsure. These findings emphasize the need for clear communication and simplified explanations to enhance understanding of the IC form.

Notably participants with higher education levels did not consistently read the IC form. For example, none of the graduates reported reading each point, with **50.0%** not reading and **50.0%** being unaware. Many participants viewed signing the IC form as a mere formality, fearing delays in surgery if not signed, especially those from poor socioeconomic backgrounds. These findings emphasize the need for clear communication and education about the IC form to ensure informed decision-making across diverse educational and socioeconomic backgrounds. These results emphasize the importance of providing clear explanations about IC to ensure proper understanding and compliance with the submission process. The data also suggests that many participants may benefit from improved communication and clarification regarding IC procedures.

Pre-Surgery Diagnostics and Patient Preparedness: Pre-surgery diagnostic tests play a crucial role in surgical preparedness and patient safety. Pre-surgery tests were recommended to 96% of patients, mostly within 2-3 days of surgery. Yet, 86 patients did not receive test suggestions after a week of admission. The majority of participants received information regarding their ailment (51.3%) and diagnosis (87.4%) for tests such as X-ray, ECG, and CBC, with most tests conducted within the same hospital. Medication-related information was provided to 41.1% of participants. Preventive measures and possible complications were less frequently discussed, with 25.4% and 22.5% of participants receiving information on these topics, respectively. Notably, not all patients require preventive measures or develop possible complications. These findings illustrate that a significant portion of participants received recommendations for multiple diagnostic tests to ensure comprehensive pre-surgery evaluation.

Anesthetist Visit and Dietary Instructions: The findings suggest that the likelihood of receiving an anesthetist visit and dietary instructions prior to surgery increases as the scheduled surgery date approaches. However, a considerable proportion of participants remain uninformed about necessary dietary restrictions, indicating potential gaps in pre-surgical communication. Findings also suggest that awareness of anesthetist visits and dietary restriction instructions before surgery is influenced by age, gender, education, and household income. Targeted communication and education efforts could help increase awareness, especially among younger, older, less educated, and lower-income participants.

Post-Surgery Care: The study highlighted significant gaps in communication regarding post-surgery care, with 86% of participants not receiving information about post-operative care. Only a small percentage of participants were informed about potential future surgeries and ICU transfers, underscoring the need for comprehensive education and improved communication to ensure patients and their families are well-prepared for the post-operative period.

Awareness of Hospital Infrastructure and Equipment: Awareness of hospital infrastructure and equipment varied significantly across different demographic factors. Invariably 97.7% acknowledged the availability of an operating room, only 38% were aware of the required equipment. Younger participants and those with higher education levels demonstrated better awareness, while a significant proportion of participants, especially those with lower education

levels and household incomes, were unaware of the in-house infrastructure and required equipment. This indicates the need for targeted awareness programs to enhance knowledge and accessibility of hospital resources.

Expected outcome as Reported by Participants:

Most participants (71.5%) were unaware of the surgery duration, but 88% knew the benefits, with 81.5% expecting health improvement and 93.8% less pain after surgery. Only 48.5% of patients and 73.2% of relatives were aware of surgical risks, primarily pain (97.7%), infection (54.1%), and immobility (36%). Awareness varied by age, gender, education, and income, with younger, older, and less educated participants showing lower awareness. According to discussions with the service provider, the risks associated with surgeries are primarily communicated to relatives, rather than patients, depending on their understanding, and emotional and mental status.

Educational levels exhibits a less significant role, with higher education not always correlating with increased awareness. For instance, all post-graduate respondents (7) are aware of the benefits of surgery, while only 57.1% of them are aware of the risks. Interestingly, 88.9% of illiterates are aware of the benefits and 48.2% are aware of the risks, similar to the awareness levels of graduates. This implies that regardless of educational level, awareness of the risks and benefits of surgery remains relatively consistent.

In summary, the report underscores the importance of effective communication, comprehensive education, and patient involvement in all aspects of surgical care. By addressing the challenges and implementing effective strategies, healthcare providers can enhance patient confidence, improve surgical outcomes, and ensure that patients make well-informed decisions about their healthcare journey.

Insights from Service providers:

Overall Human Resource is a constrain. The findings emphasize critical areas to enhance surgical practices and outcomes, focusing on resource availability, standardized protocols, and structured training. Ensuring consistent access to drugs, equipment, and advanced laparoscopic tools is vital. Standardization of documentation, team roles, and emergency preparedness protocols is highlighted as a necessity. Training programs are suggested to improve communication, inter-departmental coordination, and community engagement through CPR and disaster management workshops. Addressing remuneration concerns with complexity-based pay scales and conducting public awareness campaigns are also key priorities. Additionally, equipping ambulances with advanced medical tools and improving surgical infrastructure are recommended. These measures aim to foster efficiency, improve patient care, and enhance satisfaction among medical professionals, driving holistic improvements in healthcare systems.

Chapter 1: Introduction

This chapter aims to introduce the range of contexts in which the concept of surgery is invoked, offer an account of the concept of informed consent in surgery, discuss several features and implications of this account, and apply it to various issues.

1.1 Background

Surgery has emerged as a crucial component of worldwide healthcare, with approximately 234 million procedures conducted annually. According to the World Bank's 2002 findings, around 164 million disability-adjusted life years, accounting for 11% of the total disease burden, were linked to conditions that could be treated through surgery (Bhasin et al., 2011). The main difference between surgical and non-surgical medical practice is the operation. Surgical therapy involves entering the patient's body. Healthcare providers recommend surgery for various reasons, from relieving or preventing pain to diagnosing a problem, improving body function, and, in some cases, when there are no other alternatives. Surgeries have risks and benefits. The need for adequate and qualitative communication prior to the surgery is an important aspect of quality of care. From the patients point of view it is essential to understand the risk and benefits associated with surgery before deciding whether it is appropriate and necessary. Whereas from the surgeons' point of view it is essential to communicate efficiently all the relevant details of the surgery to the patient. It becomes challenging to communicate to the diverse patients from different socio economic backgrounds. Ideally, the healthcare provider will explain the need for surgery to a patient, and if required, further explanation is given to those who find it difficult in understanding the medical terms. They should not only clearly explain the surgical procedure, such as the steps involved but also explain the benefits and risks of these choices so that a patient can make an informed decision about whether or not surgery is necessary. In some cases, healthcare provider will monitor the patient's condition over time to observe changes and disease progression and accordingly decide on surgery. Whereas, in some cases, the patient may require a furthermore number of surgeries. Further, post-surgery information on the time it will take to start the normal routine activities and possible side effects that could follow the procedure. There are different methods for doing the operation and which one might be a better option for the patient as per the patients prevailing health conditions. Overall all the information should be communicated to the patients well in advance in a simple language so that patient can make all necessary arrangement. From the patient's point of view, it is essential to understand why the operation is being recommended and how this may improve their medical condition. Further, Are there any alternatives to this procedure? Sometimes, medicine or nonsurgical treatments may be as helpful as surgery. Whether the surgeries are short-term or long-term benefits? Overall adequate knowledge and information will allow patients to make informed decisions and have realistic expectations about the surgery. After weighing the benefits and risks of the surgery, the patient can decide whether the condition will worsen or if there is a possibility that it may resolve itself. The dangers of surgery minimize if one chooses a surgeon and a team who is trained and experienced in the procedure, well-

equipped infrastructures, etc. It is also necessary to know whether all the facilities pre and post surgeries are available and, in case of emergency or complications, the health care facilities have all the necessary arrangements. Finally, the state of health condition at the time of discharge, the precautions, and the approximate time it takes for a full recovery to resume work and everyday activities.

In general, surgical procedures are preceded by guidelines such as Preoperative testing (e.g., lab testing, radiography, electrocardiography), Informed consent (IC), and pre-consultation, which are essential steps in helping patients aware of the consequences of their treatment decisions. A routine lab test that helps find possible problems that might complicate surgery is done before surgery. However, in reality, pre-consultation, pretesting, and seeking informed consent is often a formal act in which a patient's signature is obtained, with physicians believing that a binding obligation has been fulfilled regardless of whether the patient has been provided with adequate information about the medical intervention that is about to take place (Makoul,2003). As per protocol, these investigations must be followed and can guide pre- and postoperative management.

1.2 Informed Consent in Surgery

Consent, in simple terms, means granting permission or agreeing. However, the simplicity of this meaning belies the complexities involved, and it cannot be used in isolation. The settings, level of understanding, and outcomes are more complex and vary accordingly. A uniform code for consent will be merely symbolic in this situation; therefore, it is crucial to formulate and define it appropriately. Consent in healthcare is both vital and morally obligatory, primarily because it concerns the life of the person giving consent. Challenges include the mental health of the consenting person, their dilemma, and the unclear process an individual may have to undergo. Article 21 of the Indian Constitution guarantees the fundamental right to protection of life and personal liberty. It ensures certain safeguards against arbitrary deprivation of life and liberty. Consent is a legal requirement of medical practice. It is commonly believed that nobody knows your mind and body better than you do. Hence, any decision such as surgery should be clearly communicated well in advance in the best way suitable to that person. Following the abolition of slavery, the idea of consent gained traction, directly challenging the previous system’s denial of individual autonomy. Parallel to the evolution of modern medicine, the idea of informed consent in healthcare is a comparatively new concept. Robert M. Veatch highlighted in his 2003 work that consent, a relatively recent concept, is absent from traditional medical ethics. He observes that, although the Hippocratic Oath is silent on the issue of consent; it mandates the strictest confidentiality regarding disclosed patient information. To navigate this effectively, it’s essential to differentiate between two primary forms of consent: originating and permissive. When granted, consent acts as a waiver, ensuring that an act does not result in wrongdoing. When a surgeon operates on a competent patient with their consent, their actions can be considered ethically and legally acceptable. In the context of background laws, rights, values, or reasons, consent can function as a waiver, giving legitimacy to actions that would otherwise be deemed wrongful.

Nevertheless, consent can also have its origins within: by introducing, altering, and endorsing components of this very context.

Informed consent (IC) is a process by which a physician interacts with a patient, enabling the latter to make a knowledgeable decision regarding the treatment of their disease. IC consists not only of the form that patients must read and sign but also involves oral communication that helps physicians establish a stronger relationship with the patients, which is considered by some to be a prerequisite for well-reasoned decision-making (Kumar, A., et.al., 2015). Informed consent gives patient assurance and faith by providing information on diagnostic and therapeutic methods, risks, cost, complications, and alternative treatment options. However, it is often seen that consent form has become a procedural formality without understanding its technical deliberation and legal implications. There are instances where either consent was not taken or when an invalid consent was obtained have been a subject matter of judicial scrutiny in several medical malpractice cases (Falagas, et al., 2009). The challenges and limitations of IC are widely discussed in different healthcare settings for diverse patient typologies (Kumar, A., et.al., 2015). The four principles of biomedical ethics (autonomy, beneficence, non-maleficence, and justice) are generally considered in these discussions (Beauchamp, 2009). Among them, the more pertinent to the ethics of IC is the principle of autonomy for which the person has the right, at all ages and stages of life, to have for himself, to the extent permitted by ethical evidence and by law, choosing whether to accept or refuse or postpone the surgery and that it is possible only by providing adequate information. Furthermore, some patients will not be informed, will not participate in treatment decisions, and will experience anxiety or other adverse effects (this is known as the "nocebo effect"), especially if they become aware of severe side effects due to surgery (Ashraf, 2014). Hence, the information communicated, the way it is communicated and understood by patients/relatives plays a vital role in the overall surgery procedure and a crucial element in the quality of care.

From the patient's point of view, it is essential to understand the risks and benefits associated with surgery before deciding whether it is appropriate and necessary. Whereas from the surgeon's point of view, it is essential to communicate efficiently all the relevant details of the surgery to the patient. It becomes challenging to communicate to diverse patients from different socio-economic backgrounds. Ideally, the healthcare provider will explain the need for surgery to a patient, and if required, further explanation is given to those who find it difficult in understanding the medical terms. They should not only clearly explain the surgical procedure, such as the steps involved but also explain the benefits and risks of these choices so that a patient can make an informed decision about whether or not surgery is necessary. In some cases, the healthcare provider will monitor the patient's condition over time to observe changes and disease progression and accordingly decide on surgery. In some cases, the patient may require a further number of surgeries. Further, post-surgery information on the time it will take to start the normal routine activities and possible side effects that could follow the procedure should be communicated. There are different methods for doing the operation and which one might be a better option for the patient as per the patient's

prevailing health conditions. Overall all the information should be communicated to the patients well in advance in simple language so that the patient can make all necessary arrangements.

The concept of informed consent involves giving individuals who are able to understand when explained the required procedure and its importance and outcome to ensure they have a clear understanding. Thus, consent forms and admission forms are crucial documents that establish the basis for patient care and procedural protocols. By signing the consent forms, the patient acknowledges the risks and potential outcomes of the surgical procedure they are about to undergo. On the other hand, admission forms collect vital medical history, ensuring thorough pre-operative evaluations and making hospital admissions smoother. Although "informed consent" is frequently used, its complexities demand careful analysis because the relationship between the provision of information and the act of consent itself is intricate and multifaceted, requiring deeper consideration. Information plays a crucial role in consent; it clarifies our consent and underpins informed decision-making. Generally, legally and ethically valid permissive consent necessitates meeting both criteria (O'Shea, 2012). One can only consent if they fully grasp what they're agreeing to. Consent, according to O'Shea (2012), is purposeful and relates to a particular act or its explanation. Therefore, sufficient information is needed for someone to consent to surgery. To ensure effective information transfer, communication must be complete, concise, clear, and delivered appropriately for optimal results. The absence of vital information, including risks and potential consequences, can undermine the validity of consent. Since the mid-20th century, modern thinking on permissive consent has prioritized stricter informational needs, often reflected in the term "informed" consent.

According to the National Library of Medicine, India sees approximately 5.2 million medical negligence cases each year wherein surgical procedures account for around 80% of deaths resulting from medical errors. Reports indicate that professionals' abilities and knowledge are generally not a concern. The real issue lies in the absence of effective communication and coordination among team members. Approximately 70% of deaths are caused by this type of mismanagement during emergencies (Delhi Medical Negligence, 2023). The level of involvement in the healing journey shared between surgeons and patients may vary from that seen in other medical fields, potentially influencing how informed consent is handled by surgeons. The surgeon may assume that the referring physician has completed the essential mental and emotional preparations and has successfully acquired the patient's consent for the surgical treatment of the clinical issue. The convergence of these factors might make the surgeon underestimate how willing and capable the patient is to take part in the informed consent process that comes before the administration of anesthesia. This can lead to the surgeon missing out on building a meaningful therapeutic connection with the patient (Jones et al., 2005).

1.3 Problem Statement

The core problem is obtaining consent for procedures from patients with varying physical and mental states, or from relatives facing emotional and mental distress. Consequently, it's vital to prioritize individualized details and circumstances over a generic consent form. Taking into account practical limitations of resources and infrastructure, is this achievable? It has been suggested by researchers that the principle of contract law should prohibit the exploitation of an individual's vulnerability (Dawson, 1947; Keren, 2012)

Do Patients who undergo surgery perceive the information communicated prior to the surgery was adequate? Does the information shared made them well prepared for the surgery and ultimately recovery? The challenges of service providers in communication the information to a diverse group of patients.

1.4 Need for the Study

Besides communication, one should also take into account legal considerations, emotional impacts, personal characteristics, levels of understanding, time availability, and the infrastructure in place. Influencing factors like family and peer pressure, as well as recent events or setbacks which led to mental turmoil can act as catalysts for these primary factors. To prevent informed consent from becoming a routine procedure, its timing should be debated and understood, whether on a case-by-case basis or depending on urgency. Making decisions when things are tough, options are few, emotions are high, and outcomes are uncertain will be much different without any of these troubles. Therefore, clear and systematic communication is vital, along with emotional support, legal support and knowledge, and risks associated with consequences. However, given the limited time and human resources available, systematic and holistic planning is necessary for this process.

In order for consent to be genuine, it would need to encompass all decision-relevant information. Thus, any lack of knowledge about the nature or consequences of the actions being consented to would undermine the validity of such consent. It is rare for us to have all the necessary information for decision-making, and if we were to demand full information, it would dismiss or downplay people's reasonably well-informed choices. It has been argued by certain philosophers that it is not possible to define or obtain full information (O'Shea, 1999).

The provider must know this information beforehand to ensure complete client understanding:

1. Guidelines and set of information deemed to be considered as full information.
2. Familiarity with the person seeking consent is necessary.
3. The individual's understanding capacity and their physical and mental condition play a role in giving consent.
4. The most crucial aspect is the exercise's suitability and ease of implementation in an environment with limited infrastructure.

5. The options when the perfect conditions are not available.

Adequate patient information is an important aspect of quality of care. With surgery, it is vitally important for patients to understand the risks and benefits of the procedure and decide accordingly. Interventions are needed to identify vulnerable groups and address patient-centered surgical decision-making in the preoperative setting. Focused interventions to address the needs of at-risk patients in terms of communication have the potential to improve the surgical decision-making process and reduce disparities. The purpose of this study is to understand the perspective of patients on quality and adequacy of the information communicated prior to the surgery.

1.5 Objectives

The study aims to explore the importance of quality of communication given to the patient, preferences, patient understanding and discussion of risks/benefits/time factor based on the communication and informed consent before the actual surgery.

The specific objectives are as follows:

1. To assess the adequacy of the pre and post-operative information communicated by the surgeons/physicians to the patients/relatives.
2. To understand surgeon/physicians perspectives of the adequacy, appropriateness and challenges in communication to the patients.
3. To find the gaps (if any) and suggestion to improve the quality of communication to ensure the patients are completely informed before undergoing the procedure and its consequences.

Chapter 2: Data and Methodology

The purpose of the study was to explore the importance of quality of communication given to the patient, preferences, patient understanding and discussion of risks/benefits/time factor based on the communication and informed consent before the actual surgery. In order to explore the things, the study proposal was reviewed and approved by the PRC Scientific and Advisory Committee (PSAC) constituted by the Ministry of Health and Family Welfare, Government of India. Then necessary approval was obtained from the Directorate of Health Services, Maharashtra and Directorate of Medical Education & Research, Maharashtra.

2.1 The Study Settings

A cross sectional analytical study was conducted at B.J. Government Medical College and Sassoon General Hospital and District Hospital Pune, after taking ethical clearance from Institutional Review Board of IIPS, Mumbai and BJ Government Medical College Ethical Board. Pretesting was conducted using the semi-structured research tool and in-depth interview tool for service providers at the Department of Surgery in both the hospitals to understand the response rate, convenient timing, understanding the process, etc. Accordingly, the tools were modified as needed to establish face and content validity.

2.2 Sample Size Determination

The sample size was estimated, by assuming a 50% of expected prevalence of the understanding the IC form, with precision of 5% and level of significance of 95%.

The minimum sample size of 384 was determined using the formula:

Sample Size N= $\frac{z^2pq}{e^2}$ = 384

P= 50 percent for parameter of unknown prevalence

z=confidence interval (1.96 confidence interval of 95%)

e=margin of error (5%=0.05)

Following necessary approvals, the study was conducted exclusively with patients who had the ability to communicate and move. In-depth Interviews was conducted with the Surgeons to understand the limitation and challenges in communication with patients. The number of surgeons to be interviewed will depend upon their availability.

2.3 Sample Allocation

The BJG Medical College and Sassoon General Hospital is the tertiary care facility and the larger proportion of the general surgeries are being conducted in the facility. Therefore, the larger sample was collected from the BJG Medical College and Sassoon General Hospital.

2.4 Study Population

2.4.1 Inclusion Criteria

Convenient sampling was used for data collection from patients admitted at least a day prior to the surgery and who undergone a general surgery. A written consent was taken for the study by the researchers before the study. Patients were interviewed via a semi structured bilingual questionnaire. For children under 18 years of age Parents/ guardians consent was taken. Service providers were also interviewed to understand the limitation and challenges in communication with patients.

2.4.2 Exclusion Criteria

Patients who require surgery in emergency cases

2.5 Research Tool

The questionnaire addressed to the patient was cover the background information, comprehensive information related to IC form, adequacy of the information, and information on the surgery outcome in broad areas as given below:

1. Background characteristics of the study participants
2. Adequacy and quality of communication by Physicians/surgeon
3. Information on the surgery outcome and associated risk factors
4. Availability of in-house infrastructure/referral facility in case of post-surgery complications
5. Information related to referral system if required and
6. Information about post-surgery for example, discharge and recovery period

2.6 Data Collection

The data collection was initiated on March 18, 2024 from the District Hospital Aundh and June 14, 2024 from B.J. Government Medical College and Sassoon General Hospital after obtaining the ethical clearance from BJGMC ethical board and permission letter from the Dean of BJGMC.

2.7 Analysis

Descriptive statistics was applied to compute the understanding of IC. Bivariate analysis was carried out performed to determine socio-demographics and understanding IC. Qualitative data collected was analyzed using thematic analysis.

Chapter 3: Socio-Demographic Characteristics of Respondents

Research on the background characteristics of patients undergoing surgery has highlighted several key factors that influence surgical outcomes such as feedback on patients' experiences with healthcare services. Communication with healthcare providers, care setting environment, overall satisfaction, pre-admission information, coordination of care, waiting time, surgical experience, post-surgery support, and the impact on life can help healthcare providers enhance the overall patient experience by addressing it. Informed consent is a critical aspect of surgical care, ensuring that patients are fully aware of the risks, benefits, and alternatives of the proposed procedure. The informed consent process involves a thorough discussion between the patient and the healthcare provider, covering the patient's diagnosis, planned surgical procedure, potential risks, benefits, and alternatives. It is essential that the patient understands this information. The consent process is documented on a surgical procedure consent form, which includes signatures and thumb impression from the patient or guardians, the healthcare provider, and a witness.

The importance of understanding patients' background characteristics, and patient-reported experiences, is mainly to optimize surgical outcomes and enhance the quality of care. Understanding the socio-economic background of participants enables researchers to contextualize findings, identify patterns, and draw meaningful conclusions. By analyzing socio-economic characteristics, researchers can better understand the needs and challenges faced by different demographic groups, informing policy decisions and interventions. Additionally, this understanding aids in generalizing findings to broader populations, ensuring that recommendations and solutions are inclusive and equitable. Additionally, the informed consent process is crucial in ensuring that patients make well-informed decisions about their surgical care, ultimately contributing to better patient outcomes and satisfaction. This chapter delves into the socio-economic characteristics of the study participants, providing a comprehensive overview of their diverse demographic backgrounds.

Table III: General Observation of the Hospitals during the field visit

Type of Ward	**Frequency**	**Percent**
Shared	382	100
Observation on general cleanliness		
Clean	375	98.2
Unclean	7	1.8
Total	**382**	**100**

Table III.a: Patient Status Before Interview and Consent

Present Status of Patient	Interview Conducted		Percent
	Patient	Relatives	
Bedridden (unable to move but able to communicate)	-	13	3.4
Bedridden (unable to move and communicate)	-	42	11.0
Can move and communicate	223	98	84.0
Can move but cannot communicate	-	6	1.6
Total	**223**	**159**	**100**

Note: 1**.** In case of the patient, who was below 18 years**, t**he informed consent for the interview were taken from their parents or relative who accompanied with them. 2**.** The interview is conducted only from patients who can move and communicate, for rest the relatives/friends who accompanied with the patients were interviewed.

The field visit, as outlined in Table III, revealed that all 382 patients surveyed were admitted in shared hospital wards. In terms of cleanliness, 98.2% (375 out of 382) of the wards were found to be clean, while 1.8% (7 wards) were identified as unclean, highlighting the need for focused improvements in certain areas. According to Table III.a, the majority of interviews (84%) were conducted with patients who could both move and communicate, comprising 223 patient interviews and 98 interviews with their relatives, as per patient requests. Among those unable to move, 3.4% (13 cases) involved interviews with relatives of bedridden patients who could communicate, while 11% (42 cases) pertained to relatives of patients who were neither mobile nor communicative. Additionally, 1.6% (6 cases) involved relatives of patients who could move but were unable to communicate. For patients under 18 years old, consent for interviews was obtained from their parents or accompanying relatives. These findings underscore a systematic approach to conducting interviews and adhering to ethical standards, ensuring both accurate representation and informed consent.

Table 3.1: Percent Distribution of the Socio-Demographic Characteristics of the Participants.

Background Characteristics	Frequency	Percentage
Place of Residence		
Urban	173	45.3
Rural	209	54.7
Age		
Less than 18	18	4.7
18 – 25	24	6.3
26 – 35	57	14.9
36 – 45	62	16.2
46 – 55	72	18.8
56 – 65	76	19.9
66 – 75	59	15.4
75+	14	3.7
Gender		
Male	258	67.5
Female	124	32.5
Marital Status		
Unmarried	52	13.6
Married	326	85.3
Widowed	4	1
Religion		
Hindu	295	77.2
Muslim	43	11.3
Christian	2	0.5
Buddhist	39	10.2
Others	3	0.8
Caste		
Scheduled Caste	84	22
Scheduled Tribe	13	3.4
Other Backward Caste	149	39
Others	102	35.6
Education*		
Illiterate	86	22.6
<literate but 4th Std	28	7.3
5th-7th Std	69	18.1
8th -10th std	112	29.4
10th-12th std	50	13.1
Graduate	27	7.1
Post-Graduate	7	1.8

Others	2	0.5
Working Status		
Yes	**217**	56.8
No	165	43.2
Occupation		
Government service (Regular)	3	1.8
Government service (Contractual)	3	1.4
Private service	36	23.5
Business related	7	3.2
Self-employed	24	15.7
Household work	10	7.4
Farmer	26	18
Labour	26	12.4
Others	8	16.6
Individual Income (Monthly)		
Less than 1250	2	0.9
1250 - 5000	50	23
5001 - 10000	74	34.1
10001 - 15000	50	23
15000+	41	18.9
Aware about the HH Income		
Yes	**324**	84.8
No	21	5.5
Don't Know	37	9.7
Household Income (Monthly)		
Less than 1250	2	0.6
1250 - 5000	41	12.7
5001 - 10000	93	28.7
10001 - 15000	95	29.3
15000+	93	28.7
Availability of BPL		
Yes	301	78.8
No	80	20.9
Don't Know	1	0.3
Availability of Health Insurance		
Yes[#]	3	0.8
No	378	99
Don't Know	1	0.3
Total	**382**	**100**

Note: *Education level considered only for age more than 7 years #Ayushman Bharat PM-JAY

Based on the data presented in Table 3.1, the socio-demographic characteristics of the participants that the majority of participants reside in rural areas (54.7%), compared to 45.3% in urban areas. The age distribution shows a higher representation in the age groups of 46-55 years (18.8%) and 56-65 years (19.9%), with fewer participants under the age of 18 (4.7%) and over 75 (3.7%).

In terms of gender, 67.5% of the participants are male, while 32.5% are female. Most participants are married (85.3%), with a smaller proportion being unmarried (13.6%) and an even smaller number widowed (1%).

Religious affiliation predominantly comprises Hindus (77.2%), followed by Muslims (11.3%), Buddhists (10.2%), Christians (0.5%), and others (0.8%). The caste distribution includes Scheduled Castes (22%), Scheduled Tribes (3.4%), Other Backward Castes (39%), and others (35.6%).

Educationally, a significant portion of participants are illiterate (22.6%), followed by those with an 8th-10th standard education (29.4%) and those with a 5th-7th standard education (18.1%). The proportion of graduates is relatively low (7.1%), with even fewer holding postgraduate degrees (1.8%).

Regarding employment, 56.8% of participants are working, while 43.2% are not. Occupations vary, with the highest percentages in private service (23.5%), farming (18%), labor (12.4%), and self-employment (15.7%). Government service, both regular and contractual, accounts for a small proportion (1.8% and 1.4%, respectively).

The individual income of most participants falls within the 5,001-10,000 range (34.1%), with a notable portion earning 10,001-15,000 (23%) and 1,250-5,000 (23%). Only 18.9% earn more than 15,000 monthly. A majority (84.8%) are aware of their household income, with a smaller percentage not aware (5.5%) or unsure (9.7%). Household income distribution shows that most households earn between 5,001-15,000 monthly (58%), with fewer households earning less than 1,250 (0.6%) or more than 15,000 (28.7%).

Most participants (78.8%) have Below Poverty Line (BPL) status, while a majority (99%) do not have health insurance. The socio-demographic profile of the participants, highlights significant variations in residence, age, gender, marital status, religion, caste, education, employment, income, and access to resources.

Figure 3.1: Substance Use Among Patients

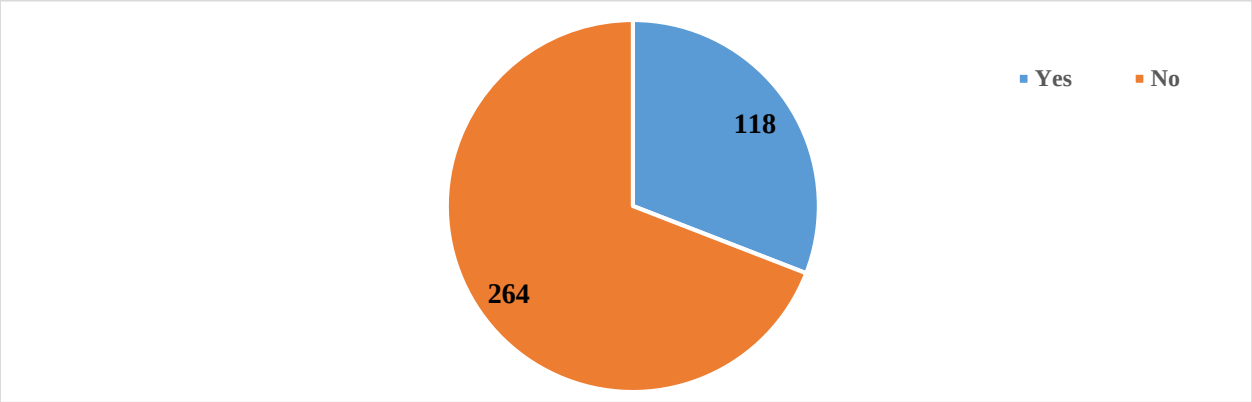


Figure 3.1 illustrates that most participants abstain from substance use.

Table 3.2: Household Distribution of Patients by Income and BPL Card Availability.

Income	Reported Household Income	Have BPL Card*
Less than 1250#	2	1
1250 - 5000	41	39
5001 - 10000	93	83
10001 - 15000	95	80
15000+	93	67
Income not mentioned	58	31
Total	**382**	**301**

Note: ***Belong to BPL is self-reported by study participants. #As per the criteria defined by the Suresh Tendulkar Committee in 2011.

The findings from Table 3.2 provide insights into the distribution of households by income and the availability of Below Poverty Line (BPL) cards among the study participants. The households' reported incomes are spread across various ranges, with the highest concentration in the 5,001 - 10,000 and 10,001 - 15,000 income brackets, each accounting for 93 and 95 households respectively. Only 2 households reported an income of less than 1,250. Out of the total 382 households, 301 households possess BPL cards, indicating a high prevalence of self-reported BPL status among the participants. The majority of households within the income brackets of 5,001 - 10,000 and 10,001 - 15,000 also have BPL cards, with 83 and 80 households respectively. A notable number of households (58) did not mention their income, among which 31 households have BPL cards. Overall, the data highlights a significant proportion of households with BPL cards, especially within the mid-income brackets, suggesting a reliance on BPL status despite varying income levels. Additionally, the presence of households with undisclosed incomes but possessing BPL cards indicates the complexity of income reporting among the study participants.

Table 3.3: Occupation-wise Income Distribution and BPL Status of Participants.

