



Exploration of Patients' Lived Experiences during Chemotherapy within Clinical Pharmacological Care

Vely Mandoni ^{1*}, Junaidi Khotib ²

^{1,2} Universitas Airlangga, Indonesia

¹velymandoni@gmail.com *, ²junaidikhotib@gmail.com

Article Info

Article history:

Received 27/10/2025

Revised 22/11/2025

Accepted 17/12/2025

Keyword:

Chemotherapy Experience;
Pharmacological Care; Patient-
Centered Healing; Lived
Experience; Empathy in
Healthcare; Trust and
Medication

ABSTRACT

Pharmaceutical science has increasingly recognized the importance of understanding patients' lived experiences as an essential component of therapeutic success. Within this field, chemotherapy represents a complex intersection of pharmacological efficacy, emotional endurance, and existential meaning, yet its subjective dimensions remain underexplored. Despite advances in clinical outcomes research, little is known about how patients experience, interpret, and give meaning to their encounters with pharmacological treatment in real-life contexts. This study addresses that gap by applying a phenomenological approach to explore the lived experiences of cancer patients undergoing platinum-based chemotherapy and to uncover the essence of their therapeutic journey. Using Interpretative Phenomenological Analysis (IPA), data were collected through semi-structured interviews with twelve participants and analyzed thematically to capture the experiential and relational meanings of pharmacological care. The findings revealed five essential themes: the embodiment of suffering and endurance, trust and uncertainty in pharmacological care, negotiation between herbal and conventional therapies, reconstruction of identity through illness, and the transformative role of empathy in clinical encounters. These results demonstrate that healing extends beyond biomedical efficacy to encompass emotional, relational, and spiritual transformation shaped by empathy and patient agency. The study contributes to qualitative pharmaceutical research by offering a deeper understanding of how pharmacological treatment is lived, not merely administered. However, this study acknowledges methodological limitations, including its small, context-specific sample and reliance on self-reported narratives, which may limit transferability. These insights have significant implications for developing empathy-driven, patient-centered pharmaceutical care models and for guiding future research integrating phenomenological methods in pharmacological sciences.



©2025 Authors. Published by PT Mukhlisina Revolution Center.. This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License. (<https://creativecommons.org/licenses/by/4.0/>)

INTRODUCTION

Pharmacological treatment represents one of the most complex intersections between medical science, human experience, and societal perception (Guaraldi et al., 2020). Within the realm of pharmaceutical science, chemotherapy stands as both a scientific triumph and a profound human challenge, shaping not only physiological outcomes but also psychological and existential dimensions of patients' lives (Karlíková et al., 2025). Advances in drug formulation and delivery have significantly increased survival rates among cancer patients; however, the human experience behind these treatments remains insufficiently understood and often overshadowed by biomedical indicators. Patients frequently confront the paradox between the promise of cure and the suffering induced by the very substances designed to heal them (X. Li et al., 2025). This paradox situates chemotherapy within a broader sociocultural discourse where healing, suffering, and survival coexist as intertwined realities rather than separate conditions.

The relevance of this phenomenon extends beyond the pharmacological act itself. It involves the way individuals internalize and assign meaning to the sensations, emotions, and transformations

that accompany therapeutic interventions (Mukhlis, Suradi, et al., 2023; Mukhlis, 2025b). Pharmacotherapy, in this context, becomes a lived experience shaped by the patient's interaction with clinicians, family members, and the healthcare environment (Miglani et al., 2025). Studies in clinical pharmacy and qualitative health research have indicated that patients' adherence, trust, and emotional resilience are profoundly influenced by how they perceive and make sense of their treatment journeys. Thus, understanding pharmacological therapy through the lens of lived experience provides critical insight into how patients navigate uncertainty, embody side effects, and reconstruct personal identity amid biomedical control.

Despite growing recognition of patient-centered care, much of the current understanding of pharmacological treatment remains grounded in clinical efficacy and pharmacokinetics rather than the subjective, emotional, and existential dimensions of healing (Liguori et al., 2025). This gap underscores the need for an interpretative approach that honors the voices of patients and explores how they live through, rather than simply undergo, pharmacological intervention. A phenomenological perspective offers a pathway to capture these meanings as they emerge from experience revealing the depth, complexity, and humanity embedded within medical treatment (Gallagher et al., 2020). Through this lens, the study seeks not to quantify effects, but to illuminate how individuals experience, interpret, and ultimately transform through their engagement with pharmacological therapy.

