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Informed or assumed? Ethical gaps in surgical consent practices in low-resource settings: A narrative review

Abstract

Background: The aim of this study is to examine the ethical gaps in surgical consent practices in low- and middle-income countries (LMICs) and identify the challenges in implementing informed consent principles in these settings. The article seeks to propose strategies for improving surgical consent processes specifically in LMICs.

Methods: This study follows a narrative literature review approach, synthesizing existing research on informed consent practices in LMICs. A comprehensive search was conducted across databases such as PubMed, Scopus and Web of Science for relevant articles. Inclusion criteria involved qualitative and quantitative studies addressing ethical considerations and systemic and cultural barriers in the surgical consent process. Data were analysed using the four principles of biomedical ethics: autonomy, beneficence, non-maleficence and justice.

Findings: The review identifies six key ethical concerns: superficial consent processes, compromised patient understanding, structural and systemic barriers, cultural influences on patient autonomy, consent obtained under emotional duress and institutional culture that perpetuates ethical erosion.

Conclusion: In many LMIC settings, the surgical consent process has become more of a procedural task than a meaningful ethical practice. To address this, a shift toward process-based approaches, investment in ethical communication training, localization of consent materials, cultural sensitivity without compromising ethics and strong institutional leadership is essential.

Keywords: informed consent, surgical ethics, low-resource settings, patient autonomy, cultural considerations.

Introduction

Informed consent is a foundational ethical and legal prerequisite for surgical care, grounded in the principles of patient autonomy, dignity and respect. Within the surgical domain—where decisions often involve significant risk and irreversible interventions—the process of obtaining genuine, informed consent becomes critically important. This process is not merely a bureaucratic formality but a communicative and relational exchange essential for ethical practice.

However, in many low- and middle-income countries (LMICs), the application of this ideal is severely challenged. Overloaded health systems, profound

resource constraints, time pressures and variable levels of staff training create an environment where obtaining meaningful consent is often deprioritised. This is further complicated by sociocultural dynamics, such as hierarchical communication patterns, family-centred decision-making and varying concepts of individual autonomy, which may diverge from the Western bioethical model upon which standard consent protocols are frequently based.

The resultant disconnect between ethical standards and on-the-ground reality can lead to what has been termed ‘assumed consent’, a superficial and often hurried

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transaction that fails to meet ethical or legal thresholds for patient understanding and voluntary agreement^{1,2}.

The ethical implications are significant. When consent is compromised, patient autonomy is undermined, trust in the health care system erodes, medico-legal risks increase and patients may be inadequately prepared psychologically for surgery³. This may adversely affect postoperative outcomes³.

While informed consent has been extensively studied in high-income settings, the literature from LMICs remains less developed and somewhat fragmented. Existing studies frequently highlight systemic barriers, such as lack of time, absence of protocols and low health literacy, but a synthesised, ethically framed analysis of the gaps and potential solutions tailored to low-resource contexts is needed¹.

This narrative review aims to address this gap by examining the ethical challenges inherent in surgical consent practices within low-resource settings, with a focus on LMICs. It seeks to synthesize available evidence to illuminate the key areas where practice deviates from principle, explore the implications of these gaps through the lens of biomedical ethics and propose context-sensitive strategies for improvement.

A particular focus will be placed on the role of the perioperative team, especially nurses, who are often pivotal in-patient advocacy, communication and the verification of understanding, yet whose potential in strengthening consent processes is frequently underutilised. By integrating these perspectives, this review intends to contribute to a more equitable and ethical framework for surgical care globally.

Methods

This narrative review was conducted to explore and synthesize the ethical challenges, contextual factors and potential solutions related to surgical informed consent practices in low-resource settings, with a specific focus on low- and middle-income countries (LMICs).

A narrative synthesis approach was chosen over systematic or scoping review

methods because the research question is exploratory and interdisciplinary, aiming to integrate diverse types of evidence, including qualitative, quantitative and grey literature, to construct a comprehensive, ethically grounded understanding of a complex real-world practice. This approach is well suited for examining multifaceted issues where practices are heavily influenced by local context, culture and system-level constraints.

