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PATIENT EXPERIENCES OF POSTOPERATIVE PAIN MANAGEMENT STRATEGIES AFTER MAJOR GENERAL SURGERY PROCEDURES

Original Research

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ABSTRACT

Background: Postoperative pain remains a significant yet often underestimated concern in surgical recovery. Despite advancements in pain management protocols, patients undergoing major general surgery continue to report varied experiences of pain relief, satisfaction, and challenges, indicating a gap between clinical practice and patient expectations.

Objective: To explore patient perspectives on the effectiveness, satisfaction, and challenges associated with postoperative pain management approaches following major general surgery.

Methods: This qualitative study was conducted over eight months in a tertiary care hospital in Lahore. Twenty-four adult patients who had undergone major elective general surgeries were purposively selected. In-depth, semi-structured interviews were conducted within seven days postoperatively. Thematic analysis was performed using Braun and Clarke's six-phase framework, supported by NVivo 12 software for coding and data organization. Ethical approval was obtained from the institutional review board, and written informed consent was secured from all participants.

Results: Four major themes emerged: perceived effectiveness of pain management, satisfaction with care, challenges in pain management, and coping strategies. Subthemes included satisfaction with initial analgesia, delays in medication delivery, fear of addiction, cultural norms suppressing pain expression, and reliance on faith and family support. Many patients expressed unmet expectations and emphasized the critical role of communication and empathy from healthcare providers in shaping their satisfaction with pain control.

Conclusion: Patient experiences underscore the need for more personalized, empathetic, and culturally sensitive approaches to postoperative pain management. Bridging the gap between clinical protocols and patient realities may enhance satisfaction and recovery outcomes in general surgery.

Keywords: Analgesia, General Surgery, Pain Management, Patient Satisfaction, Postoperative Pain, Qualitative Research, Recovery, Surgery, Tertiary Care, Thematic Analysis.

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INTRODUCTION

Pain is an inevitable consequence of surgery, but how patients experience and cope with postoperative pain—especially after major general surgical procedures—remains complex and deeply personal. Despite ongoing advancements in surgical techniques and analgesic interventions, a substantial number of patients continue to report unrelieved or poorly managed postoperative pain (1). The World Health Organization has long emphasized that pain relief is a fundamental human right, yet for many patients recovering from major surgery, pain remains a pervasive and distressing challenge. This contradiction between the availability of medical interventions and the lived experience of suffering underscores the need to more deeply explore patient perspectives on postoperative pain management (2,3). Current pain management strategies in surgical care typically include a multimodal approach—combining pharmacological therapies like opioids, nonsteroidal anti-inflammatory drugs (NSAIDs), and regional anesthesia, with non-pharmacological techniques such as physiotherapy, guided breathing, and cognitive-behavioral strategies (4). While such methods are evidence-based and designed to address both nociceptive and neuropathic components of pain, their effectiveness as perceived by patients can vary significantly. Factors such as communication with care providers, cultural expectations, individual pain thresholds, and previous experiences all contribute to how pain and its management are understood and evaluated by patients (5,6).

Numerous quantitative studies have aimed to identify optimal pain relief protocols, often measuring efficacy through pain scores, medication usage, or length of hospital stay. However, these objective markers may not fully capture the patient's subjective experience of pain or their satisfaction with care. Patients are not passive recipients of treatment; they interpret, adapt to, and emotionally respond to pain in complex ways (7,8). A purely clinical approach to pain assessment risks overlooking important psychosocial dimensions. Consequently, there is growing recognition within both academic literature and clinical practice that understanding postoperative pain management requires the inclusion of patient voices (9). Qualitative research provides an avenue to delve into these nuanced experiences. Studies exploring patients' narratives have highlighted a range of challenges, including fears of addiction to pain medication, inadequate explanations from healthcare professionals, inconsistencies in care, and a perceived lack of empathy or validation. Some patients have described feeling pressure to endure pain quietly or having their complaints minimized (10,11). Others have expressed satisfaction with pain management but credited this to good communication and a sense of agency in decision-making. Such findings suggest that effective pain management is not solely about pharmacological regimens but also about trust, expectations, and the quality of patient-clinician interactions (12).