Occupation	Individual Income		Household Income		BPL	
	Lower	Upper	Lower	Upper	Yes	No/Don't Know
Government service (Regular)	20000	60000	20000	60000	2	2
Government service (Contractual)	8300	15000	8300	15000	3	1
Private service	1000	50000	1000	50000	31	20
Business related	7000	20000	7000	25000	6	1
Self-employed	2000	50000	2500	60000	27	7
Household work	3000	15000	3000	20000	14	2
Farmer	1000	50000	3000	50000	34	5
Labour	3000	18000	4000	25000	25	2
Others	3000	26000	4000	45000	35	1
Not Working/ HH Income not mentioned	-	-	1000	35000	125	40
Total	**1000**	**60000**	**1000**	**60000**	**301**	**81**

Findings from Table 3.3 on the occupation-wise distribution of individual and household incomes, as well as the status of Below Poverty Line (BPL) and Non-BPL reveals a wide range of individual and household incomes across different occupations. For regular government service employees, individual and household incomes range from ₹20,000 to ₹60,000, with an equal number of BPL and Non-BPL households (2 each). Contractual government service employees have a lower income range (₹8,300 to ₹15,000), with more BPL households (3) than Non-BPL (1).

Private service employees show a broad income range (₹1,000 to ₹50,000), with a higher number of BPL households (31) compared to Non-BPL (20). Those involved in business-related activities have incomes ranging from ₹7,000 to ₹25,000, with most being BPL (6) and only 1 Non-BPL. Self-employed individuals and farmers have similar income ranges, extending up to ₹60,000 and ₹50,000, respectively. Both occupations have a higher number of BPL households (27 for self-employed and 34 for farmers) compared to Non-BPL (7 for self-employed and 5 for farmers).

Labourers have incomes ranging from ₹3,000 to ₹25,000, with a significant number of BPL households (25) and very few Non-BPL (2). Those engaged in household work have incomes between ₹3,000 and ₹20,000, with a higher number of BPL households (14) compared to Non-BPL (2). The "Others" category shows incomes ranging from ₹3,000 to ₹45,000, with the majority being BPL (35) and only 1 Non-BPL. The largest group in terms of BPL status is those not working or with unmentioned household income, with a substantial number of BPL households (125) compared to Non-BPL (40).

Overall, the data indicates a significant presence of BPL households across various income levels and occupations, highlighting economic disparities and the prevalence of poverty among different occupational groups

Table 3.4: Distribution of Sole Earning Participants in Households

Individual Income	Frequency	Percentage
Less than 1250	1	0.85
1250 - 5000	23	19.49
5001 - 10000	34	28.81
10001 - 15000	30	25.42
15000+	30	25.42
Total	**118**	**100.00**

Note: Considered only participants' income equals to household income.

The findings from Table 3.4 reveal the income distribution of participants who are the sole earners in their households. The data indicates that the majority of these sole earners fall within the income ranges of 5,001 - 10,000 and 10,001 - 15,000, each accounting for 28.81% and 25.42% of the participants, respectively. Similarly, 25.42% of the participants earn over 15,000. A smaller proportion of participants, 19.49%, report earnings within the 1,250 - 5,000 range. Only a negligible percentage, 0.85%, earn less than 1,250. The total number of participants who are the sole income providers in their households is 118. These findings underscore the economic variability among sole earners, with a significant portion earning moderate to higher incomes and a smaller fraction earning lower incomes.

Summary

The socio-demographic analysis highlights a diverse population with significant variations in residence, age, gender, marital status, religion, caste, education, employment, income, and access to resources. The majority reside in rural areas (54.7%) and are predominantly male (67.5%). Most participants are married (85.3%) and primarily affiliated with Hinduism (77.2%). A significant portion is illiterate (22.6%), and while 56.8% are employed, many hold lower-income jobs. The income distribution shows a concentration in the 5,001-10,000 range (34.1%), with 78.8% having Below Poverty Line (BPL) status and 99% lacking health insurance. The data underscores economic variability and challenges, particularly among sole earners, with a notable reliance on BPL status despite varying income levels.

Chapter 4: Understanding Hospital Admission and Surgical Processes

Background

Patient communication and pre-surgery diagnostics underscores the critical role of effective communication in enhancing patient outcomes and satisfaction. Azarpira et al. (2023) highlight the shift from a paternalistic model to a patient-centered approach in the patient-surgeon relationship. This transition emphasizes the importance of clear, transparent, and factual information, along with empathy, honesty, and patient participation. The study suggests that cultivating trust through transparent relationships can enhance outcomes, mitigate legal issues, and speed recovery.

In the context of pre-hospital care, Almutairi et al. (2024) emphasize the significance of structured communication protocols, such as the ISBAR framework, to enhance clarity and efficiency during patient handovers. It identifies key challenges, including time constraints and hierarchical communication structures, which can impede information transfer. The implementation of advanced communication technologies and targeted training programs for EMS personnel is recommended to improve communication skills and ensure optimal patient outcomes. The necessity of effective communication and comprehensive diagnostic practices in pre-surgery settings can be improved by addressing communication challenges and fostering a collaborative culture among healthcare providers, the quality of care can be significantly improved, ultimately enhancing patient satisfaction and surgical outcomes.

This chapter delves into the crucial aspects of patient communication, pre-surgery diagnostics, and patient preparedness for surgical procedures. By examining the experiences and perceptions of patients regarding their interactions with surgeons, we gain valuable insights into the effectiveness of communication and the comprehensiveness of information provided. The chapter primarily aims to highlight the importance of clear, timely, and thorough communication between healthcare providers and patients to ensure that patients feel well-informed and confident about their surgeries. Additionally, the chapter explores the significance of pre-surgery diagnostic tests, the timing of these tests, and their impact on surgical outcomes. The analysis aims to underscore the need for consistent and comprehensive diagnostic testing recommendations to enhance patient care and improve surgical preparedness. Overall, this chapter aims to emphasize the critical role of effective communication and diagnostic practices in optimizing patient outcomes and satisfaction in surgical settings.

Table 4.1: Percentage of Patients by Duration of Hospital Admission, Current Ailments, and Expected Date of Surgery

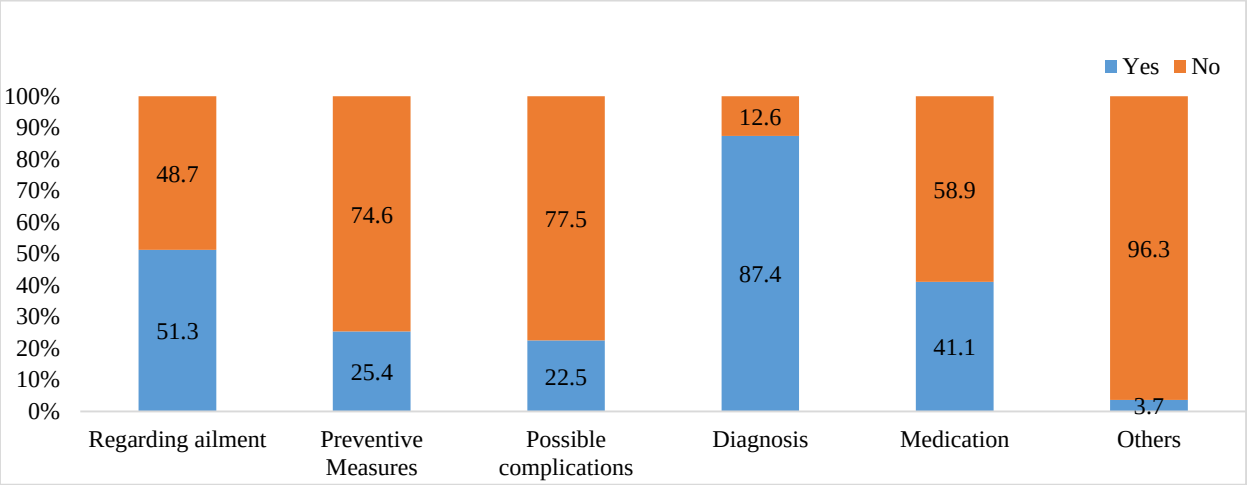
Duration of Admission (Days)	Frequency	Percentage
Mean	**6.1**	
0 – 1 day	134	35.1
2 – 3 days	100	26.2
4 – 5 days	38	9.9
6 – 7 days	20	5.2
More than 7 days	90	23.6
Know Expected date of Surgery		
Yes	294	77.0
No	1	0.3
Don't Know/Not Aware	87	22.8
Since when are suffering from current ailments		
Last 1 month	170	44.5
1 - 6 months	116	30.4
6 months - 1 Year	40	10.5
Between 1 to 5 Years	38	10.0
Between 5 to 10 Years	10	2.6
More than 10 Years	8	2.1
Total	**382**	**100**

Note: The information is based on the interview from participants

Table 4.1 findings provide insights into the duration of patient admissions and their current ailments. The mean duration of admission for the interviewed patients was approximately 6.1 days. The highest proportion of patients, 35.1%, were admitted for 0-1 days, followed by 26.2% for 2-3 days. A smaller percentage of patients were admitted for 4-5 days (9.9%) and 6-7 days (5.2%). Notably, 23.6% of patients had been admitted for more than 7 days. Regarding awareness of the expected date of surgery, 77% of patients knew their scheduled surgery date, while only one respondent was unaware. Additionally, 22.8% of patients did not know their expected surgery date. Discussion with the patients and the service provider revealed that on an average here are 4 to 5 surgeries per day scheduled however in case of emergency being a tertiary hospital which often happens priority is given to emergency patients, and thereby some schedules may change.

In terms of the duration of suffering from current ailments, 44.5% of patients reported experiencing their ailments for the past month. Another 30.4% had been suffering for 1-6 months, while 10.5% had been dealing with their ailments for 6 months to 1 year. The remaining patients had been suffering for durations ranging from 1 to 5 years (10%), 5 to 10 years (2.6%), and over 10 years (2.1%).

Figure 4.1: Knowledge Provided to Participants During Each Interaction



Note: Other includes – legs to be amputated, normal instructions etc.

Since it is the multiple option question. Therefore, please check it as row total or percent.

Figure 4.1 illustrates the percentage of participants who received information on various health-related topics, including their ailment, preventive measures, possible complications, diagnosis, medication, and other issues. Discussions with service providers revealed that most patients come from lower socioeconomic backgrounds, thus might affect the understanding level of both patients and their relatives. If a patient's comprehension level is low, information is often explained to their relatives instead. Additionally, the mental condition of the patient is considered, taking into account the placebo and nocebo effects.

The majority of participants received information regarding their ailment (51.3%) and diagnosis (87.4%). Preventive measures and possible complications were less frequently discussed, with 25.4% and 22.5% of participants receiving information on these topics, respectively. Notably, not all patients require preventive measures or develop possible complications.

Medication-related information was provided to 41.1% of participants. A small percentage (3.7%) received information categorized as "other," which includes information as probable leg amputation, and normal instructions.

Table 4.2: Knowledge Disseminated During Participant Interactions by Selected Demographic Attributes.

Background Characteristics	Regarding Ailments		Preventive Measure		Possible Complications		Diagnosis		Medication		Others		Total
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	
Age													
Less than 18*	44.4 (8)	55.6 (10)	33.3 (6)	66.7 (12)	11.1 (2)	88.9 (16)	83.3 (15)	16.7 (3)	44.4 (8)	55.6 (10)	5.6 (1)	94.4 (17)	18
18 - 25	33.3 (8)	66.7 (16)	25 (6)	75 (18)	16.7 (4)	83.3 (20)	95.8 (23)	4.2 (1)	41.7 (10)	58.3 (14)	4.2 (1)	95.8 (23)	24
26 - 35	52.6 (30)	47.4 (27)	24.6 (14)	75.4 (43)	22.8 (13)	77.2 (44)	87.7 (50)	12.3 (7)	35.1 (20)	64.9 (37)	5.3 (3)	94.7 (54)	57
36 - 45	54.8 (34)	45.2 (28)	27.4 (17)	72.6 (45)	21 (13)	79 (49)	80.7 (50)	19.4 (12)	32.3 (20)	67.7 (42)	3.2 (2)	96.8 (60)	62
46 - 55	55.6 (40)	44.4 (32)	30.6 (22)	69.4 (50)	29.2 (21)	70.8 (51)	84.7 (61)	15.3 (11)	34.7 (25)	65.3 (47)	2.8 (2)	97.2 (70)	72
56 - 65	50 (38)	50 (38)	22.4 (17)	77.6 (59)	23.7 (18)	76.3 (58)	93.4 (71)	6.6 (5)	52.6 (40)	47.4 (36)	2.6 (2)	97.4 (74)	76
66 - 75	45.8 (27)	54.2 (32)	20.3 (12)	79.7 (47)	23.7 (14)	76.3 (45)	86.4 (51)	13.6 (8)	49.2 (29)	50.9 (30)	3.4 (2)	96.6 (57)	59
75+	78.6 (11)	21.4 (3)	21.4 (3)	78.6 (11)	7.1 (1)	92.9 (13)	92.9 (13)	7.1 (1)	35.7 (5)	64.3 (9)	7.1 (1)	92.9 (13)	14
Gender													
Male	48.8 (126)	51.2 (132)	26 (67)	74 (191)	21.7 (56)	78.3 (202)	85.3 (220)	14.7 (38)	44.6 (115)	55.4 (143)	3.1 (8)	96.9 (250)	258
Female	56.5 (70)	43.6 (54)	24.2 (30)	75.8 (94)	24.2 (30)	75.8 (94)	91.9 (114)	8.1 (10)	33.9 (42)	66.1 (82)	4.8 (6)	95.2 (118)	124
Education**													
Illiterate	52.3 (45)	47.7 (41)	19.8 (17)	80.2 (69)	16.3 (14)	83.7 (72)	88.4 (76)	11.6 (10)	50.0 (43)	50.0 (43)	4.7 (4)	95.3 (82)	86

<literate but 4th Std	46.4 (13)	53.6 (15)	32.1 (9)	67.9 (19)	25 (7)	75 (21)	75 (21)	25 (7)	39.3 (11)	60.7 (17)	3.6 (1)	96.4 (27)	28
5th-7th Std	55.1 (38)	44.9 (31)	26.1 (18)	73.9 (51)	23.2 (16)	76.8 (53)	87 (60)	13 (9)	26.1 (18)	73.9 (51)	4.4 (3)	95.7 (66)	69
8th -10th std	51.8 (58)	48.2 (54)	25 (28)	75 (84)	24.1 (27)	75.9 (85)	88.4 (99)	11.6 (13)	42 (47)	58 (65)	3.6 (4)	96.4 (108)	112
10th-12th std	46 (23)	54 (27)	32 (16)	68 (34)	20 (10)	80 (40)	90 (45)	10 (5)	36 (18)	64 (32)	2 (1)	98 (49)	50
Graduate	44.4 (12)	55.6 (15)	25.9 (7)	74.1 (20)	37 (10)	63 (17)	92.6 (25)	7.4 (2)	51.9 (14)	48.2 (13)	-	100 (27)	27
Post-Graduate	71.4 (5)	28.6 (2)	28.6 (2)	71.4 (5)	28.6 (2)	71.4 (5)	85.7 (6)	14.3 (1)	57.1 (4)	42.9 (3)	-	100 (7)	7
Other	50 (1)	50 (1)	-	100 (2)	-	100 (2)	50 (1)	50 (1)	50 (1)	50 (1)	50 (1)	50 (1)	2
Household Income (Monthly)													
Less than 1250	100 (2)	-	50 (1)	50 (1)	50 (1)	50 (1)	50 (1)	50 (1)	50 (1)	50 (1)	-	100 (2)	2
1250 - 5000	51.2 (21)	48.8 (20)	19.5 (8)	80.5 (33)	14.6 (6)	85.4 (35)	78.1 (32)	22 (9)	29.3 (12)	70.7 (29)	7.3 (3)	92.7 (38)	41
5001 - 10000	54.8 (51)	45.2 (42)	21.5 (20)	78.5 (73)	16.1 (15)	83.9 (78)	89.3 (83)	10.8 (10)	35.5 (33)	64.5 (60)	5.4 (5)	94.6 (88)	93
10001 - 15000	61.1 (58)	39 (37)	25.3 (24)	74.7 (71)	30.5 (29)	69.5 (66)	96.8 (92)	3.2 (3)	36.8 (35)	63.2 (60)	1.1 (1)	99 (94)	95
15000+	51.6 (48)	48.4 (45)	30.1 (28)	69.9 (65)	22.6 (21)	77.4 (72)	80.7 (75)	19.4 (18)	44.1 (41)	55.9 (52)	3.2 (3)	96.8 (90)	93
Income not reported	27.6 (16)	72.4 (42)	27.6 (16)	72.4 (42)	24.1 (14)	75.9 (44)	87.9 (51)	12.1 (7)	60.3 (35)	39.7 (23)	3.5 (2)	96.6 (56)	58
Total	**51.3**	**48.7**	**25.4**	**74.6**	**22.5**	**77.5**	**87.4**	**12.6**	**41.1**	**58.9**	**3.7**	**96.3**	**382**

Note: * for <18 yrs. information provided to guardian, ****Education level considered only for age more than 7 years.

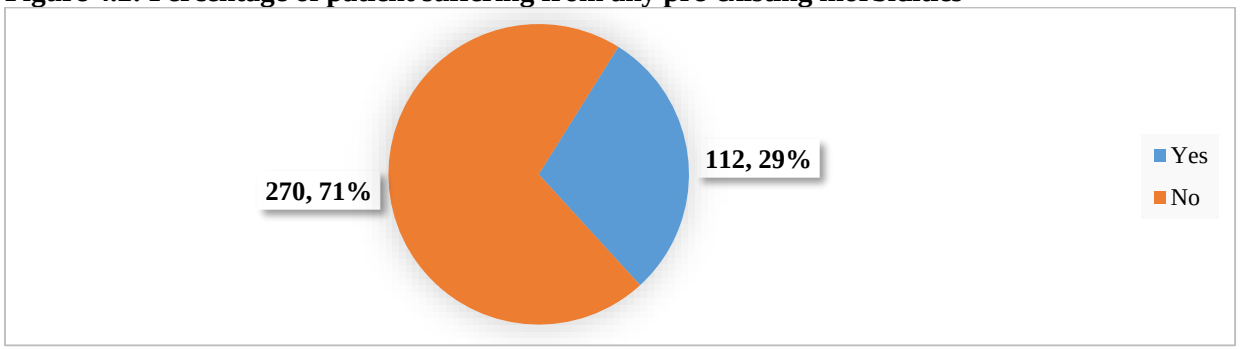
As highlighted in Figure 4.1, the information was tailored based on the understanding level and mental condition of the patients/relatives. Therefore, we examined the background characteristics of patients/relatives, as shown in Table 4.1a. Table 4.1a provide a comprehensive overview of the health-related information disseminated to participants by background characteristics such as age, gender, education, and household income. Participants under 18 years reported lower levels of receiving information about ailments (44.4%), preventive measures (33.3%), and possible complications (11.1%), compared to older age groups. Notably the respondents of participants who are less than 18 years were their parents and guardians. The highest proportion of participants receiving information about their ailments was in the 75+ age group (78.6%), while those aged 46-55 and 36-45 also received considerable information about their ailments (55.6% and 54.8%, respectively).Younger participants (18-25) reported lower level of information received on preventive measures (25%) and possible complications (16.7%), while participants aged 56-65 and 46-55 were more informed about these (22.4% and 23.7%, respectively for preventive measures, 23.7% and 29.2%, respectively for possible complications).

A higher proportion of female participants reported to receive information about their ailments (56.5%) compared to male participants (48.8%). Both male and female participants received similar levels of information about preventive measures, possible complications, and medications, with a slight variation in percentages. Illiterate participants and those with lower educational levels (less than 4th Std) reported less information about preventive measures and possible complications compared to those with higher educational levels. Participants with a 5th-7th Std education reported higher proportion of information received about their ailments (55.1%) and diagnosis (87%). Graduates and postgraduates reported to receive significant information about possible complications and diagnosis, with graduates being informed about ailments (44.4%) and postgraduates being highly informed about preventive measures (28.6%). As highlighted, diagnoses are directly concerned with individuals, hence irrespective of educational level, more than 80% of participants received information. This was highest among those with 10-12th standard education (90%) and graduates (92%), and lowest among those literate with less than 4th standard education (75%). Medication was also discussed with about half of the respondents, reflecting the correlation with educational understanding levels. However, preventive measures and possible complications were the least discussed, as highlighted from the above table. Only 9 respondents out of 16 with less than 4th standard education reported receiving information on preventive measures. Similarly, only 16 out of 50 respondents reported affirmative responses to preventive measures, and possible complications were informed to 10 respondents out of 27 graduates.

All the participants with a household income of less than ₹1250 reported they were informed about their ailments (100%) and diagnosis (50%). Those with a household income of ₹10001-₹15000 reported of being informed of their ailments (61.1%) and diagnosis (96.8%). Participants with incomes not reported reported to receive less information about ailments (27.6%) but were well-informed about

diagnosis (87.9%). The overall percentage of participants who reported to receive information about their ailments was 51.3%, preventive measures 25.4%, possible complications 22.5%, diagnosis 87.4%, and medications 41.1%. "Others" category, which includes topics such as leg amputation, and normal instructions, was the least disseminated information (3.7%). These findings highlight the varying levels of information dissemination reported based on demographic factors, with notable differences in the receipt of health-related information among different age groups, genders, education levels, and household income brackets. The information was focused on diagnosis and medication, while preventive measures and possible complications were less frequently addressed. This reflects the need to fpcus on specific aspects of health communication strategies to address the diverse needs and understanding levels of participants.

Figure 4.2: Percentage of patient suffering from any pre-existing morbidities



Note: The information is based on the interview from participants

As highlighted in Figure 4.2, approximately 30% of the interviewed respondents reported suffering from pre-existing morbidities.

Table 4.3: Distribution and Management of Pre-Existing Diseases among Patients, Medication Status, and Surgeon Awareness.

Pre-Existing Diseases	Yes	No	Total	Mean Duration (in years)	Under Medication	Surgeon/Doctor aware of the existing preexisting morbidities (%)
Diabetes	31.3	68.8	**112**	4.5	88.6	100
Blood Pressure	45.5	54.5	**112**	4.5	84.3	94.1
Heart Disease	0.9	99.1	**112**	0.0	100	100
Obesity	1.8	98.2	**112**	13.5	0	100
Lung Disease	4.5	95.5	**112**	3.3	60.0	100
Kidney Disease	5.4	94.6	**112**	3.0	66.7	100
Cancer	2.7	97.3	**112**	2.4	33.3	100
Digestive System/Stomach	11.6	88.4	**112**	2.0	53.8	100
Disabilities	0.9	99.1	**112**	0.0	100	100
ENT Issues	12.5	87.5	**112**	1.9	28.6	71.4
Allergy	3.6	96.4	**112**	4.9	75.0	100
Others	11.6	88.4	**112**	5.5	61.5	100

Note: Other includes – Knee pain, HIV, psoriasis, acidity etc.

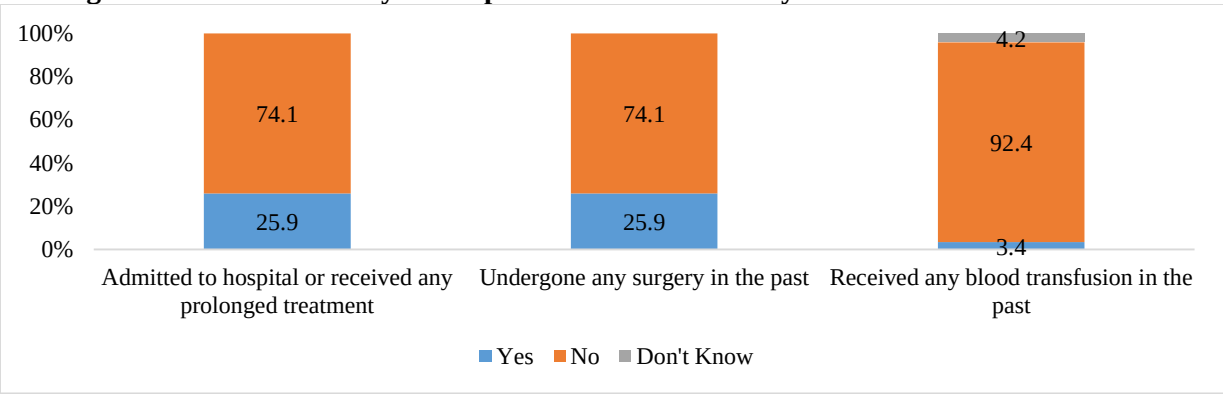
Since it is the multiple option question. Therefore, please check it as row total or percent.

Table 4.3 presents the distribution of patients with pre-existing morbidities, as reported by 112 respondents. It includes the mean duration of these morbidities, the number of patients currently undergoing medication, and the number of surgeons aware of these existing conditions. The most commonly reported pre-existing conditions are blood pressure (45.5%) and diabetes (31.3%). Conditions like heart disease, obesity, lung disease, kidney disease, and cancer have lower prevalence among the respondents. On average, patients with diabetes and blood pressure have been dealing with these conditions for approximately 4.5 years. Obesity has the highest mean duration of 13.5 years among the reported pre-existing conditions. Other conditions such as lung disease, kidney disease, and digestive system/stomach issues have mean durations ranging from 2 to 5.5 years.

A high percentage of patients with blood pressure (84.3%) and diabetes (88.6%) are currently undergoing medication for their conditions. The awareness of pre-existing morbidities among surgeons/doctors although not optimal is notably high for blood pressure (94.1) and

ENT, (74.1%). For conditions like diabetes, heart diseases, lung disease, kidney disease, and digestive system/stomach issues, there is an optimal level of awareness among surgeons/doctors.

Figure 4.3: Patient History of Hospital Admissions for Any Illness



Note: The information is based on the interview from participants

Figure 4.3 presents data on patients' prior history of hospital admissions and medical procedures before the recent surgery. The findings indicate that only 25.9% of patients had previously been hospitalized and undergone surgery, while a mere 3.4% had a history of receiving a blood transfusion.

Table 4.4: Pre-Existing Morbidities, Hospital Admissions, and Surgical History of Participants by Demographic Characteristics

Background Characteristics	Pre-existing morbidities		Admitted or Received Prolong Treatment		Undergone for any surgery in the past		Received Blood Transfusion			Total
	Yes	No	Yes	No	Yes	No	Yes	No	Don't Know	
Age										
Less than 18	-	100 (18)	11.1 (2)	88.9 (16)	11.1 (2)	88.9 (16)	-	100 (18)	-	18
18 - 25	8.3 (2)	91.7 (22)	16.7 (4)	83.3 (20)	12.5 (3)	87.5 (21)	4.2 (1)	95.8 (23)	-	24
26 - 35	10.5 (6)	89.5 (51)	12.3 (7)	87.7 (50)	14 (8)	86 (49)	1.8 (1)	96.5 (55)	1.8 (1)	57
36 - 45	29 (18)	71 (44)	17.7 (11)	82.3 (51)	27.4 (17)	72.6 (45)	1.6 (1)	96.8 (60)	1.6 (1)	62
46 - 55	41.7 (30)	58.3 (42)	16.7 (12)	83.3 (60)	26.4 (19)	73.6 (53)	4.2 (3)	90.3 (65)	5.6 (4)	72
56 - 65	29 (22)	71.1 (54)	25 (19)	75 (57)	32.9 (25)	67.1 (51)	4 (3)	89.5 (68)	6.6 (5)	76
66 - 75	44.1 (26)	55.9 (33)	22 (13)	78 (46)	33.9 (20)	66.1 (39)	5.1 (3)	86.4 (51)	8.5 (5)	59
75+	57.1 (8)	42.9 (6)	28.6 (4)	71.4 (10)	35.7 (5)	64.3 (9)	7.1 (1)	92.9 (13)	-	14
Gender										
Male	27.9 (72)	72.1 (186)	17.8 (46)	82.2 (212)	24 (62)	76 (196)	1.9 (5)	92.6 (239)	5.4 (14)	258
Female	32.3 (40)	67.7 (84)	21 (26)	79 (98)	29.8 (37)	70.2 (87)	6.5 (8)	91.9 (114)	1.6 (2)	124
Education*										
Illiterate	32.6 (28)	67.4 (58)	19.8 (17)	80.2 (69)	30.2 (26)	69.8 (60)	5.8 (5)	90.7 (78)	3.5 (3)	86
<literate but 4th Std	42.9 (12)	57.1 (16)	14.3 (4)	85.7 (24)	25 (7)	75 (21)	3.6 (1)	96.4 (27)	-	28
5th-7th Std	26.1 (18)	73.9 (51)	17.4 (12)	82.6 (57)	26.1 (18)	73.9 (51)	2.9 (2)	92.8 (64)	4.4 (3)	69
8th -10th std	31.3 (35)	68.8 (77)	21.4 (24)	78.6 (88)	27.7 (31)	72.3 (81)	3.6 (4)	92 (103)	4.5 (5)	112
10th-12th std	20 (10)	80 (40)	18 (9)	82 (41)	20 (10)	80 (40)	2 (1)	94 (47)	4 (2)	50
Graduate	29.6 (8)	70.4 (19)	11.1 (3)	88.9 (24)	14.8 (4)	85.2 (23)	-	92.6 (25)	7.4 (2)	27
Post-Graduate	14.3 (1)	85.7 (6)	28.6 (2)	71.4 (5)	28.6 (2)	71.4 (5)	-	85.7 (6)	14.3 (1)	7
Other	-	100 (2)	50 (1)	50 (1)	50 (1)	50 (1)	-	100 (2)	-	2
Household Income (Monthly)										
Less than 1250	-	100 (2)	-	100 (2)	-	100 (2)	-	50 (1)	50 (1)	2
1250 - 5000	39 (16)	61 (25)	14.6 (6)	85.4 (35)	31.7 (13)	68.3 (28)	2.4 (1)	95.1 (39)	2.4 (1)	41
5001 - 10000	28 (26)	72 (67)	18.3 (17)	81.7 (76)	24.7 (23)	75.3 (70)	4.3 (4)	92.5 (86)	3.2 (3)	93
10001 - 15000	34.7 (33)	65.3 (62)	17.9 (17)	82.1 (78)	27.4 (26)	72.6 (69)	3.2 (3)	95.8 (91)	1.1 (1)	95
15000+	29 (27)	71 (66)	22.6 (21)	77.4 (72)	26.9 (25)	73.1 (68)	1.1 (1)	94.6 (88)	4.3 (4)	93
Income not reported	17.2 (10)	82.8 (48)	19 (11)	81 (47)	20.7 (12)	79.3 (46)	6.9 (4)	82.8 (48)	10.3 (6)	58

Total	**29.3**	**70.7**	**18.9**	**81.2**	**25.9**	**74.1**	**3.4**	**92.4**	**4.2**	**382**

Note: *Education level considered only for age more than 7 years**,** The information is based on the interview from participants.

The findings presented in Table 4.4 provide an overview of pre-existing morbidities, history of prolonged treatment or hospital admissions, prior surgeries, and blood transfusions among patients, categorized by selected demographic characteristics. Among participants under 18, none (0%) reported pre-existing morbidities, 11.1% (2) had prior surgeries, and none (0%) had received a blood transfusion. In the 18–25 age group, 8.3% (2) had pre-existing morbidities, 16.7% (4) had been hospitalized or received prolonged treatment, 12.5% (3) had undergone surgeries, and 4.2% (1) had received a blood transfusion. Higher prevalence rates were observed in older age groups, with participants aged 75+ reporting the highest rates: 57.1% (8) for pre-existing morbidities, 28.6% (4) for hospitalizations or prolonged treatment, 35.7% (5) for surgeries, and 7.1% (1) for blood transfusions.

Among male participants, 27.9% (72) had pre-existing morbidities, 17.8% (46) had been hospitalized or received prolonged treatment, 24% (62) had undergone surgeries, and 1.9% (5) had received a blood transfusion. Female participants showed slightly higher rates, with 32.3% (40) reporting pre-existing morbidities, 21% (26) being hospitalized or treated, 29.8% (37) undergoing surgeries, and 6.5% (8) receiving blood transfusions.

