



Elderly Patients' Experiences with Antihypertensive Side Effects and Medication Adherence

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ABSTRACT

Hypertension is a prevalent chronic condition that requires long-term medication management, with antihypertensive drugs commonly prescribed to elderly patients. However, side effects from these medications can significantly affect patients' adherence to treatment, leading to poor health outcomes. Despite extensive research on adherence, little is known about the subjective experiences of elderly patients regarding the emotional and cognitive impact of these side effects. In this study, we address this gap by exploring the lived experiences of elderly patients managing antihypertensive side effects through a phenomenological approach. Using Interpretative Phenomenological Analysis (IPA), we analyzed interviews with nine elderly patients (aged 65–79 years; 5 females and 4 males) who shared their experiences with medication side effects and pharmacist counseling. Our findings reveal that side effects are not just physical but also evoke feelings of fear, frustration, and uncertainty, along with cognitive challenges in remembering medication schedules, all of which impact adherence. Furthermore, effective pharmacist-patient communication emerged as a crucial facilitator for improving understanding, reducing anxiety, and promoting adherence. These insights contribute to a deeper understanding of the subjective factors influencing medication adherence, highlighting the need for patient-centered care in the management of chronic illnesses. However, this study is limited by its small sample size and single-site setting, which may restrict generalizability. This study paves the way for future research exploring the role of emotional support and communication in improving medication adherence among elderly populations.



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INTRODUCTION

The management of chronic diseases, particularly hypertension, represents a significant concern in global public health, especially among the elderly population (Gibson, 2022). As societies age, the burden of long-term pharmacological therapy becomes increasingly prominent, not only in clinical outcomes but also in the lived experiences of patients navigating complex treatment regimens. Antihypertensive medications, while clinically effective in reducing cardiovascular risks, are often accompanied by side effects that disrupt patients' physical comfort, emotional well-being, and daily routines (Kember et al., 2024). These effects ranging from dizziness and fatigue to more persistent functional limitations can lead to frustration, medication non-adherence, and diminished quality of life.

In many low- and middle-income contexts, such as in Southeast Asia, elderly individuals often manage chronic illness within settings marked by limited health literacy, constrained healthcare access, and deeply rooted cultural understandings of illness and aging. Within such environments, patients' experiences of drug therapy are shaped not only by physiological responses but also by sociocultural meanings, personal narratives, and the quality of interactions with healthcare providers

(Mizuno et al., 2023). Side effects, for instance, may be interpreted not just as adverse reactions but as moral signals, divine trials, or consequences of lifestyle misalignment, depending on cultural context.

Understanding how patients interpret and respond to these experiences is essential, as pharmacological adherence is not merely a clinical behavior but also a subjective process influenced by emotions, beliefs, and interpersonal trust (Shukla et al., 2020). In particular, the patient–pharmacist relationship plays a pivotal role in shaping medication practices and understanding. Despite this, the voices of patients especially older adults are often underrepresented in clinical literature, which tends to prioritize biomedical efficacy over individual narratives.

There is a pressing need to explore the meaning behind patients’ experiences with medication, particularly how they make sense of side effects and the support they receive in managing them (Malkon et al., 2023). A phenomenological approach is well-suited to address this gap, as it seeks to uncover the essence of lived experience and provide insight into how individuals construct meaning from their encounters with health, illness, and care (Muiruri et al., 2023). Through the lens of phenomenology, the subjective dimensions of pharmacological therapy can be more fully understood, offering new perspectives for improving patient-centered care in both policy and practice.

Within the broader field of pharmacological care, research that focuses on the subjective experiences of patients particularly those managing chronic conditions has become increasingly significant (Blazek & Bakris, 2024). This growing interest reflects a shift from viewing medication adherence solely as a measurable clinical outcome toward understanding it as a lived, dynamic process shaped by personal meaning, emotional responses, and relational contexts (Y. Y. Huang et al., 2022). For elderly patients, who often contend with multiple medications and age-related vulnerabilities, the experience of drug side effects holds particular relevance, influencing not only their physical well-being but also their self-perception, autonomy, and engagement with care providers.

Despite this recognition, existing research often falls short in capturing the depth and complexity of these experiences (Jaman et al., 2025). A large proportion of prior studies rely on quantitative methodologies that, while valuable for identifying adherence rates and reporting adverse events, lack the nuance needed to explore how patients interpret and respond to such phenomena. Standardized instruments may quantify how often side effects occur or how they correlate with non-compliance, but they rarely illuminate the inner dialogues, cultural interpretations, or relational influences that shape patients’ choices and coping strategies.

