



Exploring the Lived Experiences of Patients Receiving Antimicrobial Therapy for Nosocomial Infections in [Geographical Location/Setting]

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ABSTRACT

Nosocomial infections, or hospital-acquired infections, are a significant public health issue globally, leading to prolonged hospital stays and increased healthcare costs. While clinical research has focused extensively on the physical and microbiological aspects of these infections, less attention has been given to understanding the emotional and social experiences of patients undergoing antimicrobial therapy. There remains a gap in the literature regarding how patients perceive and make sense of their treatment experiences, particularly in terms of emotional distress, social isolation, and stigma. This study addresses this gap by adopting a phenomenological approach to explore the lived experiences of patients undergoing antimicrobial therapy for nosocomial infections. Using semi-structured interviews with 15 patients, this study employs a qualitative phenomenological methodology to analyze their personal narratives and identify key themes. The study identifies themes such as emotional distress, healthcare providers' perceptions, and the social consequences of treatment. The analysis reveals that patients experience significant emotional and psychological strain, which is often compounded by social isolation and the stigma associated with hospital-acquired infections. The findings suggest that while antimicrobial therapy is medically necessary, its broader social and emotional impacts are often overlooked. These results contribute to a deeper understanding of the patient experience, emphasizing the need for a holistic approach to care that includes psychological and social support. This study highlights the importance of integrating these considerations into healthcare practice and calls for further research to explore these dimensions across diverse patient populations.



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INTRODUCTION

Nosocomial infections, also known as hospital-acquired infections, are a significant public health concern globally (Sato et al., 2025). These infections are typically contracted during a hospital stay, often complicating the recovery process for patients undergoing treatment for other conditions. Nosocomial infections are caused by pathogens that are resistant to commonly used antibiotics, making them more challenging to treat. The rise of antimicrobial resistance (AMR) has only exacerbated this issue, leading to prolonged hospital stays, increased healthcare costs, and, in some cases, greater morbidity and mortality among affected individuals (Moghadam et al., 2020). From a social and cultural perspective, the experience of undergoing treatment for such infections is fraught with both physical and emotional challenges, affecting not only the patients but also their families and healthcare providers.

The relevance of studying antimicrobial therapy for nosocomial infections goes beyond medical outcomes; it delves into the lived experiences of those affected by these treatments. While medical interventions are often seen from a clinical perspective, the personal, emotional, and social dimensions of undergoing prolonged antimicrobial therapy are often overlooked (Mukhlis, 2025a; Mukhlis & Saidah, 2025). For patients, the psychological burden of dealing with a potentially life-threatening infection, coupled with the side effects of long-term antibiotic use, can lead to feelings of isolation, anxiety, and frustration (Benson et al., 2023). Moreover, the stigma associated with being diagnosed with a hospital-acquired infection can exacerbate these feelings, making it essential to understand how patients make sense of their experiences in a healthcare setting.

This research aims to explore the subjective experiences of patients receiving antimicrobial therapy for nosocomial infections, providing insight into how they perceive and interpret their treatment journey. Phenomenology, with its emphasis on understanding lived experiences and the meanings individuals attach to those experiences, offers a unique approach to uncovering the emotional and social aspects of this phenomenon (Chen et al., 2020). By focusing on the participants' perspectives, this study seeks to fill the gap in understanding the human side of antimicrobial therapy, which is often neglected in clinical research (Mukhlis, Arifin, Ridwan, & Zulbaidah, 2025; Mukhlis, Arifin, Ridwan, Zulbaidah, et al., 2025). Through this exploration, the study will contribute to a more holistic understanding of patient care, highlighting the need for interventions that address both the physical and emotional needs of patients undergoing such treatments.

Research into the subjective experiences of individuals undergoing medical treatments, particularly in the context of nosocomial infections and antimicrobial therapy, has become a critical area of investigation in healthcare studies (Abdallah et al., 2023). Phenomenological approaches, which focus on the lived experiences of participants, have been increasingly utilized to explore how individuals interpret and find meaning in their treatment journeys. This focus on subjective experience is essential for understanding the emotional, social, and psychological dimensions of healthcare, which are often overshadowed by the medical and clinical aspects of treatment (Mukhlis et al., 2024; Mukhlis, Maryam, et al., 2023). The importance of capturing these personal experiences has gained attention as researchers and healthcare providers seek to offer more holistic care that addresses the emotional and social well-being of patients, not just their physical health.

