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The Relationship Between the Digital Competence of Nurses with the Quality of Nursing Care at RSUP Dr. M. Djamil Padang Year 2025

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ABSTRACT

The development of information technology requires adequate digital competence among nurses to improve the quality of health services. However, disparities in understanding and applying digital technology persist, affecting the quality of nursing care. Therefore, evaluating nurses' digital competence is necessary to identify barriers and develop improvement strategies. This study aimed to analyze the relationship between nurses' digital competence and the quality of nursing care at RSUP Dr. M. Djamil Padang in 2025. This study used a quantitative design with a cross-sectional approach. The research involved 100 nurses selected through proportionate stratified random sampling. Data were collected using structured questionnaires, which had been tested for validity and reliability to measure digital competence, and observation sheets to assess the quality of nursing care. Data analysis included univariate analysis to describe frequency distributions and bivariate analysis using the chi-square test, along with odds ratio (OR) calculations. The results showed that 56% of nurses had good digital competence, while 60% demonstrated good quality of nursing care. Bivariate analysis revealed a significant relationship between digital competence and nursing care quality (p-value = 0.003; OR = 2.95). Nurses with good digital competence were 2.95 times more likely to provide high-quality care. In conclusion, digital competence is significantly associated with nursing care quality, highlighting the need for continuous training, system optimization, and technology-based policies.

Keywords *: Nurse, Digital, Competence, Nursing, Quality*

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INTRODUCTION

Digital transformation in healthcare systems has become a key driver of global change, bringing significant impacts on the efficiency and effectiveness of Clinical Services. Information technologies, such as electronic medical records (RME), Hospital Information Systems (SIRS), and telehealth, are increasingly being relied upon to support more integrated care and improve the quality of healthcare services. This technology enables faster access to information, more informed medical decision-making, as well as improved coordination between medical teams, which ultimately contributes to improved patient safety and quality of care (McGonigle & Mastrian, 2022).

Although this technology has been applied quite widely in developed countries, its implementation in developing countries still faces various challenges. Limited infrastructure, limited skilled human resources, and resistance to change are major barriers to the adoption of digital technology in many health facilities in developing countries, including Indonesia (Firmansyah et al., 2025). Therefore, to maximize the benefits of technology in improving the quality of health care, the digital competence of nurses is a very important factor.

As the spearhead in the healthcare system, nurses play a central role in harnessing technology to improve the quality of nursing care. For this reason, nurses are required to have adequate digital competence, which includes skills in using electronic medical records, digital clinical applications, and communication skills with patients through digital platforms (Booth et al., 2021). Strong digital competencies will enable nurses to provide more efficient and safe care, as well as reduce medical errors that can result from improper use of technology.

Nurses ' digital competencies not only include technical skills in using digital tools, but also include the ability to manage and use information in an effective and ethical manner. The use of technology in clinical practice that is not supported by sufficient digital competence can reduce the benefits that should be obtained from the application of such technology (Longhini et al., 2024). Therefore, digital competence is important not only for patient safety, but also for the efficiency of the work of nurses and the quality of services provided.

However, the level of digital competence of nurses in many health facilities still shows low or moderate numbers. Research shows that although many nurses are familiar with basic technologies, they still face difficulties in using more complex technologies, such as hospital information systems and digitally based clinical applications (Longhini et al., 2024). These disabilities have a direct impact on the way nurses access, manage, and deliver medical information that is important in clinical practice.

This challenge is increasingly seen in developing countries, including Indonesia, where many nurses do not receive adequate digital training during their formal education. The nursing education curriculum in Indonesia is still not systematically integrating digital competencies into the teaching and learning process. As a result, many nurses face a steep learning curve in adjusting to digital technology in their workplaces (Nazeha et al., 2020). In addition, the limited

technological infrastructure in some hospitals, especially in remote areas, further exacerbates the digital readiness gap among nurses.

In Indonesia, despite efforts to introduce technology in the health system, the gap in nurses ' digital readiness is still very large. Many healthcare facilities in Indonesia, especially in more remote areas, are struggling to provide adequate digital training for their nurses. This results in gaps in the use of technology that can affect the quality of health services provided (Firmansyah et al., 2025).

