



YOUNG DOCTORS' PERCEPTION OF THE EFFECTIVENESS OF THE CLINICAL LEARNING SYSTEM AT ROYAL PRIMA HOSPITAL MEDAN

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Abstract

Young doctors often have different perceptions of the effectiveness of clinical learning in medical professional education. Clinical learning is a crucial stage in shaping the competence of young doctors, in terms of knowledge, skills, and professionalism. This study aims to explore young doctors' perceptions of the effectiveness of the clinical learning system at Royal Prima General Hospital in Medan. This qualitative study with a phenomenological approach involved six informants (five young doctors and one clinic coordinator) who were selected purposively. Data were collected through in- depth interviews, focus group discussions, and observations. The results of the study revealed four main themes. First, the quality of clinical learning is influenced by the clarity of instructions, tutor involvement, patient availability, and rotation structure. Second, the learning environment is influenced by the relationship with the supervisor and the clinical work atmosphere. Third, the young doctors' self-competence includes self-confidence, readiness to face patients, and stress management strategies. Fourth, supporting factors (senior support, hospital facilities) and inhibiting factors (patient case variations, high workload, differences in tutor supervision styles) also influence the effectiveness of clinical learning. In conclusion, the effectiveness of clinical learning is influenced by the interaction of instructional, personal, environmental, and structural factors. Therefore, improvement efforts are needed in the form of strengthening tutor supervision skills, equalizing practice opportunities, and providing psychosocial support for young doctors in order to optimize the clinical learning system.

Keywords: *Perception, Medical Interns, Clinical Learning Effectiveness*

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INTRODUCTION

Professional education is a crucial part of medical education because it provides young doctors with the opportunity to apply the knowledge and theories they have previously learned during preclinical training. The shift from preclinical to professional education involves a new environment, including the physical environment, learning materials, and clinical learning systems (Rini et al., 2021). During preclinical training, young doctors acquire a wealth of theory and skills. However, a complete understanding can only be achieved in real-world situations, which require the understanding and application of learned skills. Therefore, an effective clinical system is needed so that young doctors can apply the knowledge they have acquired in the hospital (Hanindya et al., 2022).

The clinical learning system is a crucial part of medical education, aiming to equip young doctors with practical skills. It comprises a curriculum, clinical lecturers, learning opportunities (available cases), and educational facilities. In Indonesia, including at Royal Prima Hospital in Medan, it is expected to provide an effective system and hands-on experience in handling various medical cases. However, from the perspective of young doctors involved in the learning process, its effectiveness is often questioned (Hanindya et al., 2022).

Clinical teaching influences the learning process of young doctors because the program provides them with the opportunity to actively engage in integrated learning. Teaching methods are how instructors present material so that young doctors can easily absorb it. There are many teaching approaches, including observation, demonstration, bedside teaching, case reports, and case-based learning. The teaching process in a clinical setting is more complex due to pressure, time constraints, competition for services, research, administration, and teaching (Permatasari et al., 2021).

According to UNESCO, one of the main "push" factors that can cause students to leave learning is poor teaching. Clinical lecturers are the most important factor in the quality of education if they have recognition, preparation, support, resources, autonomy, and opportunities to develop further. (UNESCO, 2022) This is supported by Law No. 20 of 2013, Article 31, paragraph 2 concerning Medical Education, which includes every young doctor's obligation to actively develop their potential in accordance with learning methods (Law-RI-No.20, 2013).

Previous research conducted by Malahayani et al. in 2019 indicated several obstacles and challenges in the clinical learning process at Datu Beru Takengon Regional General Hospital. The study found that 69.1% of junior doctors felt that their clinical experience tended to be problematic in terms of learning methods in clinical clerkships.

These obstacles included low levels of active participation by junior doctors, lack of problem-solving practice, lack of direct observation and feedback on junior doctors' activities, limited time for reflection and discussion, and a professional learning program that was inconsistent with the current curriculum (Malahayani et al., 2019).

The problem in this study stems from the importance of the clinical learning system in developing the competencies of young doctors, which encompasses not only medical knowledge but also clinical skills and professionalism. Although Royal Prima Medan Hospital has implemented a clinical learning system as part of its professional medical education, it is not yet known exactly how young doctors perceive its effectiveness. So far, there are not many studies that delve deeply into the experiences, assessments, and expectations of young doctors regarding the system, even though their perceptions can be an important benchmark for evaluating the quality and effectiveness of ongoing clinical learning. Therefore, the researcher chose the title "young doctors' perceptions of the effectiveness of the clinical learning system at Royal Prima Medan Hospital" with the aim of determining how young doctors assess the clinical learning system at Royal Prima Medan Hospital and what factors influence its effectiveness.

RESEARCH METHODS

Based on the background described above, this research is a qualitative study with a phenomenological approach. The research was conducted at Royal Prima Medan Hospital with primary data collection from August to September 2025. The participants were young doctors (aged 20–30 years) at Royal Prima Medan Hospital who met the inclusion criteria. Through a purposive sampling method, six research informants were selected, consisting of five young doctors and one clinical education coordinator. This number was considered adequate because it had reached data saturation, where no new information emerged from the final interview.

Data collection was conducted through direct observation, in-depth interviews, and focus group discussions (FGDs) with young doctors. The instruments used included an in-depth interview guide and a semi-structured FGD guide. The questions in this instrument were designed to explore young doctors' general perceptions of clinical learning, personal experiences during clinical education, factors that support and hinder learning effectiveness, and an assessment of the role of supervisors and the quality of learning facilities and methods. Furthermore, the instrument included the young doctors' hopes and suggestions for future improvements to the clinical learning system. To enhance data validity, this study employed method triangulation by combining the findings of in-depth interviews and observations.

The qualitative data obtained were then analyzed thematically following the steps outlined by Braun & Clarke (2021), starting with data familiarization (transcription and rereading of interview results), coding, identifying and reviewing themes, naming themes, and compiling the final research report.

RESULT AND DISCUSSION

The informants in this study consisted of six people, aged 22–30 years, consisting of five junior doctors and one clinical coordinator. The majority

Table 1 List of Semi-Structured In-Depth Interview Informants

Informant Code	Age (years)	Gender	Number of Clinical Rotations	Position
DM-01 (YK)	22	Woman	5 (Pediatrics, Neurology, Radiology, Psychiatry, & Internal Medicine)	Young Doctor
DM-05 (MRN)	22	Man	5 (Pediatrics, Neurology, Radiology, Psychiatry, & Internal Medicine)	Young Doctor
D M - 0 2 (SABP)	23	Woman	10 (Radiology, Psychiatry, Dermatology, Internal Medicine, Neurology, Pediatrics, Surgery, ENT, Eyes, Obgyn)	Young Doctor
D M - 0 3 (MUT)	23	Woman	10 (Internal, Radiology, Psychiatry, Skin, Nerves, Children, ENT, Surgery, Eyes, Obgyn)	Young Doctor
DM-04 (S.)	23	Woman	10 (Radiology, Dermatology, Psychiatry, Internal Medicine, Neurology, Pediatrics, ENT, Surgery, Eyes, Obgyn)	Young Doctor
KK-06 (US.)	30	Woman	-	Clinic Coordinator

Clinical Learning Quality

Based on the interviews and focus group discussions, the first theme that emerged concerned the young doctors' perceptions of the quality of clinical learning. This aspect encompassed clarity of instructions, tutor involvement, patient availability, and the structure of clinical rotations. Most informants assessed that the clinical tutors' instructions were delivered clearly and systematically, facilitating understanding of medical procedures. However, there were also differences in perception, particularly when tutors had a heavy workload that limited explanations.

Tutor involvement varied across departments. Some tutors were considered active in providing guidance and providing simulations and constructive feedback, while others tended to be passive, requiring junior doctors to be more proactive in seeking clarification. Furthermore, patient availability was deemed sufficient to support the learning process, although not all cases encountered matched the rotation's requirements or the competencies being studied. While the clinical rotation structure was generally well-structured, there were still disparities in practice opportunities

of informants were female. All junior doctors had a background in medical professional education with varying clinical rotations between 5 and 10 departments. While the clinical coordinator served as a companion informant, providing an institutional perspective on the implementation of clinical learning at Royal Prima Medan Hospital. This variety of experiences provides a representative picture of the implementation of clinical learning across various specialties.

across departments. The clinical coordinator emphasized the need for periodic evaluations to ensure more effective and equitable implementation of rotations.

Learning Environment

The second theme describes the junior doctors' perceptions of the learning environment, including the relationship with their supervisors and the clinical work environment. The relationship between the junior doctors and their supervisors was generally positive and communicative. Supervisors were perceived as open to questions and willing to provide guidance, even with limited time. However, there were still differences in the consistency of feedback between supervisors.

The clinical work environment is generally considered conducive, although in certain situations, such as the emergency department, work pressure can be quite high. These conditions are considered to provide young doctors with realistic experiences in understanding the dynamics of real clinical care. Through group discussions, perceptions of the busy atmosphere shifted from negative to positive, understood as a means of

adapting to the professional work rhythms of the hospital environment.

Young Doctors' Self-Competence

The third theme relates to the development of young doctors' self-competence, which includes self-confidence, readiness for clinical practice, and stress management skills. Most informants reported that self-confidence increases with increased hands-on experience and repeated case exposure. However, they still require supervision when handling more complex cases.

Readiness for practice also varies, with some young doctors feeling ready to perform basic skills but still requiring guidance for high-risk procedures. Stress management skills are an integral part of clinical learning. Strategies used include social support with colleagues, spiritual activities, and light recreation to maintain emotional stability. Focus group discussions (FGDs) indicate agreement that social and spiritual support are key factors in maintaining psychological balance during the learning process.

Supporting and Inhibiting Factors of Learning Effectiveness

Dalam menjawab rumusan masalah dan pertanyaan-pertanyaan penelitian, hasil penelitian harus disimpulkan secara eksplisit. Penafsiran terhadap temuan dilakukan dengan menggunakan logika dan teori-teori yang ada. Temuan berupa kenyataan di lapangan diintegrasikan/ dikaitkan dengan hasil-hasil penelitian sebelumnya atau dengan teori yang sudah ada. Untuk keperluan ini harus ada rujukan. Dalam memunculkan teori-teori baru, teori-teori lama bisa dikonfirmasi atau ditolak, sebagian mungkin perlu memodifikasi teori dari teori lama.

The fourth theme highlights supporting and inhibiting factors in the implementation of clinical learning. The primary supporting factor comes from the active support of seniors who provide practical guidance, help explain difficult cases, and assist when tutors are unavailable. Institutional support is also evident through the provision of discussion spaces and scheduling additional mentoring for junior doctors.

Conversely, frequently encountered inhibiting factors include limited practice time, variations in the number and type of patients, and differences in supervision styles between tutors, which lead to inconsistencies in understanding among young doctors. In the focus group discussions (FGDs), the issue of disparities in teaching styles was highlighted, as it was considered to directly impact the effectiveness of the learning process. The clinical coordinator emphasized that these differences represent a challenge that must be addressed through standardization of guidance and strengthening the role of clinical tutors.

Overall, the research results indicate that the effectiveness of clinical learning at Royal Prima Medan Hospital is influenced by four main dimensions: instructional, environmental, personal, and structural. The interaction between these factors creates a unique learning experience for each young doctor. Clinical learning is considered to have provided extensive exposure to professional practice, but still requires optimization in terms of supervision and equitable distribution of practice opportunities.

Discussion

Young Doctors' Perceptions of the Quality of Clinical Learning

The results of this study indicate that junior doctors' perceptions of the effectiveness of clinical learning at Royal Prima Medan Hospital are formed through a complex interaction between instructional, environmental, personal, and structural factors. Regarding the clarity of instructions, some junior doctors assessed that their supervisors provided clear directions and facilitated the learning process, while others felt that the instructions lacked systematicity and often required additional clarification. This indicates that consistency in instruction delivery between supervisors remains a major challenge in maintaining the quality of clinical learning. This finding aligns with research by Choi et al., (2020) and Permatasari et al., (2021) which emphasized the importance of clarity of instructions and quality feedback for effective learning. However, it differs from the findings of Snowdon et al. (2022), who found that uniform instruction standards were able to create consistency across supervisors. Therefore, the clarity of instructions at Royal Prima Medan Hospital can be concluded to still depend on individual factors of the tutor and the clinical work situation, rather than on a fully standardized learning system.

The involvement or activeness of clinical tutors is also a crucial factor in shaping the learning experience of young doctors. Some informants felt that tutors actively provided guidance, simulations, and regular feedback, while others assessed that tutor involvement was uneven. This variation directly impacted student motivation and depth of understanding. These results align with studies by Beck Dallaghan et al., (2022) and Pol et al. (2024), which found that active mentor involvement improved medical students' confidence and clinical skills. However, unlike the study by Gardner et al., (2022), which found consistency thanks to an organized supervision framework, at Royal Prima Medan Hospital, tutor activity was still influenced by workload and individual teaching styles. Therefore, stronger institutional mechanisms are needed to ensure consistent involvement across rotations.

Patient availability is also an indicator of the effectiveness of clinical learning. In general, the

number of patients is considered sufficient, but the variety of case types often does not align with the competency requirements being studied. This condition results in an unequal learning experience among young doctors. This finding aligns with the findings of Hanindya et al., (2022) and Madani et al. (2020), which highlight that case variety is a major challenge in clinical education because it can limit the achievement of certain competencies. However, research by Song & Vance (2021) shows that a planned rotation structure can expand case exposure and improve the distribution of clinical experience. Therefore, it can be assumed that patient availability at Royal Prima Medan Hospital is generally supportive of learning, but case variety is still heavily influenced by the actual conditions of patients in the hospital.

The clinical rotation structure also received attention from informants. In general, young doctors considered the rotation structure to be quite good because it provided learning opportunities in various departments. Although the intensity of the material was considered too dense and the rotation time was limited, resulting in often superficial understanding. These results align with the findings of Khadafianto, (2020) and Hovde et al. (2023), which emphasized that the quality of clinical rotations directly influences competency achievement and professional exam results. However, research by Couper et al., (2024) demonstrated the need for ongoing evaluation of rotation design to ensure the learning experience is more focused on achieving core competencies and is equitable across departments. Based on this, it can be concluded that although the rotation structure at Royal Prima Medan Hospital has been implemented according to the curriculum, the equity and intensity of practice still need to be improved for more in-depth learning.

Young Doctors' Perceptions of the Learning Environment

In terms of the learning environment, the relationship between junior doctors and their mentors was generally well-established and communicative. The junior doctors felt supported by their mentors' openness to discussion, although the consistency of feedback provided was not optimal due to time constraints and high workloads. These results corroborate the research of Benamer et al., (2023) and Ramani et al., (2017), which emphasized that supportive interpersonal relationships between mentors and students enhance the effectiveness of clinical learning. However, these findings also revealed challenges similar to those of Javornická et al., (2024) which showed that time constraints often hindered the provision of quality feedback. The clinical work environment was considered quite conducive, although it could become stressful in certain situations, such as in the emergency department. Some junior doctors considered the busy conditions

to provide realistic experiences for facing the real world of work. These findings align with Van Der Zwet et al. (2023), who emphasized that a challenging clinical environment can enhance professional adaptation, provided it is balanced by an adequate mentoring system, as suggested by (Birk, 2021)

Young Doctors' Perceptions of Self-Competence

The development of young doctors' self-competence includes increased self-confidence, patient readiness, and stress management skills. Young doctors' self-confidence generally increases with increasing clinical experience and repeated case exposure, although some still feel hesitant when having to make independent medical decisions. This condition shows that the development of self-efficacy is progressive and requires continuous supervision, as emphasized by Hafiz et al., (2023) Hafiz (2023) and Amar & Bitan, (2025). Patient readiness also shows a similar pattern; most young doctors feel adequately prepared to perform basic skills, but still require guidance on more complex medical procedures. These findings align with research by Delorme et al., (2025) and Sharief et al., (2025) emphasize the importance of ongoing guidance and evaluation in building safe and effective clinical readiness. Furthermore, stress emerged as an integral aspect of clinical learning. Young doctors used various adaptive strategies such as social support, light recreation, and spiritual approaches. These results are consistent with studies by (ratama et al., (2024), Salih et al., (2023), and Sani et al. (2020) who emphasized that social and spiritual coping strategies are effective in maintaining the psychological balance of students in stressful work environments.

Young Doctors' Perceptions of Supporting and Inhibiting Factors in Learning Effectiveness

Identified inhibiting factors for clinical learning include limited practice time, limited patient variety, high workloads, and differences in teaching styles between tutors. These barriers lead to an uneven learning experience and potentially reduce learning effectiveness. These findings align with research by Almushait et al., (2022), Malahayani et al., (2019), and Rini et al., (2021), which indicates that limited supervision and practice time are major obstacles in clinical education. However, there are also supporting factors that strengthen the learning process, namely senior support and institutional support. Seniors often act as informal mentors, providing practical guidance, answering questions, and assisting young doctors in clinical practice. These findings align with Beck Dallaghan et al., (2022) and Lee et al., (2024), which show that peer support contributes to increased confidence and clinical skills. Furthermore, institutional support through expanded mentoring schedules and the provision of

comfortable discussion spaces, as suggested by Khawaji et al., (2025), also plays a significant role in enhancing learning effectiveness.

In general, the results of this study indicate that the effectiveness of the clinical learning system is determined not only by the formal curriculum, but also by the dynamics of interactions between junior doctors, tutors, patients, seniors, and the institution. Instructional factors (instructions and feedback), environmental factors (relationships with supervisors and the clinical atmosphere), personal factors (self-confidence and stress management), and structural factors (facilities, rotations, workload) interact to shape the learning experience of junior doctors (Benamer et al., 2023)

Therefore, a comprehensive strategy to improve the effectiveness of clinical learning needs to be implemented, including tutor training to enhance supervision skills, regular evaluation of rotation structures, the provision of a variety of relevant patient cases, and enhanced psychosocial support for junior doctors. This way, the clinical learning system can be more optimal in preparing junior doctors who are not only technically competent but also mentally resilient and adaptable to the future challenges of the medical profession (Beck Dallaghan et al., 2022)

Several studies have shown that senior support is a crucial factor in successful clinical learning. A study by Lee, HJ et al. (2024) revealed that guidance and feedback from seniors enhance the confidence and practical skills of young doctors. Furthermore, institutional support has also been extensively researched, with Khawaji et al. (2025) stating that providing a comfortable learning environment, a clear mentoring schedule, and an effective supervision system improve the quality of clinical experience (Khawaji et al., 2025). Based on these findings, it can be assumed that senior support positively contributes to the smoothness of young doctors' practical understanding, while institutional support strengthens the sustainability and intensity of clinical learning. Thus, the clinical learning system plays a role not only in building technical competence but also in shaping the professionalism, mental toughness, and adaptability essential for young doctors in facing the complexities of future medical practice.

CONCLUSION

This study shows that the effectiveness of clinical learning at Royal Prima Medan Hospital is strongly influenced by interacting instructional, environmental, personal, and structural factors. Learning quality improves when instructions are clear, tutors are active, and a variety of patients supports clinical skill mastery. However, differences in mentoring styles among tutors, limited practice time, and uneven case variety are obstacles that hinder the consistency of the learning process. A good relationship between

junior doctors and their mentors, a supportive clinical work environment, and direct patient experience play a crucial role in fostering self-confidence and professional readiness.

Overall, the clinical learning system at Royal Prima Medan Hospital has provided a meaningful and competency-oriented learning experience, although it still requires optimization in terms of supervision, equal distribution of practice opportunities, and psychosocial support. Strengthening the role of tutors, improving instructional communication, and managing a balanced workload are expected to create a more effective, adaptive, and sustainable learning environment in developing competent, professional, and resilient young doctors to face the challenges of the medical world.

RERERENCE

- Almushait, Y. B., Alabdajabar, M. S., Alkhani, K., Abdalla, H. M., Alhayaza, R., Temsah, M.-H., & Alsohaibani, F. (2022). Challenges facing undergraduate medical education in ambulatory care clinics at tertiary care hospitals. *Healthcare*, 10(3), 496.
- Amar, S., & Bitan, Y. (2025). A Unique Simulation Methodology for Practicing Clinical Decision Making. *Journal of Medical Education and Curricular Development*, 12, 23821205241310076.
- Beck Dallaghan, G. L., Coe, C. L., Wright, S. T., & Jordan, S. G. (2022). Mentoring medical education research: Guidelines from a narrative review. *Medical Science Educator*, 32(3), 723–731.
- Benamer, H. T. S., Alsuwaidi, L., Khan, N., Jackson, L., Lakshmanan, J., Ho, S. B., Kellett, C., Alsheikh-Ali, A., & Stanley, A. G. (2023). Clinical learning environments across two different healthcare settings using the undergraduate clinical education environment measure. *BMC Medical Education*, 23(1), 495.
- Birk, H. O. , G. R. , & H. L. O. (2021). Patients' experience of choosing an outpatient clinic in one county in Denmark: results of a patient survey. *BMC Health Services Research*, 11(262).
- Braun, V., & Clarke, V. (2021). *Thematic Analysis: A Practical Guide*, SAGE Publications. London.
- Choi, S., Oh, S., Lee, D. H., & Yoon, H.-S. (2020). Effects of reflection and immediate feedback to improve clinical reasoning of medical students in the assessment of dermatologic conditions: a randomised controlled trial. *BMC Medical Education*, 20(1), 146.
- Couper, I., van Schalkwyk, S., Blitz, J., Fish, T., Viljoen, K., & Smith, L. (2024). It's all about the patients: a shift in medical students'

