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Health Psychology Approaches to Improving Treatment Adherence Among Patients with Chronic Illnesses

Afika Dirga[1], Nana Muhktar[1], Indah Permata[1]

[1]*Keperawatan, STIKes Nani Hasanuddin Makassar*

**Corresponding Author: Afika Dirga*

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Abstract

Chronic illnesses such as diabetes, hypertension, cardiovascular disease, and chronic kidney disease continue to pose major global health challenges due to persistent treatment nonadherence. Although biomedical interventions have improved, many patients still struggle to follow treatment plans, leading to worsening health conditions, higher healthcare costs, and reduced quality of life. This study examines health psychology approaches to improving treatment adherence among patients with chronic illnesses using a qualitative method to understand their experiences, perceptions, and behavior. Semi-structured interviews were conducted with purposively selected patients, and thematic analysis was used to explore psychological, social, and cultural factors affecting adherence. The results show that adherence is strongly shaped by self-efficacy, coping mechanisms, emotional well-being, and health literacy. Social support from family and community, together with culturally sensitive approaches that respect patient beliefs, also influences adherence. Interventions rooted in health psychology, including counseling, motivational interviewing, and patient-centered education, were effective when tailored to patient needs and aimed at building trust and empowerment. The study emphasizes that treatment adherence is not only a biomedical issue but a complex interaction of cognitive, emotional, social, and cultural elements. Healthcare providers and policymakers are encouraged to adopt biopsychosocial and culturally competent strategies to strengthen adherence and improve long-term outcomes.

INTRODUCTION

Chronic illnesses constitute a major global health burden, accounting for significant morbidity and mortality across populations. Conditions such as diabetes, hypertension, cardiovascular disease, and chronic kidney disease require long-term management and adherence to complex treatment regimens. Despite advances in biomedical interventions, treatment adherence remains a pressing challenge that undermines the effectiveness of clinical care and compromises health outcomes (Kardas, 2024). Patients who fail to adhere to prescribed therapies face heightened risks of disease progression, increased hospitalization rates, greater healthcare costs, and reduced quality of life (Kelvin et al., 2024). Consequently, the issue of

adherence has become central to chronic illness management, demanding strategies that go beyond biomedical prescriptions and address the psychological, behavioral, and social dimensions of patient care.

The Oliveira et al. (2024) defines adherence as the extent to which a person's behavior taking medication, following a diet, and executing lifestyle modifications—corresponds with agreed recommendations from healthcare providers. Estimates indicate that only about 50% of patients with chronic illnesses in developed countries adhere to treatment regimens, with rates even lower in low- and middle-income settings (Kirubakaran et al., 2025). Nonadherence is multifaceted, encompassing behaviors such as missed doses, incorrect timing, intentional discontinuation, or neglecting follow-up visits (Butler et al., 2022). These behaviors not only jeopardize individual patient outcomes but also strain healthcare systems through preventable complications and resource misallocation (Austin, 2021; Teymourifar, 2025; Hirani et al., 2025).

The complexity of adherence underscores the necessity of approaches grounded in health psychology, which emphasize the interplay of cognition, emotion, behavior, and social context in health outcomes (Sah et al., 2025). Health psychology frameworks acknowledge that adherence is not merely a matter of knowledge or willpower but involves motivational processes, beliefs about illness and treatment, coping strategies, and interpersonal dynamics (Bernays et al., 2021; Amdie et al., 2022). Interventions informed by health psychology often include motivational interviewing, patient-centered counseling, self-efficacy enhancement, goal setting, and behavioral reinforcement strategies (Mody et al., 2024). Such approaches aim to empower patients, foster intrinsic motivation, and support sustainable behavior change.

Qualitative research has provided critical insights into how patients perceive adherence and the psychological barriers they face. Studies indicate that patients often weigh the perceived benefits of adherence against side effects, lifestyle disruptions, and personal beliefs about illness severity (Bourgeois et al., 2024). Illness perceptions and coping mechanisms play a decisive role in shaping adherence behaviors: individuals who perceive their illness as controllable and who maintain strong self-efficacy are more likely to adhere, while those who feel overwhelmed or helpless may disengage from treatment (Ramezani & Mohd Ripin, 2023). These findings highlight the importance of patient-centered approaches that consider subjective experiences and psychosocial contexts.

