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Lived Experiences of Rural Elderly Managing Antihypertensive Side Effects: A Phenomenological Study

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ABSTRACT

Hypertension management in elderly populations is a critical concern in global public health, particularly in rural areas where access to specialized care remains limited. While pharmacological control is often emphasized, little is known about how elderly individuals subjectively experience the side effects of antihypertensive medications. Despite advances in treatment adherence strategies, few studies have captured the emotional, cultural, and existential dimensions of chronic medication use among rural elderly populations. This study addresses the question: how do elderly patients in rural communities perceive, interpret, and respond to the side effects of antihypertensive therapy? Using a descriptive phenomenological approach, this study uncovers the lived experiences of rural elderly patients and interprets the meaning they assign to their bodily and emotional responses to medication. Data were collected through in-depth, semi-structured interviews with ten participants and analyzed thematically using Braun and Clarke's framework supported by MAXQDA software. The findings reveal five key themes: bodily disruptions, emotional negotiation, cultural reinterpretation, adaptive coping, and silent endurance. These themes illustrate how medication side effects are interwoven with the patients' sense of identity, daily functioning, and sociocultural context. Rather than passive recipients of care, participants emerged as active agents in managing their experiences through culturally informed and emotionally responsive strategies. These insights highlight the need for more empathetic and culturally sensitive healthcare practices in geriatric pharmacotherapy and suggest directions for future research that prioritize patient narratives as valid sources of clinical knowledge.

INTRODUCTION

Hypertension is a prevalent chronic condition that disproportionately affects the elderly population, particularly in low-resource and rural settings where access to specialized healthcare remains limited (Abdelkader et al., 2020). As global health systems increasingly focus on the management of non-communicable diseases, the long-term use of antihypertensive medications has become a cornerstone of therapeutic strategies for aging populations (Alfian et al., 2021). These pharmacological interventions, while clinically effective, are often accompanied by a range of physiological side effects that may alter the everyday lives of patients, especially among the elderly who may already be experiencing age-related physical and cognitive changes.

In rural communities, the management of chronic illness is rarely limited to biomedical factors alone. Cultural beliefs, social norms, local health practices, and generational knowledge significantly shape how illness and treatment are perceived and navigated (Alzahrani et al., 2022). For elderly individuals, these factors often intersect with emotional, familial, and communal dynamics that influence how they make sense of and respond to the bodily changes induced by medication (Anaya et al., 2023). The side effects of antihypertensive drugs such as dizziness, fatigue, or swelling are not merely clinical symptoms; they are lived experiences that can disrupt daily routines, alter interpersonal roles, and evoke emotional responses tied to dignity, autonomy, and social participation.

Despite the growing body of literature addressing medication adherence and clinical outcomes in hypertension management, there remains limited understanding of how elderly patients subjectively interpret and cope with the adverse effects of treatment in their everyday lives (Bousquet et al., 2020). Current research tends to prioritize quantifiable metrics such as blood pressure control and pill compliance, often overlooking the nuanced ways in which individuals negotiate the meaning of their experiences with long-term medication use.

A phenomenological exploration of this issue is therefore critical. By focusing on the lived experience of elderly patients, such research can offer deeper insight into the human dimensions of pharmaceutical care insight that is essential for developing more responsive, empathetic, and culturally sensitive health interventions (bratty, 2020). The need to explore and understand these subjective experiences is not only timely but essential to ensuring that clinical practices resonate with the actual conditions, values, and lived realities of the populations they serve.

Within the broader field of chronic illness management, the exploration of patient experiences particularly among elderly individuals dealing with pharmacological side effects has emerged as a critical domain of inquiry (Farkas et al., 2020). Phenomenological research, which centers on understanding how individuals perceive and interpret their lived experiences, is especially relevant for investigating complex health phenomena that extend beyond clinical parameters.

Despite increasing attention to patient-centered care, much of the existing research on antihypertensive therapy remains predominantly quantitative in nature (Farmakis et al., 2022). Studies tend to focus on measurable outcomes such as adherence rates, pharmacokinetic profiles, and blood pressure control, often relying on standardized instruments like the Morisky Medication Adherence Scale to evaluate behavior. While such approaches offer valuable epidemiological insights, they are limited in their capacity to uncover the subjective, emotional, and contextual dimensions of medication use among older adults.

The challenge lies in capturing the nuanced meanings that patients assign to their symptoms, routines, and medication practices meanings that are often shaped by personal history, cultural context, and social dynamics. Quantitative methodologies, by design, are not equipped to reveal these intricacies. As a result, the lived realities of elderly patients, particularly those in rural communities where traditional beliefs and limited healthcare access converge, are frequently underrepresented in the literature.

