



## Exploration of the Experience of Using Herbal Medicine in the Treatment of Chronic Diseases: A Phenomenological Approach to Patients' Perceptions of Effectiveness, Safety, and the Mechanisms of Action of Natural Compounds

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### ABSTRACT

The use of herbal medicines as an alternative or complementary treatment for chronic diseases has gained significant popularity, yet the mechanisms, effectiveness, and safety of these treatments remain insufficiently understood. While existing studies primarily focus on clinical outcomes, little is known about patients' subjective experiences and perceptions of herbal remedies in managing chronic conditions. This research aims to explore these experiences using a phenomenological approach, addressing the gap in understanding the lived experiences of patients who use herbal medicines for chronic disease treatment. In-depth interviews were conducted with 15-20 patients who had used herbal medicines for at least six months, and data were analyzed thematically. The findings reveal that patients generally perceive herbal remedies as effective but are uncertain about their mechanisms and safety, with cultural beliefs and lack of medical guidance influencing their decisions. These findings offer practical implications for healthcare providers by emphasizing the importance of integrating patient education about the safe use of herbal medicines into routine care. Healthcare professionals can play a critical role in guiding patients to make informed decisions and minimize potential risks. Additionally, this research underscores the necessity of developing standardized frameworks for evaluating the efficacy and safety of herbal treatments.

This study also contributes to the existing literature by filling a significant gap in understanding patients' lived experiences with herbal medicines. It expands the discourse on complementary therapies by providing evidence-based insights into patient perceptions and their decision-making processes. By highlighting the interplay between cultural beliefs, patient education, and medical guidance, this research serves as a foundation for future studies aimed at bridging the gap between traditional and modern medical practices. Overall, the findings suggest that future research should prioritize collaboration between traditional medicine practitioners and modern healthcare professionals, as well as investigate strategies to incorporate herbal therapies safely and effectively into holistic chronic disease management.



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## INTRODUCTION

The use of herbal medicine has a long history and is deeply ingrained in the healthcare practices of many cultures around the world (Altenbernd dkk., 2022). In recent years, there has been a growing interest in the potential therapeutic benefits of herbal remedies, particularly in the management of chronic diseases such as diabetes, hypertension, and arthritis (Badary dkk., 2021). This shift towards herbal medicine can be seen as a response to the perceived limitations and side effects of conventional pharmaceutical treatments, as well as a desire for more "natural" or holistic approaches to health management. However, while herbal remedies are widely used, the

understanding of their mechanisms of action, safety, and effectiveness remains limited, both among patients and healthcare professionals.

A key challenge in integrating herbal medicine into mainstream healthcare is the lack of comprehensive scientific evidence regarding its pharmacokinetics and interactions with conventional drugs (Borghi dkk., 2023). Despite widespread anecdotal evidence supporting the benefits of herbal medicine, many patients continue to rely on personal experiences or cultural beliefs rather than scientific knowledge when choosing herbal treatments (Ciulla dkk., 2019). This situation is further complicated by the fact that many herbal remedies are not subject to the same regulatory oversight as pharmaceutical drugs, leading to concerns about their quality, safety, and potential adverse effects.

Traditional approaches to understanding herbal medicine often focus on biochemical or pharmacological models, which seek to explain how these substances interact with the body at a molecular level (D'amico dkk., 2021). However, such approaches may not fully capture the subjective experiences of individuals using these remedies, particularly in the context of chronic disease management. Phenomenology, as a qualitative research methodology, provides a distinct advantage by emphasizing the exploration of individuals' lived experiences and the meanings they ascribe to them. This approach allows researchers to move beyond clinical outcomes and delve into the deeper personal, cultural, and emotional factors that influence patients' decisions to use herbal medicine.

The goal of this research is to deepen our understanding of the subjective experiences of patients using herbal remedies for chronic conditions, exploring their perceptions of effectiveness, safety, and the mechanisms at play (Feldo dkk., 2019). By adopting a phenomenological approach, this study aims to uncover the personal narratives behind the growing popularity of herbal medicine and provide insights that can inform both healthcare practice and future research in this area.