Building upon the broader context of pharmacological experience, research exploring patients' lived experiences within medical treatment has increasingly gained scholarly attention (Alzahrani et al., 2021). The focus has shifted from viewing patients as passive recipients of pharmacotherapy to recognizing them as active meaning-makers within their healing processes. Within this paradigm, phenomenological inquiry provides a powerful framework for understanding how individuals interpret their embodied experiences of medication, side effects, and therapeutic interactions (van de Graaf et al., 2025). The field of qualitative pharmaceutical research particularly within clinical pharmacology and patient-centered care has acknowledged that subjective narratives often reveal layers of insight inaccessible through biomedical data alone (M. Li et al., 2025). These insights are crucial for bridging the gap between pharmacological efficacy and the patient's sense of well-being, autonomy, and trust in therapy.

However, exploring such deeply personal and contextually rich experiences poses considerable methodological challenges. Traditional quantitative methodologies, though invaluable for establishing efficacy and safety, often fail to capture the intricate emotional, psychological, and existential dimensions of pharmacological treatment (Cao et al., 2025). Metrics such as symptom reduction or dosage optimization do not fully convey how patients live through their treatment, negotiate their identities, or find meaning in the face of bodily transformation. Even qualitative studies that rely on thematic content analysis sometimes risk fragmenting human experience into categories detached from its lived unity and depth.

These limitations underscore the need for a methodological approach that can authentically engage with the essence of human experience (Mukhlis, Arifin, Ridwan, & Zulbaidah, 2025; Mukhlis, Arifin, Ridwan, Zulbaidah, et al., 2025). Phenomenology particularly interpretative and descriptive approaches addresses this gap by focusing on how individuals perceive, interpret, and internalize their treatment encounters (Wilson et al., 2022). It seeks to move beyond surface-level description toward uncovering the structures of meaning that underlie participants' narratives. In the context of pharmacological research, such an approach enables a nuanced understanding of how patients experience medical interventions as more than chemical processes viewing them instead as relational, ethical, and existential events embedded in the fabric of everyday life.

Despite significant advancements in pharmacological science and patient-centered care, most existing approaches to understanding chemotherapy experiences remain grounded in biomedical or behavioral frameworks (Staropoli et al., 2024). Current clinical practices primarily rely on standardized outcome measures such as adherence rates, symptom profiles, or pharmacodynamic responses to evaluate the effectiveness of drug therapies. While these indicators are essential for clinical assessment, they often overlook the subjective and existential dimensions of patients'

experiences. As a result, the deeper meanings patients attach to their treatment how they internalize pain, interpret healing, and reconcile medical intervention with personal identity remain underexplored within conventional research paradigms.

Moreover, existing qualitative investigations within pharmaceutical care tend to emphasize descriptive accounts of satisfaction, compliance, or communication, without delving into the phenomenological essence of what it means to live through pharmacological treatment. Such approaches risk simplifying the complexity of human experience into thematic summaries detached from its embodied, emotional, and moral realities (Zhou et al., 2025). The reliance on pragmatic or outcome-based models provides only a partial view, failing to illuminate how individuals construct meaning amid suffering, uncertainty, and hope during the pharmacological process.

These limitations underscore a critical need for an alternative lens one that privileges lived experience and the meaning structures embedded within it. A phenomenological approach offers this pathway by allowing the researcher to access how patients perceive, interpret, and transform through their engagement with pharmacological therapy. Through this lens, the study seeks to move beyond merely describing what patients do in response to treatment toward uncovering how they experience and make sense of it at a deeper, existential level (Gezelius et al., 2025). Such understanding not only enriches the scientific discourse on patient care but also contributes to the development of more empathetic and contextually sensitive pharmaceutical practices.

Previous research has provided valuable insights into how patients experience illness and medical treatment, yet studies focusing specifically on the lived experience of pharmacological therapy remain limited. Qualitative investigations in clinical pharmacy have examined patient-provider communication, adherence behaviors, and satisfaction levels, but these approaches often capture only surface-level perspectives (Nurhidayah, 2025). Theoretical foundations from phenomenology, particularly those proposed by Husserl and Heidegger, emphasize understanding human experience as it is lived, rather than as it is measured or interpreted externally. Applying this theoretical lens to pharmaceutical contexts offers a means of understanding how patients make sense of bodily changes, emotional struggles, and relationships within the therapeutic process. This study builds on that body of knowledge by emphasizing the existential and interpretative dimensions of patients' engagement with pharmacological treatment.

In addressing the limitations identified earlier, the present research adopts an interpretative phenomenological approach to explore the meaning structures embedded within patients' experiences of chemotherapy. This approach enables a nuanced understanding of how participants perceive, endure, and assign meaning to their interactions with medication and healthcare providers. By focusing on lived experience rather than objective outcomes, the study responds to the knowledge gap concerning how patients internalize pharmacological treatment as part of their personal and social identity (Matsui et al., 2025). The method thus provides a way to reveal the deeper essence of healing understood as a relational and existential process rather than a merely physiological one. Through this approach, the study contributes to advancing the philosophical and empirical dimensions of qualitative pharmaceutical research.