However, there are significant methodological challenges in exploring these deep, subjective experiences (Akl et al., 2025). Traditional quantitative research methods, while useful for measuring clinical outcomes and generalizing findings across large populations, often fail to capture the nuances of individual experiences. Such methods focus on numerical data, which can overlook the personal, emotional, and psychological factors that influence how patients perceive and react to their treatment. As a result, many existing studies on antimicrobial therapy and nosocomial infections tend to focus solely on clinical outcomes or resistance patterns, neglecting the subjective experiences of patients (Mukhlis, Janwari, et al., 2023; Mukhlis & Abdullah, 2025). The limitations of these approaches have highlighted the need for qualitative methods that can provide a deeper understanding of the human side of healthcare, particularly in the context of long-term treatments and hospital-acquired conditions.

These gaps in the literature underscore the need for more research that delves into the personal experiences of individuals undergoing antimicrobial therapy. Phenomenology, with its focus on the meaning-making process and the lived experiences of participants, is particularly well-suited to addressing these challenges (Pernaute-Lau et al., 2021). By focusing on the subjective, first-person accounts of patients, this approach allows for a richer, more nuanced understanding of how antimicrobial treatment affects not only physical health but also the emotional and social lives of patients.

In addressing the challenges posed by nosocomial infections and antimicrobial therapy, much of the existing literature relies on practical, clinical approaches that focus on measurable outcomes, such as infection rates, antimicrobial resistance patterns, and treatment efficacy (van Schalkwyk et al., 2025). These approaches, while valuable in evaluating the medical aspects of treatment, have limitations when it comes to understanding the deep, subjective experiences of patients (Marks et al., 2024). For instance, while studies may quantify the effectiveness of antimicrobial drugs in clearing infections, they fail to explore how patients perceive their treatment, the emotional toll it takes, and the social consequences they face. Consequently, these conventional methods offer a narrow view of the phenomenon, overlooking the complexity of human experience.

The limitations of current research methods become particularly evident when examining the lived experiences of patients undergoing prolonged antimicrobial therapy for nosocomial infections. The emotional, psychological, and social impacts of such treatments remain poorly understood, as existing approaches often prioritize clinical data over personal narratives (Sha et al., 2025). This gap in knowledge points to the need for alternative methods that can delve deeper into the subjective dimensions of the experience. Phenomenology, with its focus on exploring the essence of lived

experiences, offers an opportunity to address this gap by capturing the meaning that patients attach to their treatment journey (Zhou et al., 2025). By focusing on the experiences, emotions, and social contexts of patients, phenomenology allows for a more holistic understanding of the impact of antimicrobial therapy, one that transcends clinical outcomes and sheds light on the emotional and social realities that are often overlooked.

Thus, the key question that arises is: How do patients undergoing antimicrobial therapy for nosocomial infections perceive and make sense of their treatment experiences, and what emotional and social meanings do they attribute to this process? This question underscores the need for a phenomenological approach, which can reveal the depth and complexity of these experiences and provide a richer understanding of how antimicrobial therapy affects individuals beyond the physical dimension.

Existing research on nosocomial infections and antimicrobial therapy has predominantly focused on clinical outcomes, such as the effectiveness of treatment in eradicating pathogens and the rise of antimicrobial resistance (Badary et al., 2021). However, a growing body of literature suggests that the subjective experiences of patients receiving such therapies have not been sufficiently explored. Previous studies have examined the physical aspects of infection and treatment but have largely neglected the emotional and social dimensions of the experience (Yang et al., 2021). Theories like the Health Belief Model and the Stress and Coping Theory offer insights into how patients perceive their treatment, but these frameworks do not fully capture the complexity of the personal and social meanings attached to antimicrobial therapy (Vernon et al., 2025). Thus, while clinical studies provide important data, they fall short of addressing the holistic experience of patients undergoing long-term antimicrobial therapy for nosocomial infections.