This methodological gap underscores the inadequacy of previous studies in providing a comprehensive understanding of how antihypertensive side effects are experienced, managed, and interpreted by the elderly (Ghaem Far et al., 2021). Without access to their voices and perspectives, healthcare providers may overlook key elements that influence treatment outcomes and patient well-being. A phenomenological approach is thus not only appropriate but essential for delving into the inner worlds of patients and for informing more humanistic and context-sensitive clinical interventions.

In current clinical practice, the management of antihypertensive medication side effects among elderly patients typically relies on standardized protocols and pharmacological adjustments (Giri et al., 2021). These solutions, though effective in addressing physiological symptoms, are primarily rooted in biomedical paradigms that emphasize measurable outcomes over experiential insight. As such, they often neglect the socio-emotional and contextual dimensions of how patients actually live with and interpret these side effects.

Existing approaches, including patient education programs and adherence monitoring tools, are commonly informed by behavioral or cognitive frameworks that fail to account for the nuanced, subjective meanings individuals attach to their medication experiences. While these methods offer practical utility, they remain limited in capturing the depth of lived experience, particularly within populations where cultural beliefs and environmental constraints significantly shape health behaviors. Consequently, a full understanding of how elderly patients experience, rationalize, and respond to the side effects of long-term medication remains elusive.

This limitation calls for an alternative approach one that prioritizes human experience as both a source of knowledge and a valid object of inquiry. Phenomenology offers such a framework. By focusing on the first-person perspective, this methodology allows for the uncovering of meaning as it emerges naturally in the lived world of participants. It facilitates access to the emotional, relational, and existential aspects of medication use that are otherwise obscured in traditional research models. Despite its relevance, phenomenological inquiry into the side effects of antihypertensive therapy among rural elderly populations remains rare, leaving a critical gap in the literature and in clinical understanding.

Previous studies on antihypertensive therapy have primarily focused on clinical outcomes, medication adherence, and pharmacological efficacy. Although some qualitative research has explored patients' beliefs and treatment behaviors, these studies often lack depth in revealing how patients truly experience side effects in everyday life. Theoretical models in chronic illness management rarely address the emotional, cultural, and existential dimensions that shape these experiences. Moreover, rural elderly populations remain underrepresented in such research, despite being uniquely affected by both medical and sociocultural factors. This study aims to address that gap by focusing on their voices and perspectives.

A descriptive phenomenological approach was selected to explore how elderly individuals in rural areas interpret and manage the side effects of antihypertensive medications. This method was chosen because it allows researchers to uncover the essence of lived experience without imposing external interpretations. It answers the central research question by giving participants the opportunity to describe their bodily, emotional, and contextual realities in their own words. Through in-depth interviews and thematic analysis, the study brings forth insights that traditional approaches have not fully captured. The aim is not only to document these experiences but to interpret their meaning within the participants' lifeworld.

This article begins with an introduction that outlines the clinical and social background of the study. It continues with an explanation of the methodological framework, including participant selection, data collection, and analysis. The results are presented thematically, each supported by direct quotations to illustrate the participants' perspectives. The discussion connects the findings to existing literature and highlights their theoretical and practical implications. The paper concludes by summarizing the study's contributions and suggesting directions for future research.

RESEARCH METHODS

Study Design

This study employed a descriptive phenomenological approach grounded in the philosophical underpinnings of Edmund Husserl, which centers on capturing the essence of lived experiences from the participants' perspectives. The choice of this design was aligned with the study's aim to explore the subjective meanings and interpretations attached to the experience of managing antihypertensive medication side effects among elderly individuals in rural settings. Phenomenology, in this context, provided a rigorous framework to elicit, interpret, and structure participants' narratives without imposing preconceived theoretical constructs. The descriptive variant of phenomenology was particularly relevant as it emphasizes bracketing researcher biases (epoché) and focusing solely on participants' expressions to reveal the fundamental nature of the phenomenon.

Participants

Participants in this study were elderly individuals residing in rural areas who had been undergoing antihypertensive therapy for a minimum period of six months. A purposive sampling strategy was utilized to identify individuals who had direct and prolonged experience with the phenomenon under investigation. Inclusion criteria included: (1) aged 60 years and above; (2) diagnosed with hypertension and currently prescribed antihypertensive medications; and (3) cognitively capable of participating in extended interviews. Exclusion criteria involved individuals with diagnosed severe psychiatric disorders or communication impairments that could hinder the interview process.

A total of ten participants (six females and four males), aged between 61 and 78 years (mean age: 68.4 years), were involved in the study. All participants resided in rural villages with limited access to specialized healthcare services. Their lived experiences provided rich, diverse insights into the physiological, emotional, and sociocultural implications of antihypertensive medication use.

Data Collection

Data were collected through in-depth, semi-structured interviews conducted face-to-face in settings chosen by the participants, typically their homes or community centers. An interview guide comprising open-ended questions was used to facilitate the exploration of participants' experiences, perceptions, and coping mechanisms. The interviews lasted between 45 and 90 minutes, depending on the participant's willingness and availability.