Illiterate participants reported a 32.6% (28) rate of pre-existing morbidities, with higher proportions having undergone surgeries (30.2%, 26) and receiving blood transfusions (5.8%, 5). Participants with post-graduate education had the lowest rates of pre-existing morbidities (14.3%, 1) and surgeries (28.6%, 2). Those classified under "Other" had unique patterns, with none reporting morbidities but 50% (1) reporting prior hospitalizations and surgeries.

Among participants with a household income below 1250, none reported pre-existing morbidities, hospitalizations, surgeries, or blood transfusions. Rates increased with income, peaking at 39% (16) for morbidities and 31.7% (13) for surgeries in the 1250–5000 income group. Participants in the 15000+ income bracket demonstrated reduced rates for morbidities (29%, 27) and transfusions (1.1%, 1). Interestingly, those with unreported income showed notable variability, with 6.9% (4) receiving blood transfusions.

On the whole, 29.3% of participants had pre-existing morbidities, 18.9% had been hospitalized or received prolonged treatment, 25.9% had undergone surgeries, and 3.4% had received blood transfusions. Additionally, 4.2% were unaware of their history of blood transfusions.

Table 4.5: Distribution of Reasons for Current Surgical Interventions Among Patients

Current Diagnostic/Reason for the Surgery	Frequency	Percent
Appendices	8	2.1
Bone Grafting	2	0.5
Cancer	84	5.0
Fibro adenoma	1	0.3
Fistula	10	2.6
Gallbladder stone	22	5.8
Ganglion Cyst	4	1.1
Gastric Outlet Obstruction	2	0.5
Hernia	85	22.3
Hydrocele	6	1.6
Kidney Stone	19	5.0
Pseudocyst	6	1.6
Paraphimotic or Circumcision	2	0.5
Percutaneous Endoscopic Gastrostomy	4	1.1
Hemorrhoids	13	3.4
Bed sore grafting	1	0.3
Upper GI Endoscopy	54	14.1
Skin Grafting and Excision	26	6.8
Stoma reversal	2	0.5
Thyroid	5	1.3
Urinoma	1	0.3
Varicose Veins	16	4.2
Others	9	2.1
Total	**382**	**100**

Note: Other includes – diabetic fast, ulcer, intestine infection, liver side swelling etc.

The findings from Table 4.5 illustrate the distribution of diagnoses and reasons for current surgeries among the patients. Hernia was the most common reason for surgery, accounting for 22.3% of the cases (85 patients). This was followed by cancer, which accounted for 5.0% of the cases (84 patients), and upper GI endoscopy, which was the reason for 14.1% of the surgeries (54 patients).

Other significant diagnoses included gallbladder stones, making up 5.8% of the cases (22 patients), kidney stones and various cancers, each accounting for 5.0% of the surgeries (19 patients for kidney stones). Skin grafting and excision accounted for 6.8% of the surgeries (26 patients), and hemorrhoids were the reason for 3.4% of the surgeries (13 patients).

Less common reasons for surgeries included appendicitis at 2.1% (8 patients), fistula at 2.6% (10 patients), varicose veins at 4.2% (16 patients), and fibroadenoma, bed sore grafting, urinoma, each at 0.3% (1 patient each). Other diagnoses included bone grafting at 0.5% (2 patients), hydrocele at 1.6% (6 patients), pseudocyst at 1.6% (6 patients), paraphimotic or circumcision at 0.5% (2 patients), percutaneous endoscopic gastrostomy at 1.1% (4 patients), thyroid at 1.3% (5 patients), stoma reversal at 0.5% (2 patients), and others, such as diabetic feet, ulcers, intestine infections, and liver side swelling, at 2.1% (9 patients). These findings highlight the diverse range of diagnoses and reasons for surgeries among the patient population, emphasizing the need for specialized surgical care for various medical conditions.

Table 4.6: Sources of Surgical Information Among Patients

Surgery related Information received from	Frequency	Percentage
Surgeon	376	98.4
Nurse	2	0.52
Counsellor	1	0.26
Family Members	1	0.26
Others	2	0.52
Total	**382**	**100**

Note: Other includes – refused

The findings from Table 4.6 show the percentage of patients who received information about their surgery for the first time from various sources. A vast majority of patients, 98.4% (376), received this information from their surgeon. Nurses provided the information to 0.52% (2) of patients, while a counsellor informed 0.26% (1) of patients. Similarly, 0.26% (1) of patients received the information from family members. The findings highlight that surgeons are the primary source of surgical information for patients, with very few patients receiving this information from other healthcare professionals or family members.

Table 4.7: Frequency of First Patient-Surgeon Meetings and Subsequent Consultations Prior to Surgery

First meeting with surgeon	Number of times met with Surgeon			
	1 – 2 times	3 – 5 times	More than 5 times	Total
Less than 7 days	71.9	27.1	1.0	**196**
7 – 28 days	14.0	76.7	9.3	**129**
More than 28 days	7.0	64.9	28.1	**57**
Total	**42.7**	**49.5**	**7.8**	**382**

The findings from Table 4.7 illustrate the percent distribution of the frequency of the first meeting with the surgeon, based on the number of times patients met with their surgeon. The number of patient who had first meeting with surgeon in less than 7 days consisted of 196 patients in total

and 71.9% met with the surgeon 1-2 times, 27.1% met with the surgeon 3-5 times, and only 1.0% met with the surgeon more than 5 times.

Among 129 patients who had their first meeting with the surgeon 7-28 days before surgery, 14.0% met with the surgeon 1-2 times, 76.7% met with the surgeon 3-5 times, and 9.3% met with the surgeon more than 5 times.

For 57 patients who had their first meeting with the surgeon more than 28 days before surgery, 7.0% met with the surgeon 1-2 times, 64.9% met with the surgeon 3-5 times, and 28.1% met with the surgeon more than 5 times.

The overall findings reveal that nearly half of the respondents (49.5%) met with the surgeon 3-5 times, closely followed by 42.7% who met with the surgeon fewer than 2 times. Only 7.8% of the respondents met with the surgeon more than 5 times. When analyzing the timing of the meetings with the surgeon, it was observed that the frequency of meetings decreased slightly as number of days before surgery approached, from 71.9% for those who met less than 7 days before surgery to 76.7% for those who met 7-28 days before surgery. This is mainly due to the change in schedule of operations which happens quite frequent in tertiary hospitals due to priority given to emergency patients.

Table 4.8: Distribution of Patient Examinations and Meetings Informing About Surgery.

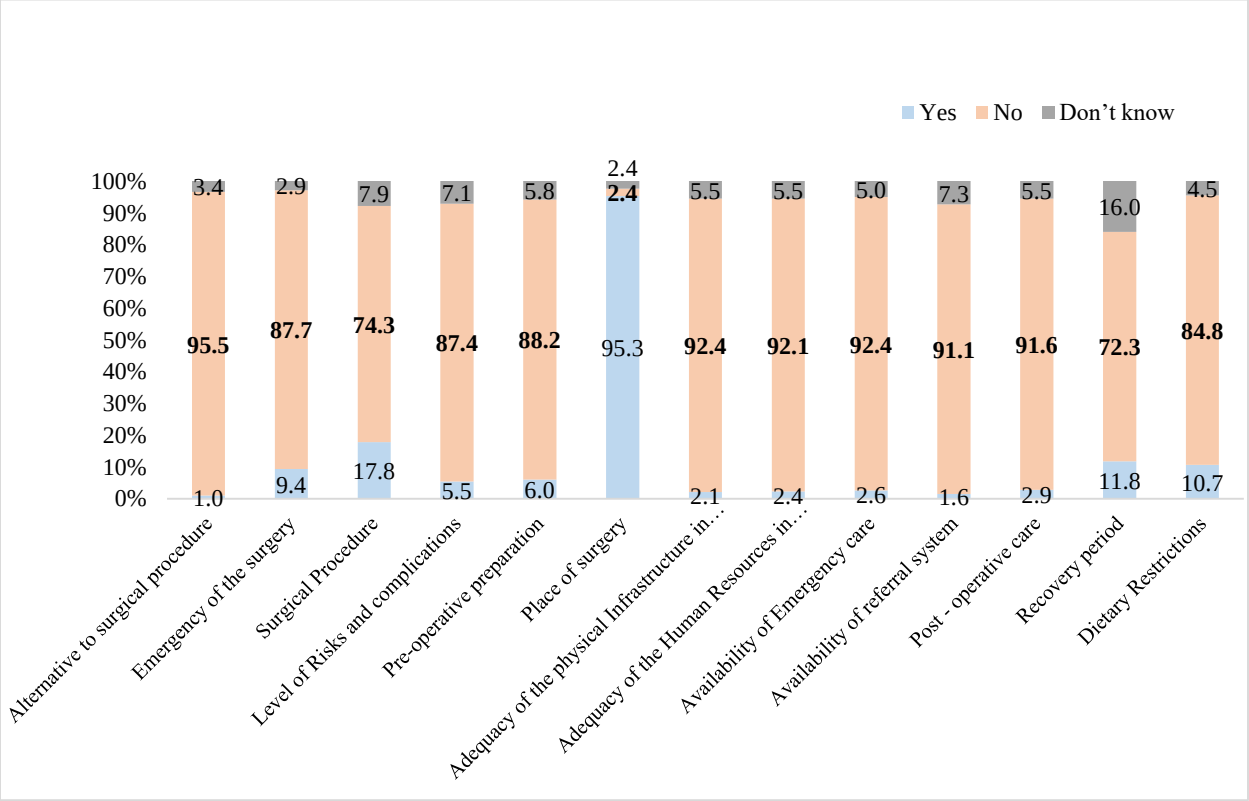
Examined by Surgeon in first meeting	Frequency	Percentage
Yes	375	98.2
No	2	0.5
Don't Know/Not Aware	5	1.3
Total	**382**	**100**
Surgeon informed in the 1st meeting about the requirement of surgery		
Yes	282	75.2
No	91	24.3
Don't Know/Not Aware	2	0.5
Total	**375**	**100**
Surgeon informed about the requirement of Surgery		
2nd meeting	51	54.8
3rd meeting	31	33.3
After 3rd meeting	11	11.8
Total	**93**	**100**

Note: The information is based on the interview from participants

The findings from Table 4.8 indicate the percentage of patients who were examined by a surgeon during their first meeting and received information about their surgery. Among the 382 patients surveyed, 98.2% (375) reported being examined by the surgeon during their first meeting, while 0.5% (2) were not examined, and 1.3% (5) were unsure.

Regarding the communication of surgery requirements, 75.2% (282) of the patients were informed about the need for surgery during their first meeting with the surgeon. However, 24.3% (91) were not informed, and 0.5% (2) were unsure. For those not informed during the first meeting, 54.8% (51) were informed during the second meeting, 33.3% (31) during the third meeting, and 11.8% (11) were informed after the third meeting. These findings, based on interviews with participants, highlight the importance of timely and clear communication between surgeons and patients regarding surgical procedures.

Figure 4.4: Percentage Distribution of Participants Receiving Specific Information from Surgeons



Note: The information is based on the interview from participants

Figure 4.4 illustrates the specific information received by patients from their surgeons. Notably, 95% of patients received information regarding the place of surgery. However, less than 3% of patients received information related to alternatives to surgery, adequacy of the physical infrastructure, human resources, emergency care, the referral system, and post-operative care.

Regarding the adequacy of infrastructure and human resources, many patients came from socio-economically poor backgrounds and had limited options to explore, likely resulting in less information being provided. As for alternatives to surgery, most patients requiring surgery were referred or were respondents who were certain about undergoing surgery, hence the lower percentage. Concerning the availability of the referral system, it is understood that Sassoon Hospital, being a tertiary care hospital, handles most major surgeries directly.

Additionally, 17.8% of patients received information about the surgical procedure, 11.8% received information about the recovery period, and 10.7% were informed about dietary restrictions.

Table 4.9: Distribution of Participants by Time Spent on Surgery Explanations and Clarification Needs

Average time spent on explaining the details	Frequency	Percentage
Less than 5 minutes	36	9.4
5 - 10 minutes	334	87.4
More than 10 minutes	12	3.2
Required clarification for any things		
Yes	21	5.5
No	350	91.6
Can't Say	11	2.9
Total	**382**	**100**

Note: The information is based on the interview from participants

Understanding the quality of information provided to patients involves various aspects, and one crucial factor is the amount of time spent by surgeons explaining surgery-related details and addressing patients' questions. The data from Table 4.9 highlights this aspect by revealing the time surgeons dedicated to explaining surgery-related details to patients. It shows that a majority of participants, 87.4% (334), reported that surgeons spent between 5 to 10 minutes explaining the details of their surgery. A smaller proportion, 9.4% (36), indicated that the surgeon spent less than 5 minutes on these explanations. Only 3.2% (12) reported that the surgeon spent more than 10 minutes.

Furthermore, the survey assessed the need for additional clarification. A significant majority, 91.6% (350), reported that they did not require any further clarification after the initial explanation. However, 5.5% (21) of the participants mentioned needing further clarification, and 2.9% (11) were uncertain or could not say if they required additional clarification. These findings underscore the importance of time spent during patient consultations. Adequate time allocation allows surgeons to provide comprehensive explanations, ensuring patients fully understand their surgical procedures and feel confident in the information received. This thorough communication is essential for informed decision-making and can significantly impact patient satisfaction and

outcomes. The information in this study is based on interviews with participants, reflecting their perceptions and experiences with the explanations provided by their surgeons.

Table 4.10: Average Time Spent Explaining Surgical Details and Clarification Needs by Patients Background Characteristics.

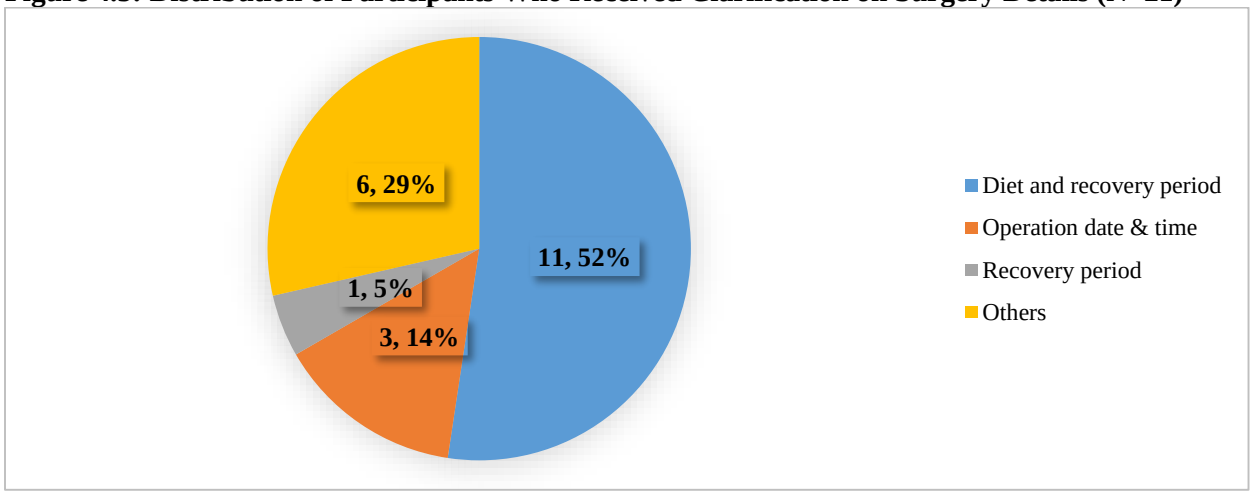
Background Characteristics	Average time spent on explaining the details			Require clarification for any of the above mentioned things			Total
	Less than 5 minutes	5 - 10 minutes	More than 10 minutes	Yes	No	Can't Say	
Age							
Less than 18	22.2 (4)	77.8 (14)	-	5.6 (1)	94.4 (17)	-	18
18 - 25	16.7 (4)	79.2 (19)	4.2 (1)	4.2 (1)	95.8 (23)	-	24
26 - 35	1.8 (1)	94.7 (54)	3.5 (2)	7 (4)	93 (53)	-	57
36 - 45	11.3 (7)	87.1 (54)	1.6 (1)	9.7 (6)	85.5 (53)	4.8 (3)	62
46 - 55	6.9 (5)	87.5 (63)	5.6 (4)	4.2 (3)	91.7 (66)	4.2 (3)	72
56 - 65	7.9 (6)	86.8 (66)	5.3 (4)	2.6 (2)	94.7 (72)	2.6 (2)	76
66 - 75	15.3 (9)	84.8 (50)	-	5.1 (3)	89.8 (53)	5.1 (3)	59
75+	-	100 (14)	-	7.1 (1)	92.9 (13)	-	14
Gender							
Male	10.5 (27)	86.1 (222)	3.5 (9)	5 (13)	91.9 (237)	3.1 (8)	258
Female	7.3 (9)	90.3 (112)	2.4 (3)	6.5 (8)	91.1 (113)	2.4 (3)	124
Education*							
Illiterate	11.6 (10)	87.2 (75)	1.2 (1)	7.0 (6)	89.5 (77)	3.5 (3)	86
<literate but 4th Std	10.7 (3)	85.7 (24)	3.6 (1)	3.6 (1)	96.4 (27)	0 (0)	28
5th-7th Std	11.6 (8)	87 (60)	1.5 (1)	4.4 (3)	88.4 (61)	7.3 (5)	69
8th -10th std	10.7 (12)	82.1 (92)	7.1 (8)	5.4 (6)	93.8 (105)	0.9 (1)	112
10th-12th std	4 (2)	96 (48)	-	4 (2)	94 (47)	2 (1)	50
Graduate	3.7 (1)	92.6 (25)	3.7 (1)	11.1 (3)	88.9 (24)	-	27
Post-Graduate	-	100 (7)	-	-	100 (7)	-	7
Other	-	100 (2)	-	-	50 (1)	50 (1)	2
Household Income (Monthly)							
Less than 1250	50 (1)	50 (1)	-	-	50 (1)	50 (1)	2
1250 - 5000	7.3 (3)	90.2 (37)	2.4 (1)	2.4 (1)	95.1 (39)	2.4 (1)	41

5001 - 10000	9.7 (9)	90.3 (84)	-	6.5 (6)	89.3 (83)	4.3 (4)	93
10001 - 15000	4.2 (4)	93.7 (89)	2.1 (2)	6.3 (6)	92.6 (88)	1.1 (1)	95
15000+	6.5 (6)	91.4 (85)	2.2 (2)	7.5 (7)	90.3 (84)	2.2 (2)	93
Income not reported	22.4 (13)	65.5 (38)	12.1 (7)	1.7 (1)	94.8 (55)	3.5 (2)	58
Total	**9.4**	**87.4**	**3.1**	**5.5**	**91.6**	**2.9**	**382**

Note: *Education level considered only for age more than 7 years

The findings from Table 4.10 present the distribution of participants by the time spent by surgeon explaining surgery-related details and the need for clarification, based on selected background characteristics.The majority of participants across age groups, genders, education levels, and income brackets reported that surgeons spent 5-10 minutes explaining surgery-related details. Among age groups, 94.7% of those aged 26-35 reported 5-10 minutes, the highest percentage, while those aged 36-45 had the highest proportion needing clarification (9.7%). Male participants (86.1%) and female participants (90.3%) predominantly reported 5-10 minutes surgeons explaining the details, with females slightly more likely to require clarification (6.5% vs. 5%). Participants with higher education levels, such as post-graduates, reported 5-10 minutes, while illiterate participants had a notable 7% requiring clarification. For income groups, participants with higher income ($15,000+) mostly experienced 5-10 minutes (91.4%) but had 7.5% requiring clarification, whereas those with unreported income showed the most varied time distribution, with 22.4% reporting less than 5 minutes and 12.1% more than 10 minutes. Across all groups, clarification needs remained relatively low, with specific demographics, such as lower education and middle-aged participants, more likely to seek further explanation.

Figure 4.5: Distribution of Participants Who Received Clarification on Surgery Details (N=21)



Note: 1. Other includes – information provided to husband, information provided to patient, what happened to patient hands.

2. The information is based on the interview from participants

A total of 21 respondents required clarification on various aspects, primarily focusing on topics such as diet, other miscellaneous concerns, and the date and time of the operation. As highlighted in Table 4.8, out of these 21 respondents, only two actively sought

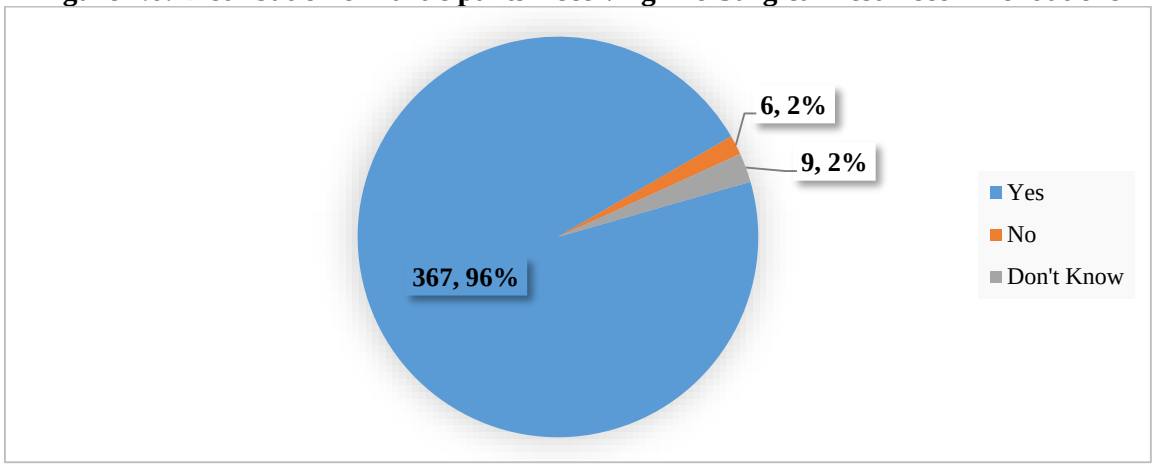
answers to their concerns during their interactions. Among these two, one respondent reported that their questions were answered satisfactorily.

Table 4.11: Distribution of Patients Raising Concerns and Their Satisfaction with Surgeon Responses.

Asked the concern to the Surgeon	Frequency	Percentage
Yes	2	9.5
No	19	90.5
Concerns were addressed		
Yes	1	50.0
No	1	50.0
Partially	0	0.0
Satisfied with the answers		
Satisfied	1	50.0
Not satisfied	1	50.0
Don't Know	0	0.0

Table 4.11 shows the number of participants who raised concerns about their surgery with the surgeon and whether those concerns were satisfactorily addressed. Among the 21 respondents who required clarification, only 2 actually asked their concerns to the surgeon, while 19 did not. Of those who raised their concerns, one reported that their concerns were satisfactorily addressed, while the other one indicated that their concerns were not addressed. Additionally, regarding satisfaction with the answers provided, one were satisfied with the responses they received, and the remaining one were not satisfied. None of the respondents indicated partial satisfaction or uncertainty about their satisfaction. These findings emphasize the need for surgeons to actively encourage patients to voice their concerns and ensure that their questions are addressed comprehensively and satisfactorily. Effective communication is essential to fostering patient confidence and understanding regarding their surgical procedures.

Figure 4.6: Distribution of Participants Receiving Pre-Surgical Test Recommendations



In total, 96% of respondents received suggestions for diagnostic tests before surgery. However, there were 9 respondents who were not aware of these suggestions, and 6 respondents reported that they were not informed about the diagnostic tests, as observed in Figure 4.6.

Table 4.12: Distribution of Patients by Hospital Stay Duration, Expected Day of Surgery, and Pre-Surgical Testing Recommendations

Duration of Admission (Days)	Suggest for any test before Surgery (freq.)			
	Yes	**No**	**Don't Know**	**Total**
0 – 1 day	128	3	3	134
2 – 3 days	97	2	1	100
4 – 5 days	37	0	1	38
6 – 7 days	19	0	1	20
More than 7 days	86	1	3	90
Expected Days of Surgery				
0 – 1 day	31	1	0	32
2 – 3 days	126	0	2	128
4 – 5 days	43	0	3	43
More than 5 days	87	1	4	91
Not Aware	80	4	4	88
Total	**367**	**6**	**9**	**382**

Note: **S**ince relatives or patients interviewed they are not sure if the said information was provided.

After admission, pre-surgery tests can be conducted any day before the surgery, ideally well in advance. Only 31 respondents indicated that tests were suggested a day before the surgery, while the majority were advised to undergo tests 2-3 days prior. However, 86 respondents were not suggested any tests even after a week of admission. It is understood that in a medical college setting, surgery schedules might change due to emergency cases taking priority. Overall, the findings from Table 4.12 show that pre-surgery tests are typically recommended well before the surgery date, with only 31 respondents indicating that tests were suggested a day before surgery. The majority of patients were recommended tests 2-3 days prior. However, 86 respondents were not suggested any tests even after a week of admission. In the context of a medical college, surgery schedules might change due to priority emergency cases.

The data highlights the distribution of patients recommended for pre-surgery tests based on the duration of their admission and the expected days until surgery. The majority of patients were recommended tests within 2-3 days of surgery, with 95.5% of those admitted

for 0-1 day and 97% for those admitted for 2-3 days receiving recommendations. However, there were cases where 1.1% (1 out of 90) of patients admitted for more than 7 days were not recommended any tests, underscoring potential variations in surgical scheduling and prioritization. Overall, 96.1% (367) of patients received pre-surgery test recommendations, emphasizing the importance of these tests in surgical preparation.

Table 4.13: Distribution of Tests Conducted Post-Admission on Patients and Place of Test

Test conducted after admission					Place of test			
Type of test	**Yes**	**No**	**NA/ Don't know**	**Total**	**Same Hospital**	**Ref. lab.**	**Any other**	**Total**
X-Ray	94.6	4.6	0.8	367	98.8	0.9	0.3	347
ECG	77.7	19.1	3.3	367	99.7	0.3	0.0	385
Urine Analysis	49.6	44.7	5.7	367	99.5	0.5	0.0	182
Sugar	49.0	41.7	9.3	367	99.4	0.6	0.0	180
CBC	93.7	2.2	4.1	367	99.7	0.0	0.3	344
PTT	6.8	42.2	51.0	367	100.0	0.0	0.0	25
Thyroid	15.8	54.0	30.2	367	96.6	1.7	1.7	58
Hepatitis B	18.3	53.1	0.8	367	100.0	0.0	0.0	67
HIV	55.9	13.6	30.5	367	100.0	0.0	0.0	205
USG	31.9	36.2	31.9	367	94.9	2.6	2.6	117
Others	22.1	67.3	10.6	367	90.7	9.3	0.0	86

Note: 1. Other includes – CT Scan, Biopsy, MRI, Endoscopy, Sonography etc.

2. Since it is the multiple option question. Therefore, please check it as row total or percent.

3. The information is based on the interview from participants.

The findings from Table 4.13 reveal that the majority of patients were recommended for various diagnostic tests after admission, with most tests being conducted within the same hospital where the patients were admitted. For example, 94.6% of patients had an X-ray suggested or conducted, with 98.8% of these being performed in the same hospital. Similarly, 77.7% of patients had an ECG suggested or conducted, with 99.7% of these being performed in the same hospital.

Other tests, like CBC (93.7%) and HIV (55.9%), also showed high percentages of patients receiving recommendations and having the tests conducted in the same hospital. However, there were lower percentages for tests like PTT (6.8%) and thyroid tests (15.8%) which is normally not recommended for everyone. Additionally, some patients were unsure about whether these tests were suggested or conducted, with 51.0% unsure for PTT and 30.2% unsure for thyroid tests.

The data highlights the hospital's capacity to perform a wide range of in-house diagnostic services, but also points to variability in the recommendations and awareness of these tests among patients.

The findings reflects that most diagnostic tests are readily available at the hospital and are offered at minimal cost, with free services provided for BPL (Below Poverty Line) categories. Nearly all patients admitted for surgeries undergo essential diagnostic tests such as ECG, X-ray, and blood tests.

Table 4.14: Distribution of Participants Who Did Not Receive Pre-Surgery Diagnostic Test Suggestions by Surgery Type

Current Reason for the Surgery	Frequency
Cancer	2
Hernia	6
Kidney Stone	2
Severe GERD	1
Skin Graphting	4
Total	**15**

Note: **S**ince relatives or patients interviewed they are not sure if the said information was provided.

Table 4.15: Distribution of Patients Not Suggested Pre-Surgery Diagnostic Tests by Duration of Hospital Admission

Duration of Admission (Days)	Type of text (Not suggested to patients/relatives)											
	X-Ray	ECG	UA	Sugar	CBC	PTT	Thyroid	Hep. B	HIV	USG	Others	Total
0 – 1 day	8	33	64	65	6	62	77	78	29	53	96	128
2 – 3 days	5	16	53	47	1	48	62	58	13	32	73	97
4 – 5 days	2	3	13	16	1	12	20	18	1	12	21	37
6 – 7 days	1	5	8	4	0	7	6	5	1	8	11	19
More than 7 days	1	13	26	21	0	26	33	36	6	28	46	86
Total	**17**	**70**	**164**	**153**	**8**	**155**	**198**	**195**	**50**	**133**	**247**	**367**

The findings from Table 4.15 reveal the distribution of diagnostic tests not suggested to participants based on their duration of admission. The data indicates that several patients, across different durations of admission, did not receive recommendations for certain diagnostic tests. For instance, out of 128 participants admitted for 0-1 day, 8 were not suggested an X-ray, 33 were not suggested an ECG, and 64 were not suggested a urine analysis. Similarly, 97 participants admitted for 2-3 days had similar test omissions, with 5 not suggested an X-ray, 16 not suggested an ECG, and 53 not suggested a urine analysis.

The trend continues with participants admitted for longer durations. For example, among the 86 participants admitted for more than 7 days, 1 was not suggested an X-ray, 13 were not suggested an ECG, and 26 were not suggested a urine analysis.

Overall, the data highlights that a notable number of participants did not receive suggestions for various diagnostic tests, regardless of their length of stay in the hospital. This underscores the need for consistent and thorough pre-surgery diagnostic testing recommendations to ensure comprehensive patient care. However, this information is based on interviews with patients or their relatives, so there may be some uncertainty regarding whether the information was provided.

Table 4.16: Number of Patients Who Did Not Receive Pre-Surgery Diagnostic Test Suggestions by Expected Duration of Surgery and Type of Surgery

Reason for the Surgery	Expected duration of Surgery				Total
	0 – 1 day	2 – 3 days	More than 5 days	Don't Know	
Cancer	-	-	1	1	2
Hernia	-	2	1	3	6
Kidney Stone	-	-	1	1	2
Upper GI Endoscopy	-	-	-	1	1
Skin Graphting and Excision	1	-	1	2	4
Total	**1**	**2**	**4**	**8**	**15**

Note: The cases included for don't know and are based on information received from participants

The findings from Table 4.16 reveal that among the 15 participants who did not receive pre-surgery diagnostic test suggestions, the distribution based on the expected duration of surgery shows one participant for surgery expected within 0-1 day, 2 for 2-3 days, 4 for more than 5 days, and 8 participants who did not know the expected duration. This data suggests that there were instances where diagnostic test suggestions were not provided, irrespective of the surgery type and expected duration. It should be noted that the information is based on interviews with participants, and there may be some uncertainty regarding the provided information.

Table 4.17: Distribution of Patients Receiving Pre-Surgical Test Recommendations by Type of Surgery.