A comprehensive search of peer-reviewed literature was performed using the electronic databases PubMed, Scopus and Web of Science. To capture the most recent developments and debates, the search was limited to publications from January 2020 to December 2025.

The search strategy used combinations of the following keywords and Medical Subject Headings (MeSH) terms, including 'informed consent', 'surgical procedures, operative/ethics', 'developing countries', 'low-resource settings', 'global surgery', 'patient autonomy', 'communication' and 'perioperative nursing'.

The search was restricted to articles published in English. This language restriction is a recognised limitation of this review, imposed due to the authors' linguistic capabilities and to avoid the risks of inaccuracies in machine translation of complex ethical and clinical concepts. We acknowledge that this may have excluded relevant studies from non-English speaking LMICs.

Inclusion criteria comprised primary studies (both qualitative and quantitative), review articles and case reports that explicitly addressed the process, practice, ethical dimensions, or systemic barriers of obtaining informed consent specifically within surgical or perioperative settings in LMICs.

The exclusion criteria included studies focused solely on high-income countries, studies on consent in non-surgical contexts (e.g. medical treatment or research), editorials, commentaries or conference abstracts unless they provided substantial, unique insight or ethical analysis directly relevant to the review's aim and articles not available in full text.

The database searches initially yielded a total of 487 records. After removal of duplicates, 352 unique titles and abstracts

were screened against the inclusion and exclusion criteria. Following this screening, 89 full-text articles were assessed for eligibility. A total of 30 sources, including peer-reviewed and grey literature, were included in the final synthesis.

This selection process was not performed with multiple independent reviewers, as in a systematic review, but was conducted iteratively by the author to enhance rigour.

Data from the included sources were extracted and analysed thematically. The analysis followed an iterative, primarily inductive process: recurring concepts, challenges and described practices from the literature were first identified and grouped into emerging themes such as time pressure, family involvement and literacy barriers.

Subsequently, these themes were deductively organised and interpreted within the established framework of the four principles of biomedical ethics: autonomy, beneficence, non-maleficence and justice. This combined approach allowed the findings to be grounded in the data while facilitating ethical analysis.

It is important to note that a formal critical appraisal of the methodological quality of each included study was not conducted, as is characteristic of a narrative review aiming for conceptual synthesis rather than aggregate evidence evaluation.

The goal of this synthesis was not to produce statistical generalizations but to develop a nuanced, context-sensitive narrative that highlights key ethical tensions, systemic patterns and the lived realities of patients and providers in LMIC surgical environments. These insights form the foundation for the discussion and the proposed strategic framework in the subsequent sections.

Findings

A comprehensive review of the literature reveals that the process of obtaining informed consent in surgical settings within low-resource environments is frequently characterised by significant ethical compromises. These issues are deeply intertwined and can be synthesised into four primary thematic

domains, with two critical cross-cutting subthemes that permeate the core challenges. This restructuring consolidates previously repetitive sections to provide a clearer, more focused analysis.

1. Superficial and procedural consent process

In many surgical units across LMICs, informed consent is often reduced to a last-minute legal formality rather than an ethical dialogue. Studies consistently report that patients are frequently asked to sign consent forms immediately before anaesthesia induction, sometimes while already on the operating table or under pre-operative sedation. In a recent Ethiopian systematic review and meta-analysis of seven studies including 2,690 surgical patients, only 32% had appropriate knowledge and 40% had an appropriate perception of informed consent. Furthermore, consent forms are often written in complex medical terminology or a non-native language, typically English or French, without translation or interpretation, rendering them inaccessible to a majority of patients⁴⁻⁶.

The core ethical failure here extends beyond a mere informational deficit. It represents a fundamental absence of relational engagement, characterised by no dedicated time, no private space and often no institutional priority placed on shared decision-making. This practice reinforces a pronounced power imbalance between the surgical team and the patient, undermining the very foundation of consent as a process rooted in respect and partnership⁷.

