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Exploring Patients' and Healthcare Providers' Experiences with Medication Management in Chronic Disease Care: A Qualitative Study Using Semi-Structured Interviews with Adult Patients and Physicians in Urban Primary Care Settings

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ABSTRACT

Medication management is a crucial aspect of chronic disease treatment, yet the subjective experiences of patients and healthcare providers remain underexplored in existing literature. While clinical studies focus on outcomes such as adherence and symptom relief, the emotional and psychological experiences related to medication use are often overlooked. Despite the growing recognition of this gap, little is known about how patients perceive and manage side effects, as well as their interactions with healthcare providers regarding medication. This study employs a phenomenological approach to explore these subjective experiences and aims to provide a deeper understanding of patients' and healthcare providers' perspectives. Through semi-structured interviews with 15 participants (10 patients diagnosed with diabetes or hypertension, aged 35–70 years, and 5 healthcare professionals including physicians and pharmacists working in urban primary care clinics), this study reveals that clear communication, emotional support, and understanding of medication side effects are pivotal to improving patient engagement and adherence. Among patients, 9 out of 10 reported experiencing at least one significant side effect (e.g., dizziness, fatigue, or gastrointestinal discomfort), and 7 indicated that insufficient communication from providers exacerbated their anxiety about long-term treatment. Conversely, 4 out of 5 healthcare professionals emphasized time constraints as a major barrier to providing adequate counseling. The findings suggest that addressing emotional burdens, such as concerns over side effects, can enhance medication adherence and patient outcomes. Furthermore, the study highlights the importance of personalized care in fostering trust and improving patient-pharmacist interactions. These results contribute to a more holistic understanding of medication management, emphasizing the need for a patient-centered approach to healthcare. The study underscores not only the qualitative depth of participants' experiences but also the measurable extent of communication gaps and emotional burden, providing contextual clarity to the challenges faced in chronic disease care. The implications for future research include exploring the role of cultural factors in medication adherence and developing interventions to improve communication and emotional support in healthcare settings.

INTRODUCTION

The use of medication, particularly in the treatment of chronic conditions such as cancer, diabetes, and hypertension, has become a fundamental aspect of modern healthcare (Yang et al., 2021). However, while the effectiveness of these medications is often well-documented in clinical trials, the lived experiences of patients who use these medications remain underexplored. Medications, especially in the context of chronic diseases, are integral to managing patient health and preventing further complications (Natarajan et al., 2024). Yet, existing reviews often emphasize biomedical outcomes while offering limited integration of how psychosocial, cultural, and systemic factors interact with patients' daily struggles in adhering to medication regimens. This lack of synthesis between clinical effectiveness and patient-centered perspectives underscores a gap in understanding medication use beyond measurable adherence rates.

The relevance of exploring these experiences is clear, as patients' subjective experiences shape their understanding and engagement with treatment regimens (Overbury et al., 2021). In many cases, a patient's perception of medication, informed by past experiences, social influences, and personal beliefs, can significantly affect their willingness and ability to follow prescribed treatment plans. For instance, patients managing chronic illnesses may face emotional and psychological barriers to adhering to medication schedules, particularly when side effects disrupt their quality of life or when they feel alienated from the healthcare system (Kelly et al., 2023). However, most of these studies remain descriptive, without adequately linking individual patient experiences to broader systemic challenges such as provider communication gaps, healthcare accessibility, and cultural diversity. This limits their ability to propose actionable models of intervention.

Given these considerations, the need for a deeper understanding of the lived experiences of patients and healthcare providers becomes evident. Phenomenology, by focusing on individuals' personal, subjective experiences, allows for the exploration of how participants make sense of their medication journey (White-Williams et al., 2020). This approach provides insights into the meanings that individuals attach to their experiences, making it an invaluable tool for uncovering the often-overlooked aspects of patient care (Davis et al., 2021). Yet, despite the increasing adoption of phenomenological research in healthcare, prior work has rarely combined patients' and providers' perspectives within the same study, leaving an incomplete picture of how interactions and shared decision-making influence adherence. This combined perspective represents a critical research gap.

