

ORIGINAL ARTICLE

Ethics and Communication in Providing Health Education in Midwifery Services

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ABSTRACT

OBJECTIVE: The aim was to analyze the differences in providing modules and assistance from a certified senior midwife in applying ethics and communication in providing health education in midwifery services.

METHODOLOGY: This quantitative research used cluster sampling and was conducted in Makassar, Maros, Pangkep, and Barru cities between January and April 2024. Slovin formula and cluster sampling were used. Each region was divided into 30 samples, with a total sample size of 120. The midwife group was split into a control group that was given a health ethics and communication module (This module is developed based on the curriculum and combined with existing regulations from the Ministry of Health). The intervention group was provided with assistance from a certified senior midwife. Eight midwives from the control and intervention groups were randomly assigned to four cities, and an independent t-test was conducted to compare the control and intervention groups. SPSS was used for analytical tools.

RESULTS: The findings show that age, education, and employment are all related to ethics and communication, with a p-value of <0.005 in both the control and intervention groups. The control and intervention groups showed significant differences in ethics and communication, with a p-value of 0.000 for both.

CONCLUSION: There are communication and ethics differences between the control and intervention groups. The findings emphasize how crucial it is to implement assistance from a certified senior midwife to enhance the quality of ethics and communication among these groups.

KEYWORDS: Age, Education, Employment, Ethics, Communication, Midwifery Services

INTRODUCTION

Health workers qualified to handle maternal and child health problems must be handled by skilled and competent health workers¹. To use the theories they have learned while midwives, they must be allowed to be directly involved in providing midwifery care to clients². Through practical experience, midwives can increase their abilities and confidence in dealing with various maternal and child health problems³. Direct involvement in providing care allows them to apply their knowledge and skills effectively, ultimately improving the quality of care provided to clients. This hands-on experience also helps midwives develop critical thinking and problem-solving abilities in real-life situations⁴.

The health profession is currently facing various challenges that need to be resolved, especially regarding strengthening regulations to support the development and empowerment of health workers, especially in midwifery⁵. Supporting all stakeholders with the same interests and goals is necessary at the central and regional levels. With the advancement of time and ease of accessing information, access to information has become unlimited, and advances in science and technology have made society increasingly critical. However, this raises various ethical problems in society. Apart from that, changes in lifestyle, culture and community values have made people more sensitive in responding to multiple issues, including assessing the services provided by midwives⁶.

Midwives are required to ensure the provision of professional services, accountability, and legal aspects of midwifery services as service providers. The knowledge and application of ethics in midwifery practice will protect midwives from ethical or moral violations currently widespread in society; this is closely related to midwifery services, so a midwife as a health service provider must be competent in responding and making appropriate decisions for further action service standards and the midwife's authority⁷.

Community health centres offer midwifery services to create prosperous and healthy families as a vital component of their overall health programs for mothers and children under five. One success in preventing maternal and child deaths is making accurate decisions when complications or emergencies occur; this can happen if the family has good basic knowledge about pregnancy and childbirth so that they can plan childbirth and prepare for complications as early as possible. The existence of community health centres is one answer to closer community access to midwifery and newborn services to prevent complications and/or get the first service when an emergency occurs⁸. The family understands the preventive aspect, and community centres need to be equipped with the skills; this can help ensure that families receive the necessary care and support during pregnancy, childbirth, and postpartum. Community health centres play a crucial role in promoting maternal and infant health by providing education and resources.

Professionals must have a decision-making process, which is fundamental in determining what actions to take next. In practice, midwives often face various dilemmas, making ethical decisions difficult. Dilemmas arise because they are faced with moral conflict, inner conflict, or conflict between the values that the midwife believes in and the existing reality⁹. These ethical decisions can significantly impact the mother and baby's well-being, highlighting the importance of a well-thought-out decision-making process in midwifery. By carefully considering all factors and seeking guidance when needed, midwives can navigate these dilemmas with professionalism and compassion.

Interpersonal communication and counseling are carried out not only by paying attention to aspects of counseling techniques but also aspects of empathetic behavior in counseling and aspects of ethical behavior in counseling by social care professionals¹⁰. In counseling, midwives and clients need to develop an empathetic attitude¹¹. Empathy can be realized if the midwife pays attention to the client and knows what the client is experiencing¹².

This research analyzed the differences in providing modules and assistance in applying ethics and communication in health education in midwifery services. The novelty of this study is that it integrates modules (This module is developed based on the curriculum and combined with existing regulations from the Ministry of Health) and mentoring as a strategy to increase the application of ethics and communication in midwifery health education. We hope we can provide valuable recommendations for midwifery practitioners to improve the quality of health services that are more ethical and communicative.

