

A COMPETENCY-BASED FRAMEWORK FOR PROFESSIONAL MEDICAL COMMUNICATION IN ENGLISH FOR MEDICAL PURPOSES (EMP)

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ABSTRACT

This study proposes a competency-based framework for professional medical communication in English for Medical Purposes (EMP) from a needs-analysis perspective. The study employed a mixed-methods approach with an exploratory sequential design that integrated qualitative thematic analysis and quantitative frequency-based structuring. Qualitative data were derived from semi-structured interviews with healthcare professionals, including doctors, nurses, and administrative staff. Relevant literature on EMP, competency-based education, and medical communication provided theoretical support. The findings identified three principal communication needs: patient interaction, medical information delivery, and interprofessional communication. The study also identified four core competency domains: linguistic competence, clinical communication skills, interpersonal competence, and professional competence. Quantitative analysis showed that patient interaction was the most dominant communication need and that clinical communication skills represented the most critical competency domain. Based on these findings, the authors developed a competency-based framework to guide curriculum design, instructional materials, teaching strategies, and performance-based assessment aligned with authentic clinical communication tasks. The framework contributes to ESP by integrating language learning with real-world healthcare communication demands and improving the relevance and effectiveness of EMP instruction in hospitals, clinics, and other healthcare settings across diverse multilingual professional contexts worldwide today. The framework also offers a foundation for future empirical validation studies.

Keywords: *English for Medical Purposes; Competency-Based Education; Medical Communication; Mixed Methods; Needs Analysis*

INTRODUCTION

The globalization of healthcare has intensified cross-border interactions among healthcare professionals, patients, and institutions, positioning English as a global lingua franca in medical communication. In multilingual healthcare settings, effective communication is no longer an additional skill but a core professional competence that directly influences patient safety, quality of care, and clinical outcomes. Previous studies have demonstrated that communication failures contribute significantly to medical errors and adverse events, particularly in linguistically diverse environments (Toth & Rees, 2015; Vermeir et al., 2015; World Health Organization, 2021). This underscores the urgent need for healthcare professionals to develop accurate, context-sensitive, and empathetic English communication skills.

English for Medical Purposes (EMP), as a specialized branch of English for Specific Purposes (ESP), is designed to address the specific linguistic and communicative needs of healthcare professionals. EMP emphasizes needs-based and goal-oriented instruction, focusing on authentic communication tasks such as patient interaction, diagnosis explanation, and interprofessional collaboration (Hutchinson & Waters, 1987; Li & Yang, 2023). However, recent studies indicate that EMP instruction remains largely dominated by general English approaches that prioritize grammatical competence rather than performance-based communication required in real clinical contexts. (Hyland, 2022).

In the Indonesian context, the gap between language training and professional communication demands is particularly evident. Many English training programs for healthcare professionals continue to rely on general English materials that do not adequately reflect the complexity of clinical communication. As a result, healthcare professionals often struggle to apply their language knowledge in real-world medical interactions. Empirical studies show that healthcare professionals view English as essential for patient communication, professional collaboration, and access to medical knowledge; however, they face challenges such as a lack of specialized English programs, limited training time, and low confidence in using English in professional contexts. (Sukisno; Saud, 2025).

More critically, recent research on language policy reveals that EMP is largely absent from national vocational English frameworks in Indonesia. Policy documents tend to represent English as a tool for economic competitiveness and workforce mobility rather than as a medium for professional and ethical communication in healthcare contexts. (Sukisno et al., 2025). This absence reflects what is described as policy silence, where domain-specific communication needs, particularly in the medical field, are systematically marginalized. Consequently, English training remains generic and fails to address essential clinical communication tasks such as patient interviews, explanation of diagnoses, and medical decision-making processes.

From a pedagogical perspective, a major limitation of existing EMP instruction is the lack of a structured competency framework that integrates linguistic competence with clinical communication skills and professional behavior. Most EMP programs emphasize language knowledge over observable, measurable performance, limiting transferability to clinical practice. This highlights the need to shift toward Competency-Based Education (CBE), which focuses on measurable outcomes, real-world performance, and alignment with professional standards. (Mulder & Winterton, 2017; Richards, 2017). In vocational education, performance-oriented language instruction has been emphasized as essential for bridging the gap between learning and workplace demands. (Yundayani et al., 2023).

