



Exploring Consumer Experience in the Use of Herbal Products: Between Expectations, Trust, and Regulatory Compliance

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ABSTRACT

The use of herbal products as an alternative treatment continues to rise, driven by consumer preferences for natural remedies and concerns over synthetic pharmaceuticals. However, selecting the right herbal product involves navigating perceptions of quality, effectiveness, and regulatory compliance. While previous research has examined consumer trust in herbal medicine, limited studies have explored the lived experiences of users in making informed choices about herbal products. This phenomenological study investigates the subjective experiences of consumers in selecting and using herbal products, highlighting how trust, expectations, and regulatory awareness shape their decisions. Through interviews with 10 participants, three dominant themes emerged: (1) Product selection criteria, where consumers prioritize perceived safety and recommendations from their social circles; (2) Expectation vs. reality, revealing varied consumer satisfaction levels due to differences in perceived effectiveness; and (3) Regulatory awareness and safety concerns, showing that while some consumers trust the "natural" label, others seek clearer regulatory standards. These insights suggest a complex interplay between consumer trust, perceived efficacy, and awareness of product legitimacy. These findings offer valuable insights for regulatory bodies and the herbal industry to enhance transparency, consumer education, and quality assurance in herbal product marketing.



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INTRODUCTION

The increasing use of herbal products for medicinal purposes has become a notable global trend, particularly in response to growing concerns over the side effects of conventional pharmaceuticals (Amanpour dkk., 2023). Herbal remedies are often seen as a safer and more natural alternative, with many consumers turning to them for the treatment of chronic conditions such as hypertension, diabetes, and digestive disorders. Despite the widespread use of these products, there remains significant variation in consumer experiences and perceptions regarding their effectiveness, quality, and safety (Bellanger dkk., 2019). This variation underscores the need for a deeper understanding of how users perceive and evaluate herbal products, especially in relation to regulatory practices and product quality standards.

Advancements in herbal medicine have brought about the development of new formulations and the incorporation of modern quality control practices, but many of these products still lack robust clinical validation (Berretta dkk., 2022). While regulatory bodies such as BPOM (Indonesian National Agency of Drug and Food Control) play a crucial role in certifying product safety, issues related to transparency, labeling, and the consistency of regulatory enforcement continue to affect public trust. Furthermore, the increasing market demand for herbal products has been accompanied by a proliferation of both regulated and unregulated products, making it difficult for consumers to navigate their choices effectively.

Historically, research into herbal product usage has focused primarily on pharmacological efficacy and safety, often relying on quantitative methods to evaluate the physiological effects of

specific herbs (Bouqoufi dkk., 2023). However, there is a growing recognition of the need to explore the subjective experiences of users, particularly through qualitative approaches like phenomenology. These approaches provide rich insights into how individuals interpret their personal experiences with herbal products, the meanings they attach to these experiences, and the factors that shape their choices. This research aims to fill a critical gap by delving into the lived experiences of users, allowing for a deeper exploration of how users make decisions about herbal product use and how regulatory factors influence these decisions.

By focusing on the subjective experiences of users, this study seeks to uncover the underlying meanings and perceptions that influence their decisions to choose herbal remedies over conventional treatments (Cocetta dkk., 2023). The goal is to explore not only the practical aspects of herbal product use but also the emotional, social, and cultural factors that shape users' attitudes and behaviors. This phenomenological approach is essential for gaining a more holistic understanding of the phenomenon, offering insights that can inform future policy, regulation, and consumer education regarding herbal products.

Research into the lived experiences of individuals using herbal products has become increasingly significant, as it provides a more nuanced understanding of consumer behavior in the context of alternative medicine (Efferth dkk., 2019). Unlike traditional pharmaceutical products, which are often studied through controlled, quantitative clinical trials, herbal products are subject to a broader range of personal, cultural, and social factors that influence their usage. As such, examining users' subjective experiences allows for a deeper exploration of the meanings they attach to their choice of treatment, the perceived efficacy of the products, and their trust in regulatory systems.

However, exploring the essence of these experiences presents several methodological challenges (Fusco dkk., 2020). One of the primary difficulties lies in capturing the subjective, often intangible nature of personal perceptions and experiences. Quantitative methods, such as surveys or randomized controlled trials, are limited in their ability to convey the personal, emotional, and contextual factors that shape individuals' interactions with herbal products. These methods tend to focus on measurable outcomes, such as symptom reduction, but fail to account for the deeper, experiential aspects of product use, such as feelings of safety, trust, or satisfaction.

In contrast, phenomenological research, with its emphasis on exploring lived experiences in depth, offers a more appropriate approach for understanding the complexities of herbal product use (Hou dkk., 2023). By focusing on individuals' interpretations of their experiences, phenomenology enables a more holistic examination of the factors that influence consumer behavior. Yet, despite the advantages of this approach, much of the existing research on herbal product use has been limited to either quantitative analyses or shallow qualitative descriptions that do not delve deeply enough into the meanings users attach to their experiences. This gap underscores the need for more in-depth, phenomenological studies that can capture the rich, subjective realities of users' experiences with herbal medicine.

Although research on herbal products has advanced significantly, most approaches used to understand this phenomenon focus on testing the effectiveness or safety of products through more practical and direct quantitative methods. For example, many studies utilize clinical trials or surveys to measure the physical impact of herbal product usage. While these approaches provide objective and measurable data, they often fail to capture the subjective experience and deeper meaning that users associate with the use of herbal products. These quantitative methods, with their emphasis on measurable outcomes and numbers, are less able to represent the complexity of the social, emotional, and cultural factors that influence consumer decisions.

This limitation suggests that common solutions in herbal research often do not provide a comprehensive understanding of how and why people choose or avoid herbal products, or how they assess their quality and effectiveness. This becomes particularly crucial when subjective factors such as trust in regulation or expectations regarding safety and side effects play a key role in users' decision-making.

As an alternative, a phenomenological approach offers a more in-depth and holistic way to explore the essence of the herbal product user experience. By delving into personal narratives and subjective reflections, phenomenology enables researchers to understand not only what users feel but also how they interpret their experiences in the context of their everyday lives. This method is highly relevant in this case, where emotional, cultural, and social factors play a significant role in the decision to use herbal products. Therefore, a phenomenological approach is necessary to uncover the deeper dimensions of user experience that have yet to be captured by previous research.

Several studies have explored the use of herbal products, focusing primarily on their effectiveness and safety through quantitative measures. However, there is a notable gap in research that delves into the lived experiences of users, especially in the context of herbal medicine. Research by [Author et al., Year] and [Author et al., Year] highlights that while clinical trials provide valuable data on physical outcomes, they often overlook the subjective experiences and meanings that consumers attach to herbal remedies. Theories such as the Health Belief Model and Social Cognitive Theory offer insights into how beliefs and perceptions shape health-related behaviors, yet these models require a more personal exploration to understand how users interpret their own experiences with herbal products. Previous studies have also pointed out the importance of cultural and social contexts in shaping users' decisions, but these areas remain under-explored within the realm of herbal product usage.

To address the knowledge gap, this study adopts a phenomenological approach to explore the deeper meanings and subjective experiences of individuals using herbal products for therapeutic purposes. Phenomenology is particularly suited for this research, as it focuses on understanding how people experience and make sense of their lives through personal narratives. This approach allows for a more holistic understanding of the factors influencing users' choices, particularly their perceptions of quality, effectiveness, and safety, in a way that traditional quantitative methods cannot capture. By engaging with participants' lived experiences, phenomenology provides the opportunity to uncover rich, detailed insights that are essential for addressing the research questions and understanding the complexities of herbal product use.

The structure of this article is organized to guide readers through the research process and findings. The introduction sets the context for the study, outlining the significance of exploring the subjective experiences of herbal product users. The methodology section details the phenomenological approach, including data collection through in-depth interviews and thematic analysis to identify core themes. Following the presentation of results, the discussion section interprets the findings in relation to existing literature and the theoretical framework, concluding with implications for practice and future research.

RESEARCH METHODS

Study Design

This study employed a phenomenological research design to explore the lived experiences of users of herbal products for medical purposes (Irmak dkk., 2019). Phenomenology was chosen because it allows for an in-depth exploration of the subjective experiences and perceptions of individuals, which is central to understanding how users evaluate the quality, effectiveness, and regulatory aspects of herbal products. By focusing on participants' first-hand experiences, phenomenology provides a comprehensive lens to uncover the meanings and interpretations that individuals attach to their use of herbal remedies. This design was deemed particularly suitable for answering the research questions, which aim to understand the factors influencing users' decisions and behaviors regarding herbal products.

Participants

The participants in this study were individuals who had used herbal products for therapeutic purposes for at least three months. A purposive sampling strategy was employed to ensure that the sample represented individuals with relevant experience, specifically those using herbal products for conditions such as hypertension, diabetes, or digestive disorders. The inclusion criteria required participants to be adults (18 years or older) who had long-term experience using herbal products for

health-related purposes. Exclusion criteria included individuals who used herbal products exclusively for cosmetic purposes or who had not consumed herbal products for health reasons.

The study included a total of 15 participants, comprising a diverse group of both men and women. The age range of participants varied from 30 to 65 years, with an average age of 47 years. This demographic diversity provided a broad perspective on the experiences and perceptions of herbal product users, contributing to the depth of the findings.

Data Collection

Data were collected through semi-structured in-depth interviews, which allowed participants to express their personal experiences and opinions in their own words (Kanfer & Patnala, 2021). The interviews were conducted face-to-face in a private and comfortable setting, ensuring that participants felt at ease and able to share openly. Each interview lasted between 45 to 60 minutes, providing sufficient time for participants to elaborate on their experiences and reflections regarding herbal product use.

The interview guide included open-ended questions that aimed to explore the participants' experiences with choosing, using, and evaluating herbal products, as well as their awareness of regulatory aspects such as certifications and labeling. While the guide provided a structure, participants were encouraged to share their stories freely, with follow-up questions asked to probe deeper into their responses.

In addition to the interviews, observational data were gathered from local pharmacies and herbal product stores, where the researcher observed consumer behaviors and product selection processes. This observational data provided valuable context and insights into how users engage with herbal products in real-world settings.

Data Analysis

The data were analyzed using thematic analysis, a method commonly used in phenomenological research to identify and interpret key themes within the data. The process began with transcribing all interviews verbatim, followed by a thorough reading of the transcripts to gain a general understanding of the content. The data were then coded, and recurring themes and subthemes were identified based on the participants' descriptions and experiences.

Each theme was further explored to uncover the meanings and underlying patterns related to users' decision-making processes, perceptions of product quality, and their attitudes towards regulation. This systematic approach to data analysis allowed for the extraction of essential insights from the participants' narratives, shedding light on the core aspects of their experiences with herbal products.

Thematic analysis was supported by the use of qualitative analysis software (NVivo), which facilitated the organization and management of large volumes of textual data. However, the focus remained on the qualitative nature of the analysis, ensuring that the interpretations remained grounded in the participants' lived experiences.

Ethics

Ethical approval for the study was obtained from the relevant research ethics committee prior to data collection. All participants provided written informed consent, which outlined the purpose of the study, the voluntary nature of their participation, and the steps taken to ensure confidentiality and anonymity. Participants were assured that their responses would be kept confidential and that their personal information would not be shared with any third parties. The study adhered to ethical standards in line with both international and local guidelines for research involving human subjects.

All interview data were anonymized, and personal identifiers were removed to maintain participants' privacy. Participants were also informed that they could withdraw from the study at any time without any negative consequences.

RESULTS

The Importance of Product Quality and Certification

The majority of participants emphasized the significance of product quality and the importance of certifications or quality labels from regulatory bodies, such as the Indonesian National Agency of Drug and Food Control (BPOM). For many, these certifications were considered essential for ensuring safety and reliability. One participant stated, “I choose products that have the BPOM label because I feel safer, even though sometimes I feel the effects take longer to show.” This sentiment was echoed by others who regarded certifications as a key factor in their decision-making process.

However, despite the presence of regulatory labels, there was still a prevailing sense of uncertainty regarding the actual effectiveness of herbal products, especially those that lacked clear clinical testing. A participant expressed this hesitation by saying, “I choose herbal products because they seem gentler on the body, but I’m not sure how effective they really are if there’s no clear research to support it.” This highlights a critical gap in the perceived connection between certification and clinical evidence, where users expect both assurances of quality and scientific proof of efficacy.

Perceptions of Effectiveness and Experience with Herbal Products

Another prominent theme that emerged from the interviews was the users’ varied perceptions of the effectiveness of herbal products. While some participants reported positive experiences, claiming that the herbal products helped them feel better without the side effects commonly associated with pharmaceutical drugs, others were more skeptical. One participant noted, “Herbal products are milder on my body, but I still wonder whether they really work as well as the medicine prescribed by my doctor.”

Interestingly, users who had a long-standing relationship with specific herbal products (for example, for managing hypertension or digestive issues) often expressed a greater sense of trust in these products. However, they also pointed out the lack of clear guidelines regarding dosage and usage instructions. “The herbal remedies are good for me, but I don’t always know if I’m taking the right amount or how often I should take them,” said one participant, reflecting the challenge of navigating unregulated dosages and product instructions.

The Role of Regulation and Trust in Product Selection

Trust in regulatory systems played a significant role in shaping users’ decisions when choosing herbal products. Many participants expressed confidence in products registered with BPOM, despite not fully understanding the specifics of regulatory processes. One user explained, “I don’t know much about the rules, but if it’s BPOM-approved, I trust it more.” This lack of detailed knowledge about regulatory processes did not appear to undermine the participants’ confidence in regulated products, highlighting the importance of certification as a trust-building tool.

However, there was a clear divergence in how users approached unregulated products. Several participants shared that they tended to rely on word-of-mouth recommendations from family or friends, rather than formal certifications, when choosing unregistered herbal products. One participant admitted, “I usually buy what my friend recommends, and I don’t really check the label. I trust their judgment more than the information on the packaging.” This reliance on personal recommendations underscores the complex role that social networks and trust in personal experiences play in the selection process, especially when formal regulation is absent or unclear.

Consumer Knowledge and Engagement with Herbal Product Quality

The findings also revealed that many users had limited awareness of the testing processes or quality control mechanisms behind herbal products. Although most were aware that certifications like BPOM indicate quality, there was little understanding of the actual testing or quality assurance procedures involved. During interviews, participants often expressed frustration with the lack of transparent information regarding how products were tested or what standards they were held to. “I see the BPOM label, but I have no idea what kind of testing they do,” one participant stated. This gap in understanding suggests that, while regulatory labeling is trusted, users feel they lack transparency about the real quality control processes that safeguard product safety and efficacy.

The study reveals that users' experiences with herbal products are influenced by a combination of factors including trust in regulatory systems, perceptions of product quality, and personal experiences with effectiveness. Certifications, particularly from BPOM, were highly valued as markers of safety, although there was significant uncertainty about the actual efficacy of products, especially in the absence of clear clinical evidence. Users also relied heavily on informal sources of information, such as recommendations from friends and family, when selecting products, particularly those not certified by official bodies. Additionally, a gap in understanding the regulatory processes and quality control mechanisms further complicates consumers' ability to make fully informed decisions. These findings highlight the need for greater transparency and clearer communication about the quality assurance processes behind herbal products.

DISCUSSION

This study reveals that the user experience with herbal products is significantly influenced by subjective factors, such as trust in quality, perceptions of effectiveness, and the level of compliance with existing regulations (Komolafe dkk., 2021). While many users consider herbal products to be a safer and more natural alternative, uncertainty regarding the quality and effectiveness of these products remains a major issue for many consumers. These findings address the research question concerning the subjective experiences of users when selecting and using herbal products, highlighting the importance of social and personal elements in their decision-making process.

This study provides deeper insights into how users assess the quality of herbal products and how factors such as regulation, trust in labeling, and personal experience influence their decisions to choose specific products (Kumar dkk., 2022). The findings confirm that users are more likely to choose herbal products registered with the BPOM (National Agency of Drug and Food Control), even though they often remain unsure about the product's effectiveness. Meanwhile, the lack of clear understanding regarding proper dosage and usage procedures suggests that user experiences are often influenced by limited and sometimes confusing information. These findings indicate that, while regulation and quality control are considered important, users still rely on personal experiences and informal information from family or friends when making their decisions.

These findings align with the Health Belief Model (HBM), which posits that an individual's perception of benefits and risks significantly affects their health behavior. In this context, herbal product users tend to perceive BPOM-registered products as safer, believing that the regulation reduces associated risks (Moghadam dkk., 2020). However, uncertainty regarding the effectiveness of herbal products that lack clear scientific evidence supporting their claims reveals a gap between trust in regulation and the actual experiences of users (Muyumba dkk., 2021). These findings also support previous research by [Author et al., Year], which showed that while there is increased interest in herbal products, consumer understanding of their safety and effectiveness remains limited. However, unlike prior studies, this research places greater emphasis on the subjective experiences of users, often involving trust or doubt towards herbal products, and underscores the need for more transparent information to guide their decisions.

Explanation of the Implications of the Findings

The findings of this study have significant implications both theoretically and practically (Samba Conney dkk., 2019). Scientifically, this research provides new insights into how users of herbal products assess the quality and effectiveness of these products based on personal experiences and trust in existing regulations. From a practical perspective, these findings highlight the need for increased transparency in the information provided to consumers, particularly regarding the quality, effectiveness, and usage procedures of herbal products. This is crucial for enhancing consumer trust in herbal products, which could positively impact the herbal industry as a whole. Additionally, the findings also indicate the important role of healthcare professionals, such as pharmacists or doctors, in providing clear, evidence-based information about herbal products to patients. From a social and cultural perspective, this study reveals that while there is growing interest in herbal medicine, there remains a tendency to rely on personal experience and social recommendations from family or friends, which are often not supported by sufficient scientific evidence.

Limitations of the Study

Several limitations of this study should be considered. First, the limited number of participants, with only 15 individuals involved, makes the findings less generalizable to a broader population. However, the phenomenological approach, which focuses on individual subjective experiences, provides in-depth insights that could not be obtained through quantitative research. Furthermore, this study only involved herbal product users who had used these products for long-term treatment purposes, meaning the findings do not encompass the experiences of new users of herbal products. Finally, although data was collected through in-depth interviews and observations, the limitations of direct supervision over herbal medicine practices in the field may also influence the conclusions drawn. Therefore, this study prioritizes a deep understanding of individual perceptions and experiences over population-wide generalization.

Prospective Statements for Future Research

The findings of this study open up various avenues for further research, particularly in exploring the factors that influence users' perceptions of herbal products from a broader perspective (Sibbritt dkk., 2022). Future studies could expand the sample to include a more diverse age group or social backgrounds, as well as compare the experiences of herbal product users with those of conventional medicine users. Additionally, this study could be extended to investigate the role of health education and government regulation in improving public understanding of herbal medicine. Further research could also explore how local cultures and traditions influence individuals' decisions in choosing herbal treatments and how this knowledge could be translated into more effective, evidence-based clinical practices.

CONCLUSION

This study explored the experiences of herbal product users, focusing on their perceptions of quality, effectiveness, and regulatory compliance in alternative medicine. The findings reveal that users tend to prioritize products with official certifications, such as BPOM labels, but remain uncertain about the clinical efficacy of many herbal products. Moreover, while some users report positive experiences, others express concerns about the lack of clear dosage instructions and evidence-based information. These insights address gaps in previous research by providing a deeper understanding of how regulatory trust and personal experience shape herbal product choices. The study highlights the need for improved transparency in product labeling and more rigorous quality control. Future research could expand on these findings by exploring the role of education and cultural factors in shaping consumer trust and decision-making in herbal medicine.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

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