



## Clinicians' Experiences and Meanings in Using Artificial Intelligence for Healthcare Decision-Making

Maulina Yulianti <sup>1\*</sup>, Fadhilah Nurluthfi Sari <sup>2</sup>

<sup>1,2</sup> Universitas Muhammadiyah Surakarta, Indonesia

<sup>1</sup>[maulinayulianti@gmail.com](mailto:maulinayulianti@gmail.com) \*, <sup>2</sup>[fadhilahnurluthfi@gmail.com](mailto:fadhilahnurluthfi@gmail.com)

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### ABSTRACT

The integration of artificial intelligence (AI) in healthcare has reshaped clinical practice by transforming how medical professionals interact with information, make decisions, and deliver patient care. Within this technological shift, understanding the lived experiences of clinicians who engage with AI-based decision systems has become essential to addressing the human dimension of digital medicine. However, current research remains largely technocentric, focusing on system performance rather than the subjective meanings and ethical reflections that emerge through clinicians' interactions with intelligent technologies. To address this gap, the present study employs a clearly defined hermeneutic phenomenological design, specifying procedural rigor in sampling, data collection, and analysis. Here, we apply a hermeneutic phenomenological approach to explore how healthcare professionals experience, interpret, and assign meaning to their engagement with AI systems in everyday clinical contexts. Data were collected through in-depth semi-structured interviews with twelve clinicians who regularly use AI-assisted diagnostic or treatment tools, followed by interpretative phenomenological analysis (IPA). The findings reveal that clinicians' experiences are characterized by four interrelated themes: negotiating trust, emotional and ethical tension, adaptive learning, and reclaiming human connection in digital care. These themes highlight a continuous process of meaning-making in which clinicians navigate the coexistence of human intuition and machine reasoning, redefining their sense of professional identity and moral accountability. The study expands our understanding of human-AI collaboration by emphasizing that technological integration is not only procedural but also existential, requiring reflection on the social, ethical, and emotional dimensions of care. These insights provide a foundation for developing more human-centered AI systems that align innovation with empathy in healthcare.



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## INTRODUCTION

In recent decades, the integration of artificial intelligence (AI) into healthcare has profoundly transformed how medical professionals interact with information, make clinical decisions, and deliver patient care (Mukhlis, Suradi, et al., 2023; Mukhlis, 2025b). This technological advancement represents more than a shift in clinical procedure it signifies a paradigm change in the human experience of care, where decision-making processes increasingly involve collaboration between human intuition and algorithmic reasoning (Lindbäck et al., 2025). AI-driven diagnostic tools, predictive analytics, and digital monitoring systems have become integral components of clinical practice, promising efficiency, precision, and data-informed insight in managing complex health conditions.

However, as technology grows more sophisticated, the lived experience of healthcare practitioners within these digital environments becomes increasingly nuanced. Beyond technical efficiency, clinicians face new psychological and ethical realities, such as navigating trust, autonomy, and moral responsibility in their interactions with intelligent systems (Chen et al., 2025). These

experiences unfold within the broader social discourse on technological dependency and professional identity issues that have become particularly salient in the post-pandemic healthcare landscape, where digital tools mediate much of the patient-provider relationship.

From a phenomenological standpoint, this shift raises important questions about the subjective meaning of technological engagement in healthcare. The introduction of AI does not merely change workflows; it reshapes how clinicians perceive themselves, their patients, and their professional role within a system increasingly influenced by machine intelligence. These dynamics involve emotional and cognitive processes that are deeply personal and socially embedded, reflecting tensions between human empathy and computational logic (Sezgin et al., 2023). Understanding this interplay requires more than technical evaluation; it calls for an exploration of the experiential dimension of working with intelligent technologies, where meaning emerges through lived encounters rather than objective observation.