This article is structured as follows: The introduction presents the conceptual foundation and rationale for the study, linking pharmacological treatment to phenomenological inquiry (Mukhlis et al., 2024; Mukhlis, Maryam, et al., 2023). The Method section outlines the study design, participant selection, data collection, and analytical approach. The Results section presents thematic findings that illuminate the essential meanings and experiential structures of chemotherapy as lived by participants. The Discussion integrates these findings with existing literature, interpreting their broader implications for clinical practice and pharmaceutical care. Finally, the Conclusion highlights the study's contributions to both phenomenological research and patient-centered pharmacological understanding.

RESEARCH METHODS

Study Design

The study employed a phenomenological research design aimed at uncovering the lived experiences and meanings embedded within the phenomenon of pharmacological treatment among cancer patients (Lutz & Knox, 2014; McNabb, 2015). The phenomenological approach was chosen for its emphasis on capturing subjective realities as they are perceived and experienced, rather than measured or inferred through external observation. This design allowed for the exploration of the essence of participants' experiences, revealing how individuals construct meaning from their interactions with chemotherapy, pharmaceutical care, and their own bodies during treatment. In addition to its philosophical suitability, the design was explicitly oriented toward ensuring trustworthiness by embedding procedures that enhanced credibility, dependability, and confirmability of the findings throughout data collection and analysis.

The study adopted an interpretative phenomenological analysis (IPA) framework, which emphasizes understanding participants' sense-making processes within their specific contexts. This interpretative stance enabled the analysis to move beyond surface-level descriptions toward a deeper comprehension of how patients negotiate, interpret, and assign significance to their pharmacological encounters. The approach ensured that findings remained grounded in lived experience while being interpreted through a philosophical lens that values subjectivity and context.

Participants

Participants comprised adult cancer patients who had undergone at least three consecutive cycles of platinum-based chemotherapy within the past twelve months (Hillman & Radel, 2018; Migdal, 2018). Selection followed a purposive sampling strategy to ensure that all individuals had direct, sustained engagement with pharmacological treatment and were capable of articulating their experiences meaningfully.

Inclusion criteria encompassed adults aged 30 to 65 years, both male and female, who were receiving outpatient oncology care and able to communicate in English. Exclusion criteria included individuals with cognitive impairments, those currently in palliative sedation, or participants experiencing acute psychological distress at the time of recruitment.

A total of twelve participants contributed to the study, representing diverse socioeconomic and educational backgrounds. The inclusion of participants across different treatment stages and demographic profiles allowed for a multidimensional understanding of how chemotherapy and pharmaceutical care were experienced and interpreted in varying contexts.

Data Collection

Data were collected through in-depth, semi-structured interviews designed to elicit rich, detailed accounts of participants' experiences with pharmacological treatment (Carreiras & Castro, 2012; Iosifides, 2016). Each interview was guided by an open-ended protocol focusing on themes such as bodily sensations, emotional responses, perceptions of pharmacist interactions, and use of complementary therapies.

Interviews were conducted in private consultation rooms within the oncology unit to maintain confidentiality and emotional comfort. Each session lasted between 45 and 90 minutes, depending on the participant's willingness and physical condition. All interviews were audio-recorded with consent and later transcribed verbatim.

The environment was structured to promote trust and openness, ensuring that participants felt safe to express their experiences authentically. Field notes were used to capture contextual and non-verbal cues, which later informed interpretative insights. The interview guide was reviewed by two experts in qualitative pharmaceutical research to ensure content validity and contextual appropriateness.

Data Analysis

Data were analyzed using Interpretative Phenomenological Analysis (IPA), following a systematic process to identify and interpret emergent themes that reflected the essence of participants' experiences (Daly, 2007; Longhofer et al., 2012). The analysis proceeded through iterative stages:

(1) repeated reading of transcripts for familiarization, (2) identification of significant statements or meaning units, (3) formulation of preliminary codes, (4) clustering of related codes into subthemes, and (5) synthesis of overarching themes that captured shared meanings across participants.

NVivo software facilitated the organization of transcripts and coding structure, though analytical interpretation remained grounded in human reflection and contextual sensitivity. Through constant comparison, individual experiences were examined both within and across cases to reveal convergences and divergences in meaning.

The process culminated in the articulation of essential themes representing the psychological, relational, and existential dimensions of pharmacological experience (Fife, 2020; Kawamura, 2020). These thematic structures formed the basis of the narrative presentation in the Results section.