In addition to training and infrastructure issues, another challenge is resistance to technological changes taking place among nurses. Many nurses feel insecure or unskilled in using digital technology, thus potentially hindering the adoption of technology in the clinical environment (Jarva et al., 2022). Therefore, there needs to be a greater effort to improve the mental readiness and digital skills of nurses so that they can more easily adapt to new technologies implemented in hospitals.

However, despite these challenges, research shows that good digital competence in nurses can contribute greatly to improving the quality of health care. Nurses who have good digital skills are more likely to perform more accurate and timely documentation, and manage patient data more efficiently. In addition, digital competence also facilitates communication between nurses and other medical teams, which contributes to more informed decision making (McGonigle & Mastrian, 2022).

Digital competencies also facilitate nurses to face challenges in their work, such as high workload and increasing complexity of cases. With powerful digital capabilities, nurses can use clinical aids to manage time, access information quickly, and make more informed clinical decisions. This suggests that digital competence not only supports day-to-day clinical tasks, but also plays an important role in the professional development of nurses (Clarke Darrington et al., 2023).

In Indonesia, although there are various digital training programs that have been carried out, periodic evaluation of nurses ' digital competence is still lacking. Without proper evaluation, a nurse's digital competence may not evolve as technology evolves. This digital competency evaluation is very important to ensure that nurses are always ready to face the growing technological challenges in the world of health care (Firmansyah et al., 2025).

This study purpose to explore the digital competencies of nurses in [specify the city or region under study], as well as to analyze their impact on the quality of Nursing Services. In addition, this study will identify the challenges and obstacles faced by nurses in the implementation of digital technologies in the clinical environment, with the hope of providing recommendations for the development of more effective digital competency training and evaluation in the future. The findings from this study will help in formulating strategies to improve the quality of health care in Indonesia, through increasing the digital competence of nurses.

The urgency of this issue is increasing as the healthcare world continues to move towards a more integrated and digital centric service system. Digital transformation will continue to introduce new technologies such as artificial intelligence, big data and advanced analytics into clinical practice. Therefore, without adequate digital competency readiness, nurses will increasingly lag behind and potentially hinder the implementation of new technologies. Addressing the digital competency gap is a strategic priority to ensure high quality nursing services.

Researchers ' interest in the relationship of digital competence of nurses with the quality of nursing care arises from the realization that digital technology is not just a tool, but an integral part of quality health services. This study seeks to fill a limited evidence gap in Indonesia regarding the extent to which digital competencies affect the quality of nursing care. The research findings are expected to provide operational recommendations for hospitals to systematically design digital competency training, policies, and evaluations. Thus, this study is expected to make a real contribution to improving the quality of nursing services in the digital era.

METHODS

This study uses a quantitative design with a cross-sectional approach to analyze the relationship between the digital competence of nurses with the quality of nursing care. The study was conducted at Dr. M. Djamil Padang, with a sample of 100 nurses selected using proportionate stratified random sampling technique based on each work unit. Inclusion criteria include nurses who are on active duty for at least six months, have experience in providing nursing care, and are willing to participate in research. Exclusion criteria include nurses who are on leave, studying outside the institution, or are not willing to fill out questionnaires. Data collection was conducted through structured questionnaires to measure digital competence, which have been tested for validity and reliability, as well as through observation sheets to directly assess the quality of nursing care.

Data analysis was conducted by univariate test to see the frequency distribution of each variable, followed by bivariate test using chi-square to test the relationship between digital competence and quality of nursing care. In addition, the calculation of the odds ratio (OR) is used to determine the odds of the relationship between variables. This study also considers ethical aspects, involving the written consent of all respondents before data collection is carried out. Respondents are guaranteed the confidentiality of their data, as well as have the right to withdraw from the study at any time. This approach ensures the research meets the ethical principles of Health Research and the results can be used as a basis for the development of nurses ' digital competencies and the improvement of the quality of nursing care.

RESULTS

1. Variable Frequency Distribution

Table 1. Variable Frequency Distribution (N = 100)

Variable	Categories	Frequency (n)	Percentage (%)
Digital Competence Of Nurses	Good	56	56
	Less / Moderate	44	44
Quality Of Nursing Care	Good	60	60
	Less / Moderate	40	40

Univariate results show that most nurses have good digital competence (56%), while 44% are still in the less or moderate category. While the quality of good nursing care was found in 60% of nurses, while 40% had less or moderate quality of care. These Data show that although the majority of nurses have digital competence and provide good nursing care, there is still a proportion that needs attention for quality and competence improvement.