Moreover, the predominance of survey-based approaches and structured interviews has limited the ability to uncover the evolving meanings that patients assign to their medication journeys (Unni et al., 2022). These methodological constraints have resulted in a literature that often overlooks the emotional and existential dimensions of pharmacological treatment, particularly in aging populations who navigate complex medical, psychological, and social realities. Without access to the narratives and lived meanings embedded in these experiences, efforts to enhance adherence or improve pharmaceutical counseling risk remaining incomplete or superficial.

Given these limitations, a phenomenological inquiry is essential to bridge the gap between clinical outcomes and human experience. By foregrounding the voices of patients and examining how they make sense of medication side effects in real-life contexts, such an approach allows for a more holistic understanding of pharmacotherapy one that aligns with person-centered models of care and the ethical imperative to honor patients’ lived realities.

In current pharmacological practice, efforts to address issues related to medication adherence and side effect management commonly rely on standardized educational interventions, clinical protocols, and quantitative monitoring tools (Yan et al., 2023). These practical solutions are often designed to improve compliance rates or reduce adverse outcomes through dosage adjustments, behavioral reminders, or brief counseling sessions (Geethanjali et al., 2024). While clinically beneficial, such approaches are typically grounded in a biomedical framework that prioritizes observable behaviors and measurable outcomes over subjective experience.

However, these strategies are limited in their ability to capture the emotional, cognitive, and relational complexities that underlie patients' decisions regarding medication use (Khadka et al., 2019). Particularly in elderly populations managing chronic antihypertensive therapy, the nuances of how side effects are perceived, interpreted, and integrated into everyday life remain insufficiently understood. Existing literature tends to underrepresent the first-person perspectives of patients and rarely addresses how meanings evolve through interpersonal encounters, such as those with pharmacists.

This methodological shortfall has resulted in a fragmented understanding of the phenomenon one that risks overlooking the psychological burden, moral interpretations, or identity shifts that accompany chronic pharmacological treatment (Begum et al., 2025). Without acknowledging these deeper layers of experience, conventional interventions may fail to resonate with patients' lived realities or promote sustainable therapeutic engagement.

A promising alternative lies in adopting a phenomenological approach, which allows for the exploration of patients' lived experiences beyond the limits of prescriptive frameworks (Dohare et al., 2024). By focusing on how individuals make sense of medication-related events in their own terms, phenomenology offers a pathway to uncovering the essence of experience that is often missed by structured assessments (García-Lluch et al., 2023). This study addresses this gap by employing Interpretative Phenomenological Analysis (IPA) to explore how elderly patients experience, interpret, and respond to the side effects of antihypertensive medication, particularly within the context of pharmacist-patient interactions.

Recent studies have explored various facets of medication adherence, particularly in the context of elderly patients and chronic disease management (Wiputri & Samlan, 2025). A significant body of research has focused on the clinical effectiveness of antihypertensive drugs and their associated side effects. However, less attention has been paid to the lived experiences of patients, particularly their emotional and cognitive responses to medication. Research by authors such as (Rifdah & Sulistyono, 2023) and (Vural & Gümüsel, 2025) has shown that side effects often carry emotional burdens that influence medication adherence, but these studies predominantly use quantitative methods that fail to capture the richness of patient perspectives (Li et al., 2021). This gap highlights the need for an approach that can delve into the subjective experiences of patients, capturing the essence of their interactions with medication and healthcare providers.

To address this gap, this study employs Interpretative Phenomenological Analysis (IPA), a qualitative approach that allows for the exploration of individual experiences through the lens of meaning-making (Mebrahtu et al., 2021). IPA was chosen for its ability to reveal the depth of lived experiences, as it emphasizes the importance of participants' perspectives and the interpretative process between the researcher and the data (Zafar et al., 2020). By using IPA, the study aims to provide a richer, more holistic understanding of how elderly patients experience side effects from antihypertensive medications and how these experiences influence their medication practices (Rezel-Potts et al., 2021). The findings will offer insights into the complex emotional and cognitive processes that traditional clinical approaches often overlook.

This article is structured as follows: the introduction provides an overview of the general and specific background of the phenomenon, emphasizing the need for deeper exploration (Qi et al., 2023). Next, the methodological approach, including data collection and analysis using IPA, is explained (White et al., 2021). The results section presents the key themes that emerged from the data, followed by a discussion of the implications for pharmacological care and patient engagement (Mohan et al., 2022). The article concludes with recommendations for future research and clinical practice based on the insights gained from the study.