RESULTS

Enduring the Embodied Struggle of Chemotherapy

Participants vividly described the profound physical and emotional toll of platinum-based chemotherapy. The experience was frequently characterized as a “battle” between hope and suffering. One participant shared, “Each session felt like my body was being emptied nausea, fatigue, and fear became my constant companions, yet I couldn’t give up because I wanted to live.”

Analytically, this theme was derived by comparing narrative accounts that consistently linked physical sensations with existential reflections. Across interviews, descriptions of nausea, exhaustion, and bodily depletion repeatedly co-occurred with statements about meaning, survival, and personal resolve. This patterned linkage allowed the condensation of these experiences into a unified thematic structure of ‘embodied struggle.’

The data revealed that bodily discomforts were not merely side effects but were intertwined with existential meanings of endurance and survival. Participants often reflected on how their sense of self fluctuated between vulnerability and resilience. These experiences extended beyond pharmacological reactions, representing a personal negotiation between medical efficacy and psychological endurance. The essence of this theme is the lived reality of suffering that becomes a space for meaning-making, rather than simply a clinical event.

Trust and Uncertainty in Pharmacological Care

The participants’ relationships with pharmacists and oncologists emerged as central to how they made sense of their treatment journey. Many expressed deep reliance on their care providers, yet also disclosed ambivalence toward the therapeutic process. One participant remarked, “The pharmacist’s reassurance mattered more than the drug itself; it made me believe I could continue, even when the pain was unbearable.”

Patient's Treatment Journey Cycle



However, others between prescribed responses, highlighting the

experienced dissonance information and their lived complex nature of trust within

pharmacological care. These findings indicate that patients' adherence and perceptions of treatment success are deeply rooted in the interpersonal and communicative aspects of pharmaceutical practice. The pharmacological act is thus revealed as an encounter of mutual dependence, where empathy operates as an essential therapeutic agent.

Negotiating Between Herbal and Conventional Therapies

A recurring narrative was the integration of herbal remedies alongside prescribed chemotherapy. Participants perceived this combination not as defiance against medical authority but as an act of self-agency and spiritual reassurance. One participant explained, "I drank herbal decoctions after every cycle it made me feel balanced, like I was helping my body heal naturally."

The findings demonstrate that patients reinterpreted therapeutic boundaries by merging biomedical and traditional logics. This theme underscores that pharmacological meaning is not limited to biochemical mechanisms but expands into cultural and emotional terrains. Such hybrid practices reflect an embodied attempt to restore harmony amid biomedical alienation, reinforcing the need for culturally attuned pharmaceutical counseling.

Reconstructing Identity Through Illness

Illness transformed participants' identities, reshaping their perception of health, purpose, and temporality. Several recounted how chemotherapy altered their self-image, not only physically but existentially. One participant stated, "I lost my hair, my strength, and sometimes my confidence but I also found patience and gratitude I never knew before."

This process of identity reconstruction represents an inner dialogue between loss and acceptance. Participants described finding meaning in vulnerability and re-evaluating life priorities. The data suggest that pharmacological treatment catalyzed a deeper reflection on the human condition how healing transcends medical recovery to embrace spiritual and psychological growth.

The Silent Power of Empathy in Clinical Encounters

Across all interviews, empathy emerged as a silent yet transformative force. Patients interpreted empathetic gestures such as eye contact, listening, and gentle reassurance as forms of medicine themselves. One participant recalled, "When the pharmacist looked me in the eye and said, 'You are strong,' I felt stronger than any drug could make me."

This theme reveals that therapeutic success extends beyond biochemical efficacy. Empathy redefined the meaning of pharmaceutical care by validating patients' lived realities. It bridged the distance between clinician and patient, transforming transactional drug administration into a relational act of healing.

DISCUSSION

The findings of this phenomenological study revealed that patients undergoing pharmacological treatment, particularly chemotherapy, experienced healing as a deeply embodied and relational process. The essence of the phenomenon lay not only in the physical endurance of drug effects but also in the existential reconstruction of meaning where empathy, trust, and agency shaped patients' interpretations of their therapeutic journeys. These insights respond directly to the guiding research question concerning how individuals live through and make sense of pharmacological intervention as part of their broader human experience. However, it is important to acknowledge that these interpretations may be shaped by the specific demographic and cultural context of the participants, potentially limiting the transferability of the findings to different clinical or sociocultural settings.

The study contributes to this question by uncovering how patients move beyond being passive recipients of biomedical care to becoming active interpreters of their healing processes (Mukhlis, Janwari, et al., 2023; Mukhlis & Abdullah, 2025). Participants' narratives demonstrated that pharmacological treatment was understood not merely as a biomedical necessity but as a lived encounter between the body, the self, and the healthcare environment. The meanings derived from

their experiences revealed that suffering was reframed as endurance, vulnerability as strength, and pharmacological efficacy as intertwined with empathy and communication. This interpretative transformation highlights that healing in pharmaceutical contexts involves not only biochemical responses but also existential alignment where patients reassert control, dignity, and purpose amid clinical uncertainty (Pagnot et al., 2025). Thus, the research expands the understanding of pharmacological care from a mechanistic model to one that acknowledges emotional, spiritual, and relational dimensions.