METHODOLOGY

Design and Sampling Method

The design was a quasi-experiment using quantitative research with cluster sampling, where four cities were studied. These four cities were chosen because they have the densest health services among other South Sulawesi, Indonesia towns. Each city was randomly selected to represent a larger population so that the research results could be considered representative of the entire relevant population. A cluster sampling method efficiently facilitated data collection from different locations. In this way, the research results can be generalized more easily.

Sampling

This study was carried out in the Indonesian cities of Makassar, Maros, Pangkep, and Barru in the province of South Sulawesi. This study was conducted between January and April 2024. Slovin formula and cluster sampling were used; the sample used in this study comprised 120 midwives. A questionnaire was used in this study. Each region was divided into 30 samples with 15 controls and 15 interventions. Thus, the total number of samples in the four cities was 120. The midwife group was split into a control group that was given a health ethics and communication module. The intervention group was provided with assistance from a certified senior midwife. As many as 16 midwives were divided into two groups, namely the control and the intervention groups, which were spread across four selected cities.

Research Instrument

The instrument used in this research is a patented questionnaire based on the variables studied in applying ethics and communication in providing health education in midwifery services. Midwifery service ethics and communication modules are given to each midwife assigned to the research area. Meanwhile, four senior cadres who have been certified were assigned to each and will accompany each midwife in the intervention group. The control and intervention groups were given a treatment period of 4 weeks. In the control group, the module provision was still supervised by the midwife coordinator for 4 weeks; control was carried out once a day by ensuring that the midwife who was given the module read and understood the module completely. As for the intervention group, a certified senior midwife provided understanding and assistance once daily for 2 hours each day for 4 weeks. The remaining time is used for reporting, recording, and data collection.

Data Analysis

Utilizing the Statistical Package for Social Sciences, data were processed. Data processing included editing, coding, entry, cleaning, and analysis. Data were analyzed using univariate and bivariate analyses. Univariate analysis aims to obtain a general picture of the frequency distribution of research results for each variable studied. In addition, through descriptive tests, it is possible to determine the distribution of respondents' characteristics and each variable studied. The relationship between the variables was ascertained using the chi-square test. Meanwhile, the Independent T-Test was used to see differences in communication and ethics variables in the sample. SPSS was used for analytical tools.

RESULTS

Table I reveals no differences between control and intervention groups, indicating homogeneity and uniform distribution of variables in the study; this suggests that randomization successfully created comparable groups for analysis.

Table I: Distribution of Respondents

Variable	Control		Intervention		Homogeneity
	Frequency	%	Frequency	%	
Age (Years)					
18 -25	5	16.7	7	23.3	0.538
26 – 37	21	70.0	18	60	
>37	4	13.3	5	27.7	
Total	30	100.0	30	100.0	
Education					
Elementary school	4	13.3	3	10.0	0.369
Junior high school	6	20.0	7	23.3	
Junior high School	8	26.7	7	23.3	
University	12	40.0	13	43.4	
Total	30	100.0	30	100.0	
Work					
Housewife	18	60.0	15	50.0	0.477
Work alone	4	13.3	7	23.3	
Private sector employees	2	6.7	1	3.4	
Civil servants	6	20.0	7	23.3	
Total	30	100.0	30	100.0	
Ethics					
Good	14	46.7	11	36.7	0.084
Poor	16	53.3	19	63.3	
Total	30	100.0	30	100.0	
Communication					
Good	17	56.7	16	54.0	0.848
Poor	13	43.3	14	46.0	
Total	30	100.0	30	100.0	

Independent T Test

Age, education, and employment are all related to ethics and communication, with a p-value of <0.005 in both the control and intervention groups; this shows that these factors can influence an individual's level of ethics and communication (**Table II**).

Table II: The relationship between age, education and employment on ethics and communication in providing health education to midwifery services

Variable	Control		Intervention	
	Ethics	Communication	Ethics	Communication
	P value	P value	P value	P value
Age (years)	0.002	0.003	0.013	0.021
Education	0,000	0.034	0.001	0.036
Work	0.005	0,000	0.007	0.001

Chi-Square Test

The statistical test using the chi-square test produces a value of $p = 0.003$, meaning it is smaller than $\alpha (0.05)$. There is a relationship between the application of ethics and communication in providing health education to midwifery services (**Table III**).