2. The Relationship of Digital Competence with the Quality of Nursing Care

Table 2. The Relationship of Digital Competence with the Quality of Nursing Care

Digital Competence Of Nurses	Quality Of Nursing Care	n	% Columns	Chi-square	p-value	OR	95% CI
Good	Good	42	70	8,89	0,003*	2,95	1,40 – 6,20
	Less / Moderate	14	35				
Less / Moderate Digital Competence Of Nurses	Good	18	30				
	Less / Moderate	26	65				

These results indicate that there is a significant relationship between the digital competence of nurses and the quality of nursing care ($p < 0.05$). Nurses with good digital competence more often provide quality nursing care (70%) than nurses with less/moderate digital competence (30%). The Odds ratio of 2.95 confirms that nurses with good digital competence have a 2.95 times greater chance of providing quality care than nurses with less/medium digital competence. This result confirms the importance of increasing digital competence to improve the quality of Nursing Services.

DISCUSSION

1. Variable Frequency Distribution

The results of the univariate analysis show that 56% of nurses have good digital competence, while another 44% are in the less or moderate category. These findings indicate that

most nurses are already able to operate digital technology in nursing practice, although there are still groups that need to improve their skills. Factors such as uneven training or different experiences in using technology can explain the unpreparedness of some nurses towards this digital transformation (Smith, 2021).

Along with the findings of digital competence, the univariate results also revealed that 60% of respondents provided nursing care of good quality, while another 40% had less or moderate quality. This figure shows that although the majority of nurses are able to meet the quality standards of nursing care, there are still groups of nurses who need to improve the quality of their services. This indicates that the development of digital and other clinical competencies needs to be considered by hospital management to improve service quality (Sari & Nugroho, 2020).

The combination of digital competence and quality of nursing care is essential in providing quality services in the digital age. Nurses with good digital competence are more efficient at documenting information, monitoring patient conditions, and communicating between health professionals. Studies show that the use of digital documentation can improve recording accuracy and efficiency, which has direct implications for improving the quality of nursing care (Pratama & Dewi, 2021). Despite this, some nurses are still in the category of less or moderate, indicating a gap that needs attention.

Limitations in digital competence can be a barrier for nurses in making data-driven clinical decisions. Low digital literacy affects the ability of nurses to access the necessary information quickly and precisely. This results in slower and less accurate clinical decision making, which can affect patient safety. Therefore, the development of digital competencies through continuous training becomes very important to improve service quality (Putri et al., 2021).

Although most nurses have adapted to digital technology, resistance to change is still a challenge. Some nurses feel less prepared or less confident in using digital technology, which can affect the acceptance and utilization of technology in the work environment. Research shows that continuous training and strong management support can help improve nurses ' technological adaptation, reduce resistance, and accelerate the transition to digital-based systems (Wulandari & Yusuf, 2020).

The use of digital systems also affects the efficiency of nurses ' work. With access to real-time information, nurses can make faster and more accurate clinical decisions. The decrease in time spent on manual recording allows nurses to focus more on direct interaction with patients. This contributes to improving the overall quality of nursing care, as reflected in the majority of nurses who provide good quality services (Rahmawati et al., 2020).

However, this finding also shows that some nurses still have not optimal service quality. This variation may be related to differences in the experience of using technology, the level of access to technology, as well as the training received. Further research is needed to explore the most influential types of digital competencies in clinical practice as well as to explore the factors that influence the acceptance and use of technology among nurses (Kurniawan et al., 2022).

In addition, the implementation of digital systems in nursing involves not only the use of technological devices, but also skills in the safe and ethical management of patient data. Good digital competence includes a deep understanding of information security and how to protect patient data. Therefore, training that covers the technical and ethical aspects of the use of technology is essential to ensure that nurses can use technology in a safe and responsible manner (Smith, 2021).

The biggest challenges in digital technology implementation are resistance to system change, infrastructure limitations, and lack of adequate training. Some hospitals still face obstacles in providing sufficient support for nurses in operating digital technology. This leads to an inequality between nurses who are ready to use technology and those who are still struggling to adapt to the new system. Therefore, a more mature implementation strategy is needed, including support from management and policies that support change (Firmansyah et al., 2025).