Current Reason for the Surgery	Total Cases	Test Suggested (Yes)										
		X-Ray	ECG	Urine Analysis	Sugar	CBC	PTT	Thyroid	Hepatitis B	HIV	USG	Others
Appendices	8	8	6	1	-	8	-	1	-	4	8	1
Bone Grafting	2	2	2	-	-	2	-	-	-	1	2	-
Cancer	84	75	61	32	44	74	6	6	10	41	32	28
Fibroadenoma	1	-	1	-	-	-	-	-	1	1	-	-
Fistula	10	9	5	3	5	8	-	1	-	3	4	2
Gallbladder stone	22	21	16	15	11	20	1	6	5	6	5	6
Ganglion Cyst	4	4	3	2	2	4	2	1	1	2	1	-
Gastric Outlet Obstruction	2		2	2	1	2	-	-	2	2	1	1
Hernia	85	76	66	40	31	76	1	4	7	54	44	8
Hydrocele	6	6	5	2	2	6	-	1	1	5	5	2
Kidney Stone	19	15	12	10	8	16	-	3	3	6	7	3
Pseudocyst	6	6	5	3	3	5	-	-	1	5	4	2
Paraphimotic or Circumcision	2	1	1	1	1	2	-	-	-	2	-	-
Percutaneous Endoscopic Gastrostomy	4	4	4	2	3	4	-	-	-	1	-	-
Hemorrhoids	13	13	11	8	9	12	2	3	3	7	3	2
Bed sore grafting	1	1	1	1	1	1	-	-	-	1	1	-
Upper GI Endoscopy	54	53	43	34	24	53	3	17	20	33	23	20
Skin Grafting and Excision	26	20	15	13	15	20	4	3	5	12	5	1
Stoma reversal	2	2	1	-	1	2	-	-	1	-	-	-
Thyroid	5	5	4	1	2	4	2	5	1	3	1	-
Urinoma	1	1	1	1	1	1	-	-	-	-	-	-
Varicose Veins	16	15	12	9	11	16	4	5	4	11	6	4
Others	9	9	9	3	6	9	-	-	3	6	4	2

Total	**382**	**230**	**201**	**106**	**110**	**222**	**16**	**22**	**22**	**144**	**101**	**39**

Note: other includes - CT Scan, Biopsy, MRI, Endoscopy, Sonography etc.

The data in Table 4.17 reveals the distribution of diagnostic tests suggested to participants based on their type of surgery. Across various surgery types, diagnostic tests such as X-ray, ECG, urine analysis, and CBC were commonly suggested. For instance, out of 84 cancer cases, 75 had an X-ray, 61 had an ECG, and 74 had CBC suggested. In hernia cases (85), 76 had an X-ray and ECG, and 76 had CBC suggested. These findings illustrate that a significant portion of participants received recommendations for multiple diagnostic tests to ensure comprehensive pre-surgery evaluation.

As observed in the table, CBC, X-ray, and ECG were advised for all patients, with only a minuscule number of patients not reporting them, possibly due to a lack of awareness. However, tests such as PTT and Thyroid are disease-specific and may not be required for all patients admitted, reflecting a focused diagnosis approach.

Table 4.18: Distribution of Patients with Pre-Surgery Apprehensions and Emotional Counselling

Any apprehensions related to surgery	Frequency	Percentage
Yes	1*	0.26
No	381	99.7
Received counselling to handle the emotional well-being		
Yes	4	1.0
No	361	94.5
Not Aware	17	4.5
Counselling provided a boost in confidence		
Yes	4	100.0
No	0	0.0

Note: * For the first two days he was in ICU, when they put pipe in his nose.

The information is based on the interview from participants.

The findings from Table 4.18 indicate that only a small percentage of participants received counselling to handle their emotional well-being related to surgery. Specifically, 0.26% (1 participant) reported having apprehensions about the surgery, while the majority, 99.7% (381 participants), did not express any apprehensions.

Regarding counselling for emotional well-being, only 1.0% (4 participants) received such support, while 94.5% (361 participants) did not, and 4.5% (17 participants) were unaware of any counselling provided. Among those who received counselling, all 4 participants (100%) reported that it provided a boost in their confidence.

Summary

The findings shows awareness of the expected surgery date was high, with 77% of patients knowing their scheduled date. Most patients received information about their ailments (51.3%) and diagnosis (87.4%), while preventive measures (25.4%) and possible complications (22.5%) were less frequently discussed. The background characteristics of patients/relatives, such as age, gender, education, and household income, influenced the level of information received. The findings reveal that 29.3% of participants had pre-existing morbidities, with older age groups showing higher percentages. Hospital admissions and prolonged treatments were reported by 18.9%, while 25.9% had undergone surgery in the past, and 3.4% had received blood transfusions. Hernia, cancer, and upper GI endoscopy were the most common reasons for current surgeries, with surgeons being the primary source of surgical information for 98.4% of patients. Most patients met with their surgeon 3-5 times before surgery, with the frequency of meetings increasing closer to the surgery date.

The findings indicate that 98.2% of patients were examined by surgeons during their first meeting, and 75.2% were informed about the need for surgery at that time. The majority of patients received information about the place of surgery (95%), but fewer than 3% were informed about alternatives to surgery, infrastructure adequacy, human resources, emergency care, the referral system, and post-operative care. Surgeons spent 5-10 minutes explaining surgery-related details to 87.4% of patients, with 91.6% not requiring further clarification. The need for additional clarification varied slightly based on patients' age, gender, education, and household income. The findings reveal that 98.2% of patients were examined by surgeons during their first meeting, and 75.2% were informed about the need for surgery at that time. However, only two out of 21 patients actively sought clarification, with half of them satisfied with the responses. Pre-surgery tests were recommended to 96% of patients, mostly within 2-3 days of surgery. Yet, 86 patients did not receive test suggestions after a week of admission. Diagnostic tests like X-ray, ECG, and CBC were commonly recommended, with most conducted within the same hospital. Some patients did not receive specific test suggestions, emphasizing the need for consistent pre-surgery diagnostics. The data underscores the importance of clear communication, timely test recommendations, and comprehensive patient care.

Chapter 5: Informed Choices in Surgery – Risks, Benefits, and Care

This chapter aims to investigate the critical aspects of patient communication, pre-surgery diagnostics, and patient preparedness for surgical procedures. Effective communication between healthcare providers and patients is paramount in ensuring that patients are well-informed and confident about their surgical procedures. Research highlights the shift from a paternalistic model to a patient-centered approach in patient-surgeon relationships, emphasizing transparency, empathy, and patient participation (Azarpira et al., 2023).

Clear and comprehensive communication is essential for fostering trust and improving patient outcomes. Almutairi et al. (2024) emphasize the significance of structured communication protocols. Their study identifies key challenges, including time constraints and hierarchical communication structures, which can impede information transfer. Implementing advanced communication technologies and targeted training programs for health personnel is recommended to improve communication skills and ensure optimal patient outcomes.

Pre-surgery diagnostic tests play a crucial role in surgical preparedness and patient safety. Davis and Wilson (2018) highlight the importance of frailty-based preoperative risk stratification in orthopedic surgery, finding that increasing frailty is an independent predictor of mortality and major complications. Integrating frailty assessment into preoperative protocols can improve predictive accuracy and patient management, ultimately enhancing surgical outcomes. This chapter seeks to underscore the significance of effective communication and comprehensive diagnostic practices in optimizing patient care and surgical outcomes.

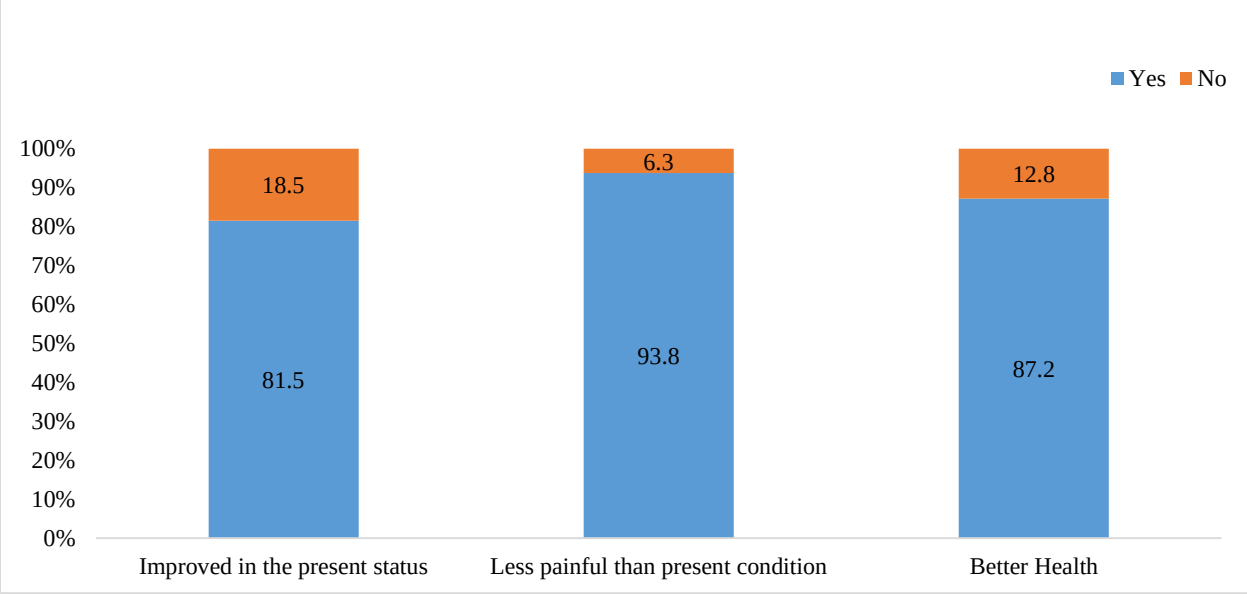
Table 5.1: Distribution of Participants by Surgery Types, Expected Duration, and Awareness of Benefits

Type of Surgery	Frequency	Percentage
Major	113	29.6
Minor	142	37.2
Not Aware	127	33.2
Expected hours takes to complete the surgery		
1 - 2 hours	103	27.0
3 - 6 hours	6	1.5
No information	273	71.5
Aware about the benefits of the surgery		
Yes	336	88.0
No	12	3.1
Not Aware	34	8.9
Total	**382**	**100**

Note: **S**ince relatives or patients interviewed they are not sure if the said information was provided

The data from Table 5.1 shows that out of 382 participants, 29.6% (113 participants) reported undergoing major surgery, 37.2% (142 participants) reported minor surgery, and 33.2% (127 participants) were not aware of the type of surgery. Regarding the expected time to complete the surgery, 27.0% (103 participants) anticipated it to take 1-2 hours, 1.5% (6 participants) expected it to take 3-6 hours, and 71.5% (273 participants) had no information about the duration. When it comes to awareness of the benefits of the surgery, 88.0% (336 participants) were aware, 3.1% (12 participants) were not aware, and 8.9% (34 participants) were unsure.

Figure 5.1: Percentage of Participants Reporting the Expected Benefits of the Surgery



Note: **S**ince relatives or patients interviewed they are not sure if the said information was provided**.**

Figure 5.1 demonstrates that the majority of participants believed their health would improve (81.5%), experience less pain (93.8%), and achieve better overall health (87.2%) post-surgery. According to discussions with the service provider, the risks associated with surgeries are primarily communicated to relatives, rather than patients, depending on their understanding, and emotional and mental status. Figure 5.2 shows that approximately three-fourths of the relatives (73.2%) and 48.5% of the patients were aware of the surgical risks. Additionally, a similar percentage of relatives (14.8%) and patients (15.9%) reported that they were unaware of the risks associated with the surgery.

Figure 5.2: Percentage of Participants Aware of the Risks Associated with Surgery

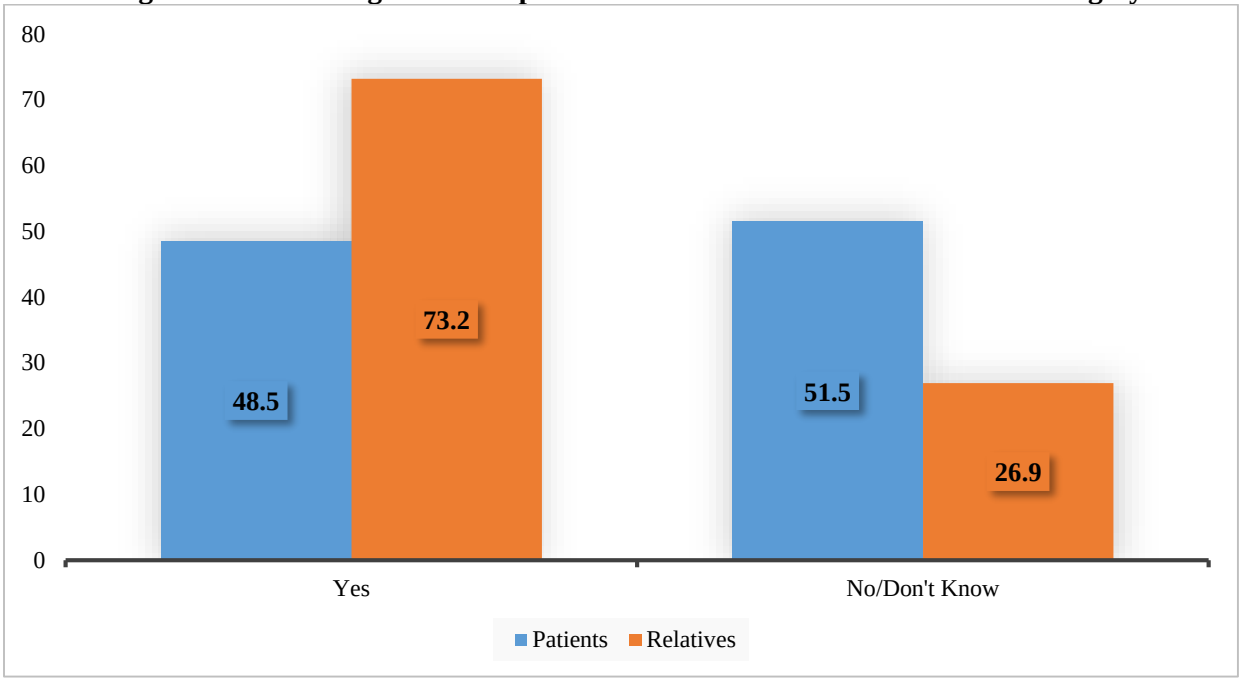
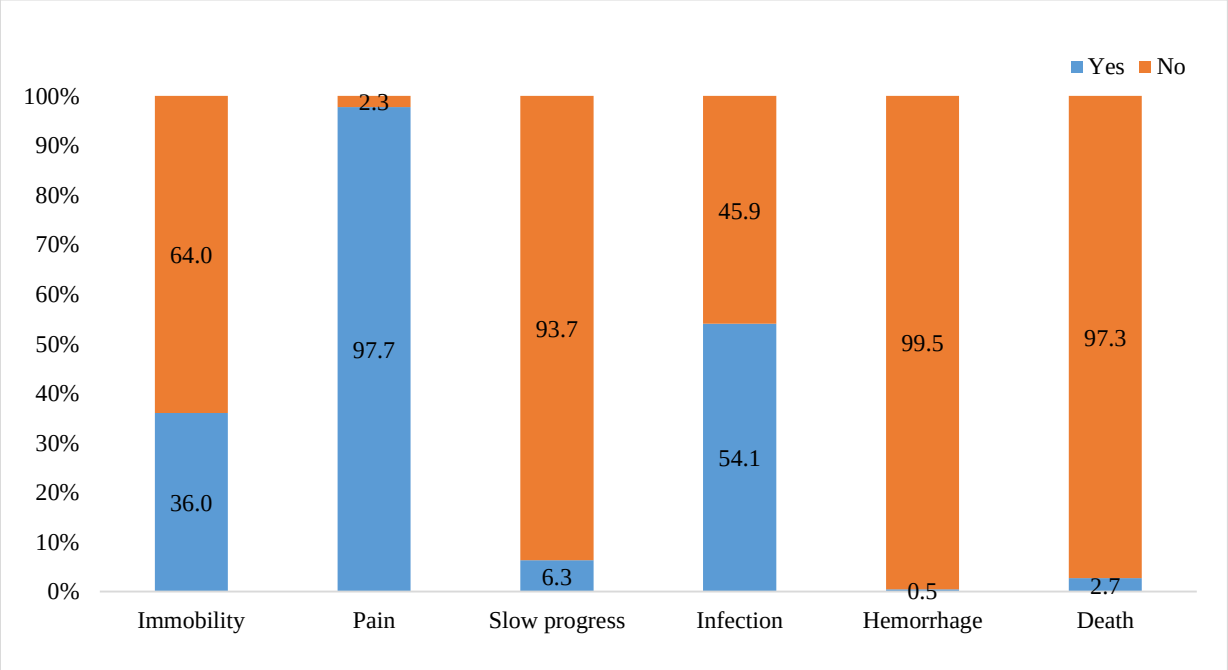


Figure 5.3: Percentage of Participants Reporting Possible Risks Associated with Surgery



Note: Since it is the multiple option question. Therefore, please check it as row total or percent. The information is based on the interview from participants.

Figure 5.3 outlines the possible risks associated with surgery, with an overwhelming 97.7% of participants reporting pain, 54.1% reporting infection, and 36% reporting immobility as probable risks. These findings highlight the primary concerns of patients regarding surgical procedures.

Table 5.2: Distribution of Awareness About Surgery Benefits and Risks by Background Characteristics Among Participants

Background Characteristics	Aware of the benefits of the surgery			Aware about the risks associated with the surgery			Total
	Yes	No	Not Aware	Yes	No	Not Aware	
Age							
Less than 18	83.3 (15)	5.6 (1)	11.1 (2)	55.6 (10)	16.7 (3)	27.8 (5)	18
18 - 25	95.8 (23)	-	4.2 (1)	54.2 (13)	33.3 (8)	12.5 (3)	24
26 - 35	96.5 (55)	1.8 (1)	1.8 (1)	73.7 (42)	24.6 (14)	1.8 (1)	57
36 - 45	88.7 (55)	-	11.3 (7)	71 (44)	16.1 (10)	12.9 (8)	62
46 - 55	83.3 (60)	2.8 (2)	13.9 (10)	61.1 (44)	22.2 (16)	16.7 (12)	72
56 - 65	86.8 (66)	4 (3)	9.2 (7)	40.8 (31)	40.8 (31)	18.4 (14)	76
66 - 75	84.8 (50)	6.8 (4)	8.5 (5)	47.5 (28)	27.1 (16)	25.4 (15)	59
75+	85.7 (12)	7.1 (1)	7.1 (1)	71.4 (10)	21.4 (3)	7.1 (1)	14
Gender							
Male	89.2 (230)	2.7 (7)	8.1 (21)	55.8 (144)	29.1 (75)	15.1 (39)	258
Female	85.5 (106)	4 (5)	10.5 (13)	62.9 (78)	21 (26)	16.1 (20)	124
Education*							
Illiterate	88.4 (76)	4.6 (4)	7.0 (6)	54.7 (47)	30.2 (26)	15.1 (13)	86
<literate but 4th Std	89.3 (25)	7.1 (2)	3.6 (1)	60.7 (17)	21.4 (6)	17.9 (5)	28
5th-7th Std	79.7 (55)	1.5 (1)	18.8 (13)	59.4 (41)	15.9 (11)	24.6 (17)	69
8th -10th std	89.3 (100)	2.7 (3)	8 (9)	58 (65)	28.6 (32)	13.4 (15)	112
10th-12th std	94 (47)	2 (1)	4 (2)	66 (33)	26 (13)	8 (4)	50
Graduate	88.9 (24)	3.7 (1)	7.4 (2)	48.2 (13)	37 (10)	14.8 (4)	27
Post-Graduate	100 (7)	-	-	57.1 (4)	42.9 (3)	-	7
Other	50 (1)	-	50 (1)	50 (1)	-	50 (1)	2
Household Income (Monthly)							
Less than 1250	50 (1)	-	50 (1)	50 (1)	-	50 (1)	2
1250 - 5000	85.4 (35)	7.3 (3)	7.3 (3)	63.4 (26)	19.5 (8)	17.1 (7)	41
5001 - 10000	85 (79)	3.2 (3)	11.8 (11)	61.3 (57)	25.8 (24)	12.9 (12)	93

10001 - 15000	90.5 (86)	2.1 (2)	7.4 (7)	70.5 (67)	19 (18)	10.5 (10)	95
15000+	86 (80)	4.3 (4)	9.7 (9)	58.1 (54)	24.7 (23)	17.2 (16)	93
Income not reported	94.8 (55)	0 (0)	5.2 (3)	29.3 (17)	48.3 (28)	22.4 (13)	58
Total	**88.0**	**3.1**	**8.9**	**58.1**	**26.4**	**15.5**	**382**

Note: 1. Since relatives or patients interviewed they are not sure if the said information was provided, 2. Information for less than 18 years is collected from guardians. 3. Education level considered only for age more than 7 years

The data from Table 5.2 indicates that participants' awareness of the benefits and risks associated with surgery varies based on their background characteristics. Analyzing awareness by age, gender, educational level, and household income, it is evident that a higher percentage of participants are aware of the possible benefits of surgery compared to the associated risks. This trend suggests a convergence towards a placebo effect.

Among different age groups, participants aged 26-35 had the highest awareness of both the benefits (96.5%) and risks (73.7%) of surgery. The percentage of males who are aware of the benefits of surgery is slightly higher at 89.2% compared to females at 85.5%. However, the reverse is observed in the case of risk awareness, with 62.9% of women being aware of the risks compared to 55.8% of men.

Educational levels also play a significant role, with higher education not always correlating with increased awareness. For instance, all post-graduate respondents (7) are aware of the benefits of surgery, while only 57.1% of them are aware of the risks. Interestingly, 88.9% of illiterates are aware of the benefits and 48.2% are aware of the risks, similar to the awareness levels of graduates. This implies that regardless of educational level, awareness of the risks and benefits of surgery remains relatively consistent.

Similarly, household income shows a trend where higher income groups have greater awareness. Overall, 88.0% of the total participants are aware of the benefits, while 58.1% are aware of the risks associated with surgery.

Table 5.3: Distribution of Surgery Benefits as Reported by Participants by Background Characteristics

Background Characteristics	Improved		Less Pain		Better Health		Total
	Yes	No	Yes	No	Yes	No	
Age							
Less than 18	80 (12)	20 (3)	86.7 (13)	13.3 (2)	86.7 (13)	13.3 (2)	15
18 - 25	87 (20)	13 (3)	95.7 (22)	4.4 (1)	87 (20)	13 (3)	23
26 - 35	89.1 (49)	10.9 (6)	98.2 (54)	1.8 (1)	89.1 (49)	10.9 (6)	55
36 - 45	89.1 (49)	10.9 (6)	96.4 (53)	3.6 (2)	92.7 (51)	7.3 (4)	55
46 - 55	85 (51)	15 (9)	91.7 (55)	8.3 (5)	90 (54)	10 (6)	60
56 - 65	74.2 (49)	25.8 (17)	86.4 (57)	13.6 (9)	80.3 (53)	19.7 (13)	66
66 - 75	72 (36)	28 (14)	100 (50)	0 (0)	86 (43)	14 (7)	50
75+	66.7 (8)	33.3 (4)	91.7 (11)	8.3 (1)	83.3 (10)	16.7 (2)	12
Gender							
Male	81.3 (187)	18.7 (43)	93 (214)	7 (16)	84.8 (195)	15.2 (35)	230
Female	82.1 (87)	17.9 (19)	95.3 (101)	4.7 (5)	92.5 (98)	7.6 (8)	106
Education*							
Illiterate	69.7 (53)	30.3 (23)	92.1 (70)	7.9 (6)	80.3 (61)	19.7 (15)	76
<literate but 4th Std	88 (22)	12 (3)	88 (22)	12 (3)	84 (21)	16 (4)	25
5th-7th Std	83.6 (46)	16.4 (9)	98.2 (54)	1.8 (1)	89.1 (49)	10.9 (6)	55
8th -10th std	85 (85)	15 (15)	94 (94)	6 (6)	89 (89)	11 (11)	100
10th-12th std	85.1 (40)	14.9 (7)	97.9 (46)	2.1 (1)	91.5 (43)	8.5 (4)	47
Graduate	79.2 (19)	20.8 (5)	83.3 (20)	16.7 (4)	87.5 (21)	12.5 (3)	24
Post-Graduate	100 (7)	-	100 (7)	-	100 (7)	-	7
Other	100 (1)	-	100 (1)	-	100 (1)	-	1
Household Income (Monthly)							
Less than 1250	-	100 (1)	100 (1)	-	100 (1)	-	1
1250 - 5000	91.4 (32)	8.6 (3)	97.1 (34)	2.9 (1)	91.4 (32)	8.6 (3)	35
5001 - 10000	83.5 (66)	16.5 (13)	88.6 (70)	11.4 (9)	86.1 (68)	13.9 (11)	79

10001 - 15000	87.2 (75)	12.8 (11)	97.7 (84)	2.3 (2)	90.7 (78)	9.3 (8)	86
15000+	88.8 (71)	11.3 (9)	95 (76)	5 (4)	90 (72)	10 (8)	80
Income not reported	54.6 (30)	45.5 (25)	90.9 (50)	9.1 (5)	76.4 (42)	23.6 (13)	55
Total	**81.5**	**18.5**	**93.8**	**6.3**	**87.2**	**12.8**	**336**

Note: 1. Since relatives or patients interviewed they are not sure if the said information was provided, 2. Information for less than 18 years is collected from guardians. 3. Education level considered only for age more than 7 years

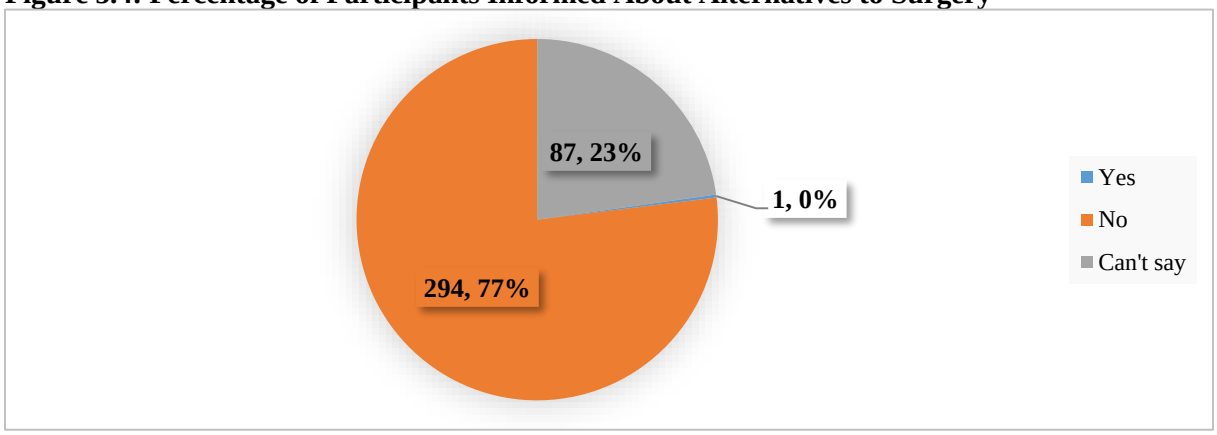
Participants' awareness of the benefits and risks associated with surgery varies significantly based on their background characteristics as shown in Table 5.3. In terms of improved health middle-aged participants (26-55) show the highest awareness, with 89.1% of those aged 26-35 and 85% of those aged 46-55 aware of improvedbenefits. Younger (<18) and older (75+) age groups show lower awareness levels, with only 80% and 66.7% respectively. Females generally exhibit higher awareness (82.1%) compared to males (81.3%). Higher education correlates with greater awareness, with post-graduates displaying 100% awareness, while illiterates show 69.7%. Participants with household incomes of 15000+ exhibit higher awareness levels (88.8%) compared to those with unreported incomes (54.6%).

For those reporting less pain participants aged 66-75 show the highest awareness, with 100% aware of this benefit. Females also exhibit slightly higher awareness (95.3%) compared to males (93%). Higher education levels correlate with greater awareness, with post-graduates and those with less than 4th standard education showing 100% awareness. Higher household incomes correlate with higher awareness, with 15000+ income group showing 95% awareness.

Regarding better health middle-aged participants (36-45) demonstrate the highest awareness, with 92.7% aware of better health benefits. Females exhibit higher awareness (92.5%) compared to males (84.8%). Higher education levels, particularly post-graduates, show the highest awareness (100%). Participants with household incomes of 15000+ show higher awareness levels (90%), whereas those with unreported incomes have lower awareness (76.4%).

These findings suggest that targeted education programs might enhance awareness about the benefits and risks of surgery, particularly among younger, older, illiterate participants, and those with unreported incomes.

Figure 5.4: Percentage of Participants Informed About Alternatives to Surgery



Note: The information is based on the interview from participants.

Most participants were admitted after being informed that surgery was necessary. As shown in Figure 5.4, nearly three-fourths (77%) did not receive any information about alternatives to surgery, 19% reported being unaware of alternatives, and only 1% were informed about such options.

Table 5.4: Distribution of Anesthetist Visits and Pre-Surgery Dietary Instructions Given to Participants.

Anesthetist visit and provided information	Frequency	Percentage
Yes	222	58.1
No	160	41.9
Received instruction to follow any dietary restrictions before surgery		
Yes	43	11.4
No	309	81.5
Not Aware	27	7.1
Total	**382**	**100**

The findings from the table 5.4 show that 58.1% of participants reported having a visit from an anesthetist and receiving information regarding their surgery, while 41.9% did not. Additionally, only 11.4% of participants received instructions to follow dietary restrictions before surgery, while a significant majority of 81.5% did not receive any dietary instructions, and 7.1% were not aware of such information.

These results highlight a gap in the communication of important pre-surgery information to patients, suggesting a need for improved protocols to ensure that all patients are adequately informed about their anesthesia and dietary restrictions before undergoing surgery.

Table 5.5: Distribution of Participants by Anesthetist Visits and Received Information on Dietary Instructions Based on Expected Day of Surgery

Expected day of Surgery	Anesthetist visited		Received Instruction to follow any dietary restrictions			Total
	Yes	No	Yes	No	Not Aware*	
0 - 1 day	37.5	62.5	18.8	65.6	15.6	32
2 - 3 days	50.8	49.2	10.2	85.9	3.9	128
4 - 5 days	67.4	32.6	16.3	81.4	2.3	43
More than 5 days	62.6	37.4	9.9	80.2	9.9	91
Not Aware	67.0	33.0	9.1	79.5	11.4	88
Total	**222**	**160**	**43**	**309**	**30**	**382**

Note: Since relatives or patients interviewed they are not sure if they said information was provided.

Anesthetist consultations and dietary instructions are typically provided a day prior to or close to the scheduled surgery. Therefore, participants were asked about the timing of receiving this information relative to their expected day of surgery.

The findings from Table 5.5 reveal variability in the percentage of participants reporting an anesthetist visit and receiving dietary restriction instructions, depending on the expected timing of surgery. Among participants with a surgery scheduled within 0–1 day, 37.5% (12) reported an anesthetist visit, while 62.5% (20) did not. Of these 32 participants, 18.8% received dietary instructions, 65.6% did not, and 15.6% were unaware of dietary restrictions. For those expecting surgery in 2–3 days, 50.8% reported an anesthetist visit, while 49.2% did not. Dietary instructions were reported by 10.2%, whereas 85.9% did not receive any, and 3.9% were unaware.

For surgeries expected in 4–5 days, 67.4% of participants reported an anesthetist visit, while 32.6% did not. Dietary instructions were received by 16.3%, while 81.4% did not receive any, and 2.3% were unaware of dietary restrictions. Among participants with surgeries expected in more than 5 days, 62.6% reported an anesthetist visit, while 37.4% did not. Of these participants, 9.9% (9) received dietary instructions, 80.2% did not, and 9.9% were unaware of dietary restrictions.

For participants who were unaware of the expected day of surgery, 67.0% reported an anesthetist visit, while 33.0% did not. Dietary instructions were received by 9.1%, while 79.5% did not receive any, and 11.4% were unaware. Additionally, 29 participants reported being unaware of the anesthetist visit, and 10 participants did not know about dietary restrictions.

Overall, the findings suggest that the likelihood of receiving an anesthetist visit and dietary instructions prior to surgery increases as the scheduled surgery date approaches. However, a considerable proportion of participants remain uninformed about necessary dietary restrictions, indicating potential gaps in pre-surgical communication.