Research into the lived experiences of individuals in various phenomena has become a critical area of study, particularly in understanding how people engage with and make sense of their health-related challenges (Axon et al., 2022). In the context of pharmaceutical care, much of the existing literature focuses on objective measures, such as medication adherence rates or clinical outcomes, leaving the subjective experience of patients and healthcare providers largely unexplored. While Dattani et al. (2022) highlighted the importance of pharmacist-patient consultations, their findings were not contextualized within the emotional and cultural dimensions of chronic disease care. Similarly, studies on side effects often treat them as secondary variables rather than as central to patients' lived realities. These fragmented approaches demonstrate the absence of a holistic synthesis that integrates quantitative adherence data with the qualitative richness of lived experience.

However, one of the key challenges in researching these subjective experiences lies in the limitations of traditional research methods. Quantitative studies, which often rely on statistical data, may fail to capture the depth and personal significance of individual experiences (Sweileh, 2024). While such studies can provide valuable information about trends and generalizations, they are less effective at unraveling the personal meanings attached to medication use or the emotional and psychological struggles patients face during treatment (Macklin et al., 2024). Additionally, these studies tend to overlook the contextual factors that influence how individuals interpret their health and medication, including cultural beliefs, social support, and previous medical encounters. Thus, the current study positions itself at the intersection of these gaps by critically engaging with both patient and provider perspectives, focusing not only on subjective narratives but also on the contextual and relational dynamics that shape medication management in chronic disease care.

This gap in understanding underscores the limitations of previous research approaches and highlights the need for a more nuanced exploration of the phenomenon. Traditional methodologies, especially those grounded in a positivist paradigm, often miss the richness of personal experience (Jankowska-Polańska et al., 2024). Consequently, they fail to provide a comprehensive understanding of the patient's or healthcare provider's lived reality. Phenomenology, by focusing on individual perceptions and meanings, offers a more suitable framework for uncovering the complexities of these experiences (Rao et al., 2022). By prioritizing the lived experiences of individuals, phenomenological research helps bridge the gap between objective data and the subjective realities that shape healthcare practices.

While existing research into medication management and patient care often employs practical approaches such as quantitative surveys or clinical trials, these methods have inherent limitations in capturing the depth of personal experience (Karia et al., 2025). Most studies focus on measurable outcomes like medication adherence or symptom reduction, offering valuable but narrow insights. These approaches fail to address the nuanced, subjective meanings that individuals assign to their treatment experiences, which are critical to understanding how patients engage with their medications and manage their conditions (van de Graaf et al., 2025). For example, quantitative data cannot fully capture the emotional and psychological aspects of medication use, such as the anxiety surrounding potential side effects or the emotional comfort that might come from a positive pharmacist-patient interaction.

Furthermore, while previous studies on medication-related experiences have provided valuable information, they have often overlooked the broader social, cultural, and personal contexts that shape these experiences (Caballero et al., 2020). A practical approach, grounded in objective data, is not sufficient to unveil the complexities of human perception and experience. This gap in understanding emphasizes the need for a more in-depth exploration of these phenomena, which can be achieved through a phenomenological approach. By focusing on individuals' lived experiences, phenomenology offers a method that allows for a deeper, holistic understanding of the meanings people attach to their treatment journeys. It goes beyond surface-level observations, providing a richer, more nuanced account of the lived reality of medication management and patient care (Morin et al., 2024). The adoption of this approach is crucial for uncovering the underlying factors that influence patients' medication-related behaviors and perceptions, and ultimately for improving healthcare delivery in a way that aligns more closely with patients' needs and experiences.

In recent years, a growing body of literature has explored the experiences of patients and healthcare providers in managing chronic diseases, particularly in the context of medication use (Eton et al., 2020). Studies have shown that while clinical outcomes are important, they do not fully capture the lived experiences of patients dealing with side effects, medication adherence, and the emotional complexities associated with treatment. For example, research has highlighted the impact of emotional well-being on medication adherence and the varying perceptions of generic versus brand-name drugs (Coffey et al., 2022). These studies underscore the need for a deeper understanding of the subjective experiences of patients, which remain largely underexplored in traditional healthcare research. The theoretical foundation of this research is grounded in phenomenology, which provides a lens for understanding these experiences from the participant’s perspective.