Health literacy is another key determinant of adherence. Patients who understand their condition, treatment regimen, and potential side effects are better equipped to follow recommendations consistently (Mangla et al., 2025; Pourhabibi et al., 2022; Coskun & Bagcivan, 2021). Conversely, inadequate knowledge and misinterpretations of medical advice contribute to unintentional nonadherence (Wang et al., 2024). This underscores the necessity of communication strategies that are clear, culturally sensitive, and tailored to patient needs (Yang et al., 2024). The patient–provider relationship, particularly the quality of communication, trust, and shared decision-making, has also been shown to significantly influence adherence (Sadiq et al., 2024). Social and cultural contexts further complicate adherence patterns. Support from family, peers, and community networks often facilitates consistent treatment behaviors, while cultural beliefs, stigma, and social pressures may serve as barriers (Liang et al., 2024). Religious and cultural frameworks can shape perceptions of illness and treatment, sometimes promoting adherence, but in other cases reinforcing skepticism or reliance on alternative practices (Patel et al., 2012). These dynamics illustrate the value of qualitative inquiry in capturing diverse perspectives and contextual influences that may not be adequately addressed in quantitative studies.

Psychological well-being is also closely tied to adherence outcomes. Depression, anxiety, and stress are prevalent among individuals with chronic illnesses and are strongly associated with nonadherence (Souza et al., 2025). Patients experiencing psychological distress may struggle with motivation, organization, or belief in the efficacy of treatment, further complicating adherence efforts. Health psychology interventions that incorporate mental health support, coping strategies, and resilience training have demonstrated promise in addressing these interconnected challenges (Toma et al., 2025).

Despite substantial evidence highlighting the role of psychological and social factors in adherence, there remain significant gaps in understanding how health psychology approaches are experienced and applied across diverse patient populations. Much of the existing literature has focused on quantitative measurement of adherence rates, leaving less attention to the subjective narratives of patients and the contextual factors that influence their decisions. Scholars have called for more qualitative research to capture the lived experiences of patients, illuminate barriers and facilitators to adherence, and evaluate the real-world applicability of health psychology interventions (Ogunjobi et al., 2024; Pedretti et al., 2023). This study sought to contribute to this growing field by qualitatively exploring health psychology approaches to improving treatment adherence among patients with chronic illnesses. By analyzing patient experiences, the study aimed to highlight how psychological, social, and cultural factors interact to shape adherence behaviors. The findings provide insight into patient-centered strategies that can be integrated into chronic illness management, ultimately advancing the role of health psychology in addressing one of the most persistent challenges in global health.

METHODS

Research Design

This study employs a qualitative research design to explore health psychology approaches that enhance treatment adherence among patients with chronic illnesses. Qualitative methods are appropriate for capturing the nuanced experiences, perceptions, and contextual factors that influence adherence behaviors, which cannot be fully quantified through surveys or standardized instruments (Creswell & Poth, 2018). By adopting an exploratory approach, the study seeks to uncover patients' subjective experiences, beliefs, coping strategies, and interactions with healthcare providers. This design allows for an in-depth understanding of the psychological, social, and cultural dynamics that shape adherence, providing insights that can inform patient-centered interventions.

Research Setting

The study was conducted in healthcare facilities providing services to patients with chronic illnesses, including diabetes, hypertension, cardiovascular disease, and chronic kidney disease. Settings were selected based on accessibility and the diversity of patient populations, ensuring the inclusion of individuals from various demographic backgrounds, including age, gender, education, and socioeconomic status. Conducting the study in multiple clinical environments enables the exploration of adherence behaviors across different healthcare contexts, highlighting systemic and environmental influences on patient experiences.