Therefore, exploring how healthcare professionals experience and interpret their interactions with AI-based systems is essential for capturing the essence of human-technology coexistence in clinical practice. A phenomenological approach enables researchers to move beyond surface-level assessments of usability or performance, toward understanding how individuals construct meaning, adapt emotionally, and negotiate ethical boundaries in technologically mediated care. Such inquiry not only enriches theoretical understanding but also informs more humane and reflective designs for future health technologies that honor the subjective and moral dimensions of clinical work.

Building upon the broader discourse on digital transformation in healthcare, research focusing on the subjective experience of healthcare professionals interacting with AI technologies has emerged as a critical area of inquiry. This body of work seeks to uncover how clinicians perceive, interpret, and emotionally respond to the growing presence of algorithmic systems in their daily practice. Studies have increasingly recognized that technological integration is not solely a matter of operational efficiency or clinical accuracy but a deeply human encounter, shaped by perception, trust, and ethical reflection (Sequeira et al., 2022). Within this context, phenomenological exploration offers a unique opportunity to capture the essence of these lived experiences, moving beyond the observable behaviors to the meanings embedded within them.

Despite this recognition, substantial methodological challenges persist in exploring the depth of human experience within technology-mediated healthcare environments. The majority of existing studies have relied on quantitative or survey-based methods, which, while valuable for identifying trends, often fail to reveal the subjective and interpretive dimensions of human-AI interaction. Such methods tend to reduce complex emotional and ethical experiences into measurable variables, overlooking the rich, context-dependent meanings that emerge through direct engagement with intelligent systems (Wu et al., 2025). Consequently, the emotional ambivalence, moral tension, and cognitive adaptation that characterize clinicians' encounters with AI remain only partially understood in current literature.

These methodological limitations underscore the necessity of an interpretive, phenomenological approach one capable of accessing the experiential layers that quantitative analyses cannot adequately address. By focusing on lived experience rather than behavioral outcomes, phenomenology enables researchers to examine how individuals construct meaning amid technological change, illuminating the existential and ethical implications of AI adoption in clinical settings. This approach not only bridges the gap between empirical evidence and human meaning but also contributes to a more holistic and human-centered understanding of innovation in healthcare systems.

Although the integration of artificial intelligence (AI) into healthcare systems has been widely studied, most existing research has focused on technical efficiency, diagnostic accuracy, and workflow optimization (Wang et al., 2025). These studies often employ quantitative or outcome-based frameworks, treating AI as a neutral tool rather than a relational and experiential phenomenon. While such approaches contribute to improving clinical performance metrics, they fall short of capturing the subjective realities of healthcare professionals who engage with these technologies on an emotional,

cognitive, and ethical level (Temsah et al., 2023). The current understanding of AI in clinical settings thus remains technocentric, emphasizing functionality over human meaning.

This reliance on practical and performance-oriented solutions has produced valuable insights into system design and usability but has simultaneously overshadowed the experiential and interpretive dimensions of AI adoption (Beddu et al., 2024). Quantitative evaluations rarely account for the inner tensions experienced by clinicians such as negotiating trust, reconciling professional identity, or managing ethical dilemmas in algorithmically influenced decision-making. As a result, the human meaning behind technological adaptation remains fragmented and insufficiently theorized within the healthcare literature.

Addressing this limitation requires a shift toward a phenomenological lens, which prioritizes the exploration of lived experience and the interpretation of meaning as constructed through human engagement with technology. A phenomenological approach does not seek to measure behavior but to understand how individuals perceive, feel, and make sense of their interaction with AI systems. By attending to the essence of experience how clinicians embody, question, and internalize their encounters with intelligent tools this research aims to fill the current gap in knowledge and contribute to a more holistic and human-centered understanding of technology in healthcare practice.

Previous studies have explored the integration of artificial intelligence (AI) in healthcare primarily from technical and operational perspectives. Research has highlighted how AI systems improve diagnostic accuracy, clinical efficiency, and decision-making processes (Bonini et al., 2024). However, fewer studies have investigated the lived experiences of healthcare professionals as they interact with these technologies. Phenomenological research in digital health has shown that such interactions often reshape professional identity, emotional engagement, and ethical responsibility (Pack et al., 2020). These findings suggest that the transformation introduced by AI extends beyond functionality it touches the human dimensions of care and decision-making.