Table 5.6: Distribution of Anesthetist Visits and Pre-Surgery Dietary Instructions by Background Characteristics of Participants

Background Characteristics	Anesthetist visited		Received Instruction to follow any dietary restrictions			Total
	Yes	No	Yes	No	Not Aware	
Age						
Less than 18	50 (9)	50 (9)	16.7 (3)	77.8 (14)	5.6 (1)	18
18 - 25	58.3 (14)	41.7 (10)	12.5 (3)	83.3 (20)	4.2 (1)	24
26 - 35	64.9 (37)	35.1 (20)	15.8 (9)	82.5 (47)	1.8 (1)	57
36 - 45	66.1 (41)	33.9 (21)	11.5 (7)	82 (50)	6.6 (4)	61
46 - 55	63.9 (46)	36.1 (26)	14.1 (10)	77.5 (55)	8.5 (6)	71
56 - 65	50 (38)	50 (38)	9.2 (7)	85.5 (65)	5.3 (4)	76
66 - 75	50.9 (30)	49.2 (29)	6.9 (4)	77.6 (45)	15.5 (9)	58
75+	50 (7)	50 (7)	-	92.9 (13)	7.1 (1)	14
Gender						
Male	56.6 (146)	43.4 (112)	12.8 (33)	79.4 (204)	7.8 (20)	257
Female	61.3 (76)	38.7 (48)	8.2 (10)	86.1 (105)	5.7 (7)	122
Education*						
Illiterate	51.2 (44)	48.8 (42)	7.1 (6)	85.7 (72)	7.1 (6)	84
<literate but 4th Std	64.3 (18)	35.7 (10)	17.9 (5)	82.1 (23)	-	28
5th-7th Std	60.9 (42)	39.1 (27)	8.8 (6)	80.9 (55)	10.3 (7)	68
8th -10th std	59.8 (67)	40.2 (45)	12.5 (14)	81.3 (91)	6.3 (7)	112
10th-12th std	68 (34)	32 (16)	18 (9)	78 (39)	4 (2)	50
Graduate	44.4 (12)	55.6 (15)	11.1 (3)	74.1 (20)	14.8 (4)	27
Post-Graduate	71.4 (5)	28.6 (2)	-	100 (7)	-	7
Other	-	100 (2)	-	50 (1)	50 (1)	2
Household Income (Monthly)						
Less than 1250	50 (1)	50 (1)	-	50 (1)	50 (1)	2
1250 - 5000	73.2 (30)	26.8 (11)	12.2 (5)	80.5 (33)	7.3 (3)	41
5001 - 10000	64.5 (60)	35.5 (33)	6.5 (6)	86 (80)	7.5 (7)	93

10001 - 15000	64.2 (61)	35.8 (34)	13.7 (13)	81.1 (77)	2.1 (2)	95
15000+	57 (53)	43 (40)	10.8 (10)	81.7 (76)	7.5 (7)	93
Income not reported	29.3 (17)	70.7 (41)	15.5 (9)	72.4 (42)	12.1 (7)	58
Total	**58.1**	**41.9**	**11.4**	**81.5**	**7.1**	**382**

Note: 1. Since relatives or patients interviewed they are not sure if the said information was provided**, 2.** Information for less than 18 years is collected from guardians. 3. Education level considered only for age more than 7 years

The findings from Table 5.6 reveal that participants' awareness of anesthetist visits and dietary restriction instructions before surgery varies based on several background characteristics such as age, gender, education, and household income. For age, participants aged 26-35 had the highest awareness, with 64.9% (37) reporting an anesthetist visit and 15.8% (9) receiving dietary instructions. In contrast, younger participants (<18) and older participants (75+) reported lower anesthetist visits at 50% (9) and 50% (7) respectively. Among those aged 56-65, 50% (38) reported an anesthetist visit and 9.2% (7) received dietary instructions, with 5.3% (4) being unaware.

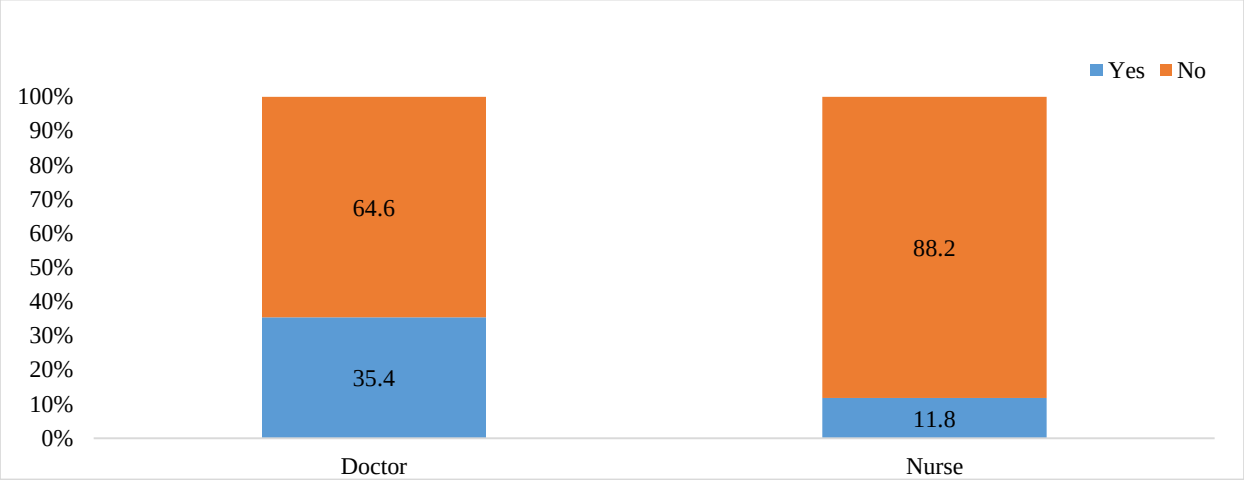
In terms of gender, females reported slightly higher anesthetist visits at 61.3% (76) compared to males at 56.6% (146). For dietary instructions, 8.2% (10) of females and 12.8% (33) of males received them, while 5.7% (7) of females and 7.8% (20) of males were unaware.

Regarding education, participants with less than 4th standard education reported the highest anesthetist visits at 64.3% (18) and dietary instructions at 17.9% (5). Illiterate participants had lower awareness, with 48.8% (42) not having an anesthetist visit and only 7.1% (6) receiving dietary instructions. Among post-graduates, 71.4% (5) reported an anesthetist visit, and 100% (7) were aware of dietary restrictions.

For household income, participants with incomes between 1250-5000 reported the highest anesthetist visits at 73.2% (30) and dietary instructions at 12.2% (5). Those with unreported income had the lowest anesthetist visits at 29.3% (17) and the highest percentage of unawareness about dietary restrictions at 12.1% (7).

Overall, these findings suggest that awareness of anesthetist visits and dietary restriction instructions before surgery is influenced by age, gender, education, and household income. Targeted communication and education efforts could help increase awareness, especially among younger, older, less educated, and lower-income participants.

Figure 5.5: Distribution of Participants Instructed on Dietary Restrictions by Health Professionals



Note: Other includes – no information received

The information is based on the interview from participants.

Figure 5.5 illustrates the type of service providers who provided information related to dietary restrictions. According to the data, 35.4% of participants reported receiving this information from doctors, while 11.8% reported receiving it from nurses.

Summary

The findings reveal that 29.6% of participants reported they will undergo major surgery, while 37.2% reported minor surgery. Most participants (71.5%) were unaware of the surgery duration, but 88% knew the benefits, with 81.5% expecting health improvement and 93.8% less pain. Only 48.5% of patients and 73.2% of relatives were aware of surgical risks, primarily pain (97.7%), infection (54.1%), and immobility (36%). Awareness varied by age, gender, education, and income, with younger, older, and less educated participants showing lower awareness. Additionally, 77% were unaware of alternatives to surgery. Communication gaps were noted, with only 58.1% reporting an anesthetist visit and 11.4% receiving dietary instructions. The likelihood of receiving necessary information increased with the expected surgery duration. The findings reveal that participants' awareness of anesthetist visits and dietary restriction instructions before surgery varies based on age, gender, education, and household income. Participants aged 26-35 showed the highest awareness, while younger and older participants reported lower awareness levels. Females generally had higher awareness compared to males. Higher education levels and household incomes were associated with greater awareness, with post-graduates and those earning between ₹1250-5000 showing the highest awareness. Doctors were the primary source of dietary restriction information (35.4%), followed by nurses (11.8%). These findings highlight the need for

targeted communication and education efforts to improve awareness, particularly among younger, older, less educated, and lower-income participants.

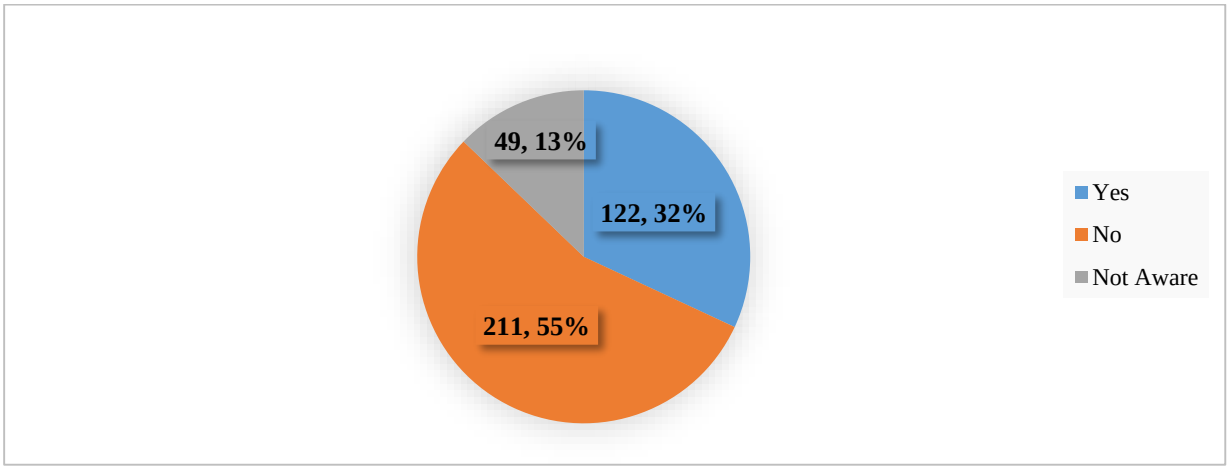
Chapter 6: Understanding Informed Consent – Procedures and Challenges

This chapter aims to explore the crucial elements of informed consent in surgical procedures, highlighting its significance and the challenges encountered in its implementation. Informed consent is a fundamental aspect of patient autonomy and ethical medical practice, ensuring that patients are well-informed about the risks, benefits, and alternatives of surgical procedures before giving their consent. However, the process of obtaining informed consent can be complex, particularly when patients have varying levels of understanding and socio-economic backgrounds.

Almutairi et al. (2024) highlight the challenges in pre-hospital care communication, recommending structured protocols to enhance clarity and efficiency. The use of frameworks like ISBAR (Introduction, Situation, Background, Assessment, Recommendation) can improve information transfer and ensure that patients are adequately informed before surgery. These communication strategies are essential for obtaining valid informed consent and preventing misunderstandings.

Overall, this chapter aims to underscore the importance of clear communication, comprehensive education, and patient involvement in the informed consent process. By addressing the challenges and implementing effective strategies, healthcare providers can ensure that patients make well-informed decisions about their surgical care.

Figure 6.1: Distribution of Patients/Relatives Receive the Informed Consent Form



During pretesting and patient interviews, it was noted that many patients or their relatives did not understand the term "informed consent" when asked directly. Therefore, the investigators took steps to simplify and clarify the concept. They asked participants if they had ever received an explanation about surgery, diagnosis, etc., and if any form was provided. They further inquired about who provided the form, what was communicated when the form was given, and whether the

details were thoroughly explained. They also checked who explained the details, whether the participants signed or used a thumb impression, and if they submitted the form. Additionally, they asked about the timing of submission and if the participants still had any queries. The investigators further asked that participants whether they understood the content of the informed consent, did they ever sought any necessary help, and asked any questions, and whether form was submitted after a thorough understanding.

Figure 6.1 illustrates the distribution of participants by the receipt of informed consent. Thirty-two percent of participants confirmed receiving the informed consent, 13% were unsure, and 55% reported not receiving it.

Table 6.1: Distribution of Participants Receiving Informed Consent Forms by Duration of Hospital Admission

Duration of Admission (in days)	Received Informed Consent Form (freq.)			
	Yes	No	Not Aware*	Total
0 – 1 day	27.6 (37)	61.2 (82)	11.2 (15)	134
2 – 3 days	29.0 (29)	60.0 (60)	11.0 (11)	100
4 – 5 days	39.5 (15)	50.0 (19)	10.5 (4)	38
6 – 7 days	35.0 (7)	50.0 (10)	15.0 (3)	20
More than 7 days	37.8 (34)	44.4 (40)	17.8 (16)	90
Total	**31.9 (122)**	**55.2 (211)**	**12.8 (49)**	**382**

Note: *participants might be not ware about that, whether IC is received by patients/relatives at the time of interview.

As previously mentioned, the date of surgery is not fixed and may change depending on emergencies. The findings from Table 6.1 indicate that among 382 participants, awareness and receipt of the informed consent form varied based on the duration of hospital admission. The table shows the distribution of participants by receipt of informed consent. Participants with recent admissions of 0-1 day (82) and 2-3 days (100) predominantly did not receive the informed consent. Those who did receive the informed consent varied by the number of days from 0-1 day (37 cases) and 2-3 days (29 cases) to more than 7 days (37 cases). However, around 49 participants were unaware of the informed consent, with variations from 0-1 day (15 cases) to more than 7 days (16 cases).

Participants admitted for 0-1 days had the lowest receipt rate of informed consent at 27.6%, with 61.2% reporting not receiving it and 11.2% being unaware. Similarly, for participants admitted for 2-3 days, 29.0% received the informed consent, while 60.0% did not, and 11.0% were unaware. As the duration of admission increased, the receipt rate of the informed consent also increased. For those admitted for 4-5 days, 39.5% received the informed consent, 50.0% did not, and 10.5% were

unaware. Participants admitted for 6-7 days had a receipt rate of 35.0%, with 50.0% not receiving it and 15.0% being unaware. Among participants admitted for more than 7 days, 37.8% received the informed consent, 44.4% did not, and 17.8% were unaware.

Overall, 31.9% of participants reported receiving the informed consent form, 55.2% did not, and 12.8% were unaware. These findings suggest that longer hospital stays are associated with higher receipt rates of informed consent forms. However, a significant proportion of participants did not receive or were unaware of the informed consent, highlighting the need for improved communication and procedures regarding informed consent in the hospital setting.

Table 6.2: Distribution of Participants Receiving Informed Consent Forms by Background Characteristics

Background Characteristics	Received Informed Consent Form			Total
	Yes	No	Not Aware	
Age				
Less than 18	33.3 (6)	55.6 (10)	11.1 (2)	18
18 - 25	33.3 (8)	66.7 (16)	-	24
26 - 35	38.6 (22)	56.1 (32)	5.3 (3)	57
36 - 45	35.5 (22)	46.8 (29)	17.7 (11)	62
46 - 55	33.3 (24)	54.2 (39)	12.5 (9)	72
56 - 65	34.2 (26)	52.6 (40)	13.2 (10)	76
66 - 75	15.3 (9)	62.7 (37)	22 (13)	59
75+	35.7 (5)	57.1 (8)	7.1 (1)	14
Gender				
Male	34.5 (89)	50.8 (131)	14.7 (38)	258
Female	26.6 (33)	64.5 (80)	8.9 (11)	124
Education				
Illiterate	24.4 (21)	62.8 (54)	12.8 (11)	86
<literate but 4th Std	39.3 (11)	53.6 (15)	7.1 (2)	28
5th-7th Std	33.3 (23)	47.8 (33)	18.8 (13)	69
8th -10th std	32.1 (36)	54.5 (61)	13.4 (15)	112
10th-12th std	38 (19)	56 (28)	6 (3)	50
Graduate	22.2 (6)	63 (17)	14.8 (4)	27
Post-Graduate	57.1 (4)	42.9 (3)	-	7
Other	50 (1)	-	50 (1)	2
Household Income (Monthly)				
Less than 1250	50.0 (1)	-	50.0 (1)	2
1250 - 5000	34.2 (14)	41.5 (17)	24.4 (10)	41
5001 - 10000	33.3 (31)	54.8 (51)	11.8 (11)	93
10001 - 15000	37.9 (36)	55.8 (53)	6.3 (6)	95

15000+	32.3 (30)	52.7 (49)	15.1 (14)	93
Income not reported	17.2 (10)	70.7 (41)	12.1 (7)	58
Total	**34.6**	**52.5**	**13**	**382**

Note: Information for less than 18 years is collected from guardians. *Education level considered only for age more than 7 years.

As discussed, informed consent is explained to patients based on their understanding level, using simpler forms, charts, and local languages. However, understanding patients' background and demographic characteristics is equally important. Therefore, the table presents details of informed consent according to patients' socio-economic and background characteristics.

The findings from Table 6.2 reveal the distribution of participants who received the informed consent form based on various background characteristics. As observed, there is not much variation by age, and approximately 34.6% of participants reported receiving the informed consent form. Participants aged 26-35 years reported the highest receipt rate of informed consent at 38.6%, while the lowest receipt rate was observed among participants aged 66-75 years at 15.3%. About 34.5% of males received the informed consent form, while 50.8% did not, and 14.7% were unaware. Among females, 26.6% reported receiving the informed consent form, while 64.5% did not, and 8.9% were unaware.

Regarding education, out of 27 graduates, 17 reported not receiving the informed consent form, and four were unaware. However, none of the post-graduate participants were unaware, and out of seven respondents, four reported receiving the informed consent form, resulting in the highest receipt rate at 57.1%. Approximately a quarter of illiterate participants did not receive the informed consent form. Illiterate participants had a lower receipt rate at 24.4%, with 62.8% not receiving the informed consent form. Participants with a household income of less than 1250 reported the highest receipt rate at 50%, though this group had only two participants. Participants with unreported income had the lowest receipt rate at 17.2%.

Overall, out of 382 participants, 34.6% reported receiving the informed consent form, 52.5% did not, and 13% were unaware. These findings suggest variations in the receipt of informed consent forms based on age, gender, education, and household income. The results underscore the need for targeted efforts to ensure the delivery and understanding of informed consent forms across different demographic groups.

Table 6.3: Distribution of Participants Receiving and Submitting Informed Consent Forms and Explanation Provided

Number of IC form	Frequency	Percentage
One	109	89.3
More than one	13	10.7
Received IC after admission		
0 – 1 days	83	68.0
2 – 3 days	26	21.3
4 – 5 days	3	2.5
More than 5 days	10	8.2
Submitted the signed/thumb IC form		
Yes	107	87.7
No	10	8.2
Not Aware	5	4.1
Submitted IC after admission		
0 – 1 days	32	29.9
2 – 3 days	27	25.2
4 – 5 days	13	12.2
More than 5 days	35	32.7
IC received from		
Administrative staff	6	4.9
Doctor	27	22.1
Staff nurse	84	68.9
Others	5	4.1
Received explanation on IC form		
Yes	44	36.1
No	63	51.6
Not Aware	15*	12.3
Total	**122**	**100**

Note: *participants might be not aware about the explanation of IC during the interview.

In addition, participants were asked about the number of consent forms they received, who provided the form, and who explained its contents to them. The findings from Table 6.3 provide the following details regarding the receipt after admission, signing, and submission of informed consent (IC) forms by participants:

Among 122 participants, 89.3% received only one IC form, while 10.7% received more than one. Regarding the timing of receipt after admission, 68.0% received the IC form within 0-1 days, 21.3% within 2-3 days, 2.5% within 4-5 days, and 8.2% after more than 5 days.

In terms of submission, 87.7% submitted the signed/thumb impression IC form, 8.2% did not submit it, and 4.1% were not aware of the submission status. The timing of submission after admission shows that 29.9% submitted it within 0-1 days, 25.2% within 2-3 days, 12.2% within 4-5 days, and 32.7% after more than 5 days.

The source from which participants received the IC form indicates that 68.9% received it from a staff nurse, 22.1% from a doctor, 4.9% from administrative staff, and 4.1% from others.

Regarding the explanation provided on the IC form, 36.1% reported receiving an explanation, 51.6% did not receive an explanation, and 12.3% were not aware of whether an explanation was provided.

These findings underscore the importance of timely receipt, thorough explanation, and proper submission of informed consent forms to ensure informed decision-making among participants in the healthcare setting.

Table 6.4: Distribution of Informed Consent Received and Submitted by Expected Duration of Surgery Among Participants.

Expected duration of Surgery	Received IC			Submitted IC		
	Yes*	No	Not Aware	Yes	No	Not Aware#
0 - 1 days	46.9 (15)	53.1 (17)	-	80.0 (12)	6.7 (1)	13.3 (2)
2 - 3 days	28.9 (37)	61.7 (79)	9.4 (12)	94.6 (35)	5.4 (2)	-
4 - 5 days	34.9 (15)	58.1 (25)	7.0 (3)	86.7 (13)	6.7 (1)	6.7 (1)
More than 5 days	39.6 (36)	44.0 (40)	16.5 (15)	86.1 (31)	11.1 (4)	2.8 (1)
Don't Know	20.7 (19)	57.5 (50)	21.8 (19)	83.3 (15)	11.1 (1)	5.6 (1)
Total	**31.8 (122)**	**55.4 (211)**	**12.9 (49)**	**87.6 (106)**	**8.3 (10)**	**4.1 (5)**

Note: *1 case of not knowing expected duration of surgery, # participant might not be aware about the IC submission at the time of interview.

The findings from Table 6.4 illustrate the distribution of informed consent (IC) forms submitted by participants based on the expected duration of surgery. Discussions with service providers revealed that the time limit for collecting informed consent usually does not exceed one day before the expected day of surgery. However, 17 participants reported not receiving the informed consent form even within one day of the expected surgery date. Among those who received the informed consent form, only one participant reported not submitting it within one day of the expected surgery date.

For those with an expected surgery duration of 2-3 days, 28.9% received the IC, 61.7% did not, and 9.4% were unaware. Of those who received the IC, 94.6% submitted the form, and 5.4% did not submit.

Participants expecting surgery in 4-5 days had a receipt rate of 34.9%, with 58.1% not receiving the IC and 7.0% being unaware. Among those who received the IC, 86.7% submitted it, 6.7% did not, and 6.7% were unaware.

For those with an expected surgery duration of more than 5 days, 39.6% received the IC, 44.0% did not, and 16.5% were unaware. Of those who received the IC, 86.1% submitted it, 11.1% did not, and 2.8% were unaware.

Participants who were unsure of the expected duration of surgery had the lowest receipt rate of IC forms at 20.7%, with 57.5% not receiving the IC and 21.8% being unaware. Of those who received the IC, 83.3% submitted it, 11.1% did not, and 5.6% were unaware.

Overall, 31.8% of participants received the IC form, 55.4% did not, and 12.9% were unaware. Additionally, 87.6% of participants who received the IC submitted the form, 8.3% did not submit, and 4.1% were unaware. The findings reveal significant variability in the receipt and submission of IC forms based on the expected duration of surgery

These findings highlight the variability in receipt and submission of IC forms based on the expected duration of surgery. The results emphasize the importance of distributing IC forms **at least three days prior to surgery** to ensure timely receipt, proper submission, and patient understanding. Clear communication is essential to improve this process.

Table 6.5: Distribution of Explanation of Informed Consent Form Among Participants by Background Characteristics.

Background Characteristics	Explained the consent form to you			Total
	Yes	No	Not Aware #	
Age				
Less than 18	66.7 (4)	33.3 (2)	-	6
18 - 25	50 (4)	50 (4)	-	8
26 - 35	27.3 (6)	54.6 (12)	18.2 (4)	22
36 - 45	36.4 (8)	40.9 (9)	22.7 (5)	22
46 - 55	50 (12)	41.7 (10)	8.3 (2)	24
56 - 65	15.4 (4)	69.2 (18)	15.4 (4)	26
66 - 75	44.4 (4)	55.6 (5)	-	9
75+	40 (2)	60 (3)	-	5
Gender				
Male	33.7 (30)	52.8 (47)	13.5 (12)	89
Female	42.4 (14)	48.5 (16)	9.1 (3)	33
Education*				
Illiterate	33.3 (7)	47.6 (10)	19.1 (4)	21

<literate but 4th Std	27.3 (3)	63.6 (7)	9.1 (1)	11
5th-7th Std	39.1 (9)	47.8 (11)	13 (3)	23
8th -10th std	33.3 (12)	50 (18)	16.7 (6)	36
10th-12th std	57.9 (11)	42.1 (8)	-	19
Graduate	33.3 (2)	66.7 (4)	-	6
Post-Graduate	-	75 (3)	25 (1)	4
Other	-	100 (1)	-	1
Household Income (Monthly)				
Less than 1250	100 (1)	-	-	1
1250 - 5000	14.3 (2)	57.1 (8)	28.6 (4)	14
5001 - 10000	29 (9)	54.8 (17)	16.1 (5)	31
10001 - 15000	47.2 (17)	44.4 (16)	8.3 (3)	36
15000+	26.7 (8)	66.7 (20)	6.7 (2)	30
Income not reported	70 (7)	20 (2)	10 (1)	10
Total	**36.1**	**51.6**	**12.3**	**122**

Note: #The information is based on the interview from participants, therefore they might not be aware about the explanation of IC. *Education level considered only for age more than 7 years

The findings from Table 6.5 show the distribution of participants who received explanation of informed consent based on various background characteristics. Participants aged less than 18 years reported the highest explanation at 66.7%. Those aged 56-65 years had the lowest explanation at 15.4%. Among males, 33.7% reported the consent form was explained to them, while 52.8% did not, and 13.5% were unaware. Among females, 42.4% reported the consent form explained to them, while 48.5% did not, and 9.1% were unaware. Participants with a 10th-12th standard education reported they received explanation and was highest at 57.9%. Participants with less than 4th standard literacy reported lower explanation at 27.3%. Among the six graduates 4 of them responded that the informed consent is not explained to them whereas 3 out of 4 post graduates reported that the informed consent was not explained to them. Near about half the number of respondents with 8-10th std and illiterates (50%), and 8 out of 19 participant responded that the consent form was not explained to them. Only one participant with a household income of less than 1250 received and explanation of IC. Participants with a household income of 1250-5000 reported lowest at 14.3%. Overall out of 122 participants, 36.1% had the informed consent form explained to them, 51.6% did not, and 12.3% were unaware. These findings highlight the variations in explaining the informed consent form based on age, gender, education, and household income. The results emphasize the importance of ensuring that all participants receive a thorough explanation of the informed consent form, considering their demographic characteristics.

Table 6.6: Distribution of Participants by Number of Informed Consent Forms and Type of Surgery

Type of Surgery	Number of IC form		
	One	More than 1	Total
Bone Grafting	-	1	1
Cancer	22	4	26
Fibroadenoma	1	-	1
Fistula	2	-	2
Gallbladder stone	3	1	4
Hernia	21	2	23
Hydrocele	-	2	2
Kidney Stone	6	-	6
Pseudocyst	3	-	3
Paraphimotic or Circumcision	-	1	1
Percutaneous Endoscopic Gastrostomy	2	-	2
Hemorrhoids	4	2	6
Bed sore grafting	1	-	1
Upper GI Endoscopy	22	-	22
Skin Grafting and Excision	11	-	11
Thyroid	1	-	1
Urinoma	1	-	1
Varicose Veins	3	-	3
Others	6	-	6
Total	**109**	**13**	**122**

The findings from Table 6.6 present the number of informed consent (IC) forms received by participants based on the type of surgery. Participants undergoing cancer surgeries (4 participants), hernia surgeries (2 participants), hemorrhoid surgeries (2 participants), bone grafting (1 participant), hydrocele (1 participant), and paraphimotic or circumcision surgeries (1 participant) received more than one informed consent (IC) form. For all other surgeries, including upper GI endoscopy, skin grafting and excision, kidney stone treatment, fibroadenoma, fistula, pseudocyst, percutaneous endoscopic gastrostomy, bed sore grafting, thyroid, urinoma, varicose veins, and others, participants received one IC form each. Overall, 109 participants received one IC form, and 13 participants received more than one.

Table 6.7: Distribution of Participants Who Received Explanation of Informed Consent Form by Types of Health Professionals.

IC Explained by	Frequency	Percentage
Administrative staff	3	2.5
Doctor	24	19.7
Staff nurse	17	13.9
No one	62	50.8
Not Aware*	16	13.1
Total	**122**	**100**

Note: Since relatives or patients interviewed they are not sure if the said information was provided

The findings from Table 6.7 show the percentage of participants who received an explanation of the informed consent (IC) form from different sources.

Among the participants, 2.5% (3) received the explanation from administrative staff, 19.7% (24) from doctors, and 13.9% (17) from staff nurses. A significant proportion of participants, 50.8% (62), reported that no one explained the informed consent form to them, while 13.1% were not aware if the information was provided. Since the information is based on interviews with relatives or patients, they might not be sure if the said information was provided.

These findings highlight that a substantial number of participants did not receive an explanation of the IC form, underscoring the need for improved communication and clarity in the informed consent process

Table 6.8: Distribution of Participants Reading and Understanding the Points in the Informed Consent Form.

Read each and every point written in consent form	Frequency	Percentage
Yes	13	10.8
No	59	69.9
Partially	5	4.8
Don't Know	45	14.5
Total	**122**	**100**
Understood the things mentioned in the consent form		
Yes	13	72.2
Partially	3	16.6
No/Don’t Know	2	11.2
Total	**18**	**100**

Note: Since relatives or patients interviewed they are not sure if the said information was provided

The findings from Table 6.8 present the percentage of participants who can read and understand the informed consent form. Regarding their ability to read each point written in the consent form, 10.8% (13) of participants reported that they read every point, while 69.9% (59) reported that they did not. Additionally, 4.8% (5) of participants mentioned that they partially read the points, and 14.5% (45) were unsure. When it came to understanding the content mentioned in the consent form among those who read it, 72.2% (13) reported that they understood it completely, 16.6% (3) reported partial understanding, and 11.2% (2) mentioned that they did not understand or were unsure. Overall, out of 122 participants, these findings highlight the variations in participants' ability to read and understand the informed consent form, suggesting the need for clear communication and simplified explanations to ensure proper comprehension.

Table 6.9: Distribution of Participants Reading Each Point in the Informed Consent Form by Education Level

Education level*	Read each and every point of IC				Total
	Yes	No	Partially	Not Aware[#]	
Illiterate	14.3 (3)	47.6 (10)	4.8 (1)	33.3 (7)	21
<literate but 4th Std	9.1 (1)	45.5 (5)	-	45.5 (5)	11
5th-7th Std	4.3 (1)	47.8 (11)	4.3 (1)	43.5 (10)	23
8th -10th std	13.9 (5)	52.8 (19)	2.8 (1)	30.6 (11)	36
10th-12th std	10.5 (2)	31.6 (6)	10.5 (2)	47.4 (9)	19
Graduate	-	50.0 (2)	-	50.0 (2)	4
Others	-	100.0 (1)	-	-	1
Total	**10.7 (13)**	**47.9 (58)**	**4.1 (5)**	**37.2 (45)**	**121**

Note: [#]participants might be not aware about the explanation of IC during the interview. *Education level considered only for age more than 7 years

Discussions with service providers revealed that informed consent was explained to patients or their relatives, considering both the placebo and nocebo effects, as well as their level of understanding. The findings from Table 6.9 show variations in reading the informed consent form based on education levels. Among illiterate participants, **14.3% (3)** relied on literate relatives or guardians to read each point, while **47.6% (10)** did not, and **33.3% (7)** were unaware. Participants with less than 4th standard literacy showed similar trends, with **9.1% (1)** reading each point, **45.5% (5)** not reading, and **45.5% (5)** being unaware. Those with 5th to 7th standard education had **4.3% (1)** reading, **47.8% (11)** not reading, **4.3% (1)** partially reading, and **43.5% (10)** being unaware. Participants with 8th to 10th standard education had **13.9% (5)** reading each point, **52.8% (19)** not reading, **2.8% (1)** partially reading, and **30.6% (11)** being unaware. Among those with 10th to 12th standard education, **10.5% (2)** read each point, **31.6% (6)** did not, **10.5% (2)** partially read, and **47.4% (9)** were unaware. Surprisingly, none of the graduates (**0%**) reported reading each point, with **50.0% (2)** not reading and **50.0% (2)** being unaware. Participants in the "Others" category showed **0%** reading each point, while **100.0% (1)** did not.