Despite its relevance, integrating CBE into EMP remains limited. Existing studies tend to address EMP, medical communication, and competency-based approaches separately, resulting in a lack of integrated frameworks that connect these dimensions into a coherent model. This gap is particularly significant in healthcare contexts, where communication is not only functional but also ethical, interpersonal, and high-stakes.

Therefore, this study proposes a competency-based framework for professional medical communication in EMP from a needs-analysis perspective. By integrating theoretical insights, empirical findings from healthcare professionals, and evidence from language policy analysis, this study seeks to identify key competency domains required for effective medical communication and to conceptualize their relationships within a structured framework. The proposed framework is expected to contribute to the

development of EMP instruction that is more relevant, performance-oriented, and aligned with real-world healthcare communication demands.

LITERATURE REVIEW

1. English for Medical Purposes (EMP) in ESP Context

EMP is a specialized branch of English for Specific Purposes (ESP) that focuses on the communicative needs of healthcare professionals in clinical and professional contexts. ESP, as originally conceptualized by Hutchinson and Waters (1987), is grounded in the principle that language instruction should be tailored to learners' specific needs, particularly in relation to their target situations. In EMP, these target situations include patient interaction, medical documentation, diagnosis explanation, and interprofessional communication.

Recent developments in EMP highlight the increasing complexity of medical communication, which goes beyond linguistic competence to include pragmatic, interpersonal, and ethical dimensions. Li and Yang (2023) emphasize that EMP should integrate clinical communication practices with language learning, particularly in contexts where miscommunication may lead to serious medical consequences. Similarly, Lan and Wu argue that medical communication is a situated practice, requiring learners to perform language in specific clinical scenarios rather than merely acquire vocabulary and grammar. (Wu et al., 2019).

Despite these developments, EMP instruction in many contexts remains limited. Studies indicate that EMP programs are often reduced to general English with medical terminology, lacking authentic task-based communication and clinical relevance. (Hyland, 2022). In Indonesia, this issue is further compounded by the absence of EMP in the national language policy, resulting in a lack of structured curriculum and inconsistent implementation across training institutions. (Sukisno et al., 2025). This reinforces the need for a more structured, competency-oriented approach to EMP instruction.

2. Competency-Based Education (CBE) in Language Learning

CBE has emerged as a significant paradigm in education, emphasizing measurable learning outcomes, performance-based assessment, and alignment with real-world professional tasks. Unlike traditional knowledge-based approaches, CBE focuses on what learners can do in authentic contexts (Richards, 2017). In vocational education, this approach is particularly relevant because it ensures learning outcomes align directly with workplace demands.

Mulder (2017) defines competence as the integration of knowledge, skills, and attitudes that enable effective performance in professional settings. In healthcare education, competency-based frameworks are widely used to assess clinical performance, including communication skills, decision-making, and ethical behavior. (Mulder & Winterton, 2017). Miller's competency pyramid further illustrates this progression from knowledge ("knows") to performance ("does"), highlighting the importance of practical application. (Miller, 1990).

In language learning, integrating CBE requires a shift from teaching linguistic knowledge to developing communicative performance. Yundayani argues that vocational English instruction should prioritize performance-oriented communication aligned with real workplace situations. (Yundayani et al., 2023). However, in EMP contexts, CBE

remains limited. Most programs still emphasize language proficiency tests over performance-based assessment, creating a gap between classroom learning and clinical practice.

3. Medical Communication as a Multidimensional Competence

Medical communication is a complex and multidimensional process that involves not only linguistic accuracy but also interpersonal, cultural, and ethical competencies. Effective communication in healthcare settings requires clear information, empathetic responses, and shared decision-making with patients. According to the World Health Organization (2021), communication failures are among the leading causes of patient safety incidents in multilingual healthcare environments.

Thomas introduced the concept of pragmatic failure, which occurs when language users fail to convey intended meaning appropriately in context. (THOMAS, 1983). In medical settings, such failures can lead to misunderstandings, misdiagnosis, and reduced patient trust. This highlights the importance of integrating pragmatic and interpersonal skills into EMP instruction.

Recent studies further emphasize the need for communication training that reflects real clinical interaction. Lan and Wu propose a situated communication framework in which learners engage in authentic medical scenarios, such as patient interviews, informed consent, and clinical handovers. (Wu et al., 2019). This approach aligns with the view that communication competence is not static but context-dependent and performance-based.

However, many EMP programs still treat communication as a linguistic exercise rather than a professional practice. This limitation underscores the need for a framework that integrates linguistic, clinical, interpersonal, and professional competencies into a unified model.