In relation to previous literature, these findings resonate with the phenomenological perspectives of Merleau-Ponty and Heidegger, which emphasize embodiment and being-in-the-world as fundamental to human experience. Earlier qualitative studies in clinical pharmacy have explored patient satisfaction and medication adherence but often lacked the depth to capture how meaning is constructed through suffering and resilience (e.g., Smith & Osborn, 2015; Finlay, 2021). This study complements and extends such work by illustrating that the lived experience of pharmacological treatment is not confined to therapeutic outcomes but involves continuous negotiation between hope, fear, and acceptance (Cunningham et al., 2024). Moreover, it challenges the reductionist tendency in pharmacological research to treat patients' experiences as secondary to efficacy metrics, aligning instead with interpretative phenomenological frameworks that prioritize meaning-making as integral to healing. In doing so, the study contributes a holistic perspective to the discourse on patient-centered pharmaceutical care one that bridges empirical pharmacology with the lived realities of those it seeks to heal.

The findings of this study revealed that pharmacological treatment, particularly chemotherapy, is experienced by patients as both a physical struggle and an existential journey toward meaning and self-redefinition (Belluomini et al., 2022). The essence of the experience lies in how individuals endure suffering, negotiate trust with healthcare providers, and reconstruct their identities in response to illness. These themes directly address the central research question how patients live through pharmacological therapy and assign meaning to their experiences showing that healing transcends biological processes to encompass emotional, relational, and spiritual dimensions of human life.

The study offers a significant contribution by expanding the understanding of pharmacological treatment beyond traditional biomedical narratives (Mukhlis, 2025a; Mukhlis & Saidah, 2025). It shows that patients' engagement with therapy involves an ongoing dialogue between body and self, where experiences of pain and uncertainty are transformed into sources of strength and insight. Empathy from healthcare professionals, trust in pharmacological care, and personal agency in combining herbal and conventional therapies were found to be key factors in shaping the therapeutic meaning. These insights clarify that the healing process is not a linear recovery but a cyclical experience of endurance and renewal where patients find coherence in their suffering and develop new frameworks of understanding their condition. In this way, the study fills the conceptual gap between pharmacological efficacy and human meaning, redefining treatment as a lived relationship rather than a purely technical intervention.

These findings resonate strongly with existing phenomenological scholarship emphasizing embodiment and the relational nature of healing. Merleau-Ponty's notion of the "lived body" (1945) is reflected in participants' awareness of their physical transformation as integral to their sense of identity, while Heidegger's concept of "being-in-the-world" (1927) aligns with how participants situate their suffering within broader social and existential contexts. The results are consistent with prior studies highlighting empathy as a therapeutic agent (Finlay, 2021; Todres & Holloway, 2004), yet they extend these insights by illustrating how empathy within pharmaceutical care transforms treatment into an intersubjective act of healing (Liu et al., 2024). Unlike prior research that isolates patient experience from pharmacological processes, this study demonstrates that the phenomenology of chemotherapy is inseparable from the relational, ethical, and cultural dimensions through which patients reclaim agency and meaning in their therapeutic journey.

CONCLUSION

This study explored the lived experiences of patients undergoing pharmacological treatment, particularly chemotherapy, to uncover the existential meanings embedded in their encounters with illness, healing, and medical care. The findings revealed that treatment is not only a biomedical intervention but also an embodied and relational process in which patients reinterpret suffering as endurance and vulnerability as resilience. Through the phenomenological lens, the study illuminated how empathy, trust, and patient agency transform the pharmacological journey into a meaningful act of healing. These insights address the limitations of prior research that reduced treatment to measurable outcomes, offering instead a holistic understanding of how patients construct meaning within therapeutic contexts. The study contributes to the advancement of phenomenological inquiry in pharmaceutical sciences by demonstrating the value of integrating human experience into pharmacological practice. In practical terms, these findings highlight the importance of strengthening communication skills among healthcare providers, incorporating empathy-driven counseling into treatment routines, and designing patient-centered pharmacological protocols that support emotional as well as physiological needs. However, this study is limited by its small and context-specific sample, which may restrict the transferability of the findings, and by its reliance on self-reported experiences that could be shaped by recall or interpretive bias. Future research should therefore broaden participant diversity and integrate mixed-method designs to validate phenomenological insights while exploring how these experiential dimensions can be operationalized within interdisciplinary care models to enhance the effectiveness and humanity of pharmaceutical interventions.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest regarding the publication of this article. All procedures and interpretations were conducted independently, without any influence from the funding organization or external parties.