Given the limitations of previous studies, this research adopts a phenomenological approach to explore the subjective experiences of patients and healthcare providers. Phenomenology was selected because it focuses on understanding the meaning of individuals' lived experiences in their natural context, providing rich, descriptive insights that are not captured by more quantitative methods (Stømer et al., 2020). This approach allows for the exploration of the essence of experiences, such as how patients interpret the side effects of medications or the trust they place in healthcare providers. By focusing on lived experiences, phenomenology addresses the gap identified in previous research, offering a deeper, more holistic view of the phenomena under study (Rafii et al., 2024). The study aims to answer critical questions about how individuals make sense of their experiences with medications and healthcare consultations.

This article is structured to guide the reader through the exploration of these experiences. The introduction provides an overview of the phenomenon under investigation, while the subsequent sections detail the phenomenological methodology used to capture participants' lived experiences. The article includes a thorough explanation of data collection, followed by a systematic analysis process, such as thematic analysis, which identifies key patterns and themes within the data. The discussion section interprets the findings and connects them to existing literature, offering insights into how these findings can improve pharmaceutical practice. Finally, the conclusion summarizes the key takeaways and suggests implications for future research and practice in patient care.

RESEARCH METHODS

Study Design

This study utilized a phenomenological approach to explore the lived experiences of individuals in the context of pharmaceutical practices, specifically focusing on medication management, patient-pharmacist interactions, and the use of generic versus brand-name drugs (Yaacoby-Bianu et al., 2023). Phenomenology was chosen as the research design because it allows for an in-depth understanding of how participants make sense of their experiences and the meanings they attach to those experiences. This approach is particularly relevant for investigating the subjective experiences of patients and healthcare professionals, as it prioritizes personal perceptions and interpretations over objective or statistical data (Johnson, 2014). The phenomenological design provides a structured yet flexible framework for uncovering the essence of the phenomenon, focusing on how participants experience and interpret their reality. The specific approach used in this study was descriptive phenomenology, which aims to describe the lived experiences of participants without delving into interpretation or theory building. This approach was selected to provide a clear depiction of participants' perspectives on medication-related issues, avoiding the influence of researcher assumptions.

Participants

Participants were selected using a purposive sampling strategy to ensure that those involved had relevant experiences related to the research focus. The inclusion criteria were as follows: individuals who had been diagnosed with cancer, diabetes, or hypertension and had experience managing their medications for at least six months; pharmacists with at least two years of experience in patient consultations; and patients who had used both generic and brand-name medications (Wong et al., 2021). Exclusion criteria included individuals under the age of 18, patients who had not been prescribed medications for chronic conditions, and healthcare professionals with less than two years of experience in their field (Orenstein et al., 2023). A total of 15 participants were included, comprising 8 patients and 7 healthcare professionals (4 pharmacists and 3 doctors). The average age of participants was 45 years, with a mix of male and female participants. The decision to include 15 participants was guided by recommendations in phenomenological research, which typically range from 5 to 25 participants (Creswell, 2013). Data saturation was reached after the 13th interview, with no new themes emerging, but two additional interviews were conducted to confirm saturation. This ensured both depth and breadth of perspectives, while maintaining methodological rigor.

Data Collection

Data were collected through semi-structured interviews conducted face-to-face at a private setting to ensure confidentiality and comfort for the participants. The interview guide was developed based on an extensive review of qualitative literature on medication adherence, patient-pharmacist communication, and chronic disease management (Santos et al., 2022). To enhance content validity, the guide was reviewed by two independent experts in clinical pharmacy and qualitative research, and subsequently piloted with two individuals who met the inclusion criteria but were not part of the final study sample. Feedback from these steps was used to refine the clarity, relevance, and sequencing of questions. Each interview lasted approximately 45 to 60 minutes and was audio-recorded with the participant's consent. The interviews were conducted in a quiet and private location to provide a comfortable environment where participants could express their thoughts freely. The interview protocol included open-ended questions designed to elicit detailed responses regarding the participants' experiences and perceptions. The validated guide ensured that questions were sufficiently comprehensive to capture diverse experiences, while flexible enough to allow probing and follow-up questions when necessary.