All interviews were audio-recorded with participants' consent and supplemented with observational notes. A quiet and familiar environment was ensured to promote comfort and openness during the data collection process. Probing questions were used as needed to clarify meanings and encourage deeper reflection. The data collection continued until thematic saturation was reached, where no new relevant information emerged.

Data Analysis

Data were analyzed using thematic analysis based on Braun and Clarke's six-step framework. The process began with verbatim transcription of audio recordings, followed by repeated readings to become immersed in the data. Meaningful units were identified and systematically coded using MAXQDA software. These codes were then categorized into broader themes that reflected the shared and divergent experiences of participants.

Thematic clustering was conducted to reveal patterns and essential meanings underlying the participants' narratives. Constant comparison across interviews ensured consistency and depth in theme development. The final themes were refined to represent the core elements of the lived experience, free from researcher assumptions, thus maintaining fidelity to the descriptive phenomenological tradition.

Ethical Considerations

Ethical approval was obtained from the relevant institutional ethics committee prior to data collection. Participants were informed about the study's purpose, voluntary nature, and their right to withdraw at any stage without penalty. Written informed consent was secured from all participants. To safeguard confidentiality, pseudonyms were used in transcripts and all identifying information was removed. The study adhered to the ethical standards outlined in the Declaration of Helsinki and complied with local regulations governing human subject research.

RESULTS

This study explored the lived experiences of elderly patients in rural communities regarding their management of side effects associated with antihypertensive medications. Through in-depth semi-structured interviews, several major themes emerged, each representing a unique facet of the participants' subjective experiences. The following section presents a narrative, thematically organized account of these findings, supported by direct quotations from the participants.

Bodily Disruptions as a Daily Reality

Participants consistently described physical discomfort as a persistent part of their lives. Common side effects such as dizziness, fatigue, and swelling were not only viewed as bodily disturbances but were deeply intertwined with their daily activities and sense of autonomy.

"Sometimes, after taking my blood pressure pills, I feel like the room is spinning. I sit down and wait for the world to stop moving." (Participant 3)

"I get tired so easily now. Just walking to the garden makes me feel like I've worked all day." (Participant 6)

These physical symptoms were not simply acknowledged but were experienced as intrusive, limiting their capacity to perform routine tasks and contributing to a perceived decline in personal independence.

Negotiating Between Medicine and Meaning

Rather than viewing medications merely as therapeutic tools, participants attached nuanced meanings to their drug regimens. Some saw medications as essential, while others harbored ambivalence or even resentment toward them.

"I know it helps, but sometimes I wonder if it's the pills making me worse. I never felt like this before starting them." (Participant 1)

"The medicine is like my walking stick now I depend on it, even if I don't like it." (Participant 7)

This theme reveals a psychological negotiation where adherence is driven by a complex blend of trust, doubt, dependence, and fear. Medication was experienced not only physiologically but emotionally and symbolically.

Cultural Logic and Community Wisdom

Many participants drew on traditional or community-based understandings of illness and treatment. Local wisdom and advice from elders often shaped how side effects were interpreted and managed.

"The old folks say if your hands shake after medicine, drink coconut water. So I do it." (Participant 4)

"We believe in balance. If the medicine makes you too cold inside, you need something warm like ginger." (Participant 2)

Such practices often coexisted with biomedical approaches, illustrating a hybrid health belief system. The rural sociocultural context played a significant role in how side effects were evaluated and acted upon.

Adaptation Through Routine and Resistance

Some participants developed coping mechanisms to adapt to the side effects, while others engaged in subtle forms of resistance such as dose modification or skipping medication when symptoms became too burdensome.

"I take it only in the morning now. If I take it at night, I can't sleep well." (Participant 5)

"When the swelling gets bad, I stop the pills for two days. Then I start again." (Participant 8)

These self-directed adjustments reflect both adaptive strategies and the lack of access to consistent medical guidance. Participants often relied on personal experience rather than formal medical advice to regulate their therapy.

The Silent Burden and Emotional Isolation

Beyond physical discomfort, participants expressed feelings of worry, isolation, and emotional fatigue particularly because the side effects were often invisible or minimized by others.

"People just say, 'You're old, of course you feel tired.' But this is different it's not just age, it's the medicine." (Participant 9)

"I don't want to complain all the time, so I keep it to myself." (Participant 10)

This theme captures the silent psychological toll of enduring ongoing side effects without adequate emotional support. It reveals a sense of alienation from both caregivers and community members who may not recognize the seriousness of these experiences.