- approach to learning during a novel distributed integrated clinical rotation. *BMC Medical Education*, 24(1), 1145.
- Delorme, C., Stenfors, T., & Söndén, A. (2025). Lost in transition: from medical student to clinical supervisor-a mixed-methods study. *BMC Medical Education*, 25(1), 800.
- Gardner, M. J., McKinstry, C., & Perrin, B. (2022). Effectiveness of allied health clinical supervision following the implementation of an organisational framework. *BMC Health Services Research*, 22(1), 261.
- Hafiz, A. M., Senturk, E., Teker, C., & Sarikaya, O. (2023). Factors affecting the level of reflective thinking and clinical decision-making skills in medical faculty students. *The Medical Bulletin of Sisli Etfal Hospital*, 57(4), 543.
- Hanindya, I., Fachrudin, D., & Rahadiani, O. (2022). Rotasi Klinik Dalam Program Profesi Universitas Swadaya Gunung Jati. *Tunas Med J Kedokt Kesehat*, 8(2), 1–12.
- Javornická, D., Kisvetrová, H., Prušová, E., Váverková, R., Greaves, P. J., & Steven, A. (2024). The influence of supervisory support on clinical learning as experienced by Czech nursing and health professional students in the context of patient safety events: a qualitative study. *Nurse Education in Practice*, 79, 104041.
- Khadafianto, F. (2020). Korelasi nilai proses rotasi klinik dengan kelulusan uji kompetensi mahasiswa program profesi dokter (UKMPPD). *Jambi Medical Journal: Jurnal Kedokteran Dan Kesehatan*, 8(2), 141–146.
- Khawaji, B., Alorabi, R. A., Alzahrani, R. A., Alhnaidi, B. A., Alzahrani, R. S., Althobaiti, R. M., Ghandora, H., Alsaffar, H., & Althubaiti, A. (2025). Medical interns and senior medical students' perceptions toward clinical teaching. *BMC Medical Education*, 25(1), 1245.
- Lee, H. J., Kim, D.-H., & Kang, Y. J. (2024). Understanding medical students' transition to and development in clerkship education: a qualitative study using grounded theory. *BMC Medical Education*, 24(1), 910.
- Malahayani, S., Riezky, A. K., & Maulanza, H. (2019). Tantangan yang dihadapi mahasiswa tahap profesi dalam menjalankan kepaniteraan klinik senior di rumah sakit umum daerah datu beru takengon tahun 2019. *Prosiding SEMDI-UNAYA (Seminar Nasional Multi Disiplin Ilmu UNAYA)*, 3(1), 576–589.
- Permatasari, R. C., Sari, M. I., & Oktaria, D. (2021). Efektivitas pengajaran klinik di RSUD dr. H. Abdul moeloek provinsi lampung. *Medical Profession Journal of Lampung*, 10(4), 638–643.
- Pratama, M. K., Wiriansya, E. P., Azis, U., Syamsuddin, S., & Dahlia, D. (2024). Gambaran tingkat stres mahasiswa program profesi dokter Fakultas Kedokteran Universitas Muslim Indonesia. *Prepotif: Jurnal Kesehatan Masyarakat*, 8(1), 676–684.
- Ramani, S., Könings, K., Mann, K. V., & van der Vleuten, C. (2017). Uncovering the unknown: a grounded theory study exploring the impact of self-awareness on the culture of feedback in residency education. *Medical Teacher*, 39(10), 1065–1073.
- Rini, F. A. A., Kusumawati, A., Sakti, Y. B. H., & Ningrom, I. C. (2021). Perbandingan Persepsi Tentang Lingkungan Pembelajaran Klinik dan Strategi Belajar Mahasiswa Pendidikan Profesi Dokter di RSUD Salatiga. *Herb-Medicine Journal: Terbitan Berkala Ilmiah Herbal, Kedokteran Dan Kesehatan*, 4(1), 36–42.
- Salih, S., Mahmoud, S. S., Abudeyah, M. A., Albeladi, F. I., Mohsen, W. M., Hayyan, A. I., Alfaifi, N. A. Y., Hakami, G. M., & Alnamazi, N. A. (2023). Stressors and coping strategies among medical students in Jazan, Saudi Arabia: A cross-sectional study. *Journal of Family Medicine and Primary Care*, 12(9), 2075–2081.
- Sharief, W. M., Mahdy, N. H., & Al-Eraky, M. (2025). Perceived Preparedness for the Clinical Practice Among Medical Interns: A Cross-Sectional Study. *Advances in Medical Education and Practice*, 69–78.
- Song, X., & Vance, S. (2021). Students' surgical experiences in a distributed model of clinical education: a mixed-methods sequential case study. *Journal of Surgical Education*, 78(3), 858–865.