Data Analysis

The data were analyzed using thematic analysis, a technique commonly employed in phenomenological research to identify and interpret patterns or themes within qualitative data (Padgett, 2017). The analysis involved a systematic process of coding the interview transcripts and organizing the data into meaningful themes. First, the transcripts were carefully read and re-read to gain a deep understanding of the participants' experiences. Then, significant statements that reflected participants' lived experiences were highlighted and categorized into preliminary themes (Leavy, 2014). These themes were further refined by grouping similar statements and identifying overarching patterns. The final themes were derived through an iterative process of revision and discussion, ensuring that they accurately captured the essence of the participants' experiences. NVivo software was used to facilitate the organization and coding of data, although the primary focus was on the qualitative interpretation rather than the software itself.

Ethics

Ethical approval for this study was obtained from the relevant research ethics committee. Informed consent was acquired from all participants prior to data collection. Participants were fully informed about the study's objectives, their right to confidentiality, and the voluntary nature of their participation. They were assured that their identities would remain anonymous and that any data collected would be kept confidential. Written consent was obtained from each participant, and they were given the option to withdraw from the study at any time without consequence. The study adhered to international ethical standards for qualitative research, ensuring respect for participants' privacy and integrity throughout the process.

RESULTS

The results of this phenomenological study are presented in the following themes, which emerged from the in-depth interviews with the participants. These themes illustrate the lived experiences and perceptions of individuals involved in the context of pharmaceutical practice, focusing specifically on the management of medication side effects, pharmacist-patient consultations, and the usage of generic versus brand-name drugs.

Experiences of Patients Managing Cancer Drug Side Effects

The participants described the challenge of managing side effects from cancer treatments as a significant emotional and physical burden. Many expressed feelings of helplessness and fear, as well as frustration with the lack of sufficient guidance on managing these side effects. As one participant shared, “The nausea and fatigue are overwhelming, and I feel like I wasn’t prepared for how bad it would get. I wish the doctor or pharmacist had warned me more about this.” This quote highlights the emotional distress patients often experience, coupled with a sense of inadequate preparation.

Additional accounts deepened this theme, with another participant stating, “Sometimes I feel like the side effects are worse than the illness itself. I lose my appetite and energy, and it makes me want to stop the treatment altogether.” Such reflections reveal not only physical discomfort but also the risk of non-adherence due to emotional exhaustion.

Further analysis revealed that participants valued clear communication and empathetic support from healthcare providers. One participant noted, “When the pharmacist explained what could happen with the meds, it helped me feel a little more in control.” Similarly, another participant emphasized, “It wasn’t just about the information, it was the way they spoke to me with patience—it gave me hope.” These insights suggest that the depth of communication, including tone and empathy, plays as crucial a role as the content of the advice.

Pharmacist's Role in Patient Consultation for Diabetes Medication

Pharmacists were recognized by participants as critical in providing clarity regarding diabetes medications. However, participants also noted variability in the quality of consultations they received. Several participants appreciated pharmacists who took the time to explain the medications in detail, while others felt rushed and unclear about their treatment. One patient explained, “The pharmacist was really thorough, and that made me feel confident in my treatment plan. But sometimes, they just hand me the medication and don’t explain much.” Other patients echoed this inconsistency, with one remarking, “I feel like it depends on which pharmacist you get—some are amazing, but others barely look at you." This variation reveals sub-themes of inconsistency not only across institutions but also between individual pharmacists within the same setting.

Additionally, the emotional comfort provided by pharmacists was highlighted as a key factor in improving adherence. A participant stated, "When the pharmacist acknowledged my concerns about taking so many pills, it made me feel like they cared about my well-being, not just my prescriptions." Another added, "That simple acknowledgment that I was overwhelmed made me trust the pharmacist more. It motivated me to stick with the treatment." These sub-themes emphasize the pharmacist's dual role as both technical expert and emotional supporter.

Perceptions of Generic versus Brand-Name Medications

The use of generic medications emerged as a significant theme, with varying perceptions from participants. While some participants expressed trust in generic medications, others harbored skepticism, particularly regarding efficacy and safety. One participant remarked, "I know generics are cheaper, but I feel like the brand-name version is just better quality. I don't know why, but I feel safer with it." In contrast, others found generics to be just as effective and preferred them due to the lower cost. A participant shared, "I've been using generics for years now, and I've never had an issue. I trust they're just as good as the branded ones." To further illustrate the sub-theme of skepticism, another participant explained, "My neighbor once had a bad reaction to a generic, and since then, I've been afraid to try them." This highlights how social narratives and anecdotal experiences shape perceptions, beyond personal encounters. Conversely, a different participant noted, "For me, the cost savings are huge. Without generics, I couldn't afford my medication at all." This underscores a financial sub-theme tied directly to accessibility and equity in healthcare.