To address this deeper experiential layer, the present study adopts a hermeneutic phenomenological approach, which is designed to uncover the meanings embedded within human experience. This method allows for a nuanced interpretation of how clinicians perceive and make sense of their encounters with AI systems in clinical contexts (Mukhlis, Arifin, Ridwan, & Zulbaidah, 2025; Mukhlis, Arifin, Ridwan, Zulbaidah, et al., 2025). By focusing on the subjective and interpretive aspects of experience, the study responds to the knowledge gap identified earlier specifically, the need to move beyond measurement toward understanding meaning. The phenomenological perspective enables a rich, human-centered inquiry into how professionals navigate trust, ethics, and adaptation in technologically mediated care. In doing so, it provides insights that contribute both theoretically and practically to the discourse on human-AI collaboration in healthcare.

Based on this literature landscape, a clearer research gap emerges: although AI integration has been extensively evaluated for accuracy, efficiency, and usability, far less is known about how clinicians interpret, emotionally negotiate, and assign meaning to their interactions with AI in everyday practice. Existing studies rarely illuminate the existential and ethical dimensions of this engagement. Accordingly, the present study seeks to address this gap by pursuing two specific objectives: (1) to explore the lived experiences of clinicians who use AI-based systems in real clinical settings, and (2) to interpret how these experiences shape clinicians' perceptions of trust, identity, and moral responsibility in technologically mediated care.

This article is structured as follows. The Introduction outlines the conceptual background and research motivation. The Method section details the phenomenological design, participant selection, and data collection and analysis procedures (Cingolani et al., 2023). The Results section presents thematic findings derived from interpretive analysis of lived experiences (Sweileh, 2024). Finally, the Discussion and Conclusion sections synthesize these insights, connecting them to existing literature and emphasizing their implications for future human-centered technology development in healthcare.

## **RESEARCH METHODS**

### **Study Design**

This study employed a hermeneutic phenomenological design, grounded in the philosophical tradition of Heidegger, to explore the lived experiences of healthcare professionals interacting with artificial intelligence (AI)-based clinical decision support systems (Lutz & Knox, 2014; McNabb, 2015). The phenomenological approach was selected for its capacity to reveal the subjective meanings and interpretive dimensions embedded in human experience rather than to measure external variables. This design allows for a comprehensive understanding of how clinicians perceive, interpret, and make sense of their encounters with intelligent technologies in everyday clinical contexts.

Hermeneutic phenomenology emphasizes interpretation over description, focusing on how meaning arises through lived engagement with the phenomenon. In this study, the design enabled the uncovering of both experiential depth and contextual nuance, allowing participants' narratives to serve as the primary source of insight into the complex relationship between human cognition, emotion, and technology-assisted decision-making.

To strengthen methodological rigor, the study incorporated explicit validation strategies, including member checking, triangulation of data sources, and maintenance of a detailed audit trail to document analytical decisions throughout the research process.

### **Participants**

Participants consisted of licensed healthcare professionals including physicians, nurses, and medical technologists who had direct experience using AI-supported diagnostic or treatment systems in clinical practice (Hillman & Radel, 2018; Migdal, 2018). Purposive sampling was applied to ensure that each participant possessed relevant experiential knowledge of the phenomenon under investigation. Inclusion criteria involved professionals who had at least one year of exposure to AI-driven systems and who could articulate their experiences clearly. Exclusion criteria included individuals without direct interaction with AI tools or those engaged exclusively in administrative roles.

A total of twelve participants were included, representing a balanced demographic composition in terms of gender, professional role, and age (ranging from 29 to 56 years). This diversity allowed for a richer understanding of the phenomenon across different clinical perspectives while maintaining coherence in the experiential focus of the study.