RESEARCH METHODS

Study Design

This study employed an interpretative phenomenological approach to explore the lived experiences of elderly patients in managing side effects of antihypertensive medications (Fife, 2020).

Interpretative Phenomenological Analysis (IPA) was selected due to its focus on understanding how individuals make sense of their personal and health-related experiences. This approach is particularly appropriate for capturing the subjective meaning patients attribute to complex pharmacological encounters. Grounded in Heideggerian philosophy, IPA emphasizes interpretative engagement with participants' narratives, allowing for a deep exploration of experiential meaning within specific contexts. By prioritizing the first-person perspective of participants, this design facilitated the uncovering of essential insights into how side effects are perceived, interpreted, and responded to in everyday life.

Participants

Participants consisted of elderly individuals aged 60 years and above who were undergoing antihypertensive therapy in primary healthcare settings. Inclusion criteria required participants to (1) have been on antihypertensive medication for at least six months, (2) have experienced one or more side effects related to the treatment, and (3) have received counseling from a licensed pharmacist. Individuals with cognitive impairments or communication difficulties that could hinder the interview process were excluded. A purposive sampling strategy was applied to ensure rich, relevant, and diverse experiential data. The final sample included nine participants (5 women and 4 men) ranging in age from 62 to 78 years, with an average age of 69.4 years. All participants were able to provide articulate reflections on their medication experiences and represented varied backgrounds in terms of education, duration of illness, and access to health services.

Data Collection

Data were collected through in-depth, semi-structured interviews guided by a flexible interview protocol designed to elicit detailed narratives about patients' medication experiences. Interviews were conducted face-to-face in private consultation rooms within the primary healthcare centers, ensuring both confidentiality and comfort. Each interview lasted approximately 45 to 60 minutes and was audio-recorded with prior consent. The interview guide included open-ended prompts such as: "Can you describe what you felt when you experienced side effects from the medication?" and "How did the pharmacist help you understand your condition better?" Follow-up questions were used to probe for deeper meaning. All interviews were conducted in the local language and later transcribed verbatim for analysis. Participants were given the opportunity to review and validate their transcripts as part of the member checking process.

Data Analysis

The data were analyzed using Interpretative Phenomenological Analysis (IPA), following a structured multi-step procedure. Transcribed interviews were first read and re-read to gain a holistic understanding. Meaningful units were then identified and coded using NVivo software to aid data organization. Coded units were examined for recurring patterns, which were grouped into emergent themes. These themes were subsequently clustered into broader categories that captured the essence of participants' lived experiences. Special attention was given to maintaining the contextual integrity of each participant's narrative while interpreting the significance of individual and shared meanings. The analytic process emphasized reflexivity, ensuring that interpretations remained grounded in the data and informed by the phenomenological framework.

Ethical Considerations

Ethical approval was obtained from the relevant institutional ethics committee prior to data collection. All participants provided written informed consent after receiving a clear explanation of the study's purpose, procedures, and their rights. Confidentiality and anonymity were ensured by assigning pseudonyms and securely storing all data. The research was conducted in accordance with the Declaration of Helsinki and applicable local ethical guidelines governing human subject research.

RESULTS

Awakening Through Discomfort: Experiencing Side Effects as a Turning Point

Participants described the emergence of side effects as an unsettling yet enlightening experience. Many initially dismissed mild symptoms but gradually recognized their significance as these discomforts became more intrusive in daily life.

“I used to think the dizziness was just part of aging, but it kept happening, especially after taking the pills. I couldn’t walk straight some mornings... that's when I realized something wasn’t right.”

The physical discomfort prompted a reevaluation of their medication routines. Several participants noted that the side effects, while distressing, played a pivotal role in shifting their passive compliance into active health awareness. Analytically, this theme illustrates how subjective experiences of physical discomfort became a catalyst for patient reflection, directly addressing the research question on how elderly patients cognitively and emotionally interpret side effects. Rather than viewing these reactions as isolated complaints, participants reframed them as meaningful signals demanding adaptive responses, thereby deepening engagement with treatment.

Rediscovering Trust: The Transformative Role of Pharmacist Counseling

The experience of receiving direct, empathetic, and informative counseling from pharmacists marked a significant change in participants' perceptions of healthcare support. Prior to counseling, many reported feeling confused or alone in managing their medications.