4. Needs Analysis in ESP and EMP

Needs analysis is a fundamental component of ESP and serves as the basis for designing relevant and effective language instruction. Hutchinson and Waters define needs analysis as the process of identifying learners' target situation requirements and learning needs. (Hutchinson & Waters, 1987). In EMP, needs analysis involves understanding the specific communication tasks, contexts, and challenges healthcare professionals face.

Contemporary studies highlight the importance of conducting a needs analysis that reflects real-world clinical practice. Choi found that nursing students require not only medical vocabulary but also communication strategies for patient interaction and teamwork. (Choi, 2021). Similarly, Li and Yang emphasize that EMP needs analysis should include both linguistic and professional competencies. (Li & Yang, 2023).

Empirical research in the Indonesian context further supports these findings. Sukisno and Saud report that healthcare professionals identify patient communication, professional collaboration, and access to medical information as key areas requiring English proficiency (Sukisno; Saud, 2025). However, they also highlight challenges such as limited training opportunities, a lack of specialized EMP programs, and low confidence in using English in clinical settings.

In addition, policy-level analysis reveals that these needs are not adequately reflected in the national language policy. Sukisno, Suseno, and Lustyantie show that EMP is largely absent from vocational English policy frameworks, resulting in what they

describe as policy silence. (Sukisno et al., 2025). This disconnect between policy, practice, and professional needs further emphasizes the importance of developing a structured framework based on needs analysis.

5. Research Gap and Conceptual Direction

Based on the reviewed literature, several gaps emerge. First, EMP instruction often fails to integrate linguistic competence with clinical communication practice. Second, competency-based education in EMP remains limited, resulting in a focus on knowledge rather than performance. Third, needs analysis findings are not systematically translated into structured curriculum-design frameworks. Finally, policy-level limitations contribute to the absence of standardized EMP models, particularly in the Indonesian context.

These gaps indicate the need for an integrated framework that combines EMP, CBE, medical communication, and needs analysis into a coherent model. Such a framework should not only identify competency domains but also reflect the dynamic interaction between language use and professional practice.

Therefore, this study proposes a competency-based framework for professional medical communication in EMP, grounded in needs analysis and informed by empirical, theoretical, and policy-based perspectives. The framework is intended to bridge the gap between language instruction and real-world clinical communication demands.

METHOD

1. Research Design

This study employs a mixed-methods approach using an exploratory sequential design, in which qualitative analysis serves as the primary phase followed by quantitative structuring. This design was selected to explore and conceptualize the competency domains required for professional medical communication in EMP from a needs-analysis perspective. The qualitative phase identifies key communication needs and challenges, while the quantitative component supports categorizing and structuring competencies into a coherent framework.

This approach suits framework development studies, as it integrates empirical insights with theoretical constructs to generate a model that reflects both real-world practices and conceptual rigor.

2. Data Sources

The study draws on two main sources of data: 1) Empirical data derived from previous research conducted by the author involving healthcare professionals in Indonesian medical contexts (Sukisno; Saud, 2025). The participants included doctors, nurses, and administrative staff working in healthcare institutions where English is used for professional communication. 2) Literature-based data obtained from recent studies on EMP, CBE, medical communication, and needs analysis. These sources provide theoretical grounding and support the identification of competency domains. Combining empirical and literature-based data enables the development of a framework that is both contextually relevant and theoretically informed.

3. Data Collection Techniques

The qualitative data were originally collected through semi-structured interviews with healthcare professionals. The interviews focused on: 1) communication needs in clinical contexts; 2) Challenges in using English in professional settings; and 3) Types of communication tasks performed in the workplace.

The interview data were transcribed and organized for thematic analysis. For the literature-based component, relevant studies were selected based on their relevance to EMP, CBE, and medical communication. The selection criteria included publication recency, relevance to healthcare communication, and contribution to competency-based frameworks.

4. Data Analysis Techniques

Data analysis in this study was conducted in two interconnected stages, combining qualitative interpretation and quantitative structuring. In the first stage, qualitative data were analyzed using thematic analysis to identify recurring patterns related to communication needs and competency requirements. The analysis involved several systematic steps, including familiarizing with the data, coding relevant segments, identifying emerging themes, and categorizing communication needs. The identified themes were then synthesized and mapped into broader competency domains that reflect the multidimensional nature of professional medical communication.

In the second stage, a quantitative structuring process organized the identified competencies into a more systematic framework. This process involved grouping similar competencies, examining theme frequency and relevance, and arranging the competencies into hierarchical categories. Although this stage does not involve statistical testing, it enhances the clarity, coherence, and structural representation of the proposed competency-based framework.

5. Framework Development Procedure

The development of the competency-based framework followed a systematic process: 1) Identification of communication needs from qualitative findings; 2) Integration with theoretical constructs from EMP, CBE, and medical communication literature; 3) Categorization of competencies into core domains; and 4) Conceptual modeling of relationships between domains. This procedure ensures that the framework is grounded in both empirical evidence and theoretical perspectives.

6. Trustworthiness and Validity

To ensure the credibility of the findings, this study adopts several strategies: 1) Data triangulation, combining empirical data and literature-based analysis; 2) Theoretical triangulation, integrating multiple perspectives from EMP, CBE, and medical communication; and 3) Transparent analytical procedures, including clear coding and categorization processes. These strategies enhance the validity of the proposed framework and support its relevance for EMP instruction.

RESULTS AND DISCUSSION

1. Communication Needs in EMP Context

The qualitative analysis reveals that professional medical communication in EMP is characterized by three major domains of communication needs: patient interaction, medical information delivery, and interprofessional communication. These domains represent the core communicative functions required in healthcare settings.

Patient interaction emerges as the most critical domain, involving activities such as taking medical histories, responding to patient concerns, and providing explanations in a patient-centered manner. This domain requires not only linguistic competence but

also empathy and contextual sensitivity. Medical information delivery includes explaining diagnoses, procedures, and treatment plans, requiring the ability to simplify complex medical concepts into accessible language. Interprofessional communication involves coordination and collaboration among healthcare providers and requires precision and clarity in professional discourse.

To strengthen the qualitative findings, we quantitatively structured the identified themes. The results indicate that patient interaction constitutes the most dominant communication need (40%), followed by medical information delivery (31%) and interprofessional communication (29%), as presented in Table 1.

Table 1. Frequency of Communication Needs

Communication Domain	Frequency	Percentage
Patient Interaction	18	40%
Medical Information Delivery	14	31%
Interprofessional Communication	13	29%
Total	45	100%

These findings confirm that EMP instruction should prioritize patient-centered communication while maintaining a balanced focus on other communication domains. The distribution also reflects the task-based nature of communication in healthcare contexts, supporting previous studies emphasizing authentic communication practices. (Li & Yang, 2023).

2. Challenges in EMP Learning and Implementation

The findings also reveal several challenges healthcare professionals face in developing English communication competence. The most prominent challenges include limited access to specialized EMP training, insufficient time for learning, and low confidence in using English in clinical contexts. Participants indicated that existing training programs are largely focused on general English, which does not adequately prepare them for real clinical communication tasks.

These challenges reflect a broader structural issue in EMP implementation, particularly the lack of alignment between training content and workplace demands. This condition is further exacerbated by the absence of EMP in national language policy, which leads to generic curriculum design and inconsistent implementation across institutions. (Sukisno et al., 2025).

3. Quantitative Representation of Competency Domains

Integrating qualitative findings and literature-based analysis identified four core competency domains: linguistic competence, clinical communication skills, interpersonal competence, and professional competence. To enhance clarity and systematic representation, these domains were further structured quantitatively based on their frequency and relevance.

Table 2. Distribution of Competency Domains

Competency Domain	Frequency	Relevance Level
Clinical Communication	22	Very High
Linguistic Competence	20	High
Interpersonal Competence	18	High
Professional Competence	15	Moderate-High

The results indicate that clinical communication skills represent the most critical domain, followed by linguistic and interpersonal competencies. Although professional competence appears slightly less frequently, it remains essential because it ensures ethical, culturally sensitive, and context-appropriate communication. This distribution supports the view that communication competence in EMP is multidimensional and performance-oriented.

4. Proposed Competency-Based Framework for EMP

By integrating qualitative insights with quantitative structure, this study proposes a competency-based framework for professional medical communication in EMP. The framework positions professional medical communication as the central outcome, supported by four interrelated competency domains: linguistic competence, clinical communication skills, interpersonal competence, and professional competence.

Linguistic competence provides the foundation for using appropriate medical language. Clinical communication skills represent the ability to perform task-based communication in healthcare settings. Interpersonal competence ensures effective patient-centered interaction through empathy and active listening. Professional competence governs ethical communication, cultural sensitivity, and adherence to healthcare standards.

These domains interact dynamically within authentic clinical contexts, such as patient consultation, diagnosis explanation, and interprofessional collaboration. The framework emphasizes that effective communication comes from integrating competencies rather than isolated linguistic knowledge.

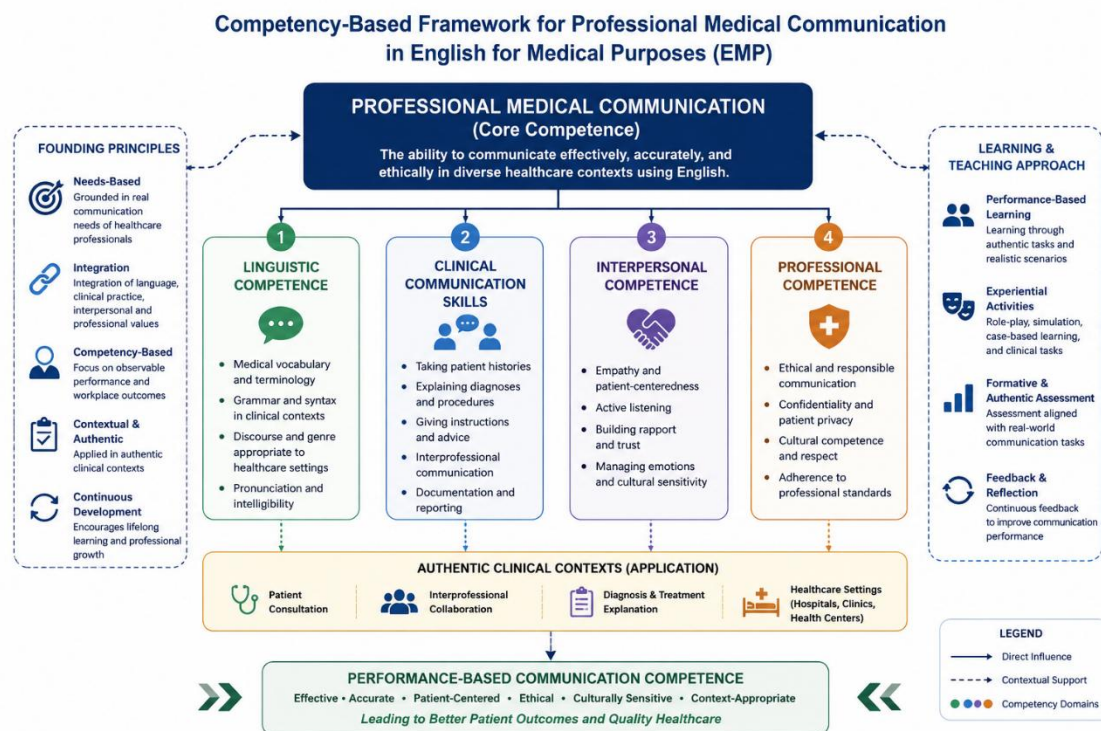


Figure 1. Competency-Based Framework for Professional Medical Communication in EMP

Figure 1 illustrates the proposed competency-based framework for professional medical communication in EMP. Professional medical communication is positioned as the core competence, supported by four interrelated domains: linguistic competence,

clinical communication skills, interpersonal competence, and professional competence. These domains are applied within authentic clinical contexts and developed through performance-based learning, resulting in measurable communication outcomes relevant to healthcare practice.

5. Discussion: Toward a Performance-Based EMP Model

This study's findings highlight a significant gap between existing EMP instruction and the communication demands healthcare professionals face. Traditional EMP approaches tend to emphasize linguistic competence, while real-world medical communication requires integrating clinical, interpersonal, and professional competencies.

The proposed framework addresses this gap by offering a structured, competency-based model grounded in empirical findings and theoretical perspectives. Integrating qualitative and quantitative analysis strengthens the framework's validity and supports its application in curriculum design, teaching strategies, and assessment.

From a pedagogical perspective, the framework implies a shift toward performance-based learning, in which learners must demonstrate communication skills in authentic clinical scenarios. This approach aligns with competency-based education principles and enhances the transferability of learning to real-world practice (Richards, 2021; Mulder, 2017).

CONCLUSION

This study proposes a competency-based framework for professional medical communication in EMP from a needs-analysis perspective. By integrating qualitative findings, quantitative frequency-based structuring, and relevant theoretical perspectives, the study identifies four core competency domains required for effective communication in healthcare settings: linguistic competence, clinical communication skills, interpersonal competence, and professional competence. These domains interact within authentic clinical contexts and collectively support the development of performance-based communication competence.

The findings indicate that healthcare professionals need English not only for general language use but also for specific clinical tasks, including patient interaction, explaining diagnoses and procedures, and interprofessional collaboration. However, existing English training programs remain largely focused on general English and do not adequately address the communication demands of healthcare practice. This gap highlights the need for a more structured and outcome-oriented approach to EMP instruction.

The proposed framework contributes to the field of ESP by integrating language competence with clinical practice and professional behavior within a competency-based model. The framework provides a conceptual foundation for designing EMP curricula, learning materials, instructional strategies, and performance-based assessments that are aligned with real-world healthcare communication needs.

This study is limited by its reliance on a relatively small empirical dataset and the absence of large-scale statistical validation. Future research should empirically test and validate the proposed framework across diverse healthcare settings and examine its effectiveness in improving learners' communication performance in authentic clinical contexts.

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BIBLIOGRAPHY

- Choi, L. J. (2021). Implementing English for Medical Purposes (EMP) in South Korea: Nursing students' ongoing needs analysis. *Nurse Education Today*, 104. <https://doi.org/10.1016/j.nedt.2021.104989>
- Hutchinson, T., & Waters, A. (1987). *English for Specific Purposes: A Learning-Centred Approach*. Cambridge University Press.
- Hyland, K. (2022). *English for Specific Purposes: What is it and where is it taking us?* 10, 202–220.
- Li, N., & Yang, L. (2023). Second Language Acquisition: An Introductory Course (5 th edn) . *Southern African Linguistics and Applied Language Studies*, 41(3), 381–384. <https://doi.org/10.2989/16073614.2022.2085592>
- Miller, G. E. (1990). The assessment of clinical skills/competence/performance. *Academic Medicine : Journal of the Association of American Medical Colleges*, 65(9 Suppl), S63-7. <https://doi.org/10.1097/00001888-199009000-00045>
- Mulder, M., & Winterton, J. (2017). Introduction. In *Technical and Vocational Education and Training* (Vol. 23). https://doi.org/10.1007/978-3-319-41713-4_1
- Richards, J. C. (2017). *Curriculum_Development_in_Language_Teaching_2nd_Edition_books-here.com*.
- Sukisno; Saud, J. (2025). *RETORIKA: Jurnal Ilmu Bahasa 2024 CC-BY-NC-SA 4.0 License Perception of Healthcare Professionals on the Importance of English Training in Medical Contexts*. 152–162. <https://doi.org/10.55637/jr.11.1.11414.152-162>
- Sukisno, Suseno, M., & Lustyantje, N. (2025). The Representation of English for Medical Purposes in Indonesian Vocational Language Policy: A Critical Discourse Analysis Perspective. *International Seminar on Humanity, Education, and Language*, 1(1), 771–783. <https://doi.org/10.21009/ishel.v1i1.56987>
- THOMAS, J. (1983). Cross-Cultural Pragmatic Failure. *Applied Linguistics*, 4(2), 91–112. <https://doi.org/10.1093/applin/4.2.91>
- Toth, Z., & Rees, P. (2015). Language Barriers in Medical Settings: The Consequences of Miscommunication. *International Journal of Medical Education*, 6, 53–58.
- Vermeir, P., Vandijck, D., Degroote, S., Peleman, R., Verhaeghe, R., Mortier, E., Hallaert, G., Van Daele, S., Buylaert, W., & Vogelaers, D. (2015). Communication in healthcare: A narrative review of the literature and practical recommendations.



International Journal of Clinical Practice, 69(11), 1257–1267.
<https://doi.org/10.1111/ijcp.12686>

- World Health Organization. (2021). Patient Safety Incident Reporting and Learning Systems Technical report and guidance. In *Global patient safety action plan 2021–2030*. <https://www.who.int/teams/integrated-health-services/patient-safety/policy/global-patient-safety-action-plan>
- Wu, Y. J. A., Lan, Y. J., Huang, S. B. P., & Lin, Y. T. R. (2019). Enhancing medical students' communicative skills in a 3D virtual world. *Educational Technology and Society*, 22(4), 18–32.
- Yundayani, A., Suseno, M., & Herlina, E. (2023). A Duolingo-based English Language Skills Assessment: Through the Eyes of Vocational Students. *Jurnal Ilmu Pendidikan (JIP) STKIP Kusuma Negara*, 15(1), 9–23.
<https://doi.org/10.37640/jip.v15i1.1683>