### **Data Collection**

Data were collected through in-depth, semi-structured interviews guided by open-ended questions that encouraged reflective expression of lived experiences (Carreiras & Castro, 2012; Iosifides, 2016). The interviews were conducted in a private, comfortable setting either in person or through secure video conferencing platforms to promote a sense of trust and openness. Each session lasted approximately 60 to 90 minutes and was audio-recorded with participants' consent to ensure accuracy of transcription.

The interview guide focused on themes such as trust in AI systems, emotional responses to algorithmic recommendations, ethical dilemmas, and perceived shifts in professional autonomy (Daly, 2007; Longhofer et al., 2012). Field notes were taken immediately after each interview to capture contextual observations and nonverbal cues relevant to meaning interpretation. All recordings were transcribed verbatim to preserve the authenticity of participants' voices.

### **Data Analysis**

The data were analyzed using the Interpretative Phenomenological Analysis (IPA) framework, which facilitates systematic engagement with the text to identify essential meanings and thematic structures (Fife, 2020; Kawamura, 2020). Analysis proceeded through iterative reading, coding, clustering, and interpretative synthesis. Initially, transcripts were read repeatedly to grasp the

overall sense of participants’ narratives. Units of meaning were then extracted and coded to highlight significant experiential expressions.

Coded data were subsequently grouped into emergent themes that captured shared yet nuanced aspects of experience, such as trust negotiation, ethical friction, cognitive adaptation, and emotional displacement. The analytical process employed the hermeneutic circle, ensuring continuous movement between parts and whole to refine the interpretation of meanings. NVivo 14 software was used to organize and trace coding patterns, though thematic development remained interpretatively driven by the phenomenological framework.

The final synthesis aimed to reveal the essential structure of the lived experience, reflecting the interconnectedness of cognitive, emotional, and ethical dimensions in human-AI interaction within healthcare practice.

**RESULTS**

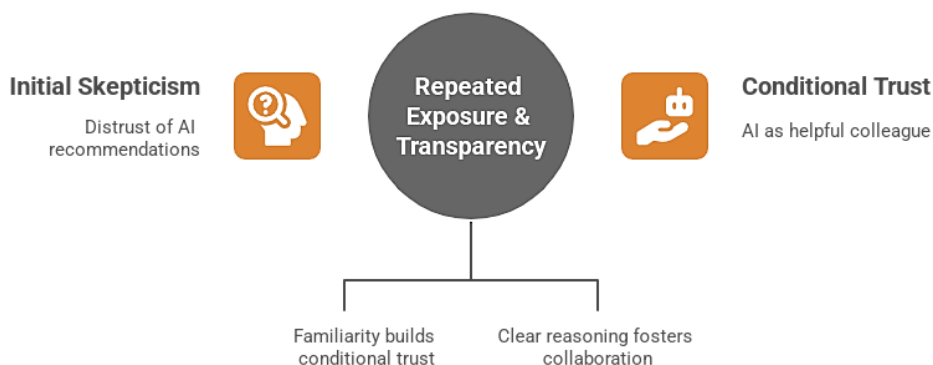
**Negotiating Trust in Artificial Intelligence**

Participants consistently described the process of building trust toward AI recommendations as complex and evolving. While initial encounters often involved skepticism, many clinicians eventually developed conditional trust, grounded in repeated exposure and system transparency. One physician shared:

“At first, I didn’t really trust the AI. It felt like it was taking over my clinical judgment. But over time, I started to see it as more of a colleague still imperfect, but helpful when I understood its reasoning.”

The data revealed that trust was not absolute; it fluctuated based on the perceived reliability and explainability of the system. Clinicians valued AI tools that provided clear reasoning or evidence behind recommendations, highlighting the essential role of interpretability in fostering meaningful collaboration between humans and machines.

**Building Trust in AI Recommendations**



**Emotional Displacement and Professional Identity**

Another dominant theme was the emotional tension clinicians experienced as they reconciled their professional identity with the presence of intelligent systems. Some participants expressed feelings of displacement or diminished autonomy, perceiving AI as a silent evaluator of their expertise. One participant reflected:

“When the system suggests something different from my assessment, I start questioning myself am I missing something, or is it just the algorithm being too rigid?”