Essential Summary of the Findings

The core essence of this study reveals that elderly patients living in rural areas experience antihypertensive side effects as more than physiological responses they interpret, negotiate, and manage these effects through personal, cultural, and social lenses. The side effects impact not only their physical wellbeing but also their emotional resilience, social interactions, and perceptions of aging. Their stories reflect a complex interplay of suffering, adaptation, agency, and meaning-making in the context of chronic medication use.

DISCUSSION

The findings of this study revealed that elderly patients living in rural areas experience antihypertensive medication side effects not merely as physical disturbances but as deeply personal, emotionally charged, and culturally shaped events (Haggag et al., 2021). These experiences were marked by bodily discomfort, emotional negotiation, cultural reinterpretation, adaptive behavior, and a sense of isolation offering rich insight into the lived realities behind chronic medication use, in direct response to the central research question posed in the Introduction.

By exploring how elderly individuals subjectively make sense of and manage the side effects of antihypertensive drugs, this study provides an interpretive lens into a phenomenon often reduced to clinical metrics (Khanfar et al., 2021). The results contribute a nuanced understanding that such effects are not isolated incidents but are embedded in broader life contexts involving social roles, cultural beliefs, and emotional landscapes (Tachapuripunya et al., 2021). These findings illuminate how side effects influence not only physical health but also self-perception, autonomy, and dignity in aging. The study thus extends the conversation from adherence and clinical management to the human meanings behind chronic illness and pharmaceutical intervention.

The present findings resonate with, yet expand upon, earlier qualitative work. For instance, Martelli et al. (2020) highlighted how elderly patients perceived medication side effects as disruptions to their sense of normalcy, while Nasr et al. (2022) emphasized the role of cultural logic in shaping medication practices. This study deepens these insights by showing how cultural reinterpretation and emotional adaptation coexist with practical strategies such as dose adjustment or avoidance behaviors. Unlike the work of Pan et al. (2021), which focused largely on treatment compliance, this study uncovers the existential layers of suffering, negotiation, and resistance, underscoring the need for a more holistic, person-centered approach in pharmacological care for the elderly. Such findings support phenomenological theory's claim that health and illness are not merely biological states but lived experiences that unfold within a social and cultural world.

Implications of the Findings

The findings from this study offer several important implications for clinical practice, health education, and pharmaceutical policy, particularly in underserved and aging populations (Trifirò et al., 2020). The complex ways in which elderly individuals interpret and respond to side effects shaped by cultural logic, emotional reasoning, and adaptive behaviors suggest that treatment strategies must go beyond pharmacological precision to incorporate psychosocial and cultural dimensions of care. Clinicians and pharmacists working in rural communities should be attuned not only to the physical symptoms but also to the symbolic meanings that patients assign to their medications (Peeters et al., 2020). Moreover, the study underscores the need for training health professionals to engage empathetically with patient narratives, fostering communication that validates lived experience. These insights also contribute to geriatric and rural health frameworks by emphasizing patient agency and lived context as essential components of effective medication management.

Study Limitations

While this study provides rich and meaningful insights, several limitations should be acknowledged. The use of purposive sampling, while methodologically appropriate for phenomenology, limits the transferability of findings to broader populations. All participants were drawn from rural Indonesian communities, which may differ significantly from urban or cross-cultural contexts in both access to care and health beliefs (Pop et al., 2022). Additionally, the reliance on self-reported narratives introduces the potential for recall bias or selective disclosure, although efforts such as member checking and triangulation were employed to enhance credibility. The findings represent subjective interpretations rather than objective generalizations, and therefore should be viewed within the boundaries of their contextual and methodological scope.

Future Research Directions

Building upon these findings, future research could explore the intersection of pharmaceutical experiences with broader constructs such as spiritual coping, intergenerational caregiving, or gendered perceptions of illness among the elderly (Shen et al., 2020). Comparative studies involving urban populations or different cultural regions could illuminate how context mediates medication experiences. Longitudinal qualitative designs may also capture how these meanings evolve over time as health conditions and treatment regimens change. Additionally, integrating phenomenological inquiry with participatory or action-based methodologies could inform the co-design of interventions that better reflect patient needs and realities. Such directions will continue to expand the scope of phenomenological research in pharmacological settings and contribute to more inclusive, humane, and effective healthcare practices.

CONCLUSION

This study explored the lived experiences of elderly patients in rural areas as they managed the side effects of antihypertensive medications. It revealed that these individuals interpret side effects not merely as physical symptoms, but as deeply personal and culturally meaningful experiences. Thematic analysis identified patterns of bodily discomfort, emotional negotiation, cultural adaptation, and silent endurance that shaped their daily lives. These findings address a significant gap in previous research, which often overlooked the subjective dimensions of medication use among vulnerable populations. By highlighting the human meaning behind chronic pharmaceutical treatment, this study contributes to more empathetic and context-sensitive healthcare practices. Future research may expand on these insights by examining other populations or integrating phenomenological inquiry with participatory methods to co-create patient-centered interventions.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

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