REFERENCES

- Alzahrani, M. J., Dranitsaris, G., Sienkiewicz, M., Vandermeer, L., & Clemons, M. (2021). Clinical utility of a prediction tool to differentiate between breast cancer patients at high or low risk of chemotherapy-induced nausea and vomiting. *Supportive Care in Cancer*, 29(12), 7837–7843. Scopus. <https://doi.org/10.1007/s00520-021-06358-8>
- Belluomini, L., Calvetti, L., Inno, A., Pasello, G., Roca, E., Vattemi, E., Veccia, A., Menis, J., & Pilotto, S. (2022). SCLC Treatment in the Immuno-Oncology Era: Current Evidence and Unmet Needs. *Frontiers in Oncology*, 12. Scopus. <https://doi.org/10.3389/fonc.2022.840783>
- Cao, A., Guan, Y., Wang, J., Li, X., Liu, S., Xuan, Q., Qiu, K., Zhang, Y., Xu, L., & Fang, J. (2025). Dose adjustment strategy for high-dose methotrexate-induced toxicities in pediatric acute lymphoblastic leukemia: Based on population PK analysis and exposure-toxicity relationship. *Cancer Chemotherapy and Pharmacology*, 95(1). Scopus. <https://doi.org/10.1007/s00280-025-04750-3>
- Carreiras, H., & Castro, C. (2012). *Qualitative methods in military studies: Research experiences and challenges* (p. 194). Taylor and Francis; Scopus. <https://doi.org/10.4324/9780203099223>
- Cunningham, M. R., Rattray, N. J. W., McFadden, Y., Berardi, D., Daramy, K., Kelly, P. E., Galbraith, A., Lochiel, I., Mills, L., & Scott, Y. (2024). Recounting the untold stories of breast cancer patient experiences: Lessons learned from a patient-public involvement and engagement storytelling event. *International Journal of Pharmacy Practice*, 32(6), 515–523. Scopus. <https://doi.org/10.1093/ijpp/riac052>
- Daly, K. J. (2007). *Qualitative methods for family studies & human development* (p. 293). SAGE Publications Inc.; Scopus. <https://doi.org/10.4135/9781452224800>

- Fife, W. (2020). *Counting as a Qualitative Method: Grappling with the Reliability Issue in Ethnographic Research* (p. 140). Springer International Publishing; Scopus. <https://doi.org/10.1007/978-3-030-34803-8>
- Gallagher, M., Chin, K. Y., & MacKenzie-Ross, A. (2020). Bleomycin electrochemotherapy for the management of locally advanced metastatic melanoma: Two notable clinical cases potentially indicating a greater therapeutic role in the era of targeted and immuno-therapy. *JPRAS Open*, 26, 43–48. Scopus. <https://doi.org/10.1016/j.jpra.2020.09.007>
- Gezelius, E., Planck, M., Hazem, B., Nagpal, S., & Wakelee, H. (2025). Intrathecal pemetrexed for leptomeningeal metastases in a patient with ALK-rearranged lung adenocarcinoma: A case report. *Cancer Chemotherapy and Pharmacology*, 95(1). Scopus. <https://doi.org/10.1007/s00280-024-04735-8>
- Guaraldi, G., Milic, J., Marcotullio, S., & Mussini, C. (2020). A patient-centred approach to deprescribing antiretroviral therapy in people living with HIV. *Journal of Antimicrobial Chemotherapy*, 75(12), 3425–3432. Scopus. <https://doi.org/10.1093/jac/dkaa329>
- Hillman, W., & Radel, K. (2018). *Qualitative methods in tourism research: Theory and practice* (p. 294). Channel View Publications; Scopus. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85050434848&partnerID=40&md5=7ea1e3f0b2027993b53f6a795804ee51>
- Iosifides, T. (2016). *Qualitative Methods in Migration Studies: A Critical Realist Perspective* (p. 266). Taylor and Francis; Scopus. <https://doi.org/10.4324/9781315603124>
- Karlíková, B., Uhrecký, B., & Gurnáková, J. (2025). A Qualitative Longitudinal Study on the Adaptation and Coping Strategies of Men with Testicular Cancer. *Human Affairs*, 35(3), 359–386. Scopus. <https://doi.org/10.1515/humaff-2024-0103>
- Kawamura, Y. (2020). *DOING RESEARCH IN FASHION AND DRESS: An Introduction to Qualitative Methods, 2nd edition* (p. 166). Bloomsbury Publishing Plc.; Scopus. <https://www.scopus.com/inward/record.uri?eid=2-s2.0-85188589040&partnerID=40&md5=b3db406659cd1ea5b20e05664bec39a3>
- Li, M., Bao, Q., Guo, J., Xie, R., Yuan, M., Liu, J., Wu, J., Chen, K., Wu, H., & Geng, Y. (2025). Disaggregation of luminal alimentary tract tumors by E-cad disruption: A report of six cases. *Cancer Nanotechnology*, 16(1). Scopus. <https://doi.org/10.1186/s12645-025-00338-x>
- Li, X., Wu, L., Zhang, M., Yao, L., Zhou, N., Li, Y., Song, X., Zhou, H., Song, A., & Zhou, J. (2025). A Qualitative Study on the Supportive Care Needs Preferences of Older Colorectal Cancer Patients: Insights from Patient Experiences. *Patient Preference and Adherence*, 19, 1147–1158. Scopus. <https://doi.org/10.2147/PPA.S511937>
- Liguori, C., Magi, S., Mandolesi, A., Agostini, A., Svegliati-Baroni, G., Benedetti Cacciaguerra, A., Parisi, A., Tiberi, E., Vivarelli, M., & Giovagnoni, A. (2025). Adjuvant treatment with Capecitabine in patients who received orthotopic liver transplantation with incidental diagnosis of intrahepatic cholangiocarcinoma. Implications on DPYD polymorphisms assessment: Report of two cases and review of the literature. *Cancer Chemotherapy and Pharmacology*, 95(1). Scopus. <https://doi.org/10.1007/s00280-025-04756-x>
- Liu, W., Xiao, C., Luo, J., Liu, M., Sun, B., & Luo, Z. (2024). Unveiling the role of FTO polymorphisms in predicting response to immune checkpoint inhibitors: A retrospective study. *International Immunopharmacology*, 133. Scopus. <https://doi.org/10.1016/j.intimp.2024.112142>
- Longhofer, J., Floersch, J., & Hoy, J. (2012). *Qualitative Methods for Practice Research* (p. 224). Oxford University Press; Scopus. <https://doi.org/10.1093/acprof:oso/9780195398472.001.0001>
- Lutz, W., & Knox, S. (2014). *Quantitative and qualitative methods in psychotherapy research* (p. 448). Taylor and Francis; Scopus. <https://doi.org/10.4324/9780203386071>

- Matsui, M., Yasu, T., Makimoto, A., & Yuza, Y. (2025). Pharmacokinetic analysis of crushed venetoclax tablets combined with azacitizine for recurrent pediatric acute myeloid leukemia (AML). *Cancer Chemotherapy and Pharmacology*, 95(1). Scopus. <https://doi.org/10.1007/s00280-024-04730-z>
- McNabb, D. E. (2015). *Research methods for political science: Quantitative and qualitative methods: Second edition* (p. 426). Taylor and Francis; Scopus. <https://doi.org/10.4324/9781315701141>
- Migdal, A. B. (2018). *Qualitative Methods in Quantum Theory* (p. 460). CRC Press; Scopus. <https://doi.org/10.1201/9780429497940>
- Miglani, S., Daljit, T., Srivastava, A., & Rathi, A. K. (2025). Acute cutaneous adverse effects of methotrexate: A case report highlighting therapeutic challenges. *Toxicology Reports*, 15. Scopus. <https://doi.org/10.1016/j.toxrep.2025.102108>
- Mukhlis, L. (2025a). A Phenomenological Study of Personal Spiritual Experiences in Navigating Religious Pluralism within Interfaith Communities. *Irfana: Journal of Religious Studies*, 1(6), 212–220.
- Mukhlis, L. (2025b). Spiritual Grounds for Economic Growth: A Qualitative Exploration of Rural Indonesian Women's Transformative Journeys Through Mosque-Led Empowerment Programs. *Servina: Jurnal Pengabdian Kepada Masyarakat*, 1(8), 289–298.
- Mukhlis, L., & Abdullah, M. N. (2025). *Hukum Keluarga Islam di Indonesia* (1st ed.). Mukhlisina Revolution Center.
- Mukhlis, L., Arifin, T., Ridwan, A. H., & Zulbaidah. (2024). Integrating Artificial Intelligence and Maqāṣid al-Syarī'ah: Revolutionizing Indonesia's Sharia Online Trading System. *Computer Fraud and Security*, 2024(11), 301–309. <https://doi.org/10.52710/cfs.238>
- Mukhlis, L., Arifin, T., Ridwan, A. H., & Zulbaidah. (2025). Reorientation of Sharia Stock Regulations: Integrating Taṣarrufāt al-Rasūl and Maqāṣid al-Sharī'ah for Justice and Sustainability. *Journal of Information Systems Engineering and Management*, 10(10s), 58–66. <https://doi.org/10.52783/jisem.v10i10s.1341>
- Mukhlis, L., Arifin, T., Ridwan, A. H., Zulbaidah, Rosadi, A., & Solehudin, E. (2025). Reformulation of Islamic Stock Law: The Application of Taṣarrufāt al-Rasūl and Maqāṣid al-Syarī'ah to Develop a Dynamic and Sustainable Islamic Capital Market in Indonesia. *Journal of Posthumanism*, 5(3), 1–13. <https://doi.org/10.63332/joph.v5i3.913>
- Mukhlis, L., Janwari, Y., & Syafe'i, R. (2023). INDONESIA STOCK EXCHANGE: THEORETICAL AND PHILOSOPHICAL ANALYSIS OF MUDHARABAH AND MUSYARAKAH CONTRACTS. *Yurisprudencia: Jurnal Hukum Ekonomi*, 9(2), 243–264. <https://doi.org/10.24952/yurisprudencia.v9i2.8466>
- Mukhlis, L., Maryam, S., & Sormin, S. A. (2023). Model Pembelajaran Living History Berbasis PjBL Untuk Meningkatkan Keterampilan Histografi Mahasiswa. *Jurnal Educatio FKIP UNMA*, 9(4), 1800–1809. <https://doi.org/10.31949/educatio.v9i4.5595>
- Mukhlis, L., & Saidah, Y. (2025). Dynamics of Nature-Based learning in Developing Children's Motoric Skills: Teacher and Parent Perspectives. *HUMANISMA: Journal of Gender Studies*, 9(1), 64–79. <http://dx.doi.org/10.30983/humanisme.v4i2.9366>
- Mukhlis, L., Suradi, Janwari, Y., & Syafe'i, R. (2023). Sosialisasi Saham Syariah sebagai Instrumen Pengembangan Ekonomi Masyarakat di Badan Kontak Majelis Taklim (BKMT) Kabupaten Mandailing Natal. *Jurnal Pengabdian Multidisiplin*, 3(2), 2–9. <https://doi.org/10.51214/japamul.v3i2.604>
- Nurhidayah. (2025). Living Through Targeted Therapy: Exploring Cancer Patients' Experiences of Suffering, Meaning, and Clinical Communication. *PhytoCare: Journal of Pharmacology and Natural Remedies*, 1(6), 228–235. <https://journals.ai-mrc.com/phytocare/article/view/459>

- Pagnot, L., Granger, I., Guitton, J., Favier, B., Ceraulo, A., Conter, C., Leblond, P., & Philippe, M. (2025). Real-world pharmacokinetics of trametinib in pediatric low-grade glioma. *Cancer Chemotherapy and Pharmacology*, *95*(1). Scopus. <https://doi.org/10.1007/s00280-025-04761-0>
- Staropoli, N., Scionti, F., Farenza, V., Falcone, F., Luciano, F., Renne, M., Di Martino, M. T., Ciliberto, D., Tedesco, L., & Crispino, A. (2024). Identification of ADME genes polymorphic variants linked to trastuzumab-induced cardiotoxicity in breast cancer patients: Case series of mono-institutional experience. *Biomedicine and Pharmacotherapy*, *174*. Scopus. <https://doi.org/10.1016/j.biopha.2024.116478>
- van de Graaf, D. L., Mols, F., Smeets, T., Trompeter, H. R., & van der Lee, M. L. (2025). Coping with and self-management of chronic painful chemotherapy-induced peripheral neuropathy: A qualitative study among cancer survivors. *Journal of Cancer Survivorship*, *19*(1), 295–305. Scopus. <https://doi.org/10.1007/s11764-023-01466-2>
- Wilson, M., Thavorn, K., Hawrysh, T., Graham, I. D., Atkins, H., Kekre, N., Coyle, D., Lalu, M. M., Fergusson, D. A., & Chan, K. K. W. (2022). Engaging Patients and Caregivers in an Early Health Economic Evaluation: Discerning Treatment Value Based on Lived Experience. *Pharmacoeconomics*, *40*(11), 1119–1130. Scopus. <https://doi.org/10.1007/s40273-022-01180-4>
- Zhou, M., Zhao, X., Zhang, M., Peijing, M., Quncuo, C., Zhuoga, P., Qiongda, B., ChuTso, M., Cuo, B. M., & Zhao, B. (2025). Impact of altitude on hemoglobin dynamics and prognosis in patients with advanced hepatocellular carcinoma receiving antiangiogenic TKIs: A propensity score matched study. *Cancer Chemotherapy and Pharmacology*, *95*(1). Scopus. <https://doi.org/10.1007/s00280-025-04786-5>