This tension underscores how technology-driven healthcare solutions may inadvertently challenge clinicians’ sense of professional agency. The findings highlight the existential conflict between embracing innovation and maintaining the human essence of medical judgment.

**Ethical Friction in Algorithmic Decision-Making**

Participants frequently encountered ethical dilemmas when AI recommendations conflicted with patient-centered values. Some expressed unease about the lack of moral sensitivity in algorithmic outputs. A senior physician stated:

“The AI gives probabilities, not compassion. Sometimes, it’s correct statistically, but it doesn’t understand the patient’s fear or family situation.”

This illustrates a broader phenomenon of ethical friction, where clinicians must balance data-driven efficiency with empathetic care. The results indicate that moral interpretation remains a deeply human act, even within technologically advanced clinical systems.

### **Adaptive Learning and Cognitive Calibration**

Clinicians described a gradual process of cognitive calibration, wherein they learned to integrate AI recommendations into their workflow without over-reliance. One participant described this as “learning the rhythm” of the system:

“After using it for months, I began to anticipate its suggestions. I could tell when it would flag something, and that helped me think differently about diagnoses.”

Such reflections reveal that human adaptation to AI involves both technical learning and reflective practice clinicians continuously reinterpret the system’s output to refine their decision-making frameworks. This adaptive process fosters co-evolution between human expertise and technological intelligence.

### **Reclaiming Human Connection in Digital Care**

Despite technological integration, participants emphasized the irreplaceable value of human connection in patient interactions. Some expressed relief in consciously reclaiming the interpersonal dimension of care after periods of digital immersion:

“Sometimes, I just close the laptop and talk to the patient directly. That’s when I remember why I became a doctor in the first place.”

This sentiment reveals a counterbalancing movement within digital healthcare: the deeper clinicians engage with technology, the more they rediscover the necessity of empathy, presence, and relational depth in clinical encounters.

## **DISCUSSION**

### **Summary of Key Findings**

This study reveals that clinicians’ interactions with artificial intelligence (AI)-based decision support systems are shaped by a dynamic process of trust negotiation, emotional adaptation, ethical reflection, and professional identity reconstruction (Mukhlis et al., 2024; Mukhlis, Maryam, et al., 2023). The phenomenological analysis uncovers the essential meaning behind these experiences clinicians continuously seek balance between human intuition and technological reasoning, reaffirming the inherently human dimension of medical decision-making. These findings directly address the guiding research question concerning how healthcare professionals experience and interpret their engagement with AI systems in clinical practice.

### **Contribution of Findings to the Research Question**

The results provide a profound response to the central inquiry by demonstrating that clinicians’ experiences are not merely functional but existential and interpretive (Lenart, 2025). Rather than viewing AI as a passive tool, participants described a relational engagement characterized by emotional ambivalence oscillating between reliance and resistance. This insight advances current understanding by highlighting that the integration of AI fundamentally transforms not only workflow but also the ethical and psychological landscape of healthcare practice. The research contributes uniquely to the field by framing AI adoption as a meaning-making process, wherein clinicians reinterpret their professional autonomy, responsibility, and moral accountability through their lived experiences with intelligent systems.

### **Relation to Previous Literature and Theoretical Perspectives**

These findings both align with and extend existing theoretical and empirical work on human-technology interaction. Consistent with (Gaillard et al., 2025; Subu et al., 2025), the study confirms that AI adoption evokes complex emotional and ethical responses rather than simple behavioral adaptation. However, this research deepens the discussion by providing phenomenological evidence that the sense of trust, displacement, and moral conflict is not an isolated cognitive response but part of a broader ontological negotiation an ongoing process of redefining what it means to be a clinician in a digitized care environment. The results resonate with Heidegger's (1962) notion of being-in-the-world, where technology becomes both a medium of empowerment and a potential source of alienation. By grounding interpretation in lived experience, this study complements the more descriptive accounts of previous research and offers a deeper understanding of the human essence of technological integration.