Table III: Relationship between the Application of Ethics and Communication in Providing Health Education to Midwifery Services

Variable	Ethics	R
	P value	
Communication	0.003	0.433

Chi-Square Test

With a p-value of 0.000 for each, **Table IV** demonstrates a difference in communication and ethics between the control and intervention groups. This noteworthy distinction indicates that the intervention significantly impacted ethics and communication. Different findings highlight how crucial it is to implement intervention programs to raise the standard of ethics and communication amongst other groups.

Table IV: Differences in communication and ethics in the control and intervention groups

Variables	Samples	p
Ethics	Controls	0,000
	Intervention	
Communication	Controls	0,000
	Intervention	

T Independent Test

DISCUSSION

The analysis findings indicate that age, education, and employment significantly correlate with ethics and communication; these factors can influence an individual's level of ethics and communication. Older individuals may have more life experiences that shape their ethical beliefs and communication style. Likewise, a higher level of education can result in a better understanding and application of moral principles in workplace communication. The type of job a person has can influence their ethical decision-making and communication skills¹³. For example, individuals in leadership positions may have higher moral standards and demonstrate stronger communication skills. These findings suggest that age, education, and occupation are essential in shaping communication ethics and practices; this reflects the value of ongoing education and training to promote moral communication in the workplace. It also underscores the need for organizations to provide training and support to employees at all levels to improve their ethical decision-making abilities.

Organizations can guarantee their employees have the skills to effectively handle ethical dilemmas by investing in continuous training and development programs¹⁴; this enhances the overall ethical culture within the workplace and contributes to improved communication and decision-making processes across all levels of the organization. Ultimately, promoting ethical communication in the workplace can increase trust among employees and stakeholders and create a more substantial reputation for the organization¹⁵. Organizations must prioritize ethical communication as a core value to maintain a positive and sustainable work environment¹⁶.

There is a relationship between the application of ethics and communication in providing health education through midwifery services. These results show that communication and the application of ethics in health education are significantly correlated. These findings suggest that focusing on these aspects can improve community midwifery services. By emphasizing ethics and communication in health education, midwifery services can enhance their effectiveness and quality. Implementing strategies to strengthen these areas can lead to better outcomes.

Additionally, improving the culture of ethical behavior and effective communication can contribute to increasing patient satisfaction and trust in the healthcare system¹⁷. Ultimately, prioritizing ethics, communication, and being knowledgeable and skillful in providing patient care through health education can improve overall health outcomes. Given the importance of adhering to these principles in midwifery care, workshops should address these issues¹⁸. Ongoing education and training regarding ethics and patient rights should be integrated into the curriculum to ensure students are well-prepared for future roles as midwives¹⁹.

Philosophy's field of ethics is intimately tied to human values in judging whether a course of conduct is right or wrong and whether a particular course of action is the best. Additionally, ethics are crucial in helping people and organizations make moral choices and behave appropriately in public²⁰; this helps establish a moral compass that influences how people interact with others and make choices in various situations²¹. Ethics can also affect the reputation and credibility of individuals and organizations and their long-term success²². Ultimately, practicing ethical behavior can create a more harmonious and just society. Individuals and organizations can build community trust and integrity by adhering to moral principles, resulting in stronger relationships, increased collaboration, and a positive societal impact. Ethical behavior can also lead to increased employee morale and loyalty and improved customer satisfaction. Overall, prioritizing ethics in decision-making can contribute to a more sustainable and prosperous future. Individuals and organizations

need to consider the long-term consequences of their actions and decisions, as ethical behavior can have a lasting impact on society. By prioritizing ethics, we can work towards creating a more equitable and sustainable world for future generations²³.

With a p-value of 0.000 for both, there were ethical and communication differences between the control and intervention groups. This noteworthy distinction indicates that the intervention significantly impacted ethics and communication. Different findings highlight how crucial it is to implement intervention programs to raise the standard of ethics and communication amongst other groups. Thus, it can be concluded that interventions play a significant role in improving group dynamics; this also shows that efforts to enhance ethics and communication must continue to achieve optimal results. The findings suggest that targeted interventions can improve ethical standards and group communication. Continued support and resources should be allocated towards sustaining these positive changes in group dynamics for long-term success. The success of intervention programs in improving group dynamics highlights the importance of ongoing efforts to enhance ethics and communication²⁴. By investing in targeted interventions, organizations can create a culture of transparency and collaboration that fosters positive relationships among different groups^{2, leading} to increased productivity, innovation, and overall success. Therefore, organizations must prioritize and invest in ongoing interventions to continuously improve group dynamics and foster a positive work environment.