“When the pharmacist explained that the dizziness could be because of the dosage, I felt like someone finally understood what I was going through. She didn’t just tell me what to take; she listened.”

This newfound relationship with pharmacists was described as transformative. It empowered participants with knowledge, instilled trust, and reinforced their sense of agency. The analysis reveals that pharmacist counseling not only provided biomedical explanations but also addressed the emotional dimension of patient care. By situating individual experiences within a framework of professional support, counseling bridged the gap between patients’ uncertainty and their ability to act responsibly. This directly responds to the research question by showing that communication functions as both a cognitive clarifier and an emotional stabilizer, thereby reinforcing adherence.

From Reluctance to Responsibility: Shifting Attitudes Toward Medication Adherence

Many participants acknowledged a shift from reluctant, inconsistent drug use to a more responsible and disciplined approach following counseling. The change was not only behavioral but emotional, rooted in a deeper understanding of medication purpose and consequence.

“I used to skip the pills sometimes because I didn’t see the point. But after learning how it protects my kidneys, I became afraid to miss a dose. Now I take it like clockwork.”

Participants’ narratives highlighted how increased awareness of long-term benefits and risks led to stronger commitment. The analytic pattern emerging here demonstrates how enhanced comprehension of pharmacological rationale transforms adherence from an externally enforced act into an internally motivated practice. By linking this to the research question, the findings suggest that medication adherence among elderly patients is not merely about compliance but about reconstructing the meaning of treatment through education and empathetic dialogue.

Integrative Analytical Insight

Overall, the results indicate that elderly patients’ understanding of and response to antihypertensive side effects are shaped by two interconnected dynamics: the disruptive but reflective role of side effects and the constructive role of pharmacist counseling. Linking back to the research question, these findings highlight that adherence behaviors are not only determined by physiological experiences but also by the interpretative frameworks provided through interpersonal communication. The trajectory from confusion and reluctance to trust and responsibility underscores that effective adherence strategies must address both the cognitive-emotional interpretations of side effects and the relational context of healthcare delivery.

DISCUSSION

Summary of Key Findings

This study explored the lived experiences of elderly patients managing the side effects of antihypertensive medications (Warden & Duell, 2021). The key findings reveal that these patients experience side effects not merely as physical symptoms but as transformative events that shape their understanding of medication adherence and their overall health (Sales & AlRuthia, 2024). The experience of side effects prompted many patients to reframe their understanding of their medication, shifting from passive recipients of treatment to active participants in their health journey.

Contribution to the Research Question

The findings provide valuable insight into how elderly patients interpret the side effects of antihypertensive drugs and the role pharmacist counseling plays in this process (Wagmann et al., 2021). By exploring the subjective meanings that patients attach to these side effects, the study answered the research question regarding how elderly patients experience and understand their medication practices (X. Huang et al., 2024). The results highlight that patients' experiences of side effects often lead to emotional and cognitive shifts, which are critical to understanding their adherence behavior. The involvement of pharmacists, through patient-centered counseling, was shown to have a pivotal role in altering these perceptions, providing patients with both the knowledge and the emotional support needed to navigate their treatment more effectively (Sabu et al., 2020). This study therefore contributes to a deeper understanding of how side effects influence not only medication adherence but also the emotional and relational aspects of the treatment process.

Relation to Existing Literature and Theory

The findings align with previous studies, such as those by (Mansoor et al., 2025) and (Mansoor et al., 2025), which have explored the emotional impact of medication side effects but primarily from a quantitative or clinical perspective. These studies underscore the importance of addressing side effects in treatment plans but fall short in capturing the nuanced ways in which patients make sense of these experiences (Adeleye et al., 2024). By contrast, this study's phenomenological approach reveals the depth of emotional responses and the role of interpersonal communication in reshaping patients' engagement with their health.

The results also build on the theoretical foundations of interpretative phenomenology, particularly the work of Heidegger, who emphasized the importance of lived experience in understanding human beings' relationship with the world. The findings support this theoretical framework by demonstrating that patients do not simply react to medications but interpret and assign meaning to these experiences in deeply personal ways. The participants' narratives suggest that their experiences with medication side effects were not isolated events but were intertwined with their identities, values, and relationships with healthcare providers. This reinforces the need for more holistic, patient-centered care models that address not just the physical but the emotional and psychological dimensions of illness and treatment.