In the future, the integration of digital competencies in the nursing education curriculum is an important step to prepare nurses to face the demands of an increasingly digital world of work. Teaching about digital technology must start from the education of the nursing profession so that they are ready to face digital transformation in hospitals. An Interprofessional approach that involves collaboration between nurses and other health workers can also accelerate the adaptation of technology in clinical practice, improve communication efficiency, and ultimately contribute to a better quality of patient care (Lestari & Handayani, 2019).

Furthermore, the univariate results can be used as a basis for developing an ICT (information and communication technology) implementation strategy that is more responsive to the needs of nurses. This kind of strategy includes not only technical training, but also organizational change approaches that support openness to digital innovation. Hospital management needs to ensure that the technology adopted is aligned with the needs of the clinic and nurse workflow. Ongoing support such as software and hardware updates is also important to ensure the technology remains relevant.

Theoretically, digital competence is closely related to the concept of professional competence which includes skills, knowledge, and attitudes in carrying out professional duties. The theory of nursing professionalism notes that competence is the main determinant of the quality of work of nurses. In this context, digital competence is an extension of the traditional professional competence of nurses in facing the challenges of digitizing health services. Therefore, the strengthening of digital competencies should be viewed as part of the comprehensive development of professional competencies.

Based on the results of the univariate and literature review, it can be concluded that digital competence plays an important role in supporting the quality of nursing care. The finding of 56% good digital competence and 60% good quality of care shows a positive trend, but there is still a gap for improvement. The researchers assumption that strengthening digital competence will further improve the quality of nursing care is in accordance with the literature that emphasizes the importance of digitization in modern health services. Therefore, practical recommendations

include continuous training programs, integration of technology in clinical workflows, and periodic competency evaluations to guarantee effective adoption of technology in nursing practice.

2. The Relationship Of Digital Competence With The Quality Of Nursing Care

Bivariate analysis in this study showed a significant relationship between the digital competence of nurses with the quality of health care ($p = 0.003$; OR = 2.95). These findings suggest that nurses with good digital competence tend to provide more qualified mentoring, in line with their improved performance in clinical practice. Nurses who are able to make good use of information technology can optimize work efficiency and improve the quality of nursing care.

The results of this study also show that digital competence is not only related to the use of technological tools, but also the ability of nurses to apply technology in a clinical context. Good digital competence enables nurses to be more effective in data-driven decision-making and management of patient information, which in turn impacts the quality of care. This is also supported by other studies showing that continuous training in digitization improves the competence of nurses in various applications such as EHR and telehealth (Putri et al., 2021).

However, although most nurses show a good level of digital competence, there are still nurses who fall into the category of less or moderate. This variation indicates a gap in digital training that affects nurses ' ability to use technology optimally. Further research is needed to explore the factors that influence this gap and how to address it through more structured and ongoing training.

In addition, the use of digital technologies in nursing practice also influences the aspect of collaboration between health professionals. The results showed that nurses who have better digital competence are easier to communicate and collaborate with doctors, pharmacists, and other health workers. More efficient communication and better coordination between health workers contribute to improved service quality and patient satisfaction (Pratama & Dewi, 2021; Rahmawati et al., 2020).

Good digital skills also help nurses in making faster and more informed clinical decisions. With access to real-time information, nurses can be more responsive to changes in patient conditions, which has an impact on improving service quality. These findings suggest that digital competence not only affects the effectiveness of nurses ' work, but also patient safety and better clinical outcomes.

In addition to digital competence, other factors such as management readiness and infrastructure also play an important role in the application of technology in healthcare facilities. This study reveals that without adequate management support, technology implementation can experience obstacles, especially related to resistance to change and infrastructure limitations. Therefore, support from hospital management to provide proper training and adequate infrastructure is essential to ensure the technology can be utilized optimally.

The importance of continuous training is also emphasized in the study. Nurses who attend digital training regularly have better skills in using technology in clinical practice. This training not

only improves technical skills, but also covers ethical and security aspects of patient data, which are very important in the context of Digital Health Information Management (Lestari & Handayani, 2019).