Midwives, as service providers, must guarantee professional services, accountability, and legal aspects of midwifery services. Midwives, as service practitioners, must maintain the development of evidence-based practice and prepare themselves to anticipate changes in community needs; this entails searching for opportunities for ongoing professional development and staying current with the most recent findings and recommendations in midwifery. By doing so, midwives can ensure they provide high-quality services to their clients and adapt to the ever-evolving healthcare landscape. This commitment to education and continuous improvement is essential for midwives to uphold their duty to provide safe and effective care to mothers and newborns. Additionally, by staying aware of legal and ethical standards, midwives can navigate the complex healthcare system and protect themselves from potential liabilities²⁶.

A person's recovery can be achieved in various ways, such as continuously taking the medication recommended by the midwife, receiving good health services, and moral encouragement in the form of motivation from people closest to them, such as family²⁷. Apart from ensuring that the physical condition returns to normal, healing must also be carried out for the patient's psychology itself because, in general, people who are lying ill experience a declining psychological condition, which is known as droop; at times like this, someone needs moral encouragement in the form of enthusiasm and motivation to be able to face it²⁸. The "Intermediate-high risk" PE continues until the patient recovers. At this stage, the role of the health workers, especially in caring for patients who experience droop, is to provide motivation and moral support so that the patient feels cared for wholeheartedly.

Various experiences positively impacting behaviours, mindsets, and information about people's, communities, and countries' health are collectively called health education²⁹. Many subjects include disease prevention, physical activity, mental health, and nutrition. By promoting healthy behaviors and providing accurate information, health education aims to empower individuals to make decisions regarding well-being³⁰. Health education also plays a vital role in reducing healthcare costs and improving overall quality of life; this is important in addressing public health problems and improving long-term well-being³¹.

Health education can also help reduce the burden on healthcare systems by preventing illnesses and promoting early detection and treatment³². It can also help build a more

proactive, knowledgeable society prioritizing health and well-being. Health education can result in healthier lifestyles and improved health outcomes by giving people the information and abilities to take charge of their health³³. Funding health education can result in a healthier populace and a more long-lasting healthcare system. Additionally, it can aid in lowering the expense of treating chronic illnesses and avoidable diseases, freeing up funds for more urgent medical requirements. Health education can also enable people to make knowledgeable decisions about their health, enhancing their general well-being and quality of life.

Without ethics and morals in carrying out service duties, various deviations will give birth to midwives as service providers and patients as health consumers³⁴. Midwives must uphold high ethical standards to ensure their patient's welfare and safety. Maintaining high moral standards ensures trust and provides high-quality care³⁵. This trust is essential for effective communication and collaboration in healthcare, resulting in better health outcomes for all parties involved. Upholding high ethical standards helps maintain the integrity and reputation of midwifery.

Ethics are critical to be applied in the world of health, especially in midwifery services that prioritize ethics in every service provided³⁶. The application of ethics will also impact good communication so midwives can provide good health education. This assumption is based on the belief that ethical practices contribute to better patient outcomes and overall quality of care. Patients receive compassionate and respectful care during pregnancy and delivery by prioritizing ethics in midwifery services.

Ethical practices in midwifery help build trust between patients and healthcare providers, improving patient satisfaction and overall experience³⁷. Including ethics in midwifery services promotes the development of the healthcare system overall in addition to helping specific individuals. Midwives can promote better health outcomes for mothers and babies by empowering patients to make informed decisions about their treatment by adhering to ethical standards. Furthermore, ethical midwifery practices can support health equity across diverse communities and lessen gaps in access to high-quality care³⁸.

CONCLUSION

Mentoring by certified senior midwives has proven to be more effective than simply providing modules for young midwives in delivering health services. The study found a significant relationship between ethics and communication in midwifery services, with age, education, and employment playing essential roles. The intervention successfully enhanced ethics and communication in health education, emphasizing the importance of implementing such programs. These findings suggest that targeted interventions can effectively improve ethical practices and communication skills among healthcare professionals. This study highlighted the need for ongoing training and support to maintain these improvements over time. This study underscores the importance of prioritizing ethics and communication in healthcare settings to ensure quality patient care.