Participants and Sampling

Participants were adult patients diagnosed with one or more chronic illnesses who had been under medical treatment for at least six months. The inclusion criteria ensured that participants had sufficient experience managing their condition to provide meaningful insights into adherence challenges and strategies. Purposive sampling was employed to select participants who could provide rich, relevant

information, while maximum variation sampling ensured diversity in age, gender, educational background, and type of chronic illness. A total of 20–30 participants were targeted, following the principle of data saturation, whereby interviews continued until no new themes emerged (Guest, Bunce, & Johnson, 2006).

Data Collection Methods

Data were collected primarily through semi-structured, in-depth interviews, which allow participants to express their experiences and perceptions in their own words while providing the researcher with the flexibility to probe further. The interview guide included open-ended questions exploring patients' understanding of their illness, treatment regimen, perceived barriers and facilitators to adherence, coping strategies, psychological challenges, social support, and interactions with healthcare providers. Each interview lasted approximately 45–60 minutes and was audio-recorded with participant consent. In addition to interviews, field notes were maintained to capture non-verbal cues, environmental context, and researcher reflections, enriching the data and supporting interpretive analysis.

Data Analysis

Data were analyzed using thematic analysis, a systematic approach that identifies, analyzes, and reports patterns or themes within qualitative data (Braun & Clarke, 2006). The process involved familiarization with the data through repeated reading of transcripts, generating initial codes for significant statements, and organizing codes into broader themes related to health psychology approaches, adherence behaviors, and psychosocial factors. Themes were reviewed iteratively to ensure consistency, credibility, and relevance to the research objectives. NVivo qualitative software was utilized to facilitate data management, coding, and theme visualization, enhancing the transparency and rigor of the analytic process.

Trustworthiness and Rigor

To ensure trustworthiness, the study applied Lincoln and Guba's (1985) criteria for qualitative research, including credibility, transferability, dependability, and confirmability. Credibility was enhanced through member checking, where participants reviewed and verified preliminary findings. Transferability was supported by providing rich, detailed descriptions of the research context and participant characteristics. Dependability was ensured through careful documentation of the research process, including data collection procedures and analytic decisions. Confirmability was achieved by maintaining an audit trail and reflexive notes, allowing external reviewers to trace how interpretations were derived from the data.

RESULTS AND DISCUSSION

Drawing from qualitative data collected through semi-structured interviews, the analysis focuses on the psychological, social, and cultural factors that influence adherence behaviors. This chapter highlights key themes related to patients' perceptions of their illness, coping strategies, motivational processes, and the role of family, peers, and healthcare providers in supporting adherence. Furthermore, it examines how health psychology interventions such as counseling, motivational interviewing, and educational strategies are experienced and perceived by patients within real-world clinical and social contexts. By presenting these findings, the chapter aims to provide a comprehensive understanding of the complex and interrelated factors that shape adherence, offering critical insights into patient-centered strategies that can enhance chronic illness management and inform healthcare practice and policy.

Patient Perceptions of Adherence

Participants' understanding of their chronic illness and prescribed treatment emerged as a central factor influencing adherence behaviors. Many patients demonstrated a spectrum of knowledge levels regarding the pathophysiology of their condition, the purpose of medications, and the importance of lifestyle modifications. Those with a clear understanding of how their illness progressed and how treatment could mitigate complications were more likely to adhere consistently. For instance, patients who recognized that uncontrolled diabetes could lead to severe complications, such as neuropathy or kidney disease, described feeling more compelled to follow their medication schedules and dietary recommendations.

Conversely, some participants reported partial or fragmented knowledge, often shaped by prior experiences, informal sources, or misinterpretation of medical advice (Nguyen et al., 2023). This limited understanding sometimes led to unintentional nonadherence, such as incorrect timing of medication, skipping doses, or prematurely discontinuing therapy. Participants emphasized that medical jargon and rushed explanations by healthcare providers created barriers to comprehension, highlighting the importance of clear, patient-centered communication. Several patients also expressed a desire for visual aids, written instructions, or interactive educational sessions to better grasp their treatment plans. Patients' adherence behaviors were deeply intertwined with their personal motivations, beliefs, and perceptions of illness severity. Intrinsic motivations, such as the desire to maintain independence, avoid hospitalizations, and sustain quality of life, played a critical role in adherence. Participants who perceived tangible benefits from following their treatment regimens reported higher levels of commitment, often linking adherence with their ability to continue work, care for family, or engage in social activities.