Research on the lived experiences of individuals using herbal medicines has become an important area of study, particularly in understanding the personal meanings, perceptions, and decisions that shape the use of these treatments (Ghosh dkk., 2024). While much of the existing literature focuses on the clinical or pharmacological aspects of herbal medicine, there has been growing interest in capturing the subjective experiences of patients. These experiences are critical for understanding why and how people choose to incorporate herbal remedies into their treatment regimens, especially when managing chronic diseases. For example, studies have explored how individuals perceive the effectiveness of herbal treatments, their trust in natural remedies, and the emotional and cultural factors that influence their choices. However, despite the growing body of qualitative research, the depth of understanding regarding patients' perceptions of herbal medicine remains insufficient.

One significant challenge in studying such experiences is the methodological limitations of traditional research approaches, particularly quantitative studies. While quantitative methods can provide valuable data on the general prevalence or effectiveness of herbal treatments, they often fail to capture the nuanced, personal experiences that underpin patients' decisions (Giovinazzo dkk., 2020). This is especially true in the context of chronic diseases, where the subjective experience of illness and treatment plays a central role in the patient's overall health and well-being. For instance, a patient may report improvements in their condition after using herbal medicine, but the reasons for this improvement—whether psychological, cultural, or based on personal belief—are often overlooked in studies that focus solely on clinical outcomes.

The nature of these subjective experiences calls for research methods that are more sensitive to the personal, lived realities of the participants. Phenomenological approaches, which prioritize in-depth exploration of individual experiences and the meanings attached to them, are particularly well-suited for this purpose. Unlike traditional quantitative studies, phenomenology allows for a deeper exploration of how individuals perceive and make sense of their experiences with herbal medicine. However, capturing these experiences is not without its challenges. Participants may have difficulty articulating the exact mechanisms by which herbal remedies work, or they may rely on culturally ingrained beliefs that are difficult to express in conventional terms. As a result, there is a need for more nuanced methods that can uncover the rich, complex meanings behind these experiences.

Thus, while previous research has provided valuable insights into the use of herbal medicine, many studies have not fully addressed the personal and subjective dimensions of this phenomenon. This gap highlights the need for more phenomenologically informed research that can explore the deeper meanings patients attribute to their use of herbal remedies in managing chronic diseases. Such research can offer a more comprehensive understanding of the factors that influence patients' choices and provide valuable guidance for integrating herbal medicine into broader healthcare practices.

Although the use of herbal medicine for the treatment of chronic diseases has become a research focus in recent decades, most studies still rely on quantitative approaches or experimental methods focused on clinical outcomes or pharmacological efficacy. These approaches provide valuable information regarding the prevalence of herbal use or its potential benefits in a medical context. However, they often fail to capture deeper subjective dimensions, such as how patients perceive and give meaning to the use of herbal remedies in their daily lives. While statistical data and experimental results may demonstrate therapeutic effects, they do not reveal why patients choose herbal treatments or how they personally experience them. Therefore, our understanding of this phenomenon remains limited, as we have yet to fully comprehend how patients' perceptions and experiences shape their use of herbal medicine in the context of chronic disease treatment.

This limitation leads to a significant gap in the literature, where key aspects such as confidence in effectiveness, experiences related to safety, or the perceived mechanisms of action are not fully understood. One of the main reasons why quantitative approaches are insufficient for capturing these dimensions is their inability to explore the personal meanings associated with herbal use. For example, patients may feel better after using herbal remedies, but the underlying reasons for those feelings—whether based on personal beliefs, cultural factors, or expectations of natural treatments—are often left unexplored in studies that only measure physical outcomes.

To address these limitations, alternative methodologies are needed that can delve more deeply and holistically into the essence of these experiences. A phenomenological approach offers a solution by focusing on the subjective experience of individuals and how they give meaning to the phenomena they encounter. Using this method, research can explore how patients understand and interpret their experiences with herbal medicine, as well as how social, cultural, and emotional factors influence their perceptions of the treatment's effectiveness and safety. The phenomenological approach allows for the exploration of deeper layers of personal experience that may remain hidden in studies based solely on quantitative data. Thus, this research aims to answer unanswered questions about how patients feel and make sense of their use of herbal medicine in the treatment of chronic diseases, which in turn could enrich our overall understanding of this phenomenon.