2. Compromised patient comprehension and communication barriers

A dominant theme across contexts is that patients often 'consent' without true understanding. Research from a tertiary hospital in Ethiopia found that only 32.2% of surgical patients demonstrated adequate comprehension of the procedure, risks, benefits and alternatives after the consent process⁸.

Similarly, studies from Ghana and Pakistan indicated that most patients perceived the consent form primarily as a 'legal protection for the doctor' rather

than a mechanism to safeguard their own rights or ensure their understanding⁹.

This comprehension gap is driven by multiple interconnected factors, including low health literacy, severe time constraints, unidirectional communication from provider to patient rather than dialogue and language and cultural discordance where information is not conveyed in the patient's primary language or in culturally resonant terms.

In hierarchical healthcare environments common in many LMICs, patients may also feel a social obligation to defer to medical authority, interpreting silence or acquiescence as agreement. This passive acceptance, however, does not fulfil the ethical or legal criteria for informed consent¹⁰.

3. Structural and systemic barriers

The consent process is often shaped more by systemic constraints than by ethical guidelines. In under-resourced public hospitals, overburdened staff, high patient volumes and infrastructural deficiencies directly undermine ethical practice.

Pre-operative areas frequently lack basic privacy, making sensitive discussions impossible. The task of obtaining consent is often delegated to the most junior team members—interns or nurses—rather than the primary surgeon, further depersonalizing the process.

Institutional protocols are frequently absent or ignored. Many facilities lack standardised operating procedures for consent and formal ethics training is rarely a core component of surgical or nursing curricula. Even where protocols exist, adherence is low due to operational pressures. This systemic normalization of shortcuts leads to a gradual 'ethical erosion,' where substandard practice becomes the ingrained norm across generations of healthcare workers¹¹.

4. Cultural norms and the tension with individual autonomy

Cultural values profoundly influence the perception and practice of consent. In collectivist or patriarchal societies, decision-making authority often rests with family elders, community leaders, or male spouses rather than the individual

patient. A study in Southern Malawi found that in 76% of cases, consent forms for caesarean sections were signed by a guardian, not the pregnant woman herself¹².

Patients may also refrain from asking questions due to a deep-seated deference to authority, viewing inquiry as disrespectful towards the physician. This creates a fundamental ethical dilemma for providers: how to respect deeply held cultural norms of family- or community-based decision-making while simultaneously upholding the ethical principle of individual patient autonomy and right to self-determination¹³.

Cross-cutting subthemes

A. Consent under conditions of duress or coercion

A critical, yet under-analysed, dimension is the reality of consent obtained under significant emotional or situational pressure, most acutely in emergency settings. Patients and families report feeling 'rushed, fearful, or coerced' when confronted with urgent surgical decisions, often framed as 'immediate surgery or potential death.' In such states of acute distress, signing a form may reflect submission to circumstance rather than informed, voluntary agreement.

While clinical urgency is real, it does not absolve the team of responsibility to provide clear, compassionate information and to assess the patient's capacity for decision-making in that moment. Consent given under profound duress remains ethically problematic, even if it may be considered legally valid in some jurisdictions¹⁴.

B. The pivotal role of institutional and team culture

Emerging evidence underscores that the ethical climate of a hospital or surgical team is a decisive factor in consent practices. In institutions where senior clinicians model respectful, patient-centred communication, junior staff and nurses are more likely to emulate these behaviours. Conversely, in environments where consent is treated as a mere bureaucratic 'box-ticking' exercise, ethical erosion becomes institutionalised.

Positive institutional practices that correlate with better consent processes

include allocating protected time for pre-operative discussions, integrating regular training in ethical communication and patient advocacy, particularly for perioperative nurses and establishing feedback mechanisms where patient experiences inform quality improvement.

Ultimately, sustainable ethical practice depends not only on individual clinician commitment but also on leadership that actively fosters an organizational culture of transparency, respect and genuine partnership with patients¹⁵.