Overall, **10.7% (13)** of participants read each point of the IC form, **47.9% (58)** did not, **4.1% (5)** partially read, and **37.2% (45)** were unaware. Many participants viewed signing the IC form as a mere formality to avoid surgery delays, especially those from poor socioeconomic backgrounds. These findings emphasize the need for clear communication and better education about the IC form to ensure informed decision-making among participants with diverse educational backgrounds.

Table 6.10: Distribution of Participants' Understanding of Informed Consent Form by Education Level

Education level*	Understood the things mentioned in the consent form				Total
	Yes	No	Partially	Not Aware[#]	
Illiterate	75.0 (3)	-	4.5 (1)	-	4
<literate but 4th Std	100.0	-	-	-	1
5th-7th Std	50.0 (1)	50.0 (1)	-	-	2
8th -10th std	83.3 (5)	-	16.7 (1)	-	6
10th-12th std	50.0 (2)	-	25.0 (1)	25.0 (1)	4
Graduate	100.0	-	-	-	1
Total	**72.2 (13)**	**5.6 (1)**	**16.7 (3)**	**5.6 (1)**	**18**

Note: [#]participants might be not aware about the explanation of IC during the interview. *Education level considered only for age more than 7 years

The findings from Table 6.10 illustrate participants' understanding of the informed consent (IC) form based on their education level. Among illiterate participants, **75.0% (3)** understood the IC form, while **4.5% (1)** partially understood it. Participants with literacy below the 4th standard showed **100.0% (1)** comprehension. Those with a **5th to 7th standard education** demonstrated **50.0% (1)** full understanding, while the remaining **50.0% (1)** did not understand. Participants with an **8th to 10th standard education** had **83.3% (5)** full comprehension and **16.7% (1)** partial understanding. Among those with a **10th to 12th standard education**, **50.0% (2)** understood the form, **25.0% (1)** partially understood, and **25.0% (1)** were unaware. Graduates demonstrated **100.0% (1)** comprehension of the IC form.

Overall, **72.2% (13)** of participants fully understood the IC form, **16.7% (3)** partially understood it, **5.6% (1)** did not understand, and **5.6% (1)** were unaware. These findings highlight that understanding of the IC form improves with education but still varies, emphasizing the importance of tailored communication to bridge comprehension gaps across education levels.

Table 6.11: Distribution of Participants' by Submission of Informed Consent Form and Education Level

Education level*	Submitted Informed Consent Form			Total
	Yes	No	Not Aware	
Illiterate	95.3 (20)	4.7 (1)	-	21
<literate but 4th Std	90.9 (10)	9.1 (1)	-	11
5th-7th Std	91.3 (21)	4.3 (1)	4.3 (1)	23
8th -10th std	77.8 (28)	11.1 (4)	11.1 (4)	36
10th-12th std	94.7 (18)	5.3 (1)	-	19
Graduate	100.0	-	-	6
Post-Graduate	50.0 (2)	50.0 (2)	-	4
Other	100.0	-	-	1
Total	**87.6 (106)**	**8.2 (10)**	**4.1 (5)**	**121**

Note: #participants might be not aware about the explanation of IC during the interview. *Education level considered only for age more than 7 years

The findings from Table 6.11 highlight the distribution of informed consent (IC) form submissions based on education level. Overall, 87.6% (106) of participants submitted the IC form, while 8.2% (10) did not, and 4.1% (5) were unaware. Submission rates were highest among graduates (100%) and the "others" category (100%). However, post-graduates had the lowest submission rate at 50% (2 submitted, 2 did not). Participants with an 8th to 10th standard education had a submission rate of 77.8% (28), with 11.1% (4) not submitting and 11.1% (4) being unaware. Those with less than 4th standard literacy showed a 90.9% (10) submission rate, while 9.1% (1) did not submit. Illiterate participants had a submission rate of 95.3% (20), with 4.7% (1) not submitting. These findings indicate variability in submission rates, highlighting the need to support post-graduates and participants with lower education levels to ensure informed decision-making.

Table 6.12: Number of Participants' Submitted Informed Consent Forms Based on Explanation Received

Received explanation about the things in IC	Submitted Informed Consent Form			Total
	Yes	No	Not aware	
Yes	44	0	0	44
No	51	10	2	63
Not aware	12	0	3*	15
Total	**107**	**10**	**5**	**122**

Note: *participants were not aware about the explanation and submission during the interview.

The findings from Table 6.13 reveal that among 122 participants, 44 received an explanation of the Informed Consent (IC) before submission. In contrast, 63 participants did not receive an explanation, of which 51 submitted the IC form, 10 did not submit, and 2 were unaware of the

submission status. Additionally, 15 participants were not aware of receiving an explanation, out of which 12 submitted the IC form and 3 were uncertain about both the explanation and submission during the interview. These results emphasize the importance of providing clear explanations about IC to ensure proper understanding and compliance with the submission process. The data also suggests that many participants may benefit from improved communication and clarification regarding IC procedures.

Figure 6.2: Distribution of Participants' Understanding of Information on Informed Consent Before Submission

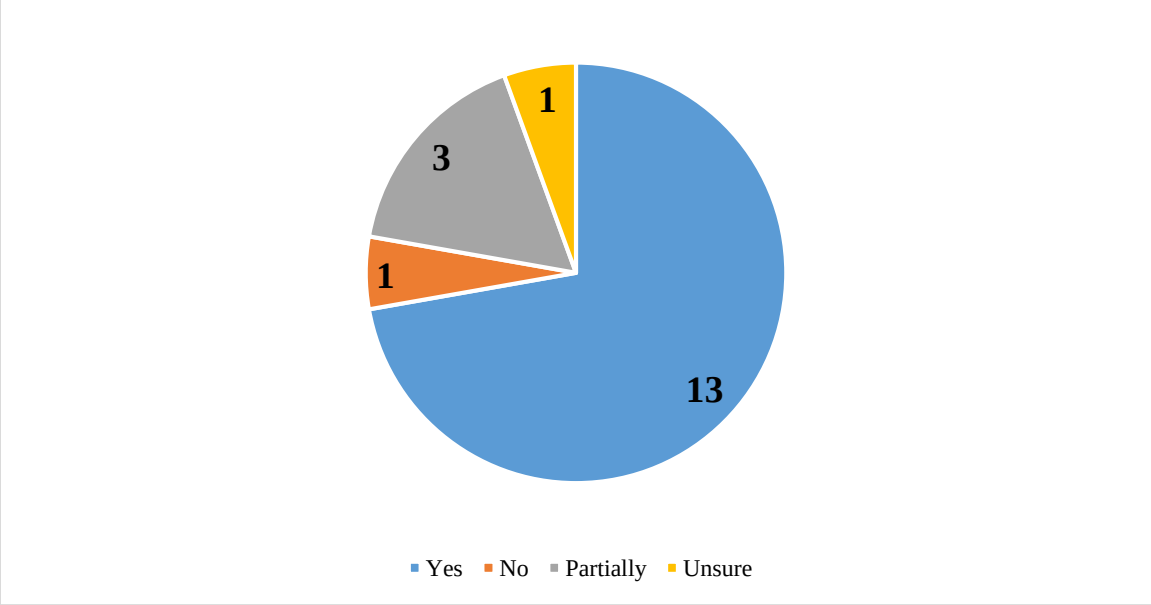


Figure 6.2 illustrates that out of the 18 participants who submitted the informed consent form, 13 understood the content, one did not understand it, three partially understood it, and one respondent was unsure whether the informed consent was submitted with full understanding. This uncertainty may arise because respondents are often relatives or patients who may not be aware if their relatives or patients fully understood the information in the informed consent form before submitting it.

Summary

The findings reveal that only 32% of participants confirmed receiving informed consent, with significant variations based on the duration of hospital admission. Longer stays were associated with higher receipt rates. Younger participants (<18 years) reported the highest explanation rates (66.7%), while those aged 56-65 had the lowest (15.4%). Females had higher explanation rates (42.4%) than males (33.7%). Higher education levels correlated with better understanding, with

57.9% of those with a 10th-12th standard education receiving explanations, compared to 27.3% of those with less than 4th standard literacy. Household income also influenced awareness, with those earning less than ₹1250 reporting 100% understanding. Overall, 36.1% received an explanation of informed consent, highlighting the need for improved communication to ensure all patients understand the process. Explanation rates varied by background characteristics, with younger participants (<18) reporting the highest (66.7%) and those aged 56-65 reporting the lowest (15.4%). Higher education levels correlated with better understanding, yet only 10.8% of participants read every point in the IC form, and 72.2% of those who read it understood the content. Most participants considered signing the IC form a mere formality. The findings highlight the need for clear communication and tailored education about IC forms to ensure proper comprehension and informed decision-making across different demographic groups.

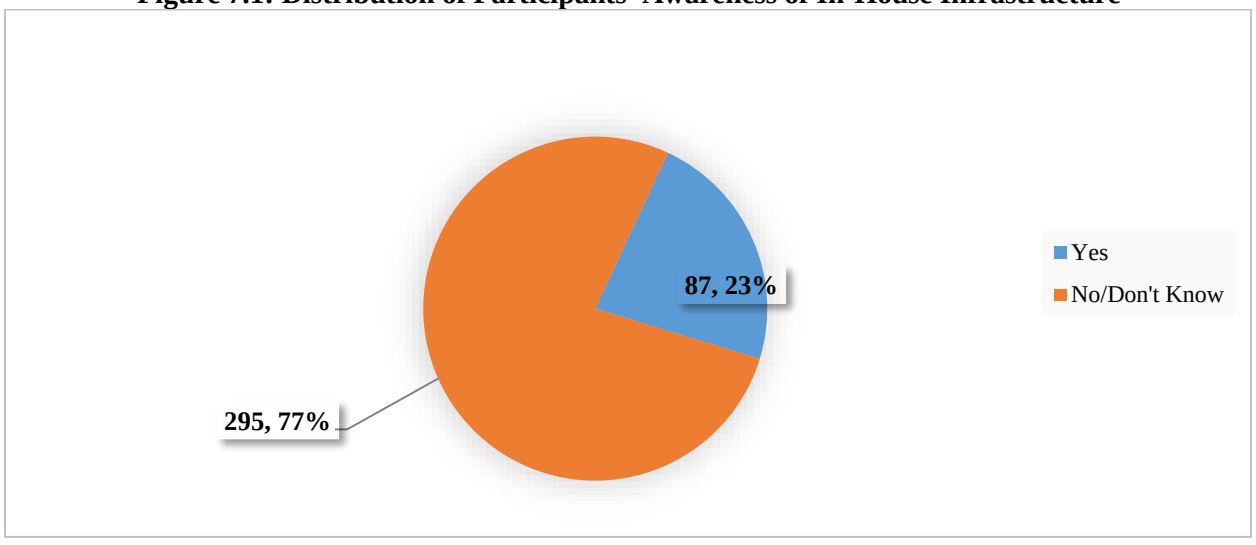
Chapter 7: In-house Infrastructure: A Patient's Perspective

This chapter aims to explore the awareness and understanding of hospital infrastructure and equipment among patients undergoing surgical procedures. The significance of patient awareness regarding in-house infrastructure and required equipment cannot be overstated, as it directly impacts their confidence and preparedness for surgery. This chapter will also examine the variations in awareness based on different demographic factors, such as age, gender, education level, and household income.

In the context of healthcare infrastructure, Almutairi et al. (2024) discuss the challenges in pre-hospital care communication and recommend structured protocols, such as the ISBAR framework, to improve clarity and efficiency during patient handovers. Implementing such communication strategies can help ensure that patients are adequately informed about the available resources and the quality of care they will receive. Furthermore, Davis and Wilson (2018) emphasize the role of preoperative risk stratification in informing patients about the potential risks and benefits of surgery. Their study suggests that a better understanding of hospital infrastructure and equipment can contribute to more accurate predictions of surgical outcomes, thereby facilitating a more informed decision-making process.

Overall, this chapter seeks to highlight the importance of patient awareness and understanding of hospital infrastructure and equipment. By addressing the challenges and implementing effective communication strategies, healthcare providers can enhance patient confidence and improve surgical outcomes.

Figure 7.1: Distribution of Participants' Awareness of In-House Infrastructure

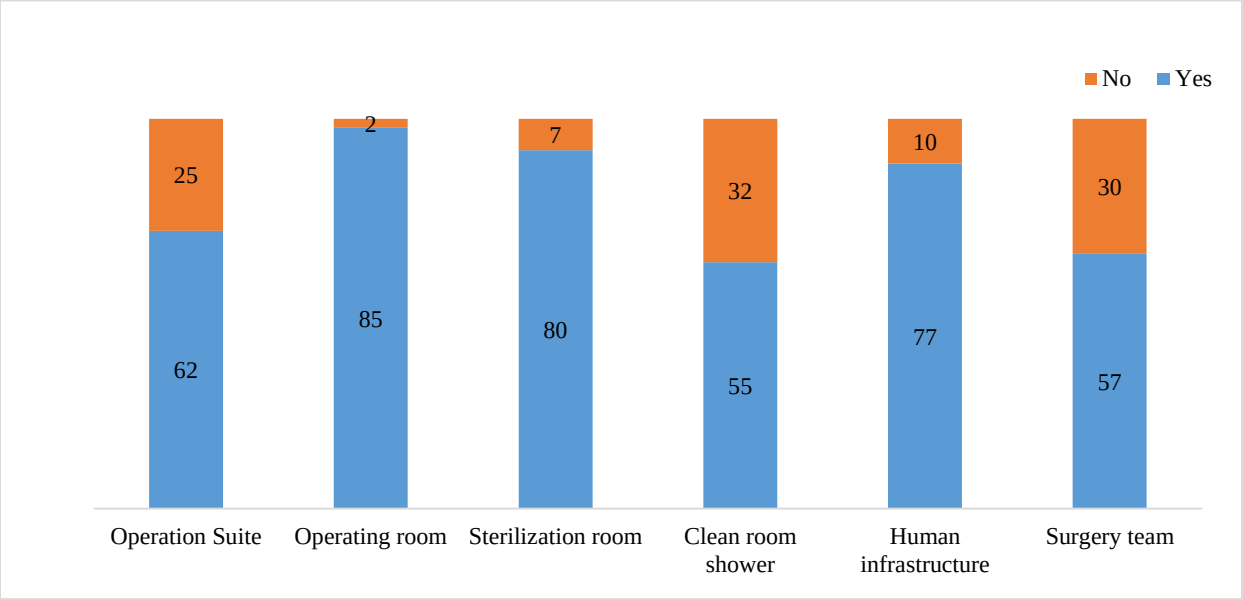


Note: **S**ince relatives or patients interviewed they are not sure if the said information was provided

Among the participants 23% who reported awareness of the in-house infrastructure as highlighted in figure 7,7, 97.7% acknowledged the availability of an operating room, 92.0% recognized the presence of a sterilization room, 88.5% were aware of the human infrastructure, 71.3% noted the

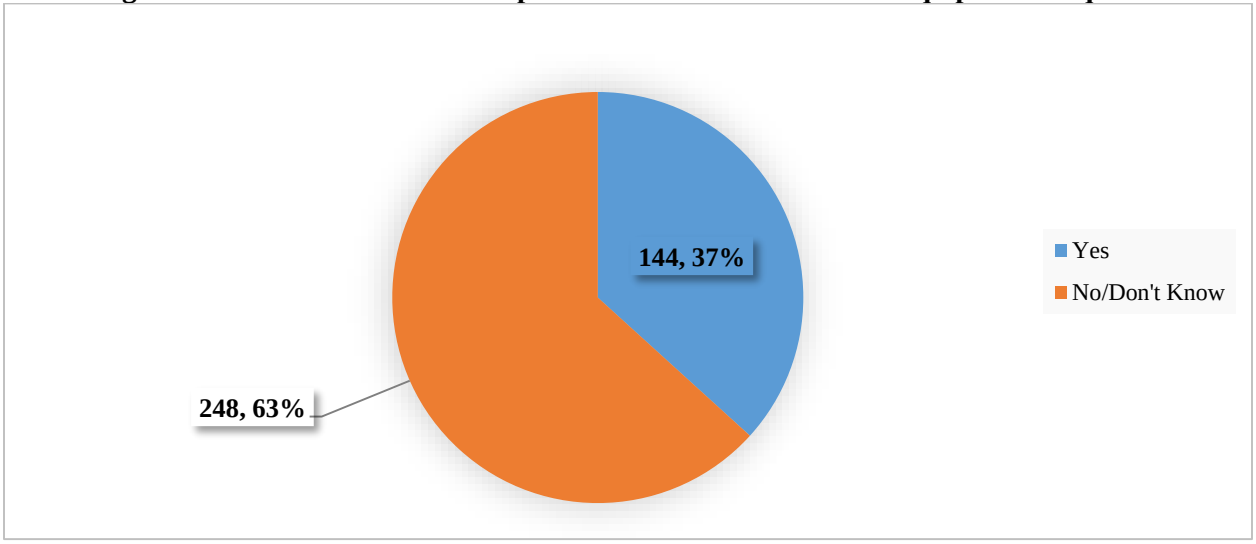
availability of an operating suite, 65.5% identified the presence of a surgery team, and 63.2% were aware of the clean room shower, as highlighted in Figure 7.2.

Figure 7.2: Distribution of Participants Awareness of Different Types of In-House Hospital Infrastructure



Note: **S**ince relatives or patients interviewed they are not sure if the said information was provided

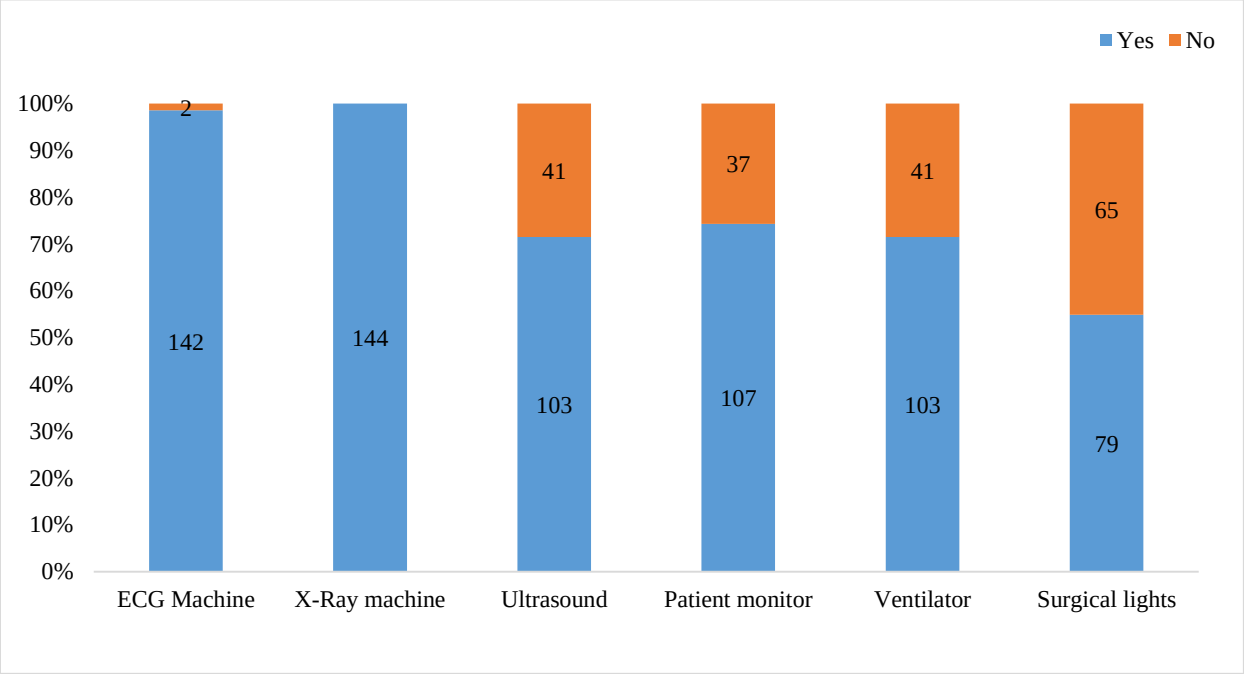
Figure 7.3: Distribution of Participants' Awareness of Essential Equipment Required



Note: **S**ince relatives or patients interviewed they are not sure if the said information was provided

As highlighted in Figure 7.3, only 38% of the participants were aware of the required equipment.

Figure 7.4: Distribution of Participants' Awareness of Different Types of Equipment Available in the Hospital



Note: **S**ince relatives or patients interviewed they are not sure if the said information was provided

Figure 7.4 presents the hospital equipment that participants reported being aware of. Universally, participants indicated awareness of the availability of the X-ray machine. Additionally, 98.6% of participants reported awareness of the ECG machine, 4.3% were aware of the monitor machine, 71.5% were aware of both the ultrasound and ventilator, and 54.9% acknowledged awareness of surgical lights. Given that most patients underwent diagnostic procedures within the same hospital, their awareness of the availability of these equipment items is understandable.

Table 7.1: Distribution of Participants' Awareness of Hospital Infrastructure and Essential Equipment by Background Characteristics

Background Characteristics	Aware about the in-house infrastructure[#]			Aware about the required equipment[#]			Total
	Yes	No	Not Aware	Yes	No	Not Aware	
Age							
Less than 18	33.3 (6)	5.6 (1)	61.1 (11)	50 (9)	5.6 (1)	44.4 (8)	18
18 - 25	25 (6)	8.3 (2)	66.7 (16)	29.2 (7)	4.2 (1)	66.7 (16)	24
26 - 35	28.1 (16)	7 (4)	64.9 (37)	42.1 (24)	5.3 (3)	52.6 (30)	57
36 - 45	25.8 (16)	4.8 (3)	69.4 (43)	45.2 (28)	3.2 (2)	51.6 (32)	62
46 - 55	26.4 (19)	6.9 (5)	66.7 (48)	47.2 (34)	4.2 (3)	48.6 (35)	72
56 - 65	15.8 (12)	6.6 (5)	77.6 (59)	29 (22)	5.3 (4)	65.8 (50)	76
66 - 75	13.6 (8)	6.8 (4)	79.7 (47)	25.4 (15)	6.8 (4)	67.8 (40)	59
75+	28.6 (4)	14.3 (2)	57.1 (8)	35.7 (5)	14.3 (2)	50 (7)	14
Gender							
Male	20.5 (53)	6.6 (17)	72.9 (188)	34.9 (90)	4.7 (12)	60.5 (156)	258
Female	27.4 (34)	7.3 (9)	65.3 (81)	43.6 (54)	6.5 (8)	50 (62)	124
Education							
Illiterate	16.3 (14)	7.0 (6)	76.7 (66)	31.4 (27)	5.8 (5)	62.8 (54)	86
<literate but 4th Std	14.3 (4)	7.1 (2)	78.6 (22)	46.4 (13)	3.6 (1)	50 (14)	28
5th-7th Std	18.8 (13)	8.7 (6)	72.5 (50)	39.1 (27)	7.3 (5)	53.6 (37)	69
8th -10th std	29.5 (33)	6.3 (7)	64.3 (72)	42 (47)	5.4 (6)	52.7 (59)	112
10th-12th std	26 (13)	4 (2)	70 (35)	36 (18)	2 (1)	62 (31)	50
Graduate	25.9 (7)	7.4 (2)	66.7 (18)	33.3 (9)	3.7 (1)	63 (17)	27
Post-Graduate	42.9 (3)	-	57.1 (4)	42.9 (3)	-	57.1 (4)	7
Other	-	-	100 (2)	-	-	100 (2)	2
Household Income (Monthly)							
Less than 1250	50 (1)	-	50 (1)	50 (1)	-	50 (1)	2
1250 - 5000	14.6 (6)	4.9 (2)	80.5 (33)	48.8 (20)	2.4 (1)	48.8 (20)	41
5001 - 10000	22.6 (21)	4.3 (4)	73.1 (68)	37.6 (35)	4.3 (4)	58.1 (54)	93
10001 - 15000	26.3 (25)	8.4 (8)	65.3 (62)	44.2 (42)	8.4 (8)	47.4 (45)	95

15000+	23.7 (22)	7.5 (7)	68.8 (64)	33.3 (31)	2.2 (2)	64.5 (60)	93
Income not reported	20.7 (12)	8.6 (5)	70.7 (41)	25.9 (15)	8.6 (5)	65.5 (38)	58
Total	**22.8**	**6.8**	**70.4**	**37.7**	**5.2**	**57.1**	**382**

Note: *Education level considered only for age more than 7 years. # Information for less than 18 years is collected from guardians.

Since relatives or patients interviewed they are not sure if the said information was provided

Table 7.1 reveals that participants aged less than 18 (33.3%) and those aged 75+ (28.6%) demonstrated higher awareness of in-house infrastructure and equipment compared to other age groups. Conversely, participants aged 66-75 had the lowest awareness, with only 13.6% being aware of in-house infrastructure.

A higher percentage of females (27.4%) were aware of both in-house infrastructure and required equipment compared to males (20.5%). Participants with higher education levels, such as post-graduates (42.9%), had better awareness of in-house infrastructure and equipment. In contrast, illiterate participants (16.3%) and those with lower education levels (14.3% for <4th Std) had the lowest awareness.

Participants with household incomes less than 1250 or between 1250-5000 showed higher awareness of required equipment (50% for less than 1250, 48.8% for 1250-5000) but lower awareness of in-house infrastructure (50% for less than 1250, 14.6% for 1250-5000). Participants with higher incomes (15000+) had moderate awareness of both in-house infrastructure (23.7%) and required equipment (33.3%).

Out of 382 participants, 22.8% were aware of in-house infrastructure, 6.8% were not aware, and 70.4% were unaware. Regarding required equipment, 37.7% were aware, 5.2% were not aware, and 57.1% were unaware. Overall, it is observed that as educational level increases, the percentage of participants aware of infrastructure also increases. However, in terms of equipment, there is not much difference as awareness levels remain relatively high across all education levels, ranging from 31% (illiterate) to 46% (literate but <4th Std).These findings indicate that awareness of hospital infrastructure and equipment varies significantly across different age groups, genders, education levels, and household incomes. Table also indicates that a large number of participants are unaware of the in-house infrastructure and required equipment in the hospital. Specifically, 70.4% of participants are unaware of the infrastructure, with the highest unawareness among those aged 66-75. Similarly, 57.1% of participants are unaware of the required equipment, with the highest unawareness among those aged 56-65. Males generally show higher unawareness compared to females, and illiterate participants or those with lower education levels have a higher rate of unawareness. Awareness levels also vary with household income, with those in the lower income brackets showing varying degrees of unawareness. This suggests the need for targeted awareness programs to improve knowledge and accessibility of hospital resources.

Summary

The findings indicate significant variations in awareness of hospital infrastructure and equipment as reported among participants. While 97.7% acknowledged the availability of an operating room, only 38% were aware of the required equipment. Awareness levels varied by age, gender, education, and household income. Younger participants (<18) and those aged 75+ had higher awareness, while those aged 66-75 had the lowest. Females and participants with higher education

levels demonstrated better awareness. However, a significant proportion of participants, especially those with lower education levels and household incomes, were unaware of the in-house infrastructure (70.4%) and required equipment (57.1%). These findings highlight the need for targeted awareness programs to enhance knowledge and accessibility of hospital resources.

Chapter 8: Continuity in Care: Referral Support and Post-Surgical Needs

This chapter aims to delve into the critical aspects of post-surgery care and the communication of vital information to patients and their families. The availability of referral facilities, expected discharge periods, and post-operative care are essential components of comprehensive healthcare services. Effective communication about these aspects can significantly impact patient satisfaction, recovery, and overall healthcare outcomes.

Overall, this chapter seeks to emphasize the importance of effective communication and comprehensive education about post-surgery care. By addressing the challenges and implementing effective communication strategies, healthcare providers can ensure that patients and their families are well-informed and prepared for the post-operative period.

Table 8.1: Distribution of Participants Who Were Informed About Referral and Transport Facilities by DH and SGH

Informed about the availability of referral facility	DH	SGH	Total	%
Yes	1	0	1	0.26
No	12	301	313	81.9
Not Aware	8	60	68	17.8
Time takes to reach the referral facility				
30 Minutes	1	0	1	100
Informed about the availability of transport facility				
Yes	1	0	1	0.26
No	13	304	317	83.0
Not Aware	6	57	64	16.7
Overall time take in case of referral				
30 Minutes	1	0	1	100
Total	**21**	**361**	**382**	

Note: 1. Since SGH is the tertiary level health facility and most of health services are available, therefore the availability of referral system not considered. 2. The information is based on the interview from participants.

The availability of referral facilities is crucial in healthcare services, where timely care, management, and access to specialists and technicians are essential. However, analysis from Table 8.1 reveals that only one respondent was aware of the referral facility, as the medical college is a tertiary care hospital, thus reducing the likelihood of external referrals. For those who were aware of the referral facilities, the time taken to reach them was noted to be 30 minutes.

Figure 8.1: Distribution of Participants' Awareness of Expected Duration of Hospital Stay Post-Surgery

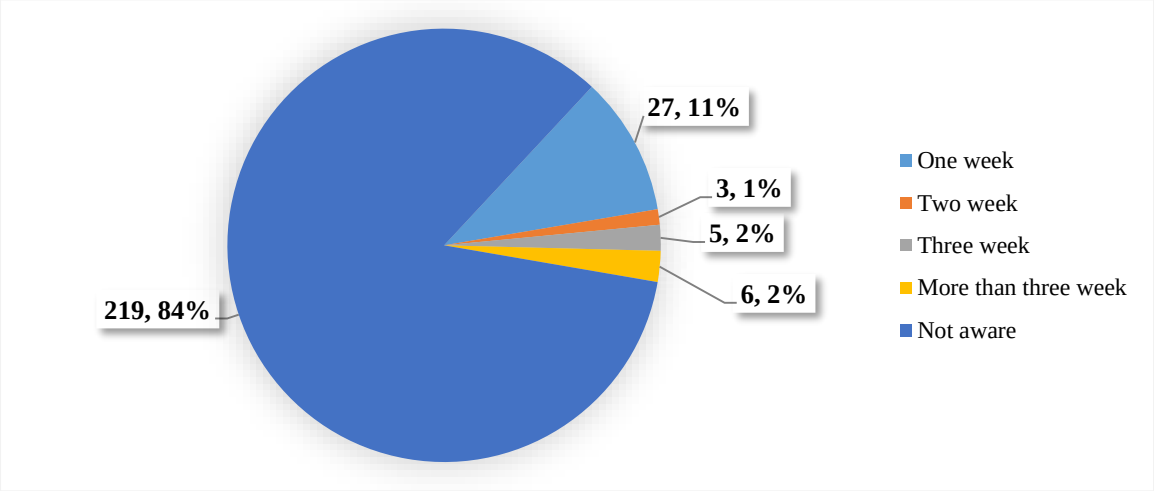


Figure 8.1 illustrates that a majority of respondents were aware of the expected discharge period. Around 84% reported that they had been informed they would need to stay in the hospital for at least a week

Figure 8.2: Distribution of Participants' by Information Received on Time Taken to Regain Consciousness Post-Surgery

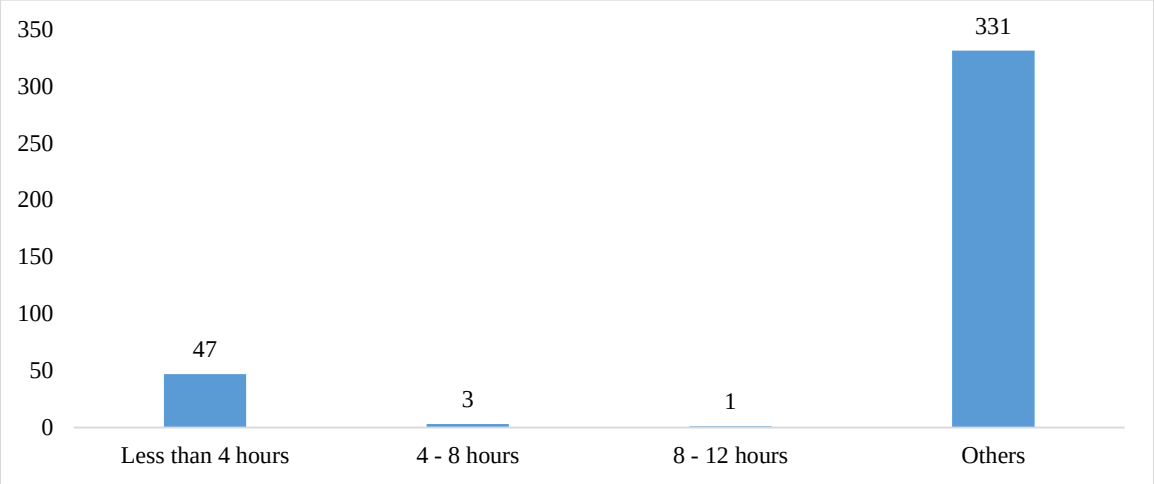


Figure 8.2 shows out of the total respondents, 47 mentioned they were informed that it would take less than 4 hours to regain consciousness, 3 respondents reported it would take less than 8 hours, and just 1 respondent was told it would take under 12 hours. Approximately 60% reported not receiving any information about the time needed to regain consciousness, while 40% were unsure about it.