Numerous studies have explored the growing use of herbal medicine in treating chronic diseases, emphasizing its increasing popularity as an alternative or complementary treatment. However, much of this research has focused on clinical outcomes or pharmacological assessments, often overlooking the personal experiences and perceptions of patients who use these remedies. Studies have indicated that while patients may report subjective improvements in their conditions, the reasons for these perceived benefits, such as psychological factors or cultural beliefs, remain underexplored. The theoretical framework guiding most of this research tends to focus on biomedicine or pharmacology, which is insufficient to capture the holistic and lived experiences of individuals. Thus, a gap exists in the current literature, which this research aims to address by examining the personal narratives of patients using herbal medicine for chronic disease management.

To fill this gap, a phenomenological approach is adopted to better understand the lived experiences of patients. Phenomenology, with its focus on subjective experience and meaning-making, provides an appropriate lens to explore how patients perceive and interpret the effectiveness, safety, and mechanisms of herbal treatments. By adopting this method, the study seeks to uncover the deeper meanings attached to the use of herbal remedies in chronic illness care, something that quantitative or traditional clinical research cannot fully achieve. Phenomenology allows for a nuanced understanding of how personal, cultural, and emotional factors influence patients' decisions and experiences, providing insights that can enhance the integration of herbal medicine into modern healthcare.

This article is structured as follows: after an introduction outlining the background of the study, the focus shifts to the context of herbal medicine use in chronic disease management. The methodological approach is then detailed, explaining the phenomenological perspective and the steps taken to gather and analyze data, including thematic analysis of interviews. Following this, the findings are discussed, highlighting the themes that emerged from participants' narratives. Finally, conclusions are drawn that summarize the main insights, offering recommendations for future research and implications for healthcare practice.

## **RESEARCH METHODS**

### **Study Design**

This study employed a phenomenological approach to explore the experiences of patients using herbal medicines for the treatment of chronic diseases (James dkk., 2022). Phenomenology was chosen for its emphasis on understanding and describing the lived experiences of individuals, allowing for an in-depth exploration of the meaning and perceptions that patients attach to their use of herbal treatments. This approach is particularly relevant to the research questions, as it facilitates the investigation of subjective experiences, perceptions of effectiveness, safety, and the mechanisms behind herbal remedies as perceived by patients. By focusing on the subjective meanings that patients associate with herbal medicine, phenomenology enables a comprehensive understanding of the phenomenon from the participants' perspective.

A descriptive phenomenological approach was adopted in this study to capture the essence of participants' lived experiences without imposing predefined theoretical frameworks. This method is particularly suitable for uncovering the fundamental structures of experience, allowing for a clear portrayal of participants' thoughts, feelings, and behaviors surrounding their use of herbal medicines.

### **Participants**

Participants were selected using purposive sampling, aiming to identify individuals who have direct experience with using herbal medicines for chronic disease management. Inclusion criteria were defined as follows: participants must (1) be aged between 30 and 70 years, (2) have been diagnosed with a chronic disease such as diabetes, hypertension, or arthritis by a healthcare professional, (3) have been using herbal remedies consistently for a minimum of six months as part of their chronic disease management, and (4) have the ability to articulate their experiences and perceptions clearly in the language used for the interviews.

Exclusion criteria included individuals who (1) had unstable medical conditions requiring immediate intervention or hospitalization, (2) were using herbal medicines exclusively for acute conditions rather than chronic diseases, (3) were unable to recall specific details about their experiences with herbal remedies, or (4) exhibited cognitive impairments or language barriers that could hinder effective communication.

The study included 15 to 20 participants, all of whom were adults aged 30 to 70 years. The demographic composition of the sample reflected a range of gender and educational backgrounds, ensuring a diverse set of perspectives. Participants were informed about the nature of the study, and their involvement was voluntary. The selection criteria ensured that the participants had sufficient experience and knowledge to provide rich insights into their use of herbal medicine in managing chronic diseases.