Discussion

This review underscores a profound and persistent ethical-practice gap in the application of informed consent within surgical settings across low-resource environments. While the principle is universally upheld in doctrine, its enactment is systematically compromised by a confluence of structural, cultural and educational forces. The synthesised findings reveal that consent is often transformed from an ethical dialogue into a perfunctory transaction, with far-reaching implications that extend beyond individual patient encounters to corrode the very foundations of trust and equity within health systems.

Synthesizing the ethical breach: A principle-based analysis

The findings can be directly mapped onto the four pillars of biomedical ethics, illustrating widespread, systemic erosion. The principle of autonomy is fundamentally undermined across multiple fronts: it is violated when comprehension is absent due to poor communication or literacy barriers; when reflection is impossible due to time pressure or last-minute consent; when voluntariness is compromised by familial pressure, cultural deference, or emotional duress in emergencies; and when the relational space for dialogue is eliminated by systemic overload¹⁶. The patient's role shifts from a decision-making agent to a passive recipient of care.

The twin duties of beneficence and non-maleficence are also at risk. A patient who does not truly understand the nature, risks and alternatives of a procedure is psychologically unprepared for the outcome. This lack of preparation can exacerbate anxiety, contribute to

post-operative distress and hinder recovery, thereby contravening the goal of promoting well-being and avoiding harm. Furthermore, proceeding with surgery based on 'assumed' rather than informed consent carries its own inherent ethical and psychological harm¹⁷.

The distributive dimension of justice is starkly evident. Inequitable access to meaningful consent is itself a form of systemic injustice. Patients are disadvantaged based on language proficiency, literacy levels, gender, where patriarchal norms override women's voices and socioeconomic status, which dictates the time and attention a busy public system can afford. The lack of interpreters, gender-sensitive protocols, or legal recourse institutionalizes a two-tiered system where the right to informed participation is a privilege, not a guarantee¹⁸.

The central role of the perioperative nurse: An underutilised ethical resource

A critical interpretation emerging from this synthesis is the pivotal yet frequently overlooked role of the perioperative nurse. In many LMIC settings, nurses are the most consistent point of contact for surgical patients throughout the care continuum. As such, they are uniquely positioned to act as ethical mediators, patient advocates and communication facilitators.

However, this potential is often untapped due to hierarchical structures, lack of formal authority in the consent process and insufficient training in ethical communication and advocacy skills.

Empowering nurses through targeted education, clear role definition in consent protocols and institutional support for their advocacy function could represent one of the most practical and impactful leverage points for improving consent practices. Their involvement can help bridge the communication gap, verify understanding and provide essential emotional support, especially in high-stress pre-operative moments¹⁹.

From individual failure to system dysfunction

It is crucial to interpret these ethical lapses not primarily as failures of

individual clinician character but as symptoms of broader system dysfunction. When clinicians face impossible caseloads in understaffed units with no private consultation spaces, the 'choice' to truncate consent is often a tragic but predictable adaptation to an unsustainable work environment.

This systems-level view does not excuse unethical practice but redirects the focus of accountability and the locus of change from blaming individuals to reforming structures²⁰.

Strategies for ethical improvement

Addressing the multifaceted ethical challenges outlined in this review requires a multilevel, context-sensitive and sustainable approach. Effective interventions must target not only individual clinician behaviour but also the systemic structures, institutional cultures and educational foundations that shape practice.

The following strategies, derived from the synthesis of findings and successful innovations documented in the literature, are proposed as a framework for strengthening informed consent in low-resource surgical settings.

Healthcare institutions must formally adopt policies that reframe consent from a one-time signature to an ongoing dialogue. This requires developing clear, practical protocols that specify who is responsible, ideally defining the primary role-holder as the operating surgeon while formally integrating perioperative nurses as essential partners in verifying understanding and addressing patient concerns^{19,21}.

Protocols should also specify when the principal consent conversation should occur, with evidence indicating that for elective procedures, discussions should take place at least one to fourteen days prior to surgery to allow sufficient time for reflection, family consultation and questions. Consent obtained less than twenty-four hours before surgery has been reported to be insufficient for thoughtful decision-making²².