### **Implications of the Findings**

The findings of this study carry significant implications for both clinical practice and the broader understanding of human-technology relations in healthcare (Mukhlis, Janwari, et al., 2023; Mukhlis & Abdullah, 2025). At a professional level, the results illuminate how clinicians' trust, ethical awareness, and emotional adaptation shape their engagement with AI systems, emphasizing that successful technological integration depends as much on psychological readiness and moral sensitivity as on technical competence (DuPont-Reyes et al., 2025). Culturally, these insights underscore a shift toward a hybrid model of medical reasoning, in which human intuition and machine intelligence coexist in continuous dialogue. The study also contributes to the social understanding of digital transformation in healthcare by highlighting that clinicians are not passive recipients of technology but active interpreters who reframe their identities and responsibilities within AI-driven contexts (Moehring et al., 2025). These reflections provide practical implications for healthcare institutions seeking to implement AI ethically and sustainably, suggesting the need for training programs and design strategies that support reflective practice and ethical awareness among users.

### **Limitations of the Study**

Several limitations must be acknowledged when interpreting the findings of this research. First, the study involved a limited number of participants from specific clinical settings, which may restrict the transferability of insights to other healthcare contexts or cultural environments (Stano, 2024). Second, while the phenomenological design enabled a deep exploration of lived experience, it did not capture longitudinal changes in participants' attitudes or adaptations over time. Additionally, because the data relied primarily on self-reported narratives, the interpretation of meaning may have been influenced by contextual subjectivity and participants' retrospective reflection (Adekoya et al., 2025). These limitations are inherent to qualitative inquiry and should not be viewed as methodological weaknesses but as boundaries that shape the depth rather than breadth of understanding. Future studies can expand on these findings through comparative or mixed-method approaches to explore how experiential meanings evolve as AI technologies continue to advance.

### **Prospective Directions for Future Research**

Future research should extend these insights by examining how different healthcare specializations experience and internalize interactions with AI systems, particularly in ethically complex domains such as mental health, palliative care, or surgical decision-making (Mukhlis, 2025a; Mukhlis & Saidah, 2025). Longitudinal phenomenological studies could explore how sustained exposure to AI transforms clinicians' professional judgment, trust formation, and moral reasoning over time (Kong & Zhu, 2025). Furthermore, interdisciplinary approaches combining phenomenology with design research or human-computer interaction studies could help develop human-centered AI frameworks grounded in lived experience rather than abstract theory. Finally, cross-cultural comparisons may reveal how sociocultural values and healthcare norms shape the way clinicians construct meaning in technologically mediated practice (Jayasinghe et al., 2025). Collectively, these future directions would deepen our understanding of the human condition within

digitalized medicine and contribute to the creation of technologies that honor both innovation and empathy.

## CONCLUSION

This study explored the lived experiences of healthcare professionals engaging with artificial intelligence (AI)-based clinical systems to understand how meaning, trust, and ethical awareness are constructed in technologically mediated care. The findings revealed that clinicians' experiences are shaped by a continuous negotiation between human intuition and algorithmic reasoning, reflecting both the potential and the tension inherent in human-AI collaboration. Through a hermeneutic phenomenological lens, the research provided deep insight into how technology influences professional identity, moral judgment, and emotional engagement in clinical decision-making. These results fill an important gap in existing literature by shifting the focus from technical efficiency toward the subjective and ethical dimensions of AI integration. The study highlights the need for more reflective and human-centered approaches in designing and implementing AI tools in healthcare environments. Future research may expand this work by exploring cross-cultural or longitudinal perspectives to understand how lived experiences with AI evolve over time and shape the moral landscape of digital medicine.

## CONFLICT OF INTEREST

The authors declare no conflict of interest related to the conduct, analysis, or publication of this research. All funding and support received for this study were used solely for academic and scientific purposes, with no influence from the sponsoring organization on the study design, data interpretation, or manuscript preparation.