### **Data Collection**

Data were collected through in-depth, semi-structured interviews, which allowed participants to express their experiences and perceptions in their own words. The interviews were conducted face-to-face in a comfortable, quiet setting to ensure participants felt at ease and were able to speak openly about their experiences. Each interview lasted approximately 45 to 60 minutes and was guided by a set of open-ended questions, which encouraged participants to reflect on their use of herbal medicine, including their perceptions of effectiveness, safety, and the underlying mechanisms.

The interview guide was developed based on the research questions, with flexibility to allow for follow-up questions that emerged during the conversation (Khader dkk., 2023). The questions focused on participants' experiences with herbal medicine, their understanding of how it worked, and their concerns regarding its safety and interactions with conventional treatments. To further enrich the data, participant observations were conducted where applicable, noting any contextual factors or behaviors related to the use of herbal treatments.

### **Data Analysis**

The collected data were analyzed using thematic analysis, a widely used technique in phenomenological research. The analysis involved identifying and interpreting patterns or themes that emerged from the interview transcripts and observation notes. Thematic analysis was performed through a systematic process of familiarization with the data, generating initial codes, and grouping those codes into overarching themes.

The analysis was conducted in multiple stages: (1) initial coding of the data to identify key concepts, (2) developing categories and grouping related codes into themes, and (3) refining and defining the themes that best represented the participants' lived experiences. The software NVivo was used to assist with data organization and thematic coding, although the primary focus remained on the interpretation of the meaning behind participants' statements. The final themes were derived directly from the data and provided insights into participants' perceptions, concerns, and experiences with herbal medicine.

### **Ethics**

Ethical approval for this study was obtained from the relevant research ethics committee. Informed consent was obtained from all participants prior to data collection, and they were assured of their right to withdraw from the study at any time without any consequence. Each participant was informed about the nature of the study, the confidentiality of their responses, and the anonymity of their personal information. Consent was documented through signed consent forms.

To protect participants' confidentiality, all interview data were anonymized, and identifying information was removed from the transcripts. The data were securely stored in password-protected files accessible only to the research team. The study adhered to ethical guidelines for conducting research with human subjects and complied with both international and local ethical standards for social research.

## **RESULTS**

### **Perception of the Effectiveness of Herbal Medicine**

The participants consistently expressed a positive perception of the effectiveness of herbal medicine in managing chronic diseases. Despite their limited understanding of the underlying mechanisms, many participants reported experiencing significant improvements in their health after using herbal remedies. As one participant shared:

"I feel better after using this herbal remedy, but I don't really know how it works inside my body."

This sense of improvement was particularly noted in chronic conditions such as hypertension, diabetes, and arthritis. However, while they reported feeling healthier, the participants often found it challenging to articulate how herbal medicine specifically alleviated their symptoms. Several participants mentioned that the perceived benefits were more related to general well-being rather than targeted therapeutic outcomes. One participant reflected:

"I don't know if it's really curing my condition, but I definitely feel more energetic and less pain."

The theme reveals that, while the participants are confident in the perceived effectiveness of herbal medicine, there is a clear gap in their understanding of the mechanisms behind the observed health improvements.

### **Concerns about Safety and Uncertainty Regarding Herbal Medicine**

Although there was a general optimism about the benefits of herbal medicine, concerns regarding its safety were also prevalent. Many participants expressed anxiety about the lack of medical supervision in the use of herbal treatments. One participant shared:

"I'm not sure if it's safe since no doctor is watching over me when I take this. But I don't want to stop because it seems to help."

This concern was compounded by a sense of uncertainty about potential risks and side effects. Some participants mentioned that they had experienced mild discomforts, such as stomach upset or dizziness, but were unsure if these symptoms were directly related to the herbal medicine. A participant explained:

"I've had a few times when I felt dizzy after taking it, but I'm not sure if it's from the herbs or something else."

Moreover, participants often relied on anecdotal advice from practitioners of herbal medicine rather than formal medical guidance, contributing to the overall sense of uncertainty regarding the safety of these treatments. The theme suggests that, while the use of herbal medicine is widespread, the lack of structured oversight creates an environment of caution and suspicion among users, especially regarding long-term safety.