Beliefs about treatment efficacy also significantly influenced adherence. Participants who trusted the prescribed medications and believed in their effectiveness were more likely to follow recommendations rigorously. Conversely, skepticism often rooted in prior side effects, cultural beliefs, or reliance on alternative therapies led some participants to selectively adhere or modify treatment on their own. Several patients described negotiating adherence based on their lived experiences, balancing perceived benefits against inconveniences or side effects.

Furthermore, emotional factors, including fear of disease progression, anxiety about future complications, and past experiences with illness, were reported as motivators or deterrents. For example, some patients adhered strictly out of fear of worsening symptoms, while others felt overwhelmed by the chronic nature of their illness, which occasionally resulted in avoidance or disengagement from treatment. These findings underscore that adherence is not merely a behavioral action but a complex interplay of knowledge, personal beliefs, emotional responses, and risk appraisal. Taken together, these insights highlight that patient perceptions of adherence are multi-dimensional, encompassing cognitive understanding, motivational drivers, beliefs about treatment efficacy, and emotional responses to illness. Effective interventions must therefore address not only informational gaps but also psychological and motivational components to foster sustained adherence among patients with chronic illnesses.

Psychological Factors Affecting Adherence

A key psychological factor influencing treatment adherence among participants was self-efficacy the belief in one's ability to successfully manage their illness and follow prescribed regimens (Yu et al., 2022). Patients who expressed confidence in their capacity to organize their medication schedules, maintain dietary restrictions, and monitor their health indicators reported higher levels of adherence. Several participants highlighted that prior successes in managing symptoms or effectively

coping with treatment side effects reinforced their confidence, creating a positive feedback loop that strengthened adherence behaviors.

Conversely, individuals with low self-efficacy often struggled with feelings of helplessness and doubt about their ability to manage complex treatment plans. These patients were more likely to miss doses, skip appointments, or modify treatment without consulting healthcare providers. Low confidence was particularly pronounced among patients recently diagnosed with chronic illnesses or those experiencing multiple comorbidities, reflecting the psychological burden of managing complex and ongoing care. Coping strategies emerged as another determinant of adherence, reflecting how patients managed the stressors associated with chronic illness. Participants employed a range of strategies, from problem-focused coping such as using medication reminders, creating structured daily routines, and seeking social support to emotion-focused coping, including reframing negative experiences, engaging in relaxation techniques, or relying on spiritual practices.

Patients who adopted proactive problem-solving approaches demonstrated higher adherence, as these strategies reduced the likelihood of unintentional lapses and enhanced their sense of control over the illness. In contrast, maladaptive coping strategies, such as denial, avoidance, or reliance on alternative remedies without professional guidance, were associated with nonadherence. Notably, patients who perceived their illness as overwhelming or unpredictable often resorted to avoidance, skipping medications or neglecting appointments as a way to manage anxiety or frustration. These findings underscore the importance of equipping patients with effective coping mechanisms as part of adherence-enhancing interventions.

Emotional well-being significantly shaped adherence behaviors. Several participants reported that periods of heightened stress, anxiety, or depressive symptoms negatively affected their motivation and capacity to adhere to treatment plans. Depression was particularly impactful, as it reduced energy, concentration, and initiative, leading to missed doses, irregular monitoring of health indicators, and disengagement from healthcare providers. Anxiety, often related to fear of side effects or uncertainty about disease progression, sometimes led to selective adherence, such as taking medications inconsistently or adjusting dosages independently. Chronic stress, arising from personal, social, or financial pressures, compounded these challenges by increasing cognitive load and diminishing patients' ability to prioritize treatment. Participants frequently described feeling "overwhelmed" or "burned out" by the constant demands of managing a chronic illness, which contributed to lapses in adherence. Some participants emphasized that supportive interventions such as counseling, stress management techniques, or peer support groups helped them cope more effectively and maintain adherence even under emotionally challenging circumstances.