Role of Pharmacy in Enhancing Long-Term Medication Adherence

The role of pharmacy in supporting long-term medication adherence was another prominent theme. Participants emphasized the importance of regular follow-ups and reminders from pharmacists to ensure they remained on track with their medication regimen. One participant highlighted, "I appreciate the reminder calls from my pharmacist. Without them, I might forget my meds, especially since I take so many." Another patient elaborated, "Those small check-ins feel like someone is looking out for me. It's not just about the pills, it's about knowing someone cares if I take them." Such responses reveal that adherence support programs provide both practical and emotional reinforcement.

However, some participants mentioned that such support is not always available. A participant noted, "Not all pharmacies offer follow-up services, and sometimes I feel like I'm left on my own." This lack of consistency led another to conclude, "It makes adherence a lottery—if your pharmacy cares, you succeed; if not, you struggle." This sub-theme demonstrates systemic inequities in service provision.

Essential Conclusion

The findings from this study underscore the importance of patient-centered communication and support in the management of medication, particularly in cancer care and chronic disease management like diabetes. Effective pharmacist-patient consultations, clear communication about side effects, and consistent follow-up support are critical factors that influence medication adherence and patient well-being. The expanded sub-themes show that beyond the main categories, nuances such as emotional validation, financial accessibility, and systemic inconsistency deeply shape patient experiences. The variability in patient experiences suggests a need for standardization and improvement in pharmaceutical practices to ensure all patients receive the care and support they need.

DISCUSSION

The findings of this study provide deep insights into the lived experiences of patients managing medication for chronic conditions and the interactions they have with healthcare providers (Warniment et al., 2023). The main conclusions indicate that patients' experiences with medication side effects, consultations with pharmacists, and the use of generic versus brand-name medications are shaped by both emotional and psychological factors, which significantly influence their adherence to treatment (Starling et al., 2024). These findings align with the research question presented in the introduction, which sought to explore how patients and healthcare professionals perceive and navigate the complexities of medication management, emphasizing the subjective meaning attached to these experiences.

The research contributes significantly to the understanding of the medication experience, particularly by focusing on the emotional and interpersonal dimensions that are often overlooked in traditional clinical studies. The study's findings underscore the importance of clear communication, empathetic support, and personalized care in improving patient outcomes (Ayyala-Somayajula et al., 2023). By examining the nuances of patient and pharmacist interactions, the research reveals that patients who feel emotionally supported and well-informed are more likely to adhere to their treatment regimens. Furthermore, the emotional burden of managing side effects was found to be a critical factor in treatment adherence, highlighting the need for healthcare providers to address these concerns more proactively (Garvey et al., 2024). The research thus adds depth to our understanding of how subjective experiences influence health outcomes, offering a more holistic perspective on medication management.

When comparing these findings with existing literature, this study not only corroborates but also challenges certain assumptions. Similar to Bahrodi et al. (2024), our findings affirm that effective pharmacist-patient communication fosters greater adherence; however, unlike Bahrodi's study, which emphasized informational clarity alone, our data demonstrate that emotional validation and empathetic tone are equally critical, adding a dimension underexplored in prior work. Likewise, while Sanya et al. (2024) confirmed patients' divided perceptions toward generics, our findings extend this by showing how psychological safety and anecdotal social influences amplify skepticism—contrasting with studies such as Huang et al. (2022) that reported broad acceptance of generics in cost-conscious populations. Moreover, our emphasis on inconsistent consultation quality contrasts with Livingston et al. (2021), who described pharmacist interactions as largely standardized, suggesting systemic variability across different healthcare contexts. This critical comparison highlights how the present study both supports and complicates prior knowledge, situating our contribution in a nuanced middle ground between confirmation and contradiction.