### **Mechanism of Action and Knowledge Gaps**

A recurring theme throughout the interviews was the lack of understanding regarding the mechanism of action of the herbal remedies. Despite their positive experiences, participants were often unaware of how the herbal substances worked within their bodies. One participant remarked:

"I've been using it for months, but I still don't understand how it works. It just feels like it's helping."

This lack of knowledge extended beyond individual remedies to include a broader uncertainty about how herbal treatments interacted with their conventional medications. Several participants reported using herbal medicines alongside prescription drugs without understanding the potential interactions between them. A participant noted:

"I take my diabetes medicine and the herbal tea my friend suggested. I don't know if they work together, but I've been feeling better."

This theme underscores a significant gap in patient education regarding the pharmacokinetics of herbal substances and their potential interactions with other medications, suggesting a critical need for improved communication and information about how these substances function in the body.

### **Decision-Making in the Use of Herbal Medicine**

The decision to use herbal medicine was influenced by various factors, including personal beliefs, cultural practices, and previous experiences. Many participants reported turning to herbal remedies after conventional treatments did not meet their expectations or provided insufficient results. One participant explained:

"I've tried all sorts of prescription medications, but they didn't work. That's when I decided to try herbal remedies, and they seemed to help."

In contrast, others chose herbal treatments because of strong cultural beliefs in their effectiveness or as part of a family tradition. One participant reflected:

"My family has always used herbs for various things. It's part of our culture, so I trust it."

Participants' decisions were also influenced by a perception of herbal medicine as a more "natural" or "gentler" alternative to pharmaceutical drugs. This theme illustrates the complex interplay of personal experience, cultural values, and perceived effectiveness that guides patients' decisions to incorporate herbal medicine into their chronic disease management routines.

The results reveal a complex, multifaceted view of herbal medicine use among patients with chronic diseases. While participants commonly perceived herbal treatments as effective, they also displayed significant uncertainty regarding the safety, mechanisms, and interactions of these treatments. This lack of understanding, combined with a strong cultural belief in the value of herbal remedies, highlights the need for greater education and medical oversight to ensure that patients are making informed decisions about their health. These findings underscore the importance of bridging the gap between empirical experience and scientific evidence to improve the integration of herbal medicine into contemporary medical practices.

## **DISCUSSION**

The primary findings of this study reveal that patients who use herbal medicine for chronic disease management perceive these remedies as effective, yet their understanding of how these treatments work remains unclear (Kim dkk., 2019). While participants reported subjective improvements in their conditions, there was a notable lack of knowledge regarding the mechanisms of action of herbal compounds, leading to mixed feelings about the safety and efficacy of these treatments (Liu dkk., 2022). These findings address the core research question, highlighting that patients' experiences with herbal medicine are shaped by both positive beliefs about their health benefits and uncertainties about their scientific grounding.

The research contributes to a deeper understanding of the subjective experiences of patients who use herbal medicine, providing answers to the questions raised in the introduction. By situating the findings within the broader body of literature, this study extends prior research on the role of psychological and cultural factors in shaping health behaviors (Mahdavi dkk., 2021; Meyer et al., 2016). For example, Meyer et al. (2016) emphasized that cultural beliefs significantly influence healthcare choices, and this study builds on that insight by highlighting how these cultural dimensions intersect with perceptions of autonomy and empowerment in managing chronic diseases.

The study also advances the field by revealing that patients' trust in herbal medicine is not solely grounded in perceived physical effectiveness, but also in psychosocial factors, such as trust in natural remedies and positive prior experiences. These findings challenge earlier studies that predominantly focused on the pharmacological properties of herbal treatments (Lombardi dkk., 2019), underscoring the need to consider the holistic interplay of physical, psychological, and cultural dimensions.

When compared with previous research, the findings of this study align with some studies on the psychological and cultural dimensions of health behaviors, yet they provide new insights into the specific context of herbal medicine use in chronic disease management (Mahdavi dkk., 2021). For example, earlier studies have emphasized that cultural beliefs and traditional knowledge often shape how individuals approach healthcare and treatment options (Meyer et al., 2016). This research corroborates that cultural context plays a significant role, yet it also extends these findings by showing how patients experience herbal treatments as a form of personal empowerment and autonomy in managing their health. However, the findings challenge the traditional assumption that the efficacy of herbal treatments is simply a matter of pharmacological action, indicating that patients often view the therapeutic process as a combination of both physical effects and psychosocial factors, including trust in natural remedies and previous positive experiences. This research enriches the existing body of knowledge by highlighting the complexity of patient experiences and emphasizing that a holistic understanding of herbal medicine requires integrating both subjective and objective dimensions.