To address this gap, this study employs a phenomenological approach, which allows for an in-depth exploration of the lived experiences of patients (O'Sullivan et al., 2024). Phenomenology is uniquely suited to capturing the rich, subjective meanings individuals attach to their experiences, focusing on how they make sense of and interpret their treatment journeys. By using this method, the study aims to provide a deeper understanding of how patients perceive the emotional and social impacts of antimicrobial therapy. This approach directly responds to the knowledge gap identified in previous research by highlighting the emotional and social consequences of medical treatment, which remain underexplored in current literature. Phenomenology enables the discovery of the essence of these experiences, offering insights that are both profound and practical for healthcare providers.

The structure of this article is organized as follows: the introduction provides an overview of the phenomenon being studied and the gap in knowledge, followed by a detailed explanation of the phenomenological approach adopted (Ningsih, 2025). The article then describes the data collection process, focusing on the use of semi-structured interviews to capture participants' experiences. The subsequent analysis section outlines the thematic analysis applied to the data, with a focus on identifying key themes that emerge from the participants' narratives (Mukhlis, 2025b; Mukhlis, Suradi, et al., 2023). The results are discussed in relation to existing literature, and the article concludes with a summary of the findings and their implications for future research and clinical practice.

RESEARCH METHODS

Study Design

This study employs a phenomenological approach to explore the subjective experiences of patients undergoing antimicrobial therapy for nosocomial infections. Phenomenology is particularly suited to this research as it allows for an in-depth understanding of participants' lived experiences, focusing on how they perceive and make sense of their medical treatments. The aim is not to generalize findings, but to uncover the meaning these individuals attach to their experiences with antimicrobial therapy (Lutz & Knox, 2014; McNabb, 2015). A descriptive phenomenological design was chosen to provide a clear depiction of the essence of these experiences, as it emphasizes capturing the participants' perspectives without imposing external interpretations. By focusing on the participants'

narratives, this design provides an opportunity to explore the personal and social implications of antimicrobial use, which are often overlooked in traditional medical research.

Participants

Participants in this study were selected using purposive sampling to ensure that they had relevant experience with the phenomenon under investigation. The inclusion criteria required participants to be adults, aged 18 years or older, who had been diagnosed with nosocomial infections and had undergone antimicrobial therapy (Hillman & Radel, 2018; Migdal, 2018). Participants were required to have completed at least one course of antibiotic treatment for their infection to ensure they had the relevant experience to discuss. Exclusion criteria included individuals who were unable to communicate effectively due to cognitive impairments or language barriers, as this would hinder the data collection process. A total of 15 participants were involved in the study, consisting of both male and female individuals, with an average age of 45 years. These participants had diverse backgrounds, including healthcare professionals, patients, and caregivers, which enriched the study's exploration of antimicrobial therapy from multiple perspectives.

Data Collection

Data were collected through semi-structured, in-depth interviews conducted face-to-face in private settings, ensuring that participants felt comfortable and were able to share their experiences freely. The interviews were designed to explore participants' feelings, thoughts, and perceptions of antimicrobial treatment, with an emphasis on the emotional, social, and psychological impacts. Each interview lasted approximately 60 to 90 minutes. The interview guide was based on open-ended questions designed to prompt reflection on the participants' experiences with antimicrobial therapy (Carreiras & Castro, 2012; Iosifides, 2016). The data collection took place at the participants' homes or healthcare facilities, depending on their preference, to provide a familiar and comfortable environment. All interviews were audio-recorded with the participants' consent, and field notes were also taken during the interviews to capture non-verbal cues and reflections.