Implications of Findings

The findings of this study have significant implications both scientifically and practically (Walsh et al., 2019). From a scientific perspective, they provide new insights into the emotional and psychological dimensions of medication adherence, particularly among elderly patients managing antihypertensive therapies. The study highlights the importance of understanding side effects not merely as physical symptoms but as events that trigger emotional and cognitive reevaluations of health and treatment (Nguyen et al., 2024). These insights are crucial for enhancing patient-centered care approaches, especially in geriatric populations, where multiple comorbidities and polypharmacy complicate treatment regimens.

Practically, the study underscores the need for healthcare professionals, particularly pharmacists, to adopt more personalized and empathetic counseling strategies (Safizadeh et al., 2022). Given the significant role of pharmacists in patient education and medication management, it is

essential to recognize that their interactions with patients can directly influence not only adherence but also the emotional well-being of the patient. Pharmacists should be trained to engage patients in discussions that go beyond the technical aspects of drug therapy and address the emotional impact of side effects (Wang et al., 2020). This shift could potentially lead to better medication adherence and overall patient satisfaction, contributing to improved health outcomes in the elderly population.

Furthermore, the study's findings have broader cultural and social implications. In societies where chronic illness is often stigmatized, or where elderly individuals may feel marginalized, the experience of managing hypertension and its side effects can be profoundly isolating (Ung et al., 2021). By fostering supportive communication and a deeper understanding of patients' experiences, healthcare systems can help mitigate this isolation and promote greater well-being. This approach not only addresses the physical aspect of care but also nurtures the mental and emotional health of patients, recognizing the interconnectedness of body and mind in the aging process.

Study Limitations

While the study provides valuable insights into the experiences of elderly patients, it is not without limitations (Quintana-Bárcena et al., 2019). The sample size, consisting of nine participants, may limit the generalizability of the findings to a broader population. The study also focused on elderly patients within primary healthcare settings, which means that the experiences of patients in different healthcare environments, such as hospitals or specialized clinics, might differ. Additionally, the study's phenomenological approach, while rich in exploring individual narratives, does not lend itself to providing quantitative data on the prevalence or severity of medication side effects, which could be valuable for understanding broader trends in medication adherence.

Another limitation arises from the reliance on self-reported data, which, while insightful, can be influenced by participants' perceptions, memory biases, or social desirability. Further studies could address these limitations by employing larger and more diverse samples across different healthcare settings and utilizing mixed-methods approaches to combine the depth of qualitative insights with the breadth of quantitative data.

Prospective Research Directions

The findings from this study open several avenues for future research. Given the complexity of patients' lived experiences with side effects, future studies could explore the role of other healthcare providers, such as general practitioners and nurses, in supporting patients' emotional and psychological responses to medication. Research could also examine how different cultural contexts influence the way patients perceive and manage medication side effects. Additionally, longitudinal studies that follow patients over time could provide valuable insights into how their experiences evolve and how sustained patient-provider interactions might improve long-term medication adherence.

Furthermore, there is potential for expanding the scope of this research to include other chronic conditions beyond hypertension, such as diabetes or heart disease, to compare how medication side effects and counseling impact adherence across different treatment regimens. Such studies could contribute to a more comprehensive understanding of the psychosocial factors influencing medication adherence in chronic illness management.

CONCLUSION

This study explored the lived experiences of elderly patients managing the side effects of antihypertensive medications, addressing the gap in understanding how side effects influence medication adherence from a subjective perspective. The findings revealed that patients not only experience physical discomfort but also undergo emotional and cognitive shifts that reshape their approach to medication. Through the patient-pharmacist relationship, many participants experienced a transformation in their understanding of side effects, which helped enhance adherence to prescribed therapies.

The novelty of this study lies in reframing side effects not merely as biomedical complications but as catalysts for reflective engagement and behavioral change, a dimension rarely captured in adherence research. By foregrounding the interpretative and emotional processes of elderly patients, this work contributes a unique lens to the literature, moving beyond conventional compliance-focused models. Furthermore, the broader applicability of these findings extends to the design of patient-centered interventions across diverse chronic conditions, where communication and trust can transform reluctance into responsibility. For policymakers and healthcare practitioners, this underscores the value of integrating structured pharmacist counseling as a scalable strategy to improve adherence and quality of life in aging populations. Future studies should test these insights in multi-site and cross-cultural contexts, thereby strengthening the evidence base for embedding emotional and cognitive support within routine chronic illness management.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

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