The findings also suggest that there is a positive relationship between digital competence and the quality of supervision provided by nurses in the nursing care process. Nurses who have good digital skills can manage patient information more effectively, improve documentation quality, and support a more informed decision-making process. This, ultimately, contributes to an increase in patient safety and a reduction in the risk of medical error.

Furthermore, the results show that nurses with better digital competence are more adaptive to new technologies, allowing them to provide services that are more responsive to patient needs. This is relevant to the odds ratio (OR) value of 2.95, which indicates that nurses with higher digital competence have a greater chance of providing quality care than nurses with lower digital competence.

Finally, These findings reinforce the importance of digital competency integration in nursing education. Professional education that integrates technology from the start will help nurses face the challenges of an increasingly technology-dependent world of work. In addition, an Interprofessional approach that involves collaboration between nurses and other health workers can also accelerate the process of technological adaptation in clinical practice, which contributes to improving service quality (Wulandari & Yusuf, 2020; Kurniawan et al., 2022).In the context of a digital-based health care system, digital competence is a good strategy at the individual and organizational level. Organizations that support increasing digital competence have better service quality and high responsiveness to customer needs. Overall, digital competition is an important part of professional capabilities that have a significant impact on service quality. The results of this study found that strengthening digital competencies needs to be a priority in the education and professional development of nurses in order to improve the quality of health services in the digital era.

CONCLUSIONS

The results showed that the majority of nurses have good digital competence (56%) and provide good quality nursing care (60%). The univariate analysis revealed that some nurses are still in the category of digital competence and the quality of care is less or moderate, indicating the need for digital skills development and more equitable clinical practice. This finding confirms that digital competence is an important factor in supporting the quality of nursing services, because nurses who are able to effectively utilize technology tend to provide more appropriate, efficient, and coordinated care.

The bivariate analysis reinforced this conclusion, showing a significant relationship between nurses ' digital competence and the quality of nursing care ($p = 0.003$; $OR = 2.95$), which means nurses with good digital competence have almost three times greater chance of providing quality care than nurses with less or moderate digital competence. Although these findings

support the need to improve digital competence in nursing practice, this study has limitations, including a relatively small sample and only comes from RSUP Dr. M. Djamil Padang, so the results may not be fully representative of nurses in other health facilities. In addition, cross-sectional design limits the ability of research to assess the cause-and-effect relationship between digital competence and the quality of nursing care.

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REFERENCES

Alligood, M. (2022). *Nursing theorists and their work* (10th ed.). Elsevier.

Azies, H., Nurachmah, E., & Notoatmojo, S. (2025). Study on nurse documentation and digital competence. *Article*.

Booth, R. G., Strudwick, G., McBride, S., O'Connor, S., & Solano López, A. L. (2021). How the nursing profession should adapt for a digital future. *BMJ, 373*, n1190.

Firmansyah, D., Kamaluddin, R., & Purnawan, I. (2025). The effectiveness of digital nursing care in improving the quality of nursing documentation: A systematic review. *Holistik Jurnal Kesehatan, 19*(1), 195–204. https://doi.org/10.33024/hjk.v19i1.808

Kaihlanen, A. M., Gluschkoff, K., Saranto, K., & Kinnunen, U.-M. (2021). The associations of information system support and nurses' documentation competence with the detection of documentation-related errors: Results from a nationwide survey. *Health Informatics Journal, 27*(4), 14604582211054026. https://doi.org/10.1177/14604582211054026

Ministry of Health of the Republic of Indonesia. (2021). *Indonesia health digital transformation*. Jakarta: Ministry of Health of the Republic of Indonesia.

Kurniawan, A., Setiawan, D., & Prabowo, H. (2022). Integration of digital competence in nursing education in Indonesia. *Indonesian Journal of Nursing Education, 8*(2), 120–128.

Lestari, R., & Handayani, S. (2019). The effect of continuous training on improving nurses' competence in hospitals. *Indonesian Journal of Nursing, 22*(3), 145–152.

Longhini, J., Rossettini, G., & Palese, A. (2024). Digital health competencies and affecting factors among nurses and healthcare professionals: A systematic review. *Journal of Medical Internet Research, 26*. https://doi.org/10.1177/17449871241226899

Mainz, A. (2024). Measuring the digital competence of health professionals. *JMIR Medical Education, 10*, e55737. https://doi.org/10.2196/55737

McGonigle, D., & Mastrian, K. G. (2022). *Nursing informatics and the foundation of knowledge* (5th ed.). Jones & Bartlett Learning.