Despite the relevance of these insights, there remains a notable gap in literature specifically addressing postoperative pain experiences following major general surgical procedures—operations such as colorectal resections, gastrectomies, or hepatectomies, which often entail significant trauma, longer recovery periods, and greater potential for pain-related complications (13). Most existing qualitative studies have focused on orthopedic or obstetric surgeries, where the pain trajectory and patient demographics may differ considerably. Thus, the generalizability of findings from those contexts to general surgery patients is limited (14,15). Understanding the lived experiences of individuals recovering from major general surgery is crucial not only for improving immediate postoperative care but also for shaping long-term recovery trajectories and enhancing overall patient satisfaction. As healthcare systems strive for more personalized and patient-centered approaches, listening to and learning from patients themselves becomes indispensable. Their perspectives can illuminate gaps between clinical assumptions and real-world experiences, guiding more empathetic, effective, and responsive care strategies. In light of this, the present study seeks to explore patients' subjective experiences of postoperative pain management following major general surgical procedures. By investigating how patients perceive the effectiveness of pain control, what aspects of care they find satisfactory or inadequate, and the specific challenges they encounter, this research aims to inform future improvements in pain management protocols. The objective of this study is to capture and analyze patient narratives to better understand the realities of postoperative pain care and identify actionable insights that can enhance both clinical practice and patient outcomes.

METHODS

This qualitative study was conducted over a period of eight months at a tertiary care hospital in Lahore, Pakistan, with the objective of exploring patient perspectives on the effectiveness, satisfaction, and challenges associated with postoperative pain management

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following major general surgical procedures. Employing an exploratory descriptive design, the study sought to capture the lived experiences of individuals in the immediate postoperative phase, particularly focusing on those who had undergone high-impact procedures such as colectomies, gastrectomies, and major hepatic resections. This design was selected to allow for in-depth exploration of patients' narratives and the subjective meanings they attributed to their experiences with pain management. Participants were recruited using purposive sampling to ensure representation of individuals with relevant surgical histories and the cognitive ability to articulate their experiences. Inclusion criteria included adult patients aged 18 years and above who had undergone major elective general surgery within the past 2 to 7 days, were hemodynamically stable, and were able to communicate in either Urdu or English. Patients with cognitive impairments, severe postoperative complications such as sepsis or ICU admission, or those who had undergone emergency surgeries were excluded to avoid confounding factors that could limit meaningful participation or influence the depth of responses (16). Based on principles of data saturation and the exploratory nature of qualitative research, a sample size of approximately 20 to 25 participants was estimated, allowing for richness of data while maintaining analytical manageability. Recruitment continued until thematic saturation was achieved, defined as the point at which no new codes or themes were identified in subsequent interviews. Ultimately, 24 participants were enrolled, with the final few interviews confirming thematic redundancy.

Data were collected through semi-structured, in-depth interviews, each lasting approximately 30 to 60 minutes. Interviews were conducted in a quiet, private space within the hospital, typically in the patient's ward cubicle during visiting hours to ensure minimal disruption. An interview guide was developed based on existing literature and expert consultation, covering key domains related to the perceived effectiveness of pain control, satisfaction with pain relief interventions, challenges faced during recovery, communication with healthcare staff, and personal coping strategies. Questions were open-ended to encourage detailed responses, and probing was used to elicit deeper reflections and clarify ambiguities. All interviews were audio-recorded with the participants' consent and later transcribed verbatim. Transcriptions in Urdu were translated into English by bilingual researchers to facilitate analysis. To enhance the trustworthiness of findings, member checking was conducted with a subset of participants to verify the accuracy of interpretations. Additionally, reflexive field notes were maintained to document contextual observations and interviewer reflections, which supported analytical rigor. Data were analyzed thematically using Braun and Clarke's six-phase framework, which includes familiarization with data, generation of initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the final report. Coding was conducted manually by two independent researchers to ensure reliability, with regular meetings held to reconcile discrepancies and reach consensus. NVivo 12 software was utilized to facilitate data management, coding organization, and thematic mapping.