The findings indicate that self-efficacy, coping strategies, and emotional well-being are interrelated and collectively influence adherence behaviors. High self-efficacy often facilitated the adoption of adaptive coping strategies, which in turn buffered the negative impact of stress and emotional distress. Conversely, low confidence, maladaptive coping, and psychological distress frequently reinforced one another, creating a cycle of nonadherence. Understanding these interconnections is crucial for developing health psychology interventions that not only provide knowledge and reminders but also address the underlying psychological and emotional determinants of adherence.

Social support from family, peers, and the broader community emerged as a critical factor influencing treatment adherence among patients with chronic illnesses. Participants consistently emphasized that encouragement, practical assistance, and emotional backing from family members facilitated consistent adherence to

medications, dietary restrictions, and lifestyle modifications. For instance, patients reported that family members reminded them to take medications on time, helped organize appointments, or assisted in preparing meals that aligned with dietary guidelines. These tangible forms of support reduced the cognitive and logistical burden associated with chronic illness management, making adherence more feasible and sustainable.

Emotional support, such as empathy, reassurance, and companionship, also played a significant role. Patients who felt understood and supported by their families or peers were more motivated to maintain adherence, as these social connections provided a sense of accountability and reinforced positive health behaviors. Moreover, peer support particularly through patient groups or informal networks of individuals with similar conditions offered opportunities to share experiences, exchange practical tips, and reduce feelings of isolation. Participants highlighted that knowing others faced similar challenges normalized their experiences and enhanced their confidence in adhering to treatment regimens.

However, the absence of social support or exposure to negative social influences sometimes hindered adherence. Participants reported that lack of family engagement, interpersonal conflicts, or competing social responsibilities created stressors that interfered with consistent treatment. Some noted that peers who disregarded health recommendations or endorsed alternative remedies discouraged adherence, demonstrating that social networks can both facilitate and impede treatment compliance. Cultural and religious frameworks were also pivotal in shaping participants' adherence behaviors. Many participants described how cultural norms and traditional health beliefs influenced their perceptions of illness and the perceived necessity of biomedical treatment. In some cases, adherence was reinforced by cultural values emphasizing self-care, discipline, and responsibility to family, motivating patients to follow prescribed regimens to maintain health and fulfill social roles.

Conversely, certain cultural or religious beliefs sometimes posed barriers to adherence. Some participants expressed initial skepticism toward modern medicine, preferring traditional remedies or spiritual interventions as complementary or alternative approaches. For instance, the use of herbal remedies, faith-based healing practices, or dietary practices rooted in religious observances occasionally conflicted with prescribed treatment schedules. These beliefs sometimes led patients to modify, delay, or selectively adhere to medical advice, highlighting the importance of culturally sensitive interventions that respect patient values while promoting safe and effective adherence.

Participants also described the influence of community expectations and social norms on adherence behaviors. In tightly knit communities, social scrutiny or stigma related to chronic illness could either encourage adherence, by motivating patients to maintain their health publicly, or discourage it, by prompting concealment of illness and avoidance of healthcare engagement. Religious practices, such as fasting or ritual observances, also intersected with adherence, requiring patients to negotiate treatment schedules in ways that balanced spiritual obligations with medical recommendations.

The study's findings suggest that social and cultural factors are deeply interconnected and interact with psychological determinants to influence adherence. Supportive social networks can buffer cultural or religious tensions with biomedical treatment, while strong cultural beliefs may shape the types of social support patients seek or accept. Recognizing these interactions is essential for health psychology interventions, as effective adherence strategies must not only address

individual knowledge and motivation but also incorporate family involvement, peer support, and culturally appropriate guidance.