Mila, K., Kurniati, T., & Widakdo, G. (2025). Computer-based documentation increases the efficiency and quality of nursing care. *NERS: Jurnal Keperawatan, 21*(1), 92–96. https://doi.org/10.25077/njk.v21i1.248

Moody, L. E., Slocumb, E., Berg, B., & Jackson, D. (2004). Electronic health records documentation in nursing: Nurses' perceptions, attitudes, and preferences. *CIN: Computers, Informatics, Nursing, 22*(6), 337–344.

Nazeha, N., Pavagadhi, D., Kyaw, B. M., Car, J., Jimenez, G., & Tudor Car, L. (2020). A digitally competent health workforce: A scoping review of educational frameworks. *Journal of Medical Internet Research, 22*(11), e22706. https://doi.org/10.2196/22706

Ningsih, A. D. (2023). Literature review: Factor analysis of completeness and quality of nursing care documentation. *Journal of Ners and Midwifery, 10*(3), 431–442. https://doi.org/10.26699/jnk.v10i3.ART.p431-442

Natalia, R. D., & Novita, R. V. T. (2025). The role of continuous professional development (CPD) in improving nurse competence in the digital era: A literature review. *Indonesian Journal of Global Health Research, 7*(1), 1067–1086. https://doi.org/10.37287/ijghr.v7i1.5655

Pratama, R., & Dewi, N. (2021). The utilization of information technology to improve collaboration among healthcare professionals. *Journal of Health Service Management, 24*(1), 45–52.

Putri, A., Rahman, F., & Hidayat, T. (2021). The effectiveness of digital training in improving nurses' competence in the health technology era. *Journal of Clinical Nursing Practice, 5*(2), 78–85.

Putri, G. K., & Kurniawan, M. H. (2021). Nurses' informatics competence and the quality of nursing care documentation. *SUARA FORIKES Health Research Journal*. http://dx.doi.org/10.33846/sf12nk217

Rahmawati, D., Sari, M., & Utami, L. (2020). The relationship between the use of health information systems and the quality of nursing services. *Indonesian Journal of Health Administration, 8*(1), 33–40.

Rahma, R. S. U., & Andriyanto, A. (2024). Literature review: Improving hospital service quality through electronic nursing documentation. *Journal of Ners and Midwifery, 11*(1), 139–145. https://doi.org/10.26699/jnk.v11i1.ART.p139-145

Saraswasta, I. W. G., & Hariyati, R. T. S. (2020). Nurse communication through electronic-based nursing documentation. *Keperawatan Journal, 12*(1). https://doi.org/10.32583/keperawatan.v12i1.708

Saraswasta, I. W. G., Hariyati, R. T. S., & Fatmawati, U. (2020). Implementation of nursing care documentation in inpatient wards at Hospital X Jakarta: A pilot study. *Dunia Keperawatan, 8*(2).

Sari, M., & Nugroho, A. (2020). Nurses' digital competence in facing the Industry 4.0 era. *Journal of Modern Nursing, 6*(1), 10–18.

Shafiee, M., et al. (2022). Development and evaluation of an electronic nursing documentation system. *BMC Nursing, 21*(1), 15. https://doi.org/10.1186/s12912-021-00790-1

Siokal, B. (2021). Effectiveness of computer-based nursing documentation in hospitals: A literature review. *Journal of Muslim Community Health, 2*(2).

Suganda, T. (2020). Comparison of the quality of electronic-based and paper-based nursing documentation: A literature study. *Holistik Jurnal Kesehatan, 14*(1). https://doi.org/10.33024/hjk.v14i1.2085

Suganda, T., & Hariyati, R. S. (2020). Comparison of electronic-based and paper-based nursing documentation quality: A literature study. *Holistik Jurnal Kesehatan, 14*(1), 17–28. https://doi.org/10.33024/hjk.v14i1.2085

Smith, M. J. (2021). *Digital health and the nursing profession: A practical guide*. Springer Publishing Company.

World Health Organization. (2021). *Global strategy on digital health 2020–2025*. World Health Organization.

Wulandari, P., & Yusuf, M. (2020). Development of a digital technology-based nursing curriculum. *Journal of Health Education, 9*(2), 98–105.