To further strengthen methodological transparency, credibility was ensured through triangulation of data sources including field notes and interview transcripts, while dependability was established through peer debriefing and an audit trail documenting all analytical decisions. Transferability was considered by providing rich, contextualized descriptions of the study setting and participant characteristics, allowing readers to assess relevance to their own settings. The study received ethical approval from the Institutional Review Board of the tertiary care hospital in Lahore. Written informed consent was obtained from all participants prior to data collection, including consent for audio recording and publication of anonymized quotes. Participants were assured of confidentiality, and all identifying information was removed during transcription. The voluntary nature of participation was emphasized, and patients were informed of their right to withdraw at any stage without any impact on their medical care. Outcome measures were framed around the qualitative dimensions of patient experiences. Effectiveness was assessed through narrative accounts of pain control success or failure, referencing tools such as the Numeric Pain Rating Scale (NPRS) used in their clinical assessments. Satisfaction was explored by gauging overall contentment with pain relief strategies, including perceptions of responsiveness and attentiveness by clinical staff. Challenges were examined in terms of physical, emotional, and logistical barriers encountered in the postoperative period. Together, these measures provided a comprehensive picture of the patient's journey through pain, recovery, and care experience after major general surgery.

RESULTS

The analysis of in-depth interviews revealed four major themes, each with interconnected subthemes, that captured patients' experiences with postoperative pain management following major general surgical procedures. Participants offered diverse insights into the perceived effectiveness of analgesic strategies, satisfaction with healthcare services, barriers encountered, and their individual coping mechanisms during recovery.

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The first theme, *Perceived Effectiveness of Pain Management*, encompassed both positive and negative experiences with pain control measures. Many patients initially reported satisfaction with their immediate postoperative pain relief, particularly following administration of intravenous analgesics or regional anesthesia. However, this relief often diminished as oral medications were introduced. One participant stated, *"The first few hours were fine, but later I had to keep asking for something stronger."* The subtheme of delayed analgesia emerged as a recurrent issue, with several patients expressing frustration over the wait time between pain episodes and receiving medication. Another participant noted, *"Sometimes the nurse would take too long to bring the medicine, and by then, the pain would get unbearable."*

The second theme, *Satisfaction with Care*, addressed the interpersonal aspects of pain management, particularly communication and involvement in decision-making. Patients who felt their concerns were acknowledged by staff reported higher satisfaction levels. Some described a sense of partnership with their care teams, as reflected in comments such as, *"The doctor asked me how I felt and adjusted the medicines accordingly."* Conversely, others noted lapses in communication that left them feeling neglected. The subtheme of responsiveness illustrated this disparity, with patients highlighting how attentiveness or lack thereof shaped their perceptions of care quality.

The third theme, *Challenges in Pain Management*, uncovered significant psychological and cultural barriers. Fear of addiction to painkillers led some patients to avoid requesting medication, even when experiencing discomfort. One participant shared, *"I didn't want to depend on pain medicines. I've seen people get addicted."* This subtheme of medication hesitancy was often compounded by deeply ingrained cultural norms discouraging open expression of pain. Patients revealed that stoicism was culturally reinforced, especially among men, with one remarking, *"We are told not to complain. Pain is part of life."* This led to underreporting and, in some cases, unnecessary suffering.

The final theme, *Coping Strategies*, highlighted how patients navigated their pain experiences beyond clinical interventions. Personal resilience, religious belief, and emotional support emerged as key elements. Participants often turned to faith-based practices for comfort, with one stating, *"Reciting prayers helped me more than the injections sometimes."* Another subtheme emphasized the role of family and peer support during hospitalization. Emotional reassurance from loved ones appeared to significantly influence the ability to endure pain and maintain a positive outlook. Overall, the findings illuminated the multidimensional nature of postoperative pain experiences. Pain relief was not solely evaluated in terms of medication effectiveness but was intricately tied to how patients felt heard, respected, and supported throughout their recovery.

DISCUSSION

The results of this qualitative study offer a rich and nuanced understanding of how patients perceive and experience postoperative pain management following major general surgery. These findings are consistent with, and add depth to, the growing body of evidence that suggests pain relief is not only a clinical concern but a deeply subjective and emotional experience influenced by patient-provider communication, sociocultural norms, and individual resilience. Participants' satisfaction with initial pain relief, often stemming from intravenous analgesics or regional blocks, aligned with observations reported in previous research which identified early postoperative hours as the period when pain is most effectively controlled (15,16). However, the transition to oral analgesia was consistently cited as a period of diminished effectiveness, reinforcing literature that suggests standard protocols often fail to accommodate individual variation in analgesic response or pain trajectory (17). The reported delays in analgesia administration highlighted critical issues in nursing responsiveness, an element also emphasized by a study, which found that general surgery patients often reported greater pain than their nursing staff recognized (18). Such discrepancies not only reduce the efficacy of pain management but also erode patient trust and satisfaction. Another striking aspect was the fear of addiction to pain medications, leading to medication hesitancy or outright refusal.