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AUTHOR CONTRIBUTION

Sari LP: The conception or design of the work or the acquisition, analysis, or interpretation of data for the work, Drafting, Final Approval
Marbun U: Drafting, Analysis, interpretation of data
Irnawati I: Analysis, interpretation of data
Kadir A: Analysis, interpretation of data
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REFERENCES

1. Glass N, Jalazai R, Spiegel P, Rubenstein L. The crisis of maternal and child health in Afghanistan. *Confl Health*. 2023; 17(1): 1–10.
2. Firoozehchian F, Zareiyan A, Geranmayeh M, Behboodi Moghadam Z. Domains of competence in midwifery students: a basis for developing a competence assessment tool for Iranian undergraduate midwifery students. *BMC Med Educ*. 2022; 22(1): 1–15.
3. Inoue N, Nakao Y, Yoshidome A. Development and Validity of an Intrapartum Self-Assessment Scale Aimed at Instilling Midwife-Led Care Competencies Used at Freestanding Midwifery Units. *Int J Environ Res Public Health*. 2023; 20(3): 1–13.
4. Khosravi S, Babaey F, Abedi P, Kalahroodi ZM, Hajimirzaie SS. Strategies to improve the quality of midwifery care and developing midwife-centred care in Iran: analyzing the attitudes of midwifery experts. *BMC Pregnancy Childbirth*. 2022; 22(1): 40–52.
5. Glenton C, Javadi D, Perry HB. Community health workers at the dawn of a new era: 5. Roles and tasks. *Health Res Policy Syst*. 2021; 19(3): 1–17.
6. Mantula F, Chamisa JA, Nunu WN, Nyanhongo PS. Women's Perspectives on Cultural Sensitivity of Midwives During Intrapartum Care at a Maternity Ward in a National Referral Hospital in Zimbabwe. *SAGE Open Nurs*. 2023; 9: 1–12.
7. Shahabnia S, Lotfi R, Rahimzadeh M, Yazdkhasti M, Tourzani ZM. Effects of counseling professional ethics principles on midwifery professional codes of ethics compliance and applicability rate among midwives in community health centers: A randomized clinical trial in Iran. *Pan African Medical Journal*. 2020; 35: 1–14.
8. Khosravi S, Babaey F, Abedi P, Kalahroodi ZM, Hajimirzaie SS. Strategies to improve the quality of midwifery care and developing midwife-centred care in Iran: analyzing the attitudes of midwifery experts. *BMC Pregnancy Childbirth*. 2022; 22(1): 1–11.
9. Yuill C, McCourt C, Cheyne H, Leister N. Women's experiences of decision-making and informed choice about pregnancy and birth care: A systematic review and meta-synthesis of qualitative research. *BMC Pregnancy Childbirth*. 2020; 20(1): 1–21.
10. Moudatsou M, Stavropoulou A, Philalithis A, Koukouli S. The role of empathy in health and social care professionals. *Healthcare (Switzerland)*. 2020; 8(1): 7–9.
11. Tengera O, Nankumbi J, Nalwadda G, Muwanguzi PA, Ngabirano TD. Empathy among midwives at a referral hospital in Uganda. *Int J Afr Nurs Sci*. 2020; 13(February 2019): 100238.
12. Jin Y, Wu Y, Li J. Midwife empathy and its association with the childbirth experience: a cross-sectional study. *BMC Pregnancy Childbirth*. 2022; 22(1): 1–10.
13. McIntosh T, Antes AL, DuBois JM. Navigating Complex, Ethical Problems in Professional Life: a Guide to Teaching SMART Strategies for Decision-Making. *J Acad Ethics*. 2021; 19(2): 139–156.
14. Bhati D, Deogade MS, Kanyal D. Improving Patient Outcomes Through Effective Hospital Administration: A Comprehensive Review. *Cureus*. 2023 Oct 26;
15. Hyatt J, Gruenglas J. Ethical Considerations in Organizational Conflict. In: *Conflict Management - Organizational Happiness, Mindfulness, and Coping Strategies*. Intech Open; 2023.
16. Bag S, Srivastava G, Gupta S, Sivarajah U, Wilmot NV. The effect of corporate ethical responsibility on social and environmental performance: An empirical study. *Industrial Marketing Management*. 2024 Feb; 117: 356–70.

17. Sharkiya SH. Quality communication can improve patient-centred health outcomes among older patients: a rapid review. *BMC Health Serv Res.* 2023; 23(1): 1–14.
18. Khalil AI, Hantira NY, Alnajjar HA. The Effect of Simulation Training on Enhancing Nursing Students' Perceptions to Incorporate Patients' Families Into Treatment Plans: A Randomized Experimental Study. *Cureus.* 2023; 15(8): 1–17.
19. Ukoha WC, Mtshali NG. Integration of preconception care into the bachelor of nursing curriculum: An exploratory qualