

Patients' Perceptions of the Frequency of Medication Counseling by Pharmacists: A Qualitative Case Study

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ABSTRACT

Introduction: Medication counseling is an essential component of patient-centered pharmaceutical care, contributing to medication safety, adherence, and patient satisfaction. In hospital pharmacy settings, counseling practices are often influenced by workload and service constraints, resulting in variability in counseling frequency. Understanding how patients perceive and interpret the frequency of medication counseling is therefore important for improving the quality of pharmacy services. This study aimed to explore patients' perceptions of the frequency of medication counseling provided by pharmacists and to examine its role in shaping patient satisfaction within a hospital pharmacy setting.

Research Methodology: A qualitative case study design was employed at the pharmacy installation of a regional general hospital in Indonesia. Data were collected through in-depth interviews with patients, pharmacists, and supporting staff, complemented by non-participant observations and document review. Participants were selected using purposive sampling. Data were analyzed thematically through data condensation, data display, and conclusion drawing, with credibility ensured through triangulation of sources and techniques.

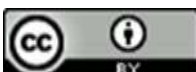
Results: The findings revealed that medication counseling frequency was delivered inconsistently and varied according to workload, patient volume, and medication characteristics. Patients perceived frequent counseling as a sign of professional care that enhanced understanding, confidence, and trust in pharmacists. Consistent counseling contributed positively to patient satisfaction, whereas limited counseling led to uncertainty in medication use. Organizational factors, such as staffing limitations and service flow, were identified as key constraints on counseling practices.

Conclusion: Medication counseling frequency is a meaningful experiential factor that shapes patient satisfaction and the quality of pharmacist-patient interactions. Strengthening counseling consistency through organizational support and standardized practices may improve patient-centered pharmaceutical care in hospital settings.

Keywords: Medication Counseling; Patient Perceptions; Patient Satisfaction; Pharmacists.



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INTRODUCTION

Medication counseling has become a core component of contemporary hospital pharmacy practice, reflecting a global shift from product-oriented services toward patient-centered pharmaceutical care (Ahmad *et al.*, 2026). Beyond accurate dispensing, pharmacists are increasingly expected to engage patients in meaningful communication to ensure safe, effective, and rational use of medicines. Through medication counseling, patients receive essential information regarding dosage, administration, duration of therapy, potential side effects, and drug interactions (Almomani *et al.*, 2024). This process not only supports therapeutic effectiveness but also contributes to medication safety, patient empowerment, and trust in health services. International evidence consistently shows that effective counseling improves patients' understanding of therapy, enhances adherence, and reduces the risk of medication errors, particularly in complex or long-term treatments (Buziashvili *et al.*, 2025).

Despite its recognized importance, medication counseling in routine hospital practice remains inconsistent, especially in developing health systems (Dimitrova *et al.*, 2025). In many public hospitals, high patient volumes, limited numbers of pharmacists, and time constraints often lead to counseling being delivered selectively or superficially (Cahaya *et al.*, 2024). As a result, not all patients receive adequate explanations about their medications, and counseling may be prioritized only for certain drugs or clinical conditions. This situation raises concerns because patients' experiences of pharmaceutical care are shaped not only by whether counseling is provided, but also by how often and how consistently it occurs during their interactions with pharmacists (Delanoy, Hutcherson and Cieri-Hutcherson, 2026).

The frequency of medication counseling represents a critical yet underexplored dimension of pharmaceutical care quality (Elsayed *et al.*, 2025). From the patient's perspective, counseling frequency is not merely a numerical count of interactions, but a meaningful indicator of professional attention, responsibility, and concern for patient well-being (Fares *et al.*, 2025). Patients who receive counseling repeatedly or consistently may feel more supported and confident in managing their therapy, whereas those who experience sporadic or absent counseling may perceive the service as impersonal or insufficient. These perceptions are closely linked to patient satisfaction, which is widely acknowledged as an essential outcome and quality indicator in health services (Figuerola-Rodríguez and Sánchez-Mateo, 2024).

In the Indonesian hospital context, previous studies have predominantly used quantitative approaches to examine medication counseling, focusing on its association with patient satisfaction, adherence, and knowledge levels (Gombos *et al.*, 2025). While such studies provide valuable statistical evidence, they offer limited insight into how patients subjectively perceive and interpret the frequency of counseling encounters. Moreover, existing research often treats counseling as a binary activity, provided or not provided, without considering variations in frequency, continuity, or meaning from the patient's standpoint. Consequently, the lived experiences of patients and how counseling frequency shapes their satisfaction and trust in pharmacists remain insufficiently understood (Hajj *et al.*, 2025).

This gap in the literature is particularly evident in regional public hospitals, where service dynamics, workload pressures, and resource limitations strongly influence pharmacy practice. In these settings, inconsistent medication counseling may yield diverse patient experiences, ranging from comprehensive guidance to minimal interaction (Hidayatullah *et al.*, 2025). However, few studies have explored this phenomenon qualitatively within its real-life institutional context. The lack of in-depth qualitative evidence limits hospital managers' and policymakers' ability to design

interventions responsive to patients' experiences and expectations regarding counseling services (Hasyim and Patandung, 2025).

Addressing this gap, the present study adopts a qualitative case study approach to explore patients' perceptions of the frequency of medication counseling provided by pharmacists. By focusing on patients' narratives and meanings, this study seeks to move beyond measuring outcomes toward understanding experiences. The qualitative design allows for an in-depth examination of how patients interpret counseling frequency, how it influences their sense of safety, understanding, and satisfaction, and how pharmacists' practices are perceived within everyday service encounters. The case study approach further enables a contextualized analysis of counseling practices within a specific hospital pharmacy setting.

The novelty of this study lies in its emphasis on counseling frequency as a meaningful experiential construct rather than a purely operational metric. Unlike previous research that centers on the presence or quality of counseling in quantitative terms, this study highlights how patients and pharmacists attribute meaning to the regularity and consistency of counseling interactions. By integrating patient and pharmacist perspectives within a qualitative case study framework, this research offers a nuanced understanding of medication counseling as a relational and contextual process. The findings are expected to contribute original insights to the literature on pharmaceutical care, inform patient-centered service improvements in hospital pharmacies, and support the development of policies that strengthen consistent and meaningful medication counseling practices.

RESEARCH METHODOLOGY

Study Design and Approach

This study employed a qualitative research approach with a case study design. The qualitative approach was selected because the research aimed to explore in depth patients' perceptions, experiences, and meanings regarding the frequency of pharmacists' medication counseling. Qualitative inquiry is particularly appropriate for examining complex social interactions and subjective experiences that cannot be adequately captured through numerical measurement. The case study design enabled an intensive, context-specific investigation of medication counseling practices as they naturally occur within a specific institutional setting, enabling a holistic understanding of the phenomenon under study.

Study Setting

The research was conducted at the Pharmacy Installation of a Regional General Hospital in Kendari, Indonesia. This hospital serves as a major referral facility and experiences a high volume of patient visits, resulting in frequent interactions between pharmacists and patients. The pharmacy installation was chosen because it represents a critical point of contact where medication counseling is expected to take place and where variations in counseling frequency can be directly observed and explored.

Participants and Sampling

Participants consisted of three groups: patients, pharmacists, and supporting pharmacy personnel. Patients were the primary informants, as they had direct experience with medication counseling and could articulate their perceptions and satisfaction with the service. Pharmacists acted as key informants, providing professional perspectives on counseling practices, frequency, and constraints within the service system. Supporting personnel, such as pharmacy technicians or administrative staff, served as supplementary informants to enrich contextual understanding of

workflow and service dynamics. Participants were selected using purposive sampling based on predefined inclusion criteria relevant to the research objectives. Patient participants were adults who had received medications from the pharmacy installation and had at least one direct interaction with a pharmacist related to medication counseling. Pharmacists were required to have at least 1 year of experience in a hospital pharmacy and to be actively involved in patient counseling. Sampling continued until data saturation was achieved, indicated by the repetition of themes and no emergence of new substantive information.

Data Collection Methods

Data were collected using multiple qualitative techniques to ensure depth and credibility. In-depth semi-structured interviews were the primary data collection method. Interview guides were developed to explore experiences of medication counseling, perceptions of counseling frequency, meanings attributed to repeated or limited interactions, and perceived impacts on understanding and satisfaction. Interviews were conducted in a private setting within the hospital environment and were audio-recorded with participants' consent. In addition to interviews, non-participant observations were conducted in the pharmacy service area to capture real-time interactions between pharmacists and patients, including the duration, content, and context of counseling encounters. Field notes were taken to document observed behaviors, service flow, and environmental factors that might influence counseling practices. Relevant documents, such as standard operating procedures (SOPs) for medication counseling and pharmacy service records, were also reviewed to provide institutional context and support data triangulation.

Data Analysis

Data analysis followed a concurrent thematic analysis process. Interview recordings were transcribed verbatim, and all data sources were systematically reviewed and coded. Initial codes were generated inductively from the data and then organized into broader themes related to counseling frequency, patient perceptions, professional practices, and satisfaction. Data condensation, data display, and conclusion drawing were carried out iteratively to identify patterns and relationships among themes. To enhance rigor, findings were continuously compared across participant groups and data sources.

Trustworthiness of the Study

The study's trustworthiness was ensured through several strategies. Credibility was enhanced by triangulating data from interviews, observations, and documents, and by involving multiple participant groups. Member checking was conducted by summarizing key interpretations to selected participants for confirmation. Dependability and confirmability were supported through detailed documentation of research procedures and analytic decisions. Transferability was addressed by providing rich descriptions of the research context and participants, enabling readers to assess the applicability of findings to similar settings.

Ethical Considerations

Ethical clearance for this study was obtained from the Politeknik Sandi Karsa Health Research Ethics Committee with an Ethical Exemption determination. The approval was issued under reference number B-588/PT19.2.1/PP/VI/2025. The study was classified as ethically exempt because it posed minimal risk and focused solely on exploring participants' perceptions and experiences of medication counseling, without any clinical intervention or manipulation of treatment. Data were collected through interviews and non-participant observations within routine service settings. Participation was voluntary, and informed consent was obtained from all participants. Confidentiality and anonymity were strictly maintained, and all data were securely

stored. The study adhered to established ethical principles for health research involving human participants.

RESULT

This section presents the study's findings based on in-depth interviews, non-participant observations, and document review conducted at the hospital pharmacy installation. The results describe patients' and pharmacists' perspectives on the frequency of medication counseling and its contribution to patient satisfaction. Data are organized thematically to highlight key patterns and meanings emerging from participants' experiences.

Subtheme 1: Variability in the Frequency of Medication Counseling

The findings indicate that the frequency of medication counseling varies across service encounters and is largely influenced by workload and medication characteristics. Counseling is more frequently and comprehensively provided for high-risk, chronic, or newly prescribed medications, while routine prescriptions often receive only brief explanations. This situational approach reflects pharmacists' efforts to balance service efficiency with patient needs. One patient explained,

Usually, the pharmacist explains the medicine, but when it is very crowded, the explanation is much shorter" (P1).

From the pharmacist's perspective, counseling intensity is adjusted based on clinical considerations, as noted by one pharmacist:

Counseling is more detailed for certain medicines, especially for chronic diseases" (A1).

These findings suggest that counseling frequency is shaped by contextual demands rather than standardized practice.

Subtheme 2: Patient Interpretation of Counseling Frequency

Patients interpret the frequency of counseling as a meaningful indicator of professional care and attention. Repeated counseling interactions are perceived as supportive and reassuring, enabling patients to understand their therapy better and feel more confident in medication use. One patient stated,

"When the pharmacist explains more than once, I feel more confident taking the medicine" (P2).

In contrast, infrequent counseling leads to uncertainty and confusion, particularly regarding dosage and administration. As another patient reported,

If there is no explanation, I am sometimes unsure how to use the medicine correctly" (P1).

These narratives highlight that counseling frequency strongly influences how patients evaluate the quality of pharmacist-patient interactions.

Subtheme 3: Counseling Frequency and Patient Satisfaction

The frequency of medication counseling plays a central role in shaping patient satisfaction with pharmacy services. Consistent counseling fosters trust, enhances confidence in therapy, and creates a sense of safety among patients. Patients commonly associate regular explanations with higher satisfaction and a more positive service experience. One participant expressed,

"I feel more satisfied when the pharmacist takes time to explain my medicine clearly" (P2).

Pharmacists also recognized this relationship, with one noting that

“Regular counseling helps patients feel safer and more confident” (A1).

These findings suggest that counseling frequency functions not only as an informational activity but also as a relational process that strengthens patient satisfaction.

Subtheme 4: Contextual Constraints on Counseling Practices

Organizational and environmental factors significantly influence the frequency of medication counseling. High patient volumes, limited staffing, time pressure, and physical space constraints reduce opportunities for extended counseling interactions. Pharmacists described difficulties in maintaining consistent counseling under these conditions, as one stated,

Sometimes it is difficult to provide counseling because many patients are waiting”

(A1).

Patients similarly observed that service pressures limit communication, noting, *“The queue is long, so the explanation is often very brief”* (P1).

These contextual constraints demonstrate how structural factors shape both counseling practices and patient experiences within hospital pharmacy services. The study concludes that medication counseling frequency is delivered inconsistently and is shaped by service workload and medication complexity. Patients perceive counseling frequency as an important indicator of professional care, influencing their understanding, confidence, and satisfaction. Consistent counseling strengthens trust and reassurance, whereas limited counseling leads to uncertainty in medication use. Overall, counseling frequency plays a crucial role in shaping patient satisfaction and the quality of pharmacist-patient interactions.

Table. Thematic Summary of Findings

Theme	Description	Key Findings	Interpretive Meaning
Frequency of Medication Counseling by Pharmacists	Describes how often and under what conditions medication counseling is provided in routine pharmacy services.	Counseling is delivered inconsistently and varies according to workload, patient volume, and type of medication; it is prioritized for high-risk or chronic therapies.	Counseling frequency is situational rather than standardized.
Patients’ Perceptions of Counseling Frequency	Captures patients’ views and interpretations regarding how frequently they receive counseling from pharmacists.	Frequent counseling is perceived as professional care and attention, while infrequent counseling leads to confusion and uncertainty about medication use.	Counseling frequency reflects perceived quality of pharmacist–patient interaction.
Meaning of Counseling Frequency in Shaping Patient Satisfaction	Explores how counseling frequency contributes to patients’ satisfaction with pharmacy services.	Consistent counseling increases trust, confidence, and reassurance, leading to higher patient satisfaction.	Counseling frequency is a key determinant of patient satisfaction and perceived service quality.
Contextual Factors Influencing Counseling Practices	Identifies organizational and environmental factors affecting counseling frequency.	High patient load, limited staffing, service flow, and physical space constrain counseling opportunities.	Structural and organizational factors shape counseling practices and experiences.

DISCUSSION

This study provides an in-depth understanding of how patients perceive and experience the frequency of pharmacists' medication counseling and how it shapes patient satisfaction within hospital pharmacy services. The findings indicate that medication counseling is delivered inconsistently and is largely influenced by workload, service flow, and medication characteristics. This result aligns with previous studies reporting that high patient volume and limited pharmacist availability often constrain the delivery of comprehensive counseling in hospital settings. Such

situational variability suggests that counseling practices remain task-oriented rather than fully standardized as a core component of patient-centered pharmaceutical care.

The variability in counseling frequency observed in this study highlights an important gap between regulatory standards and routine practice. National and international guidelines emphasize that medication counseling should be consistently provided to ensure patient safety and optimal therapeutic outcomes (Hiew *et al.*, 2025). However, the findings demonstrate that counseling is often prioritized for high-risk or chronic medications, while patients receiving routine therapies may experience minimal interaction (Jairoun *et al.*, 2024). This selective approach, although pragmatic under service constraints, risks creating unequal patient experiences and may undermine the principle of equitable care. Previous research has similarly shown that inconsistent counseling contributes to disparities in patient understanding and engagement with therapy (Joseph *et al.*, 2024).

From the patients' perspective, the frequency of medication counseling emerged as a meaningful indicator of professional attention and responsibility. Patients did not perceive counseling merely as the transfer of information, but rather as an expression of pharmacists' care, concern, and commitment (Leong *et al.*, 2026). Frequent or repeated counseling enhanced patients' confidence in managing their medications and reduced uncertainty related to dosage and administration (Low and Islahudin, 2026). These findings support earlier studies demonstrating that effective pharmacist–patient communication strengthens therapeutic relationships and fosters positive service experiences. Importantly, this study extends existing knowledge by emphasizing that it is not only the quality but also the regularity of counseling that shapes patient perceptions (Mardhiyyah *et al.*, 2025).

The relationship between counseling frequency and patient satisfaction identified in this study reinforces the role of communication as a central determinant of service quality in pharmaceutical care (Nomi *et al.*, 2025). Patients who experienced consistent counseling reported higher levels of satisfaction, trust, and reassurance. Counseling frequency functioned as a relational mechanism that helped patients feel acknowledged and supported within the healthcare system. This finding is consistent with service quality theories, which posit that interpersonal interaction and responsiveness are critical components of patient satisfaction (Qudah and Chewing, 2024). The results also suggest that even brief, consistent counseling interactions can positively affect patient experiences, particularly when delivered with clarity and empathy (Satish *et al.*, 2026).

Organizational and contextual factors were found to play a significant role in shaping counseling practices. High patient load, time pressure, limited staffing, and physical space constraints reduced opportunities for extended pharmacist–patient interaction. These structural challenges are commonly reported in public hospital settings and often force pharmacists to balance efficiency with communication (Suprpto *et al.*, 2025). The findings underscore that efforts to improve counseling frequency cannot rely solely on individual pharmacist commitment but must also address systemic factors. Without organizational support, meeting expectations for consistent counseling may be difficult in practice (Sylvia Bawilin and Suprpto, 2025).

The findings of this study have important implications for pharmacy practice and health service management. Strengthening the consistency of medication counseling requires institutional strategies, such as optimizing workflow, allocating dedicated counseling time, and ensuring adequate staffing levels (Zhang *et al.*, 2025). Integrating counseling protocols into routine dispensing processes may help reduce variability and promote more equitable patient experiences. Additionally, training programs that emphasize communication skills and patient-

centered approaches can support pharmacists in delivering meaningful counseling even within time-limited encounters (Watts Alexander *et al.*, 2025).

From a theoretical perspective, this study contributes to the literature by framing counseling frequency as an experiential and relational construct rather than a purely operational metric. While previous studies have largely focused on the presence or quality of counseling, this research highlights the importance of regularity and continuity in shaping patient satisfaction (Yotarak *et al.*, 2025). By adopting a qualitative case study approach, the study provides nuanced insights into how patients and pharmacists attribute meaning to counseling frequency within real-world service contexts (Worley, Wu and Cernasev, 2025).

Despite its contributions, this study has limitations that should be acknowledged. As a single-case qualitative study, the findings are context-specific and may not be directly generalizable to all hospital settings. However, the rich descriptions provided allow for analytical transferability to similar contexts. Future research could build on these findings by exploring counseling frequency across multiple institutions or by integrating qualitative and quantitative methods to examine its impact on clinical outcomes.

In conclusion, this study demonstrates that the frequency of medication counseling is a key factor influencing patient satisfaction and the quality of pharmacist-patient interactions. Consistent counseling enhances trust, understanding, and confidence, while inconsistent practices reflect broader organizational constraints. Addressing these challenges requires a combination of individual, institutional, and policy-level interventions to strengthen patient-centered pharmaceutical care in hospital settings.

CONCLUSION

This study concludes that the frequency of pharmacists' medication counseling is inconsistent and is strongly influenced by workload, service flow, and medication characteristics. Patients perceive counseling frequency as an important indicator of professional care, shaping their understanding, confidence, and trust in pharmacists. Consistent counseling enhances patient satisfaction and strengthens pharmacist-patient relationships, whereas limited counseling leads to uncertainty in medication use. Overall, counseling frequency emerges as a key experiential factor in determining the quality of hospital pharmacy services.

It is recommended that hospital management strengthen the consistency of medication counseling by integrating standardized counseling protocols into routine pharmacy services and ensuring adequate staffing to support patient-centered communication. Pharmacists are encouraged to provide brief but consistent counseling to all patients, regardless of medication type, to improve understanding and satisfaction. Future research is recommended to explore medication counseling frequency across multiple hospitals and to examine its impact on clinical and behavioral outcomes using mixed-methods approaches.

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Conflict of Interest

There are no potential conflicts of interest relevant to this article.

Data Availability

The data supporting the findings of this study are available from the corresponding author upon reasonable request, subject to ethical and confidentiality considerations.

Authors' Contributions

Dian Meiliani Yulis and Hairuddin K contributed to the study conception, research design, supervision, and critical revision of the manuscript. Julia Fitrianingsih contributed to methodological guidance, data interpretation, and manuscript review. All authors read and approved the final manuscript.

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