Table 8.2: Distribution of Participants' Awareness of Time Taken to Regain Consciousness After Surgery

Expected time takes to regain consciousness	Frequency	Percentage
Not aware	132	39.9
No information regarding it	199	60.1
Total	**331**	**100**

Note: **1.** Other includes – below table, *10 Patient left or refuses, **2.** The information is based on the interview from participants**.**

Table 8.2 reveals that a considerable number of participants were unaware of the expected time it takes to regain consciousness after surgery, with 132 participants (39.9%) reporting this lack of awareness. Additionally, 199 participants (60.1%) indicated that they had no information regarding this aspect. This highlights that a majority of the participants (60.1%) lacked information about the expected time to regain consciousness after surgery. Furthermore, 39.9% of the participants were not aware of the expected time.

Table 8.3: Distribution of Participants' Awareness about Shift and Duration of ICU Stay and Discharge Timing

Shifted to ICU ward	Frequency	Percentage
Yes	3	0.8
No	8	2.1
Not aware	371	97.1
Average time in ICU		
1 day	3	100
After how many days of surgery is the discharge given		
Depends upon recovery	3	100

Note: **S**ince relatives or patients interviewed they are not sure if the said information was provided.

Table 8.3 indicates that a very small percentage of participants were aware of the possibility of being shifted to the ICU after surgery. Only 0.8% reported being shifted to the ICU, while 2.1% reported not being shifted. The vast majority, 97.1%, were not aware of the possibility. For those who were shifted to the ICU, reported the expected average stay was 1 day. Additionally, all participants who were aware indicated that the duration of discharge after surgery depended upon recovery. This highlights a significant gap in communication regarding ICU care post-surgery.

Figure 8.3: Distribution of Participants Who Received Information About Post-Surgery Care

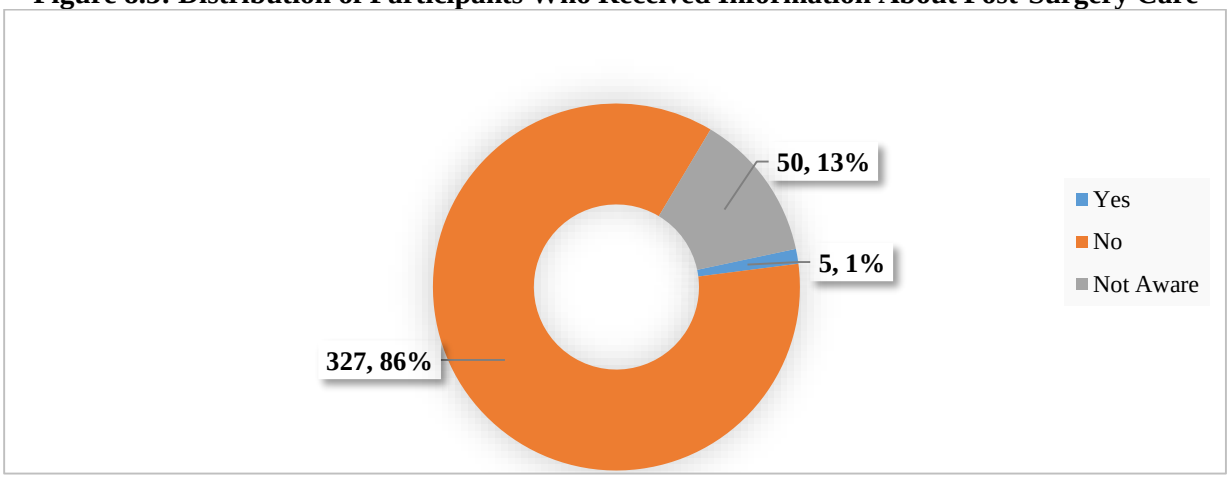
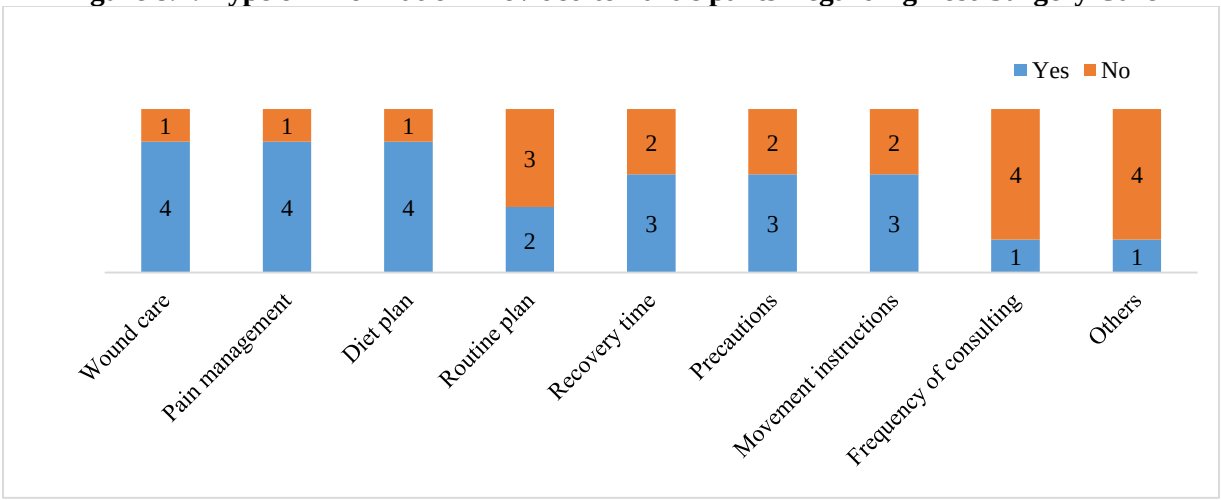


Figure 8.3 illustrates the percentage of patients or their relatives who received information about post-surgery care. The findings reveal that a vast majority did not receive this information 86% (327 individuals),13% (50 individuals) reported "Don't Know". Only 1% (5 individuals) reported "Yes". This highlights a significant gap in the communication of post-surgery care information, with the overwhelming majority of patients or their relatives not receiving the necessary instructions and guidance.

Figure 8.4: Type of Information Provided to Participants Regarding Post-Surgery Care



Note: **1.** Other includes – don't lift any heavy items

2. Since it is the multiple option question. Therefore, please check it as row total or percent.

Figure 8.4 reveals that only five participants received information on various aspects of post-surgery care, including wound care, pain management, diet plan, routine plan, recovery time, precautions, movement instructions, and the frequency of consulting, as well as other instructions

like "do not lift any heavy items." Among these, four participants each received information on wound care, pain management, and diet plans, while one did not. Two participants received information on routine plans, while three did not. Three participants each received information on recovery time, movement instructions, and precautions, while two did not. Only one participant received information on the frequency of consulting post-surgery, while four did not. Additionally, one participant received information categorized as "other," including instructions like "do not lift any heavy items," while four did not. Overall, five participants received information on wound care, pain management, and diet plans. However, fewer participants received information on routine plans, recovery time, precautions, movement instructions, and the frequency of consulting.

Figure 8.5: Percentage of Participants Informed About Potential Future Surgeries

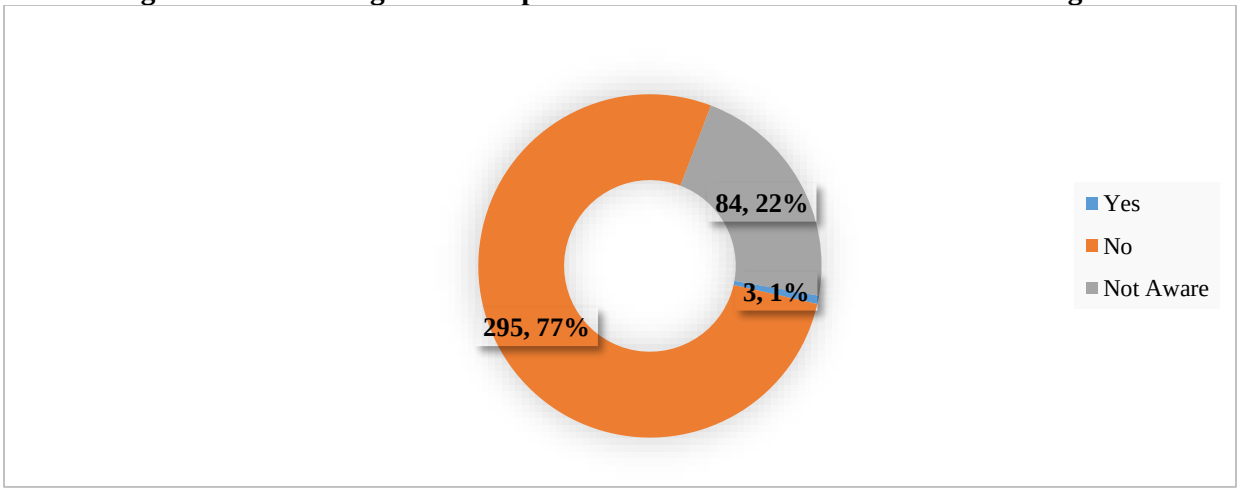


Figure 8.5 shows that only 1% (3 participants) were informed about potential future surgeries, while 77% (295 participants) were not informed and 22% (84 participants) were unaware of the potential need for future surgeries. This suggests that many participants may not require future surgical procedures.

Summary

The findings reveal significant gaps in communication regarding various aspects of patient care. Only one respondent was aware of referral facilities. While 84% were informed about the expected discharge period, 60% lacked information about the time needed to regain consciousness post-surgery. A mere 0.8% were aware of potential ICU transfers, and 97.1% were not aware of this possibility. Additionally, 86% of participants did not receive information about post-surgery care, with only five participants informed about specific aspects such as wound care and pain management. Furthermore, only 1% were informed about potential future surgeries. These results underscore the need for improved communication and patient education to ensure better preparedness and understanding of post-surgery care and procedures.

Chapter 9: Quality of Care and Consent in Surgical Care: Insights from Service Providers

Introduction

Surgical practices involve complex procedures that require high levels of expertise, effective communication, and robust teamwork. The experiences and perspectives of surgeons offer valuable insights into the dynamics of surgical environments and the challenges faced in ensuring patient welfare. This chapter aims to explore the experiences of service providers in surgical practice at SGH and DH, focusing on their communication practices, operational challenges, team dynamics, and suggestions for improvement. Through an analysis of their responses, this chapter offers a comprehensive insight into their work environment, emphasizing key aspects that need improvement to elevate patient care and enhance professional fulfilment.

The significance of effective communication and teamwork in healthcare has been widely recognized in literature. For instance, according to Sutcliffe, Lewton, and Rosenthal (2004), effective communication and teamwork are crucial for improving patient safety and reducing errors in hospital settings. Similarly, the World Health Organization (WHO) underscores the importance of surgical safety checklists to minimize risks and improve outcomes (World Health Organization, 2009).

The role of anesthetists, staff nurses, and surgeons is pivotal in ensuring the success of surgical procedures and the overall safety and well-being of patients. Anesthetists manage perioperative care, providing anesthesia and monitoring patient responses, while staff nurses ensure seamless coordination, preoperative preparation, intraoperative support, and postoperative care. Surgeons, as the primary operators, perform the procedures and make critical decisions that directly impact patient outcomes. The synergy among these professionals is instrumental in delivering high-quality surgical outcomes.

The importance of these roles has been emphasized in numerous studies. For instance, Smith et al. (2018) highlight the anesthetist's responsibility in not only administering anesthesia but also in patient assessment and risk management during surgery. This chapter explores the multifaceted roles of anesthetists, staff nurses, and surgeons in surgical practice through a detailed literature review. By synthesizing insights from contemporary studies, it seeks to provide a comprehensive understanding of their contributions, challenges, and the need for ongoing professional development in these fields.

9.1 Quality in Surgery: Perspectives and Practices from Surgeons

Demographics and Qualifications

The surveyed respondents, associated with SGH, were aged between 32 and 37 years. Among the three participants, two were male and one was female, all holding a Master of Surgery (M.S.) degree in General Surgery. Their professional experience in surgical practice ranged from 3 to 7

years, showcasing diverse levels of expertise. The length of their tenure at SGH varied notablfrom 4 months to 7 years.

Training Details

The respondents did not elaborate on the nature, quality, or frequency of their training programs. This gap highlights the absence of structured information about their professional development.

Communication Practices and Challenges

Surgeons reported to play a crucial role in maintaining effective communication throughout a patient's journey in surgical care. They ensure daily interactions with patients to discuss surgical procedures, adopting an approach grounded in compassion and empathy to address the concerns of both patients and their families. Before surgery, surgeons focus on explaining the necessity of the procedure, alternative options, preparation requirements, and potential complications. Following the surgery, their attention shifts to providing detailed recovery instructions and emphasizing post-operative care.

However, communication is not without its challenges. Surgeons often face difficulties in explaining complex surgical details to individuals from lower socio-economic or educational backgrounds. They also manage patient and family anxiety, address denial, and navigate the reluctance of relatives in accepting potential complications, all of which underscore the intricacies of effective communication in surgical practice. Respondents did not identify a significant need for further training in communication, despite the recognized challenges.

Informed Consent and Nocebo Effect

The responsibility for obtaining informed consent primarily lies with operating surgeons or their team members, who often face challenges such as patient anxiety and socio-economic barriers. To support informed decision-making, surgeons ensure that patients are aware of alternative treatment options before recommending surgery. They also address emotional and financial concerns by building rapport, explaining the risks and benefits to alleviate anxiety, and guiding patients to help manage financial constraints.

Operational Challenges and Safety Measures

Surgical teams prioritize maintaining functional equipment, with contingency plans in place to address malfunctions swiftly. Routine pre-surgery investigations are conducted, although occasional lapses, such as missing EUS or immunology tests, have been noted. The availability of drugs and consumables is systematically managed to ensure surgeries proceed without interruptions. While blood or plasma shortages are promptly communicated to relatives, some facilities benefit from having in-house blood banks.

Despite challenges in checklist availability, this essential tool remains central to surgical preparation. In emergency cases, patient delays often lead to missed golden hour opportunities, highlighting the need for better patient education. Surgeons transparently communicate complications to relatives during surgeries, although denial from family members remains a recurring challenge. Transfer protocols to ICUs are well-organized, ensuring seamless care during critical situations.

Careful documentation is maintained to address medico-legal requirements, ensuring procedural compliance. While transitions of care between departments are systematic, occasional communication gaps during such transitions require attention for further improvement.

Team Dynamics

The composition and roles within surgical teams vary depending on the complexity of the procedure. Major surgeries typically involve 4 to 8 team members, while minor surgeries require 3 to 4. Key roles within the team include the operating surgeon, assistant surgeon, anesthetist, staff nurse, and support staff, all working collaboratively to ensure procedural success. Daily meetings are integral to surgical practice, focusing on patient cases, scheduling, stock management, and anticipating clinical events. Direct communication among team members facilitates smooth collaboration, but challenges persist in optimizing coordination with other departments despite regular interactions. Strengthening inter-departmental communication remains an area for improvement.

Remuneration and Workplace Satisfaction

The respondents expressed consistent dissatisfaction with their remuneration, emphasizing the need for adjustments that reflect the complexity of surgeries, patient risk levels, and the significant time investment required. Concerns were also raised about inadequate salary increments and the lack of alignment with inflation rates, further contributing to their dissatisfaction. Regarding physical and mental health, one respondent reported experiencing strain due to insufficient time for maintaining fitness, while others indicated satisfactory well-being. Workplace challenges included coordination issues among specialties, though these were not extensively elaborated upon, leaving room for further exploration.

Suggestions for Improvement

The respondents proposed several initiatives to improve surgical practices and foster greater awareness among the public and professionals alike. Recommendations included the creation of posters to illustrate surgical techniques and the development of interactive websites aimed at public engagement. Educational films about surgeries, showcased on public platforms, were highlighted as a tool for spreading knowledge. Additionally, they suggested organizing workshops, conferences, and seminars to promote the exchange of ideas and experiences within the medical community. Public awareness campaigns, such as press releases and training programs in CPR and disaster management, were also emphasized. Celebrating "World Surgery Day" was proposed as

a means of raising awareness, alongside collaborations with social communities to encourage interactive engagement on surgical topics. These initiatives aim to enhance both the visibility and effectiveness of surgical practices.

Insight from DH Surgeons

Two surgeons at DH emphasized critical areas requiring attention and improvement, including communication practices, equipment reliability, patient management, teamwork, remuneration policies, and workplace challenges. The findings highlighted issues such as incomplete patient information, insufficient security measures, training gaps, a lack of advanced surgical instruments, and dissatisfaction with remuneration. While there were instances of successful teamwork, persistent coordination barriers were noted. Additionally, the need for stronger emotional and financial support for patients, as well as enhanced communication channels, was identified as essential for advancing care standards.

9.2 Anaesthesiology Services and Operational Insights

Professional Background and Demographics

The surveyed anaesthesiology respondents form a diverse group, each holding an MBBS degree with specializations such as DA, DNB, or MD. Of the five participants, three are male and two are female, reflecting somewhat a balanced gender distribution. Their professional experience ranges from 2 to 10 years, showcasing a broad spectrum of expertise in the field of anesthesiology.

Patient Evaluation and Interaction

Pre-surgery patient evaluations involve collaborative efforts from surgeons, anesthetists, and other team members, with patient history meticulously documented, albeit inconsistently verified digitally. Challenges with language barriers and limited patient awareness about anesthesia procedures are noted. Post-surgery interactions with patients and attendants ensure regular updates and guidance regarding recovery and care.

Operational and Equipment Management

Anaesthetists play pivotal roles in managing anaesthesia equipment and ensuring readiness for surgeries. Functional equipment includes anaesthesia machines, defibrillators, and workstations, but gaps such as missing tools and technical failures require attention. Drug trolley checks are standard, although high costs and limited drug availability are recurring challenges. Emergency preparedness involves systematic steps for patient transfers, highlighting the importance of airway management, vital monitoring, and proper ventilation techniques.

Training and Skill Development

Regular training programs, such as ACLS and BLS courses, along with workshops and thematic seminars, contribute to continuous skill enhancement. Respondents suggest advancing training protocols to address emerging practices and improve patient care standards.

Team Dynamics and Collaboration

Team compositions typically include 3 to 4 members for major surgeries and 2 for minor surgeries, ensuring a structured approach to patient management. Communication channels include face-to-face discussions and digital methods like WhatsApp for seamless coordination. Case discussions are frequent and thorough, focusing on comprehensive patient care.

Challenges and Improvement Suggestions

Recurring challenges include difficulties in communication with patients due to language barriers, emergency management constraints, and insufficient equipment or manpower during critical operations. Suggested improvements include:

- Standardized emergency drug boxes for routine use.
- Scheduling regular equipment maintenance and ensuring backup availability.
- Addressing manpower shortages for smoother operations and transfers.
- Enhancing communication protocols and documentation practices.

Remuneration and Satisfaction

The anesthesiology respondents expressed general satisfaction with remuneration across specialties. However, views diverged on increments relative to inflation and workload, with one respondent indicating dissatisfaction. This highlights the need for a balanced approach to compensation, considering the complexity, time commitment, and risk involved in surgeries.

Awareness Activities for Anesthesia

Efforts to raise awareness about anesthesia techniques and their significance received broad support, with respondents proposing various initiatives to enhance public and professional understanding. Suggested measures included the creation of pictorial posters and interactive websites aimed at educating communities about anesthesia practices. Films were recommended as effective tools for educating both the public and medical students on anesthesia procedures. Conferences and workshops focusing on emerging fields such as pain management were highlighted as key avenues for engagement. While most respondents supported media coverage through press releases, one expressed reservations about its necessity. Universal agreement emerged on the importance of teaching essential skills like CPR and disaster management to paramedical staff and the general public. Additionally, celebrating "World Anesthesia Day" was proposed as a way to foster community involvement. Collaborations with social organizations like Rotary and Lions Clubs were also suggested to facilitate interactive discussions and broaden outreach efforts. These initiatives aim to strengthen awareness and understanding of anesthesia practices.

Suggestions for Improvement

Key areas of focus for improving anesthesia services and addressing related challenges were highlighted by the respondents. Increasing the number of anesthesiologists, ensuring adequate equipment, and fostering a healthy work environment were emphasized as critical needs. Efficient management of working hours was also suggested to alleviate the physical and mental stress faced by healthcare professionals in this demanding field.

Stress management strategies included maintaining hobbies, prioritizing rest and hydration, and continuously learning new techniques to stay updated. Self-care practices were unanimously supported as essential for mitigating stress and ensuring professional well-being.

The respondents emphasized a significant need to enhance public education about anesthesia as a life-saving specialty. Many patients lack awareness of its critical role, underscoring the importance of community engagement and educational initiatives to bridge this knowledge gap. These efforts aim to promote a better understanding of the vital contributions of anesthesiologists to patient care.

9.3 Nursing Services and Operational Insights

Hospital and Respondents

The three respondents, all staff nurses from SGH, are female and do not reside in staff quarters. They have all undergone laparoscopic training in the past year, underscoring the significance of this skill in their professional growth. While mixed responses were provided regarding the necessity of additional training, there appears to be general satisfaction with the existing training programs.

Roles and Responsibilities

Pre-Operative and Post-Operative Duties

Staff nurses ensure the completion of patient checklists, focusing on the “five rights” (right patient, medication, dose, time, route). Post-operative responsibilities include verifying the count of surgical instruments and providing comprehensive care such as basic hygiene, airway suctioning, and patient safety measures. Nurses also handle smooth handovers using medication charts and doctors’ orders, ensuring continuity in care.

Aseptic Practices

To maintain sterility in the operation theatre, staff nurses perform regular tests such as taking B.A. plates and RCM swabs. These practices are critical for upholding an aseptic surgical environment.

Equipment and Resource Management

Verification and Maintenance

Regular checks are conducted to ensure the functionality of OT equipment. Availability of drugs and consumables is generally managed, though occasional shortages of antibiotics and broad-spectrum antibiotics present challenges.

Emergency Preparedness

Mechanisms for addressing complications, such as ventilator support and continuous monitoring during emergency transfers, are in place. However, respondents reported persistent shortages of blood/plasma for transfusions, which were inadequately managed due to unavailability.

Infrastructure Maintenance

Weekly checks of electrical points, pipeline oxygen, and inbuilt suction systems ensure operational readiness. Emergency resource preparedness, such as oxygen, nitrous oxide, and CO2, is maintained, though specific processes for ensuring readiness require clarification.

Communication and Team Coordination

Verification and Documentation

Respondents consistently verified patient demographic details, but inconsistencies were noted in digital document verification. While some affirmed its use, others did not, indicating a lack of standardized protocols. None of the nurses encountered inaccurate information but acknowledged the need for strategies to address potential discrepancies.

Team Collaboration

Coordination with surgeons is emphasized, yet team sizes for surgeries remain unspecified, suggesting variability. Successful teamwork examples involved effective collaboration during surgeries, though barriers to communication were not explicitly reported. Strengthening clarity in team composition and responsibilities can enhance efficiency.

Workload, Stress Management, and Employee Satisfaction

Workload

The daily workload includes managing an average of two major surgeries and three minor surgeries, indicating significant engagement and responsibility.

Stress Management

Nurses cope with stress through yoga, meditation, and personal health practices, emphasizing the importance of self-care for mental and physical well-being.

Employee Satisfaction

Satisfaction with remuneration, including allowances for OT work, is high, with general agreement that increments align with inflation and workload.

Challenges and Suggestions

To improve surgical processes respondents were of the view on addressing resource shortages, with strategies such as implementing backup plans for blood and antibiotics. Streamlining

documentation processes has also been emphasized, ensuring the availability of comprehensive checklists, particularly consent forms. Structured feedback sessions have been recommended to identify and address gaps in surgical care and operational efficiency.

Safety protocols are another focal point, with emphasis on strict adherence to pre-operative safety measures and infection control standards. Patient preparation following universal guidelines is advocated to enhance standardization and reduce the risk of cross-infections. To boost communication and team efficiency, standardizing team sizes and roles has been proposed to strengthen coordination and accountability. Addressing latent communication barriers through feedback mechanisms and team-building exercises is also deemed crucial to fostering seamless collaboration and improving surgical outcomes.

Summary:

This chapter presents a thematic analysis of the experiences and challenges faced by service providers, focusing on their demographics, professional qualifications, communication practices, operational challenges, teamwork dynamics, and workplace satisfaction. Key findings include communication barriers with patients and relatives, dissatisfaction with remuneration, and coordination issues among specialties. Surgeons emphasize the importance of informed consent, effective communication, and systematic procedures to ensure patient safety and continuity of care. The analysis also highlights the critical roles and responsibilities of staff nurses in pre- and post-operative care, as well as their contributions to patient safety and operational efficiency. Persistent challenges, such as resource shortages, documentation inconsistencies, and communication gaps, indicate areas for improvement. Anesthesiology services are marked by systematic yet adaptive approaches, addressing patient-centered care while navigating operational challenges.

Key Recommendations

The findings from service providers highlight several critical areas for improvement to optimize surgical practices and patient outcomes. Key recommendations include ensuring resource availability, standardizing documentation processes and team roles, enhancing stress management efforts, and reinforcing surgical safety protocols. Structured training programs for effective communication and strategies to improve inter-departmental coordination are emphasized as essential steps forward. Addressing remuneration concerns through complexity-based pay scales is also identified as a priority, alongside initiatives to foster public awareness through educational campaigns and interactive platforms.

Further recommendations encompass expanding training opportunities, ensuring the consistent availability of drugs and equipment, and bolstering emergency preparedness with robust protocols.

Enhanced infrastructure for laparoscopic surgeries and equipping ambulances with advanced medical equipment are suggested to elevate care standards. Public awareness initiatives, such as CPR training and disaster management workshops, are seen as vital for community engagement.

Implementing these measures is expected to foster more efficient surgical practices, improve patient care outcomes, and enhance workplace satisfaction for medical professionals, contributing to a holistic advancement in the healthcare system.

Chapter 10: Summary and Conclusion

Informed consent is a fundamental aspect of patient autonomy and ethical medical practice. A literature review by Zanatta et al. (2022) reinforces the relevance of informed consent in medical practice, emphasizing the need for patients to understand the risks, benefits, and alternatives of surgical procedures

This report provides a comprehensive analysis of the socio-economic and demographic characteristics of patients undergoing surgical procedures, highlighting key areas such as patient communication, informed consent, pre-surgery diagnostics, post-surgery care, and awareness of hospital infrastructure.

Socio-Economic Characteristics: The study revealed significant variations in residence, age, gender, marital status, religion, caste, education, employment, income, and access to resources among participants. The majority resided in rural areas, were predominantly male, married, and primarily affiliated with Hinduism. Education levels varied, with a notable portion being illiterate. Employment status showed a mix of working and non-working individuals, with many holding lower-income jobs. The data underscored economic variability and challenges, particularly among sole earners.

Patient Communication and Informed Consent: Effective communication between healthcare providers and patients was found to be paramount in ensuring patients are well-informed and confident about their surgical procedures. However, the findings revealed significant gaps in communication, with only 32% of participants confirming receipt of informed consent. Explanation rates varied by age, gender, education, and household income, highlighting the need for improved communication strategies and targeted education efforts to ensure proper comprehension and informed decision-making.

Pre-Surgery Diagnostics and Patient Preparedness: Pre-surgery diagnostic tests play a crucial role in surgical preparedness and patient safety. The majority of participants received recommendations for tests such as X-ray, ECG, and CBC, with most tests conducted within the same hospital. However, some participants did not receive specific test suggestions, emphasizing the need for consistent pre-surgery diagnostics and clear communication.

Post-Surgery Care: The study highlighted significant gaps in communication regarding post-surgery care, with 86% of participants not receiving information about post-operative care. Only a small percentage of participants were informed about potential future surgeries and ICU

transfers, underscoring the need for comprehensive education and improved communication to ensure patients and their families are well-prepared for the post-operative period.

Awareness of Hospital Infrastructure and Equipment: Awareness of hospital infrastructure and equipment varied significantly across different demographic factors. While 97.7% acknowledged the availability of an operating room, only 38% were aware of the required equipment. Younger participants and those with higher education levels demonstrated better awareness, while a significant proportion of participants, especially those with lower education levels and household incomes, were unaware of the in-house infrastructure and required equipment. This indicates the need for targeted awareness programs to enhance knowledge and accessibility of hospital resources.

Conclusion

The findings of this report underscore the critical importance of effective communication, comprehensive education, and patient involvement in all aspects of surgical care. Significant gaps in communication and awareness were identified, particularly regarding informed consent, pre-surgery diagnostics, post-surgery care, and hospital infrastructure. These gaps highlight the need for targeted strategies to improve patient understanding, preparedness, and confidence.

Pre-surgery diagnostics play a crucial role in surgical preparedness and patient safety. Firde and Yetneberk (2024) highlight the importance of preoperative investigations in identifying risk factors that may affect the course of surgery or post-operative recovery. Kristoffersen et al. (2021) examine the effectiveness of pre-anaesthetic assessment clinics in improving the quality and safety of perioperative patient care.

Post-surgery care is essential for ensuring patient recovery and satisfaction. Kannan et al. (2025) investigate the impact of Enhanced Recovery After Surgery (ERAS) protocols on patient outcomes, finding that ERAS protocols can significantly reduce hospital stay duration and postoperative complications. Jaensson et al. (2019) discuss factors influencing the quality of postoperative recovery and satisfaction, emphasizing the importance of shared decision-making and providing sufficient preoperative and postoperative information.

Awareness of hospital infrastructure and equipment is vital for patient confidence and preparedness. Scholz et al. (2015) developed a rapid assessment tool for evaluating the infrastructure of primary health care facilities, highlighting the importance of addressing infrastructural deficiencies to improve healthcare quality. Grossi et al. (2021) explore the contextual factors affecting the implementation of health technologies in hospitals, emphasizing the need for awareness and proper utilization of health technologies.

By addressing these challenges and implementing effective strategies, healthcare providers can enhance patient outcomes, improve surgical preparedness, and ensure that patients make well-informed decisions about their healthcare. The insights gained from this study can serve as a foundation for developing policies and practices that promote patient-centered care and optimize surgical outcomes.