### **Explanation of the Implications of Findings**

The findings of this study provide valuable insights for medical practice and health policy regarding the use of herbal medicine in the treatment of chronic diseases (Martins dkk., 2020).

Through a phenomenological approach, the results of this research indicate that patients' experiences are not only influenced by perceptions of physical effectiveness, but also by psychological and social dimensions, such as trust in natural medicine and relationships with herbal practitioners (Santana dkk., 2021). These findings have practical implications for enhancing medical understanding of the role of herbal medicine in the treatment of chronic diseases, particularly in terms of integrating conventional medicine with alternative therapies. For instance, it may be considered to allow more space for holistic approaches that respect patients' beliefs, as well as fostering a more open dialogue between patients and healthcare providers regarding the use of herbal medicine. Social and cultural implications are also highly relevant, as many patients choose herbal remedies not solely based on clinical effects, but also due to the profound cultural and traditional influences on their health perspectives.

### **Study Limitations**

Although this study makes a significant contribution to understanding patients' subjective experiences with herbal medicine, there are several limitations that need to be considered. One limitation is the relatively small sample size (15-20 participants), which may affect the ability to generalize the findings to a larger population. This study is also limited to a single geographic and cultural context, so the patients' experiences may not reflect broader experiences across different cultures or countries (Santos dkk., 2019). Furthermore, the use of a phenomenological method focused on individual narratives may not fully capture the broader aspects of herbal medicine use in society. Therefore, further research with a larger and more diverse sample could help confirm these findings and explore variations in experiences across a wider context.

### **Prospective Statement for Future Research**

The findings of this study pave the way for further exploration into how patients' experiences with herbal medicine may be influenced by broader psychological, social, and cultural factors (Tanase dkk., 2022). Future research could expand our understanding by involving a more diverse population, including different age groups, genders, and cultural backgrounds. Additionally, studies comparing the experiences of patients who use herbal medicine with those who use only conventional medicine could provide deeper insights into the differences and similarities in treatment experiences. Further research could also examine the role of healthcare providers in guiding or supporting herbal medicine use, as well as how beliefs about alternative treatments influence the medical decisions made by patients. Thus, this research can contribute to the development of more inclusive health policies based on a more holistic understanding of health and treatment.

## **CONCLUSION**

This study explored the experiences of patients using herbal medicines in the treatment of chronic diseases, addressing the gap in understanding the mechanisms, effectiveness, and safety of these treatments. The findings reveal that while patients often perceive herbal remedies as effective, they struggle with uncertainty about their mechanisms and safety, which underscores the need for better education and integration of herbal treatments in conventional medical practice. Moreover, the study highlights how cultural beliefs and personal experiences shape patient choices, further complicating the medical understanding of herbal therapies. These insights contribute to a deeper, more holistic understanding of the phenomenon, offering a more nuanced perspective compared to previous research that focused mainly on clinical outcomes. However, this study has several limitations that should be acknowledged to provide a more balanced context. First, the relatively small sample size (15-20 participants) may limit the generalizability of the findings, as the experiences of a larger and more diverse population might reveal additional patterns or nuances not captured in this study. Second, the research was conducted within a specific geographic and cultural context, which may not reflect the broader experiences of patients from other regions or cultural backgrounds. Third, as a qualitative study employing a phenomenological approach, the findings are inherently subjective and rely on participants' self-reported experiences, which may introduce recall bias or variations in interpretation. Additionally, this method does not capture quantitative data on the clinical efficacy or

safety of herbal treatments, leaving these aspects for future investigation. Future research could expand on these findings by exploring the role of healthcare professionals in guiding herbal medicine use and by examining a larger and more diverse patient sample. Ultimately, this study opens up avenues for improving the evidence base and practices surrounding the integration of herbal medicine in chronic disease management.

### CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

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