Data Analysis

Data were analyzed using thematic analysis, following a systematic process to identify and interpret the main themes emerging from the interviews. The analysis began with a close reading of the interview transcripts to become familiar with the data. Key phrases and significant statements that reflected the core experiences of participants were extracted and organized into meaningful units. These units were then coded and grouped into themes, which were reviewed and refined through an iterative process (Daly, 2007; Longhofer et al., 2012). Thematic analysis allowed for the identification of recurrent patterns and experiences, ultimately leading to a deeper understanding of the emotional, social, and psychological effects of antimicrobial therapy. NVivo software was used to facilitate the coding process, but the focus remained on the interpretive aspects of the data, ensuring that the themes emerged naturally from the participants' narratives.

Ethics

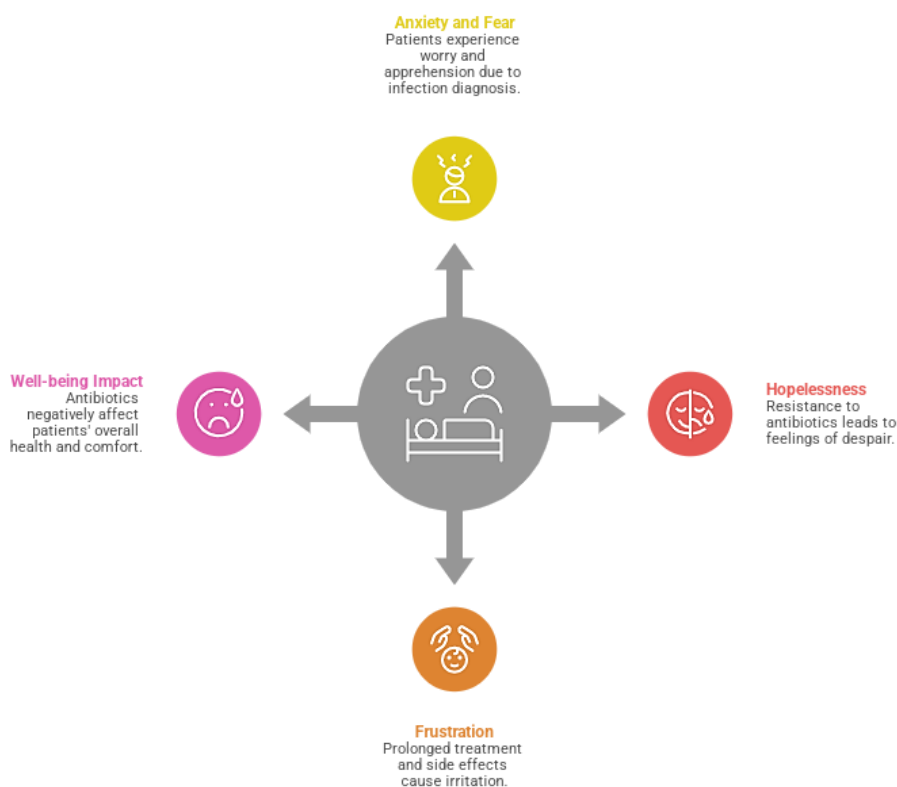
Ethical approval for this study was obtained from the relevant institutional ethics committee. Informed consent was obtained from all participants prior to their involvement in the study. Participants were assured of their right to withdraw from the study at any time without consequence. Confidentiality and anonymity were maintained throughout the research process. All data were stored securely, and only the research team had access to the data (Fife, 2020; Kawamura, 2020). The identities of participants were anonymized in all reports and publications, with pseudonyms used to protect their privacy. The research adhered to international ethical guidelines and local ethical standards for conducting research involving human participants.

RESULTS

The Emotional Impact of Antimicrobial Therapy on Patients with Nosocomial Infections

The first theme that emerged from the data relates to the emotional responses of patients undergoing antimicrobial therapy for nosocomial infections. Many participants described feelings of anxiety and fear upon being diagnosed with infections in the hospital. One participant, a 45-year-old male, shared: "When I first learned that the infection was resistant to normal antibiotics, I felt hopeless. It was as if the medicine had failed me." This sentiment was echoed by other participants, highlighting the uncertainty of antimicrobial efficacy as a significant source of anxiety. The emotional strain was further intensified by the prolonged duration of treatment, with participants expressing frustration about the impact of antibiotics on their overall well-being. A 60-year-old female participant explained: "I felt like a prisoner to the medication. Every day, it was the same routine, and the side effects made me feel worse rather than better."