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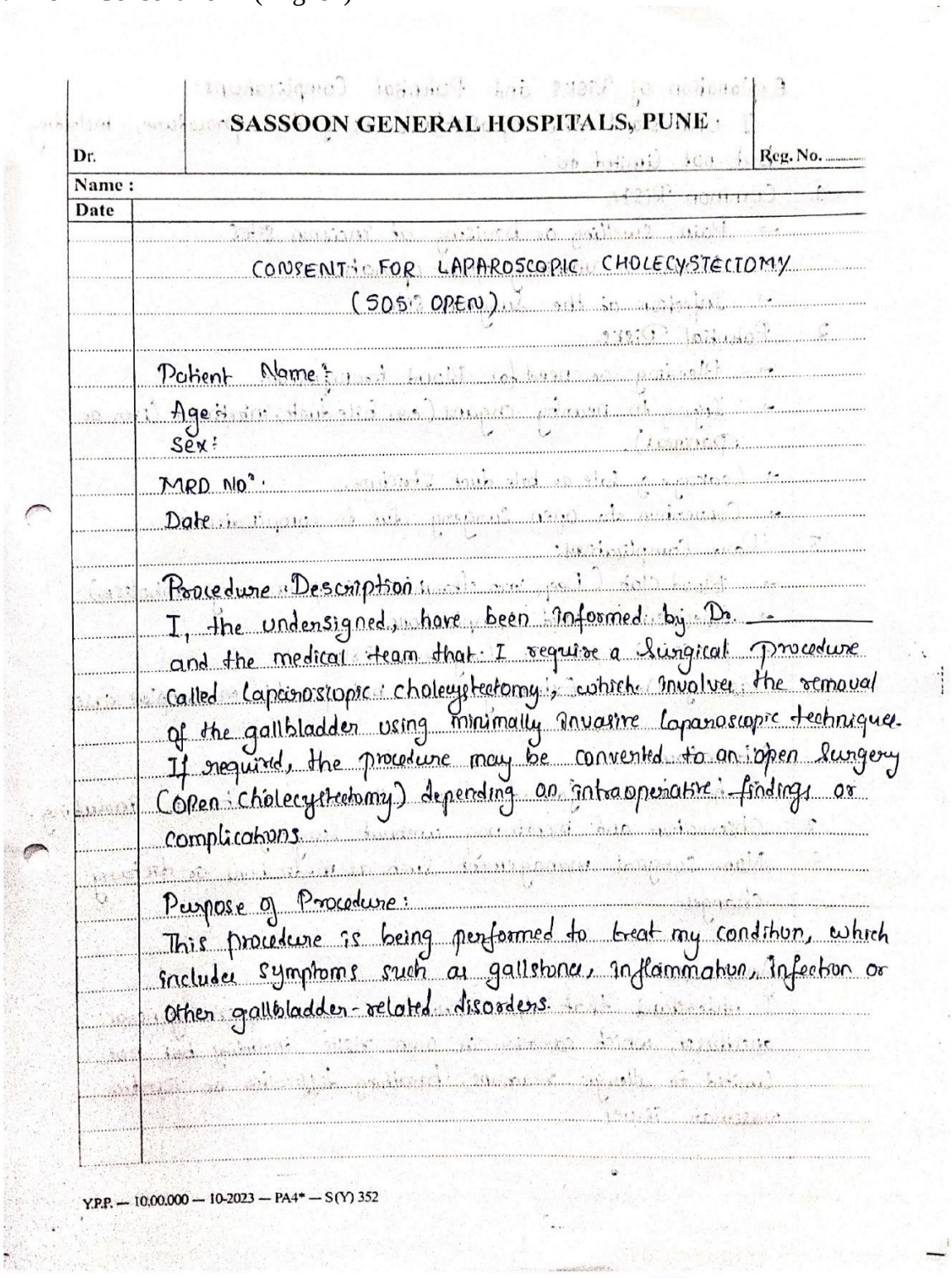
Annexures

A1: Inform Consent Form (English)



SASSOON GENERAL HOSPITALS, PUNE

Dr. Reg. No.

Name :

Date

CONSENT FOR LAPAROSCOPIC CHOLECYSTECTOMY (SOS OPEN)

Patient Name:
Age:
Sex:
MRD No:
Date

Procedure Description:
I, the undersigned, have been informed by Dr. _____ and the medical team that I require a surgical procedure called Laparoscopic cholecystectomy, which involves the removal of the gallbladder using minimally invasive laparoscopic techniques. If required, the procedure may be converted to an open surgery (Open cholecystectomy) depending on intraoperative findings or complications.

Purpose of Procedure:
This procedure is being performed to treat my condition, which includes symptoms such as gallstones, inflammation, infection or other gallbladder-related disorders.

Y.P.P. — 10.00.000 — 10-2023 — PA4* — S(Y) 352

Explanation of Risks and Potential Complications:

I understand the possible risks of the procedure, including but not limited to:

1. Common Risks
   - → Pain, swelling or bruising at incision sites.
   - → Nausea or vomiting post-operation.
   - → Infection at the surgical site.
2. Potential Risks.
   - → Bleeding or need for Blood transfusion.
   - → Injury to nearby organs (e.g., bile duct, intestines, liver or pancreas).
   - → Leakage of bile or bile duct stricture.
   - → Conversion to open surgery due to complications.
3. Rare Complications:
   - → Blood clots (Deep vein thrombosis or pulmonary embolism)
   - → Anesthesia-related complications.
   - → persistent pain or long-term issues.
4. Risk of Death: Extremely rare but possible in complex cases.

Alternatives:

I have been informed about alternative treatments, including:

1. Observation and monitoring without surgery.
2. Non-surgical management such as medications or dietary changes.

Anesthesia:

I understand that this procedure will require general anesthesia, which carries its own risks, including but not limited to allergic reactions, breathing difficulties or cardiovascular issues.

SASSOON GENERAL HOSPITALS, PUNE

Dr.

Reg. No.

Name :

Date

Patient signature :

Date: :

Witness signature :

Date:

Surgeon's signature:

Date:

In case of an emergency requiring immediate action, I authorize the medical team to take all necessary steps for my health and safety.

Y.P.P. — 10,00,000 — 10-2023 — PA4* — S(Y) 352

A2: Inform Consent Form (Marathi)

G.Pz.P.,Pune-O/307(10.00.000 Loose)-3-2024

SASSOON GENERAL HOSPITALS, PUNE

Dr. ANB

Reg. No. _____

Name :

Date

Concent for laparoscopic with potential open cholecystectomy

Pt name :

surgeon name :

Procedure concent

आरोहला आमच्या डॉक्टरने समजवल आहे की पेशंट ला पित्ताशयाच्या पिशवीमध्ये खड्डे आले आहे यामुळे पिशवी ला सूज किंवा इंफेक्शन होऊ शकते यासाठी पेशंट ला पित्ताशयाची पिशवी काढायच ऑपरेशन केल पाहिजे. पूर्णपणे भूल देऊन दुर्बिन च्या मदतीने (Laparoscopy) पित्ताशयाची पिशवी काढायच ऑपरेशन करणार आहोत. पोटावर वर ३ ते ४ छोटे चिर घेऊन दुर्बिनच्या येताने पिशवी काढण्यात येईल. जर पिशवीला खूप इंफेक्शन मुळे चिपकली असेल किंवा खूप रक्तस्राव झाल तर ओपन सर्जरी करावी लागू शकते. मोठी चिर घेऊन पित्ताशय ची पिशवी काढणार भूल देताना BP कमी जास्त होऊ शकते. ऑपरेशन च्या दरम्यान आतड्यांना किंवा कावीलच्या नली ला किंवा लिवर ला इजा होऊ शकते. रक्तस्राव खूप होऊ शकतो. - रक्त चढवायची गरज पडू शकते. ऑपरेशन नंतर IV व catheter ची गरज पडू शकते

आम्हाला डॉक्टरने सगळे संभावित धोके आमच्या भाषेत समजवले आहे. आम्ही ऑपरेशन साठी मान्यता देतो.

[पेशंट →
सही →

नातेवाईक सही →
नाव →
नाव →

A3: Research Tool

POPULATION RESEARCH CENTRE, PUNE

CONFIDENTIAL

(for research purpose only)

Adequacy of Information Communicated Pre-General Surgery: A cross-sectional study in BJ Medical College & Sassoon General Hospital and District Hospital Pune

IDENTIFICATION

NAME OF THE HOSPITAL _____

NAME OF THE PATIENT _____

SERIAL NUMBER OF PATIENT ……

USUAL PLACE RESIDENCE … …… RURAL- 1, URBAN- 2, Tribal -3, Sulms-4, Others specify-9

NAME OF RESPONDENT _____

DATE OF INTERVIEW (DD MM YYYY)

NAME OF THE INVESTIGATOR

KEYED BY

INTRODUCTION AND INFORMED ASSENT/CONSENT FORM

My name is_____. I am working with Population Research Centre, Pune. I am inviting you to participate in a research study onto Adequacy of information among the pre-surgery patients.

We will be collecting information on your demographics, health, family, and health care services. The information will be valuable for the Government to formulate health and economic policies and in improving the health care services in the country. The interview will take approximately 30 minutes.

Taking part in this study may not have direct benefits to you, but it will be valuable for the Government to formulate health and economic policies and in improving health care services for the in the country.

The information provided by you will be kept confidential strictly. The data will only be used for research and planning purposes without any personal identification. Your participation is entirely voluntary and you can withdraw from the survey at any point of time even after having agreed to participate. You are free to refuse to answer any question that is asked in the questionnaire.

If you have questions about the study, you can ask me now or anytime during the study. You can also call at [insert office phone number] or e-mail us at [insert office e-mail address].

Signing below means you are willing to be in this study: **AGREE…….1, DO NOT AGREE…….2 END**

Signature of the Interviewer: _____

परिचय आणि सूचित संमती/सहमत फॉर्म

माझं नावं _____ आहे. मी लोकसंख्या संशोधन केंद्र, गोखले इन्स्टिट्यूट ऑफ पॉलिटिक्स अँड इकॉनॉमिक्स, पुणे येथे काम करत आहे. मी तुम्हाला शस्त्रक्रियापूर्व संमती विषयी संशोधन अभ्यासात सहभागी करू इच्छीतो.

मला तुमची आरोग्य, कौटुंबिक आणि आरोग्य याविषयी माहिती हवी आहे. शासनासाठी आरोग्य आणि आर्थिक धोरणे तयार करण्यासाठी आणि देशातील आरोग्य सेवा सुधारण्यासाठी ही माहिती मौल्यवान असेल. मुलाखतीला अंदाजे 30 मिनिटे लागतील.

या अभ्यासात भाग घेतल्याने कदाचित तुम्हाला थेट फायदा होणार नाही, परंतु शासनासाठी आरोग्य आणि आर्थिक धोरणे तयार करणे आणि देशातील आरोग्य सेवा सुधारण्यासाठी मोलाचे ठरेल.

तुम्ही दिलेली माहिती काटेकोरपणे गोपनीय ठेवली जाईल. कोणतीही वैयक्तिक माहिती केवळ संशोधन आणि नियोजनसाठी वापरली जाईल. तुमचा सहभाग पूर्णपणे ऐच्छिक आहे आणि तुम्ही सहभागी होण्यास सहमती दिल्यानंतरही तुम्ही कोणत्याही वेळी सर्वेक्षणातून माघार घेऊ शकता.

प्रश्नावलीमध्ये विचारलेल्या कोणत्याही प्रश्नाचे उत्तर देण्यास तुम्ही बांधील नाही. तुम्हाला अभ्यासाबद्दल प्रश्न असल्यास, तुम्ही मला आत्ता किंवा अभ्यासादरम्यान कधीही विचारू शकता. तुम्ही [ऑफिस फोन नंबर _____] किंवा आम्हाला [ऑफिसचा ई-मेल पत्ता _____] वर ई-मेल देखील करू शकता.

खाली स्वाक्षरी करणे म्हणजे तुम्ही या अभ्यासात सहभागी होण्यास इच्छुक आहात:
सहमत…….,…….1, सहमत नाही……...2

मुलाखतकाराची स्वाक्षरी: _____

परिचय और सूचित सहमति / सहमति पत्र

मेरा नाम _____ है। मैं जनसंख्या अनुसंधान केंद्र, गोखले इन्स्टिट्यूट ऑफ पॉलिटिक्स अँड इकॉनॉमिक्स, पुणे के साथ काम कर रहा/रही हूँ। मैं आपको एक शोध अध्ययन में भाग लेने के लिए आमंत्रित कर रहा/रही हूँ, जिसका शीर्षक "सर्जरी से पहले रोगियों को दी जाने वाली जानकारी की पर्याप्तता" है।

इस अध्ययन के लिए हम आपकी जनसांख्यिकी, स्वास्थ्य, परिवार, और स्वास्थ्य सेवाओं पर जानकारी एकत्र करेंगे। इस जानकारी को सरकार के लिए स्वास्थ्य और आर्थिक नीतियों को तैयार करने और देश में स्वास्थ्य सेवाओं को सुधारने में महत्वपूर्ण माना जाएगा। इस साक्षात्कार के लिए लगभग 30 मिनट का समय लगेगा।

इस अध्ययन में भाग लेने पर आपको कोई सीधा नहीं है, लेकिन यह सरकार के लिए स्वास्थ्य और आर्थिक नीतियों को तैयार करने और देश में स्वास्थ्य सेवाओं को सुधारने में महत्वपूर्ण होगा।

आपके द्वारा प्रदान की जाने वाली जानकारी को गोपनीय रखा जाएगा। डेटा केवल अनुसंधान और योजनाये बनाने के लिए व्यक्तिगत पहचान किये बिना ही उपयोग किया जाएगा । आपकी भागीदारी पूर्णतः स्वैच्छिक है और आप सर्वेक्षण से कभी भी वापस हट सकते हैं, यहां तक कि प्रतिभागी बनने के लिए सहमत होने के बाद भी। आपको जिन प्रश्नों का उत्तर नहीं देना है, तो किसी भी समय आप उन प्रश्नो का जवाब देने से इनकार कर सकते हैं।

अगर आपके पास इस अध्ययन के बारे में कोई सवाल हैं, तो आप अभी मुझसे साक्षात्कार के दौरान कभी भी पूछ सकते हैं । आप हमें [कार्यालय फोन नंबर डालें] पर कॉल या दिए गए ईमेल [कार्यालय ईमेल पता डालें] पर ईमेल भी कर सकते हैं।

नीचे हस्ताक्षर करना यह मानना है कि आप इस अध्ययन में शामिल होने के लिए तैयार हैं:

सहमत हूँ.....1, सहमत नहीं हूँ.....2 अंत

साक्षात्कारकर्ता का हस्ताक्षर: _____

Before Initiating the Interview

Observation	Options	Remark (If any)
A. Type of Ward	Shared (specify no. of patients shared) …….2 Private…….....3 Others Specify.....9	→ Go to C → Go to B
B. If private, how many individual are currently sharing room with you	_____	
C. If shared, how many individual are currently sharing room with you	_____	
D. Observation on general cleanliness	Clean.....1 Unclean (specify).....→2 Others Specify.....9	Go to F → Go to E
E. Other specify	_____ _____	
F. If unclean specify	_____ _____	
G Accompanying person	Relatives.....1 Friends.....2 Sole.....3	
H. Present Status of the Patient	Bedridden (unable to move but able to communicate) .....1 Bedridden (unable to move and communicate) .....2 Can move and communicate.....3 Can move but cannot communicate.....4	Except for option 3 the question should be asked to the relatives
I. Relationship with patient (Who are able to respond about patient)	Father.....1 Mother.....2 Sister…….....3 Brother…….....4 Sister in law…….....5 Brother in law…….....6 Grandfather…….....7 Grandmother…….....8 Son…….....9	

	Daughter in law…….....10 Friends…….....11 Husband.....12 Wife.....13 Other (Specify)…….....99	

Section1- Background Characteristics (Patients Information)

Sr. No.	Questions	Options	Skip
Q1.1	What is your age?	_____(in completed years)	
Q1.2	What is your/his/her religion?	Hindu……1 Muslim…….....2 Christian ……..3 Buddhist……...4 Jain……...5 Others(Specify)……....9 Do not wish to specify……99	
Q1.3	What is your/his/her caste?	Scheduled Caste……...1 Scheduled Tribes……..2 Other Backward Caste…….3 General……4 No Caste……...5 Others(Specify)……....9 Do not wish to specify……99	
Q1.3a	Other specify	_____ _____	
Q1.4	What is your gender?	Male……1 Female…….2 Other (Specify)……..….9	
Q1.5	Are you/he/she married?	Married……1 Unmarried……...……2 Divorced …….……..….3 Widowed…….4 Separated…….5	

		Others(Specify)……...…....9	
Q1.5a	Other specify	_____ _____	
Q1.6	What is the highest level of education that you attained?	Illiterate……1 <literate but 4th Std……....2 5th-7th Std……...3 8th -10th std……4 10th-12th std……5 Graduate……6 Post-Graduate……7 Other (Specify)……..9	
Q1.6a	Other specify	_____ _____	
Q.1.7	Are you/ he/she is working?	Yes……..……1 No…….…..2	→ Q.1.10
Q.1.8	What is your/his/her occupation?	Government Service (Reg.) .....1 Govt service (Contra.) ……2 Private service…….....3 Business related……...4 Self-employed……..5 Household work……...6 Farmer.....7 Other (Specify).....……9	
Q1.8a	Other specify	_____ _____	
Q.1.9	What is your average monthly income for the last one year?	……Rs.	
Q 1.10	Are you or she/he is the head of the family?	Yes…….……..1 No……....2 →	If no 1.12
Q1.11	If yes, how many members of your family are dependent on you?	……	

Q1.12	Are you aware about the household income?	Yes……...1 No……..2 Don't know.....8	If Q1.14
Q1.13	What is household's average monthly income for the last one year?	…… Rs.	
Q1.14	Do you belong to BPL	Yes……..1 No……...2 Don't know.....8	
Q1.15	Are you/he/she covered any Health Insurance?	Yes (Specify)……....1 No……..…...2 Don't know.....8	If no sec 2
Q1.15a	If yes specify	_____ _____	

Section 2- Reason for Current Admission

Sr. No.	Questions	Options	Skip
Q 2.1	Date of Current Admission	…….(DD/MM/YY)	
Q2.2	Do you know expected date of current surgery?	Yes (Specify)…….1 No……..2 Don't know.....8	Q2.5
Q2.3	If yes, what is the date of surgery?	_____ _____	
Q2.4	Reason for admission?	_____ _____	
Q2.5	What is the name of the surgeon?	_____	

		_____	
Q2.6	What was the knowledge provided in each interaction?	Regarding ailment……..…..A Preventive measures…….…..B Possible complications……..…..C Diagnosis…… …D Medication…… …..E Others (Specify)…….Z	
Q2.6a	Other specify	_____ _____	
.Q2.7	Since when are you suffering from these ailments?	Last 1 month…….…….…..1 Last 6 months……..2 Last 1 year……...3 >1 year (specify in yrs.)……..…4 Other (Specify).....……..…9	
Q2.7a	Other specify	_____ _____	
Q2.8	Are you suffering from any pre-existing morbidities?	Yes…… …..1 No……..… …...2	→Q2.13
	Details of the pre-existing morbidities (Multiple options)		

Sr. No.	List of pre-existing morbidities	(Q2.9) Suffering from Yes/No	(Q2.10) Since when	(Q2.11) Under medication Yes= 1; No = 2	(Q2.12) Surgeon/Doctor aware of the existing premprbidities Yes= 1; No = 2
1	Diabetes				
2	Blood pressure				
3	Heart disease				
4	Obesity				
5	Lung disease				
6	Kidney disease				
7	Cancer				
8	Digestive system/Stomach				
9	Disabilities				
10	ENT issues				
11	Allergy				
12	Viral infection				
11	Others (specify name of the disease)				

Q2.13	Have you been admitted to hospital or received any prolonged treatment	Yes (Specify)……..... 1 No……..…... …..2 Don't know.....8	→Q2.15
Q2.14	If yes, specify	_____ ____ _____ ____	
Q2.15	Have you undergone any surgery in the past? If yes give details.	Yes (Specify)……..….. 1 No…….. …..2 Don't know.....8	→Q2.17

Q2.16	If yes, specify	_____ ____ _____ ____	
Q2.17	Have you received any blood transfusion in the past?	Yes (Specify)……..…..1 No…… …....2 Don't know.....8	→ Q2.19
Q2.18	If yes, specify	_____ ____ _____ ____	
Q2.19	Do you smoke, consume alcohol, pan, gutkha, supari etc.?	Yes (Specify)……..……..1 No…….. …..2	→ Q2.21
Q2.20	If yes, specify	_____ ____ _____ ____	
Q2.21	What is the current reason for surgery?	_____ ____ _____ ____	
Q2.22	When did you/she/he got to know the need for the surgery?	……..	
Q2.23	Who first informed you about the Surgery?	Surgeon……. …….1 Nurse……. …….2 Psychologist…… …..3 Counsellor…… ……..4 Family Members……5	

		Consulting physician.....6 Others (Specify)…..……...9	
Q2.24a	Other specify	_____ ____ _____ ____	
Q2.25	How you/she/he did come to know about the surgeon?	_____ ____ _____ ____	
Q2.26	When was the first meeting with Surgeon	…….(DD/MM/YY)	
Q2.27	As of today how many time you met the surgeon?	……times	
Q2.28	Did the surgeon first examined you in the first meeting	Yes……..1 No…….....2 Don't know.....8	→ Q2.30
Q2.29	When the surgeon did examine you/him/her?	2nd meeting.....1 3rd meeting.....2 After 3rd meeting.....3	→ Q2.31
Q2.29a	Specify in which meeting surgeon examined you/him/her?	_____ ____ _____ ____	
Q2.30	Did Surgeon informed in the first meeting of the requirement of Surgery?	Yes……..1 No……...2	→ Q2.32

		Don't know.....8	
Q2.31	When did the surgeon informed of the requirement of Surgery?	2nd meeting.....1 3rd meeting.....2 After 3rd meeting.....3	
Q2.31a	Specify in which meeting surgeon informed of the requirement of surgery?	_____ _____ _____ ____	
Q2.32	Did you receive the following information from the surgeon?	Yes No Don't know Alternative to surgical procedure.....1 2 8 Emergency of the surgery.....1 2 8 Surgical procedure.....1 2 8 Level of risk & complications….1 2 8 Pre-operative preparation.....1 2 8 Place of Surgery.....1 2 8 Adequacy of the Physical Infrastructure in Current Place.....1 2 8 Adequacy of the Human Resources in Current Place……..1 2 8 Availability of Emergency Care.....1 2 8 Availability	If Yes Specify

		of referral System.....1 2 8 Post-operative care.....1 2 8 Recovery period.....1 2 8 Surgery charges.....1 2 8 Dietary restrictions.....1 2 8 Others (Specify).....1 2 8	
Q2.32a	Other specify	_____ _____ _____ _____	
Q2.33	Average time spent on explaining the details?	_____ _____ _____ _____	
Q2.34	Do you/she/he require clarification for any of the above mentioned items?	Yes……..….1 No……..2 Don't know.....8	→Q2.36
Q2.35	If Yes specify the items and your/his/her concern?	_____ _____ _____ _____	
Q2.36	Did you ever ask your concern to the Surgeon?	Yes……..1 No……...2	→Q2.38

Q2.37	Were all your concerns addressed?	Yes……..1 No……..2 Partially……..3	→Q2.39 Q2.39 →
Q2.38	Describe the concerns that were not addressed adequately.	_____ _____	
Q2.39	Were you/she/he satisfied with the answers?	Satisfied…….1 Not satisfied……..2 Don't know.....8	
Q2.40	Did they suggest any tests before surgery?	Yes……..1 No……..2 Don't know.....8	→Q2.47

Q2.41 What are the tests conducted after admission for the surgery and when?	Q2.42 Suggested or not Yes.....1 No.....2 NA.....3	Q2.43 Date of test	Q2.44 Result	Q2.45 Where did you do these test? Same hospital.....1 Reference laboratories.....2 Any other laboratory.....3	Q2.46 Expenditure
Chest X-ray					
ECG					
Urinalysis					
Sugar					
CBC					
Prothrombin/Partial Thromboplastin Time					

Thyroid					
Hepatitis B					
HIV					
USG					
Other (Specify)					

Q 2.47	Was there any apprehension when surgery was mentioned?	Yes……1 No……2	→Q 2.46
Q 2.48	If yes, what were they?	_____ _____	
Q2.49	Did you/she/he receive any counselling to handle your emotional well-being?	Yes……1 No……2 Don't know.....8	**Sec. 3**
Q2.50	If yes, specify	_____ _____	
Q2.51	Did it help you in giving confidence?	Yes……1 No……2	

Section 3- Surgery Related Information

Sr. No.	**Questions**	**Options**	**Skip**
Q3.1	What is the type of surgery?	Major……..1 Minor……..2 Don't know……8	
Q3.2	How many hours will it take to complete the surgery?	1-2 hours……1 3-4 hours……2 5-6 hours……3 More than 6 hours……4 No information.....5	

Q3.3	Are you aware of the benefits of the surgery?	Yes……..1 No……..2 Don't know.....8	Q3.5
Q3.4	If yes, what are the benefits of the surgery?	Improved condition……..A Less pain…… B Better health……..…C Other (Specify)……..…Z	
Q3.4a	Other specify	_____ _____	
Q3.5	Are you aware of the risks associated with the surgery?	Yes……..1 No…….....2 Don't know.....8	Q3.7
Q3.6	If yes, what are the risks associated with surgery?	Immobility…… A Pain……...…B Slow progress……...C Infection……D Hemorrhage……E Blood clots…….……...F Death…….....G Others (Specify)……..…….…Z	
Q3.6a	Other specify	_____ _____	
Q3.7	Do you feel that your ailment can be cured without any surgery	Yes……..1 No…….....2 Can't say.....3 Other (Specify).....9	Q3.9
Q3.8	If yes, what are the alternative treatments for surgery?	Non-operative treatment……1 Physical therapy…….……...2 Other (specify).....9	
Q3.8a	Other (Specify)	_____ _____	
Q3.9	Did anesthetist visited you and seek any information?	Yes……..…..1 No……..…→2	**Q 3.11**
Q3.9z	If yes, specify	_____ _____	
Q3.10	Are you/she/he instructed to follow any dietary restrictions before surgery?	Yes……..…..1 No……..…2 Don't know.....8	Sec 4

Q3.10a	If yes, specify.	_____ _____	
Q3.11	Who gave you instruction regarding dietary restrictions?	Doctor……..A Nurse…….. B Nutritionist……..C Dietician…….……D Others (Specify)……..Z	
Q3.11a	Other specify	_____ _____	

Section 4- Signing, reading and comprehensibility of the written informed consent form

Sr. No.	Questions	Options	Skip
Q4.1	Did you/she/he receive the Informed consent form?	Yes……..……1 No……..……2 Don't know.....8	Sec 5
Q4.2	How many consent forms did you/him/her received?	_____	
Q4.3	When did you receive the informed consent?	A week before……1 A day before……..….2 Today…….…3 On the time of admission.....4 At the time of operation.....5 Other(Specify).....9	
Q4.3a	Other specify	_____ _____	
Q4.4	Have you submitted the signed/thumb informed consent form (general/anaesthetic)	Yes……..….1 No……..…. 2 Don't know.....8	
Q4.5	When did you submitted the consent form?	_____ _____	
Q4.6	Who gave you consent form?	Administrative……..…..1 Doctor…….....2 Staff nurse…….….3 Other (Specify)……..9	
Q4.6a	Other specify	_____ _____	

Q4.7	Did he/she explain the content of consent form to you/him/her?	Yes……1 No…… 2 Don't know.....8	Q4.7 Q 4.9
Q4.8	If no, who explain the content of the consent form?	_____ _____	
Q4.9	Did you/she/he read each and every point written in consent form?	Yes……1 No……2 Partially……..3 Don't know.....8	Sec. 5
Q4.10	Did you/she/he understand the things mentioned in the consent form?	Yes……1 No……2 Partially……..3 Don't know.....8	Q 4.12 Q4.12
Q4.11	What was written in it? (Specify)	_____ _____	
Q4.12	Was there any doubt clarification?	Yes……1 No……2 Don't know.....8	Q4.12
Q4.13	If Yes, (Specify)	_____ _____	
Q4.14	Did you/he/she ask your doubts to anyone?	Yes……...1 No……2 Don't know.....8	Q4.14
Q4.15	To whom did you ask your doubts about the things you could not understand?	Surgeon……1 Nurse……2 Family members……...3 Counsellor……..……..4 Others (Specify)……..…9	
Q4.15a	Other specify	_____ _____	
Q4.16	At present do you have any doubts or clarifications?	Yes (specify)……1 No……2 Don't know.....8	Sec 5
Q4.17a	If yes. specify	_____ _____	

Section 5- Availability of in-house infrastructure (cross check)

Sr. No.	Questions	Options	Skip
Q5.1	Is there availability of the required in-house infrastructure?	Yes……..…….…1 No…….……2 Don't know.....8	Q5.3
Q5.2	If yes, what are they?	Operating suite……..…A Operating room…….……...B Sterilization room……..……...C Clean room shower……..D Human infrastructure…….…..E Surgery team……...F Others (Specify)……..Z	
Q5.2a	Other specify	_____ _____	
Q5.3	Is there availability of the required equipment?	Yes…….……1 No…….…2 Don't know.....8	Sec 6
Q5.4	If yes, what are they?	ECG machine……...A X-ray machine…….….B Ultrasound……..…..C Patient monitor…….D Ventilator……..……E Surgical lights…….……..F Other (Specify)……..…...Z	
Q5.4a	Other specify	_____ _____	

Section 6- Referral facility in case of post-surgery complications

Sr. No.	Questions	Options	Skip
Q6.1	Were you informed about any referral facility available in case of post-surgery complications?	Yes……..……..…1 No……...…..2 Don't know.....8	Sec 7
Q6.2	If yes, how far is the referral facility?	_____ _____	

Q6.3	Were you informed about the availability of transport facility?	Yes……..……..…1 No……...…..2 →	Sec 7
Q6.4	If yes, overall time take in case of referral?	_____ _____	

Section 7- Discharge and Recovery period

Sr. No.	Questions	Options	Skip
Q7.1	How many days will it take to recover after the surgery?	One week……...…1 Two weeks……...…..2 Three weeks……..……..…3 More than three weeks.……4 Other (Specify).....9	
Q7.1a	Other specify	_____ _____	
Q7.2	How much time will it take to regain consciousness?	3-4 hours……1 4-8 hours……..…..2 8-12 hours……..3 More than 12 hours…...……4 Other (Specify).....9	
Q7.2a	Other specify	_____ _____	
Q7.3	Will you/she/he be shifted to ICU ward?	Yes……1 No……...2 Don't know.....8	Sec 8
Q7.4	If yes, what was the average time in ICU??	_____ _____	
Q7.5	After how many days of surgery is the discharge given?	2-4 days……..……1 4-7 days…….……2 Depends upon recovery……..…...3	

Section 8- Post operative care indicators

Sr. No.	Questions	Options	Skip

Q8.1	Were you informed about post-operative care?	Yes……..……..…1 No……..……..…2 Don't know.....8	Q 8.3
Q8.2	If yes, what are they?	Yes No Wound care…… 1 2 Pain management……1 2 Diet plan…… 1 2 Routine plan…….1 2 Recovery time……..1 2 Precautions…….. 1 2 Movement instructions……1 2 Physiotherapy.....1 2 Frequency of consulting.....1 2 Other(Specify).....9	
Q8.2a	Other specify	_____ _____	
Q8.3	Did they mention any further surgeries required?	Yes……..…..1 No……..…2 Don't know.....8	Q 8.5
Q8.4	If yes, specify.	_____ _____	
Q8.5	Observation by investigator	_____ _____	
Q8.6	Please confirm the actual reason for the surgery.	_____ _____	
Q8.7	Actual name of Surgery.	_____ _____	**End**

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