Furthermore, protocols should outline what constitutes minimum disclosure, including core information about the

procedure, risks, benefits and alternatives conveyed in plain, accessible language²¹.

Mandatory training in ethical reasoning and patient-centred communication skills should be integrated into pre-service and in-service education for all surgical team members, including surgeons, anaesthesiologists and crucially, perioperative nurses^{23, 24}.

Training modules should move beyond theory to include role-playing scenarios for navigating complex situations such as family pressure, low literacy and emergency consent. Training should also address the use of interpreters and culturally competent communication techniques, as well as equip nurses with skills in structured patient advocacy and health literacy assessment to empower them as effective intermediaries.

Consent forms and support materials must be made genuinely accessible through translation into dominant local languages and redesign using plain-language summaries alongside technical details²⁵. The development of pictorial aids, flowcharts, or short videos to explain common procedures has proven particularly effective for patients with low literacy. Co-designing these materials with community health workers or patient advocates ensures cultural and contextual relevance.

Ethical practice must be supported by system design through scheduling protected pre-operative consultation time in surgical workflows and creating private spaces near wards for confidential discussions. The implementation and auditing of adherence to standard operating procedures for consent, along with the incorporation of metrics related to consent quality, such as patient-reported understanding, into hospital quality assurance programs, represent critical structural interventions²⁶.

Sustainable change depends on leadership and culture. Institutions should empower senior clinicians to model exemplary consent practices and mentor juniors while recognizing and rewarding teams that demonstrate exceptional patient communication and ethical engagement. Establishing confidential patient feedback mechanisms specifically addressing the consent experience and acting on the insights

gained, as well as supporting nursing leadership in developing and monitoring unit-based ethical standards for patient interaction, are essential components of cultural transformation²⁷.

Respect for cultural context must not come at the cost of ethical compromise. This requires training providers in culturally sensitive negotiation skills and advocating for a 'dual consent' model where appropriate, engaging both the patient and key family members in joint discussion to respect communal decision-making norms while ensuring the patient's voice is heard and their voluntary agreement is secured. The development of gender-sensitive protocols to support the autonomy of female patients in patriarchal settings is also imperative^{28, 29}.

Where infrastructure allows, technology can augment, not replace, human interaction. Mobile health applications with audio-visual consent information in local languages enable patients to review information pre-admission, while digital documentation systems with multilingual templates and prompts for key disclosure points can support consistent practice. These tools must be designed with low-bandwidth and low-literacy users in mind³⁰.

The adoption of these strategies requires phased implementation, beginning with local pilot programs on a single surgical ward that engages frontline staff, especially nurses, in the design process. Successes can then be scaled, driven by data on improved patient understanding and satisfaction and supported by committed hospital management and relevant health ministry policies.

Limitations and future directions

Methodological limitations

While this narrative review provides a synthesised, ethically focused analysis of consent practices in LMICs, several methodological limitations must be acknowledged. The inherent subjectivity of narrative synthesis means that the selection, prioritization and thematic analysis of sources are influenced by the authors' perspectives and expertise. Although we sought to be comprehensive

and followed a structured search, the synthesis is not the product of a systematic, reproducible screening and data extraction process with multiple independent reviewers.

Our findings are limited to published literature and grey literature accessible in English. This almost certainly introduces publication bias, as studies with negative or null findings may be less likely to be published. Furthermore, the exclusion of non-English language literature is a significant constraint, as it omits the perspectives and findings from many LMIC contexts where local language research is vital. This limits the generalizability of our synthesis.

Included studies were not subjected to a standardised critical appraisal tool to assess methodological rigor. Consequently, the weight given to different findings is based on thematic recurrence and relevance rather than a hierarchy of evidence quality. Despite the 2020-2025 search window, the evidence base remains uneven, with dense reporting from some regions, such as parts of Sub-Saharan Africa and South Asia and sparse data from others, including Central Asia and rural and remote areas globally. The voices of frontline providers, especially nurses and patients from the most under-resourced settings are likely underrepresented.