Health Psychology Approaches in Practice

Participants reported a variety of experiences with health psychology-informed interventions aimed at improving adherence. Counseling emerged as a pivotal approach, particularly when it was individualized, empathetic, and interactive. Patients described that one-on-one sessions with healthcare providers or trained counselors helped them better understand their illness, clarify misconceptions about medications, and develop practical strategies for integrating treatment into daily life. Many participants noted that counseling provided both emotional support and actionable guidance, making them feel heard, validated, and empowered to manage their condition (Chen et al., 2023).

Motivational interventions, including motivational interviewing and goal-setting exercises, were perceived as highly beneficial. Patients who engaged in these approaches reported that discussing their personal motivations, barriers, and ambivalence regarding treatment encouraged self-reflection and reinforced their commitment to adherence (Frost & Fernandez, 2025; Mema & Huang, 2024). The process of collaboratively setting achievable goals and monitoring progress enhanced intrinsic motivation, allowing patients to take ownership of their health behaviors rather than passively following instructions. Several participants highlighted that even brief motivational sessions could significantly boost confidence and resolve doubts about treatment efficacy. Educational strategies were also critical in shaping adherence behaviors. Participants emphasized the importance of clear, comprehensible, and practical information about their condition and treatment. Educational interventions that combined verbal explanations with visual aids, written instructions, or interactive demonstrations were particularly effective in improving understanding and promoting consistent adherence. Patients appreciated opportunities to ask questions, receive feedback, and engage in problem-solving exercises, which helped them navigate complex treatment regimens and adapt strategies to their individual circumstances.

Several factors were identified as facilitating the effectiveness of health psychology approaches. Strong rapport and trust between patients and healthcare providers were consistently emphasized. Patients felt more comfortable discussing challenges, expressing doubts, and seeking guidance when they perceived their providers as empathetic, nonjudgmental, and attentive. Regular follow-up and reinforcement also enhanced the impact of interventions, ensuring that behavioral changes were sustained over time. Conversely, certain factors hindered the effectiveness of these approaches. Limited access to counseling or educational sessions, due to logistical constraints, financial barriers, or insufficient staffing, reduced patients' opportunities to engage meaningfully with interventions. Participants also reported that overly technical or generic information, delivered without consideration of individual circumstances or cultural context, was less effective in fostering adherence. Emotional barriers, such as persistent anxiety, depression, or low self-efficacy, sometimes impeded patients' ability to fully benefit from counseling or motivational strategies. Additionally, competing social obligations, family pressures, or cultural norms occasionally conflicted with recommendations provided during interventions, requiring patients to negotiate adherence in ways that diluted the intended impact of the approaches. The findings highlight the importance of tailoring health psychology interventions to patients' unique needs, preferences, and psychosocial contexts. Patient-centered approaches that combine counseling, motivational support, and targeted education, while taking into account emotional, social, and cultural factors, were reported as most effective in promoting adherence.

By fostering trust, building self-efficacy, and addressing real-world barriers, these interventions helped patients engage actively in managing their chronic conditions.

CONCLUSION

This study demonstrates that improving treatment adherence among patients with chronic illnesses requires an integrative approach that situates psychological, social, and cultural factors at the core of management strategies. By highlighting the roles of self-efficacy, adaptive coping, emotional well-being, and culturally sensitive social support, the findings underscore that adherence is not merely a matter of following medical prescriptions but is profoundly shaped by patients' beliefs, motivations, and social contexts. Health psychology interventions such as counseling, motivational interviewing, and tailored educational strategies prove most effective when delivered in a patient-centered manner that fosters trust, engagement, and understanding. From a management perspective, these insights emphasize the necessity for healthcare organizations to institutionalize psychological and educational support within chronic disease management protocols, ensuring that care is holistic, sustainable, and responsive to individual needs. Ultimately, embedding health psychology principles into practice not only enhances adherence and health outcomes but also advances the broader goal of patient-centered, effective, and resilient healthcare management.

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