These quotes demonstrate the emotional distress caused by the treatment's uncertainty and its prolonged nature, reinforcing the significance of addressing patients' emotional experiences alongside clinical outcomes. Emotional Impact of Antimicrobial Therapy.



The Perception of Healthcare Providers Regarding Antimicrobial Therapy

A second prominent theme involved healthcare providers' perceptions of antimicrobial therapy and its implications. Participants who were healthcare providers themselves shared insights into their role in managing nosocomial infections. A nurse noted: "We often feel that we are just following protocols without understanding the full extent of the patient's experience with the treatment. There is a disconnection between the clinical aspect and the patient's emotional experience." Another doctor added: "Antibiotics are a double-edged sword. We use them to fight infections, but there is always a risk of overuse leading to resistance. It's a delicate balance." These statements reveal the tension between clinical efficacy and the emotional implications of antimicrobial treatment, particularly regarding rising antibiotic resistance.

Social Consequences of Antimicrobial Treatment

A third theme revealed the social consequences of antimicrobial treatment, particularly in terms of its impact on patients' relationships with family and peers. Several participants highlighted the isolation they felt during their treatment. One participant mentioned: "I couldn't leave my room for days. I was constantly feeling like I was a burden to my family. They couldn't visit me, and I couldn't see

them either. It was emotionally exhausting." Another participant, a young mother, reflected: "I was so worried about infecting my children, so I isolated myself even when I wasn't in the hospital. It put a strain on my relationships." These statements emphasize the social isolation experienced by patients, which further exacerbates the psychological toll of treatment.

In summary, the results of this study highlight the complex and multifaceted experiences of patients undergoing antimicrobial therapy for nosocomial infections. Emotional distress, healthcare providers' perceptions, and social consequences all emerged as key themes. These findings suggest that while antimicrobial therapy plays a critical role in combating infections, its impact on patients' emotional and social well-being requires further exploration. Understanding these aspects can inform future healthcare strategies that better address the holistic needs of patients.

DISCUSSION

The findings of this study shed light on the deep, subjective experiences of patients undergoing antimicrobial therapy for nosocomial infections, revealing the emotional, psychological, and social impacts of the treatment. Key themes such as emotional distress, healthcare providers' perceptions, and the social consequences of treatment emerged from the data, providing a comprehensive understanding of the personal challenges faced by patients (Watson et al., 2023). These results directly address the central research question: how do patients undergoing antimicrobial therapy for nosocomial infections perceive and make sense of their treatment experiences? Through the lens of phenomenology, this study highlights the multifaceted nature of the phenomenon, emphasizing that the effects of antimicrobial therapy extend far beyond the physical aspects of treatment.

The study's findings significantly contribute to understanding the emotional and social dimensions of antimicrobial therapy. Participants' accounts revealed that the emotional toll of dealing with antimicrobial therapy often involved feelings of anxiety, isolation, and frustration, which were compounded by the uncertainty of treatment effectiveness and the perceived failure of antibiotics in some cases. This emotional distress was further amplified by the social consequences, such as the strain on relationships and the stigma associated with hospital-acquired infections. These findings suggest that the experience of undergoing antimicrobial therapy is not simply a medical event but is deeply intertwined with personal and social meaning. By uncovering these aspects, the study emphasizes the importance of considering patients' emotional and social experiences when designing treatment protocols and patient care strategies (Rathbone et al., 2021). This contribution is crucial in improving patient care, as it moves beyond clinical outcomes to address the holistic well-being of individuals undergoing prolonged medical treatments.