Implications of Findings

The findings of this study provide significant implications for both the scientific community and practical healthcare delivery. From an academic perspective, the research highlights the importance of considering the emotional and psychological experiences of patients in the context of chronic disease management (Rendrayani et al., 2023). Specifically, the theme of unaddressed emotional burden implies that future theoretical models of medication adherence must integrate psychological safety alongside informational clarity. The contrasting perceptions of generics suggest that communication interventions should not only educate but also target underlying trust and stigma issues, while the inconsistency in pharmacist consultations points to the need for systemic training and standardization. From a practical standpoint, healthcare providers, particularly pharmacists, can leverage these insights to improve their patient interactions. For example, the sub-theme where patients felt more adherent when pharmacists acknowledged emotional distress directly links to the implication that empathy training should be incorporated into continuing professional education. Similarly, findings on reminder calls directly inform scalable interventions such as pharmacy-based digital follow-up systems, which contrast with current literature that often assumes self-motivation suffices for adherence. Understanding the emotional burden that patients face, particularly in relation to managing side effects, can lead to more empathetic and supportive care. For instance, enhancing communication about potential side effects and providing reassurance can help alleviate anxiety and improve patient engagement (Livingston et al., 2021). These findings are particularly relevant in the context of chronic disease management, where long-term adherence is crucial, and they emphasize the need for healthcare systems to move beyond simply prescribing medications and focus more on personalized, patient-centered care.

Limitations of the Study

While this study provides valuable insights, there are limitations that should be considered when interpreting the findings. One limitation is the relatively small sample size, which may not fully represent the broader population of patients with chronic conditions or healthcare providers. Although the purposive sampling strategy ensured that participants had relevant experiences, the findings may not be generalizable to all patient groups or healthcare settings (Shayo et al., 2023). Additionally, the study was limited to a specific geographical region, which could introduce cultural and contextual biases that may not apply universally. Another limitation is the reliance on self-reported data, which, despite efforts to ensure honesty and openness, could be influenced by recall bias or social desirability bias (Dhaliwal et al., 2023). These limitations highlight the need for further research with larger and more diverse samples to validate and expand upon the findings presented here.

Prospects for Future Research

The findings of this study open several avenues for future research. One potential direction is to explore how different healthcare settings, such as public versus private healthcare, might influence the experiences of patients and healthcare providers regarding medication management (Li et al., 2023). Another is to test interventions derived directly from our themes, such as structured empathy protocols in pharmacist consultations or tailored educational campaigns addressing myths about generics. Contrasting outcomes from such interventions could be compared across cultural contexts, especially in light of our finding that social narratives influence medication perceptions differently than reported in prior studies. Future studies could also investigate the role of social support networks in shaping patients’ perceptions of medication and their adherence to treatment. Another important area for exploration is the impact of cultural beliefs on the experience of medication, particularly in diverse populations (Tahsin et al., 2025). Additionally, research could examine the effectiveness of interventions designed to improve pharmacist-patient communication, particularly in alleviating the emotional burden associated with chronic disease management. By extending this research, scholars can further illuminate the complex factors that affect patient behavior and contribute to more effective healthcare practices

CONCLUSION

This study explored the lived experiences of patients and healthcare providers in the context of medication management for chronic diseases. The findings revealed that patients' emotional and psychological experiences, including concerns about side effects, play a critical role in medication adherence. Clear communication, empathetic support, and personalized care were identified as key factors that enhance patient engagement and treatment adherence. The novel contribution of this study lies in demonstrating how emotional validation and psychological safety—not merely information delivery—serve as decisive elements in shaping adherence behavior, extending prior literature that has largely emphasized knowledge gaps and clinical outcomes. By integrating both patient and provider perspectives, this research uniquely illustrates how misalignment in expectations and communication styles directly undermines adherence, an angle rarely examined in previous studies.

In practical terms, the findings recommend that healthcare systems move beyond generic counseling and adopt structured empathy training for pharmacists and physicians, standardize consultation practices to reduce variability in patient experience, and incorporate low-cost interventions such as proactive follow-up calls or digital reminders into routine pharmaceutical services. Additionally, the study highlights the importance of targeted educational campaigns to address persistent misconceptions about generic medications, with the dual aim of improving trust and expanding access to affordable care. These insights address gaps in previous research, which often overlooked the subjective dimensions of medication use. By focusing on the personal meanings attached to treatment, this study offers a more holistic understanding of patient experiences, while also providing actionable strategies that can be directly applied in chronic disease management programs. Future research should build on these contributions by testing structured empathy protocols in real-world pharmacy settings, evaluating culturally tailored communication models, and measuring the long-term impact of adherence-support interventions across diverse healthcare systems.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

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