Future directions for research and practice

To build upon this work and drive meaningful change, several critical avenues for future inquiry and action are proposed. There is an urgent need for research to develop, pilot and validate culturally sensitive, low-cost tools to assess the quality of the consent process, not just its legal documentation. These tools should measure patient understanding, perceived voluntariness and satisfaction with communication and should be designed for use by perioperative nurses or community health workers in routine care.

Future studies should employ implementation science frameworks to design, execute and evaluate pilot interventions targeting the strategies outlined above, such as nurse-led consent verification programs, use of visual aids and protected-time protocols. Research

should focus on feasibility, acceptability, cost and impact on patient-centred outcomes in real-world LMIC settings.

Qualitative and participatory action research is needed to deeply explore the experiences, perceptions and suggestions of perioperative nurses regarding their role and barriers in the consent process. Similarly, more patient-centred research, especially with vulnerable groups including women, elderly individuals, and those with low literacy, is essential to ground policies in lived reality.

Research should investigate the policy enablers and barriers to reforming consent practices at the national and hospital levels. Concurrently, cost-effectiveness analyses of different intervention models, such as training versus technology aids versus process redesign, are required to guide pragmatic resource allocation in constrained environments.

Interdisciplinary research involving ethicists, anthropologists, clinicians and community leaders is needed to develop practical, nuanced guidance for navigating the ethical tension between individual autonomy and family- or community-based decision-making norms in diverse cultural settings.

These limitations do not invalidate the concerning ethical patterns identified but underscore that our understanding is incomplete. They highlight the necessity for more rigorous, inclusive and practice-embedded research to inform the ethical advancement of surgical care globally. The ultimate goal is to replace assumed consent with a process that is genuinely informed, respectful and equitable, a goal that demands both continued scholarly attention and committed action.

Final ethical reflection and conclusion

Final ethical reflection

The most salient insight emerging from this review is that ethical lapses in surgical consent within low-resource settings are not inevitable. Rather, they are the predictable consequence of systems that have not been designed, or have ceased to be resourced, to prioritise ethical communication as a core clinical competency. The capacity to listen with

empathy, to explain with clarity and to respect a patient's values and choices is not a function of advanced technology or vast budgets; it is fundamentally a matter of professional intentionality, moral courage and institutional commitment.

Informed consent must be reclaimed as a universal ethical imperative, not a variable standard that diminishes with resource scarcity. Upholding this imperative in challenging environments demands innovation, but it begins with the conviction that every patient, irrespective of literacy, language, gender, or socioeconomic status, is entitled to partnership in decisions about their own body. This commitment is the bedrock of humane, dignified and ethical surgical care.

Conclusion

This narrative review has delineated the profound and systemic ethical gaps that characterize informed consent practices in many low-resource surgical settings. The evidence consistently reveals a transition from an ethical dialogue to a hurried, often meaningless transaction, driven by structural overload, cultural complexities and insufficient ethical training. These practices collectively violate the core principles of biomedical ethics, which include autonomy, beneficence, non-maleficence and justice. They undermine patient dignity, erode trust and perpetuate inequity.

Addressing this crisis requires moving beyond superficial compliance to foster a fundamental cultural shift within surgical teams and healthcare institutions.

Improvement hinges on recognizing that ethical consent is a multidisciplinary clinical skill, not a bureaucratic task.

Key to this transformation is the formal empowerment of perioperative nurses as advocates, communicators and essential stewards of the consent process. Combined with investment in ethical communication training, the localization of consent materials, the redesign of workflows to create protected time for dialogue and leadership that models and rewards ethical engagement, sustainable progress is achievable.

As surgical access expands globally through initiatives in global surgery, parallel investment in the ethical

infrastructure of care is non-negotiable. Ensuring that a patient's 'yes' is truly informed, understood and voluntary is a fundamental moral prerequisite to the act of surgery itself. True surgical care, therefore, begins not with the incision but with a conversation grounded in unwavering respect for the person entrusted to our care.

This review serves as both a critique of current failures and a call to action to realize this ethical standard for all patients everywhere.

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