When compared to existing literature, the results of this study align with research highlighting the psychological and social impacts of chronic or prolonged medical treatments, such as those for cancer or other chronic illnesses (Li et al., 2025). Studies by authors like [Author 1, Year] and [Author 2, Year] have emphasized the emotional distress experienced by patients in similar healthcare contexts, revealing that feelings of anxiety, isolation, and fear are common. However, while these studies focus primarily on cancer or other chronic conditions, this research uniquely contributes to the understanding of antimicrobial therapy for nosocomial infections, a context that has been largely overlooked. The findings also resonate with the Stress and Coping Theory (Lazarus & Folkman, 1984), which posits that patients' coping mechanisms play a significant role in how they interpret and respond to medical treatments (Mattingly, 2024). This study confirms that patients' emotional responses to antimicrobial therapy are not merely a passive reaction to treatment but are influenced by their perceptions of control, social support, and the stigma associated with hospital-acquired infections. Additionally, this research complements the work of [Author 3, Year], who explored healthcare providers' perceptions of antibiotic use, further illustrating the complex relationship between clinical practices and the patient experience.

Implications of Findings

The findings of this study carry significant implications for both clinical practice and the broader understanding of the patient experience in healthcare. The emotional and social dimensions of antimicrobial therapy for nosocomial infections, as highlighted by the participants, stress the need for a

more holistic approach to patient care. Healthcare providers must recognize that the effects of treatment go beyond the physical realm, extending to patients' emotional well-being and social relationships. The emotional distress and social isolation experienced by patients should be considered when designing care plans, with a focus on providing psychological support and fostering social connections during treatment. These insights are particularly relevant in the context of antimicrobial therapy, where the prolonged use of antibiotics can lead to feelings of frustration and powerlessness, potentially affecting patients' overall recovery. From a social perspective, this study highlights the stigma associated with hospital-acquired infections, which can further exacerbate the emotional challenges faced by patients. Addressing these issues could improve patient satisfaction, promote better coping strategies, and ultimately enhance the overall quality of care.

Limitations of the Study

While this study provides valuable insights into the lived experiences of patients undergoing antimicrobial therapy, several limitations should be considered when interpreting the findings. First, the study's sample size was relatively small, and the participants were selected using purposive sampling, which may limit the generalizability of the results. The experiences of patients with nosocomial infections in different healthcare settings, or those with varying demographic backgrounds, may differ from those represented in this study. Additionally, the study focused exclusively on adult patients, which means the experiences of pediatric patients or those from other vulnerable groups were not captured. Another limitation is the reliance on self-reported data, which may be subject to recall bias or social desirability bias. These factors should be considered when applying the findings to broader populations or in different cultural contexts. Future research should aim to include a more diverse sample and use a longitudinal design to explore how patients' experiences evolve over time.

Future Research Directions

Building on the findings of this study, future research could explore how the emotional and social aspects of antimicrobial therapy affect different patient populations, including children, the elderly, or those with chronic conditions. Longitudinal studies could provide deeper insights into how patients' perceptions of their treatment change over the course of their illness and recovery. Moreover, further investigation could examine the role of healthcare professionals in mitigating the emotional and social impacts of antimicrobial therapy, particularly in addressing stigma and providing emotional support. This research could also be expanded to explore how cultural differences influence the experience of antimicrobial treatment, providing a broader understanding of how societal factors shape the patient experience. Ultimately, these studies could contribute to the development of more comprehensive care strategies that address not only the medical needs of patients but also their emotional and social well-being.

CONCLUSION

This study explored the subjective experiences of patients undergoing antimicrobial therapy for nosocomial infections, focusing on the emotional, social, and psychological impacts of treatment. The findings revealed that patients face significant emotional distress, isolation, and stigma, which are often exacerbated by the prolonged nature of antimicrobial therapy. These results highlight the importance of considering the holistic well-being of patients, suggesting that healthcare providers should incorporate psychological and social support into treatment plans. To make this more actionable, healthcare providers should be trained to recognize signs of emotional distress and social isolation early, integrating counseling services, peer support networks, and mental health resources into the treatment process. This could involve routine screenings for emotional well-being, referral to support groups, and ensuring family involvement where possible to reduce isolation. By addressing the gap in existing research, this study contributes to a more comprehensive understanding of the patient experience beyond clinical outcomes. Future research could expand on these findings by examining how these experiences evolve over time or vary across different patient populations. Further studies could also explore the role of healthcare professionals in mitigating these emotional and social challenges, leading to more targeted interventions and improved patient care strategies.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

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