## REFERENCES

- Adekoya, A., Daum, C., Miguel-Cruz, A., & Liu, L. (2025). A balancing act: Exploring ethical and legal concerns associated with release of personal information in alert systems for missing persons with dementia. *BMC Medical Ethics*, 26(1). Scopus. <https://doi.org/10.1186/s12910-025-01214-4>
- Beddu, M. J., Yanti, N., Aslina, N., & Daud, N. (2024). Caesarean Section in the Perspective of Family, Health, and Islamic Law. *Al-Istinbath: Jurnal Hukum Islam*, 9(1), 359–374. Scopus. <https://doi.org/10.29240/jhi.v9i1.8373>
- Bonini, M., Barbaglia, S., Camiciottoli, G., Del Giacco, S., Di Marco, F., Matucci, A., Micheletto, C., Papi, A., Pasqualetti, P., Pelaia, G., Ricciardolo, F. L. M., Rogliani, P., Senna, G., Triggiani, M., Vancheri, C., & Canonica, G. W. (2024). Asthma remission one, none and one-hundred thousand: The relevance of the patient's view. *Journal of Asthma*, 61(11), 1535–1544. Scopus. <https://doi.org/10.1080/02770903.2024.2366523>
- 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>
- Chen, H., Chen, Y., Zheng, A., Tan, X., & Han, L. (2025). Factors related to professional commitment of nursing students: A systematic review and thematic synthesis. *BMC Medical Education*, 25(1). Scopus. <https://doi.org/10.1186/s12909-025-06780-0>