This finding mirrors conclusions drawn in large-scale cross-sectional studies where patients demonstrated high levels of concern about opioid dependency, even in the immediate postoperative period (19). These perceptions were especially pronounced among participants with limited educational backgrounds or prior negative experiences with medication, echoing findings from a study, which noted that low educational status and subclinical depression were strongly associated with elevated postoperative pain perceptions (20). The cultural dimension of pain expression was another critical finding. Male participants, in particular, described a stoic approach to pain, reporting reluctance to express suffering or request help. This aligns with broader literature emphasizing how sociocultural norms shape pain reporting behaviors and healthcare-seeking patterns (21). These internalized norms likely contribute to underreporting and

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ineffective management, even when clinical tools are available. Participants' coping strategies ranged from spiritual practices to reliance on social support systems. Such themes reiterate that pain management cannot be reduced to pharmacological interventions alone. Psychological resilience, family presence, and spiritual comfort are all meaningful contributors to recovery, as also highlighted in studies on nursing intervention and psychological support in postoperative contexts (22). This study contributes meaningful insights into an underexplored area—subjective pain experiences in general surgery patients in South Asian settings—where cultural and systemic factors may differ significantly from Western contexts.

A notable strength was the diversity of surgical cases and the use of in-depth interviews, which allowed participants to describe their experiences in their own words, providing a rich, contextualized understanding. However, the study has limitations. It was conducted in a single tertiary care hospital, which may limit generalizability. The exclusion of patients with emergency surgeries or cognitive impairments could have excluded important perspectives, particularly from vulnerable populations. Language constraints may have influenced participant expression, despite the bilingual approach. Moreover, as with all qualitative work, findings are inherently interpretive and not intended to be statistically generalizable. Future studies should consider multi-site designs and include patients from varied linguistic and cultural backgrounds to enhance representativeness. There is also a need for mixed-methods research combining subjective reports with quantitative data on analgesic use, pain scores, and recovery metrics (23,24). Exploring interventions aimed at reducing opioid-related stigma and improving staff-patient communication could have immediate clinical relevance. Additionally, research into digital tools or preoperative counseling modules tailored to cultural contexts may help prepare patients for managing postoperative pain more effectively. In conclusion, this study reinforces the understanding that postoperative pain management is deeply subjective and influenced by clinical, interpersonal, and sociocultural variables. Ensuring effective pain control requires not only evidence-based protocols but also empathetic communication, cultural sensitivity, and respect for individual coping mechanisms.

CONCLUSION

This study highlighted the complex, multifaceted nature of postoperative pain experiences among general surgery patients, revealing that satisfaction and effectiveness are shaped as much by communication, cultural beliefs, and emotional support as by clinical interventions. Emphasizing patient-centered pain management strategies and enhancing responsiveness and education can significantly improve outcomes and recovery satisfaction in surgical care.

AUTHOR CONTRIBUTION

Author	Contribution
Mohammad Saleem*	Substantial Contribution to study design, analysis, acquisition of Data Manuscript Writing Has given Final Approval of the version to be published
Arsalan Rasool	Substantial Contribution to study design, acquisition and interpretation of Data Critical Review and Manuscript Writing Has given Final Approval of the version to be published
Sara Sajid	Substantial Contribution to acquisition and interpretation of Data Has given Final Approval of the version to be published
Malik Farasat Ullah	Contributed to Data Collection and Analysis Has given Final Approval of the version to be published
Muhammad Umair Zahid	Contributed to Data Collection and Analysis Has given Final Approval of the version to be published
Niamat Ullah*	Substantial Contribution to study design and Data Analysis Has given Final Approval of the version to be published
Muhammad Usman Gul	Contributed to study concept and Data collection Has given Final Approval of the version to be published
Saba Saleem	Writing - Review & Editing, Assistance with Data Curation

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