- Cingolani, M., Scendoni, R., Fedeli, P., & Cembrani, F. (2023). Artificial intelligence and digital medicine for integrated home care services in Italy: Opportunities and limits. *Frontiers in Public Health*, 10. Scopus. <https://doi.org/10.3389/fpubh.2022.1095001>
- Daly, K. J. (2007). *Qualitative methods for family studies & human development* (p. 293). SAGE Publications Inc.; Scopus. <https://doi.org/10.4135/9781452224800>
- DuPont-Reyes, M. J., Zou, W., Li, J., Villatoro, A. P., & Tang, L. (2025). A machine learning language model approach to evaluating mental health awareness content across Spanish- and English-language social media posts on Twitter. *Social Psychiatry and Psychiatric Epidemiology*, 60(9), 2249–2259. Scopus. <https://doi.org/10.1007/s00127-025-02870-y>
- 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>
- Gaillard, A.-S., Gather, J., Haferkemper, I., Vollmann, J., Potthoff, S., Scholten, M., & Braun, E. (2025). A template for a psychiatric advance directive: Co-development and qualitative evaluation with key stakeholders. *International Journal of Law and Psychiatry*, 103. Scopus. <https://doi.org/10.1016/j.ijlp.2025.102135>
- 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>
- Jayasinghe, S., Arm, K., & Gamage, K. A. A. (2025). Designing Culturally Inclusive Case Studies with Generative AI: Strategies and Considerations. *Education Sciences*, 15(6). Scopus. <https://doi.org/10.3390/educsci15060645>
- 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>
- Kong, S. C., & Zhu, J. (2025). Developing and validating an artificial intelligence ethical awareness scale for secondary and university students: Cultivating ethical awareness through problem-solving with artificial intelligence tools. *Computers and Education: Artificial Intelligence*, 9. Scopus. <https://doi.org/10.1016/j.caeai.2025.100447>
- Lenart, M. (2025). Between the Systemic Revolution and the Stagnation of Structures: The Evolution of University Identity in a Technological Era. *Discourses on Culture*, 23(1), 119–134. Scopus. <https://doi.org/10.2478/doc-2025-0006>
- Lindbäck, Y., Schröder, K., Engström, T., Valeskog, K., & Sonesson, S. (2025). Generative artificial intelligence in physiotherapy education: Great potential amidst challenges- a qualitative interview study. *BMC Medical Education*, 25(1). Scopus. <https://doi.org/10.1186/s12909-025-07106-w>
- 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>
- 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>
- Moehring, A., Kutwal, M., Huang, R., Banerjee, O., Jacobi, A., Eber, C., Mendoza, D., Chung, M., Dayan, E., Gupta, Y., Bui, T. D. T., Truong, S. Q. H., Pareek, A., Langlotz, C. P., Lungren, M. P., Agarwal, N., Rajpurkar, P., & Salz, T. (2025). A Dataset for Understanding Radiologist-Artificial Intelligence Collaboration. *Scientific Data*, 12(1). Scopus. <https://doi.org/10.1038/s41597-025-05054-0>
- 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-Sharī‘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-Sharī‘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>
- Pack, R., Lingard, L., Watling, C., & Cristancho, S. (2020). Beyond summative decision making: Illuminating the broader roles of competence committees. *Medical Education*, 54(6), 517–527. Scopus. <https://doi.org/10.1111/medu.14072>
- Sequeira, L., Strudwick, G., De Luca, V., Strauss, J., & Wiljer, D. (2022). Exploring Uniformity of Clinical Judgment: A Vignette Approach to Understanding Healthcare Professionals' Suicide Risk Assessment Practices. *Journal of Patient Safety*, 18(6), E962–E970. Scopus. <https://doi.org/10.1097/PTS.0000000000000973>
- Sezgin, E., Hussain, S.-A., Rust, S., & Huang, Y. (2023). Extracting Medical Information From Free-Text and Unstructured Patient-Generated Health Data Using Natural Language Processing Methods: Feasibility Study With Real-world Data. *JMIR Formative Research*, 7. Scopus. <https://doi.org/10.2196/43014>
- Stano, S. (2024). Dis- and Re-Embodiment in Religious Practices: Semiotic, Ethical, and Normative Implications of Robotic Officiants. *International Journal for the Semiotics of Law*, 37(4), 1209–1221. Scopus. <https://doi.org/10.1007/s11196-023-10078-z>
- Subu, A. T. S., Isrul, M., Sya'ban, A. R., & Hadju, L. (2025). Addressing Legal Uncertainty in Delayed Informed Consent: Protecting Health Workers in Indonesian Hospitals. *Volksgeist: Jurnal Ilmu Hukum Dan Konstitusi*, 8(2), 329–344. Scopus. <https://doi.org/10.24090/volksgeist.v8i2.13089>
- Sweileh, W. M. (2024). Analysis and mapping the research landscape on patient-centred care in the context of chronic disease management. *Journal of Evaluation in Clinical Practice*, 30(4), 638–650. Scopus. <https://doi.org/10.1111/jep.13988>
- Temsah, M.-H., Aljamaan, F., Malki, K. H., Alhasan, K., Altamimi, I., Aljarbou, R., Bazuhair, F., Alsubaihini, A., Abdulmajeed, N., Alshahrani, F. S., Temsah, R., Alshahrani, T., Al-Eyadhy, L., Alkhateeb, S. M., Saddik, B., Halwani, R., Jamal, A., Al-Tawfiq, J. A., & Al-Eyadhy, A. (2023). ChatGPT and the Future of Digital Health: A Study on Healthcare Workers' Perceptions and Expectations. *Healthcare (Switzerland)*, 11(13). Scopus. <https://doi.org/10.3390/healthcare11131812>
- Wang, R.-Y., Yan, S.-D., Zeng, J.-Q., Mu, T., Yan, Y., Zhao, Y.-Y., Xie, L., & Liu, L.-L. (2025). Construction of a Machine Learning-Based Clopidogrel Resistance Risk Prediction Model. *Cardiovascular Toxicology*, 25(10), 1548–1560. Scopus. <https://doi.org/10.1007/s12012-025-10026-2>
- Wu, C. P., Shirley, R. B., Milinovich, A., Liu, K., Mireles-Cabodevila, E., Khouli, H., Duggal, A., & Bhattacharyya, A. (2025). Exploring timely and safe discharge from ICU: a comparative study of machine learning predictions and clinical practices. *Intensive Care Medicine Experimental*, 13(1). Scopus. <https://doi.org/10.1186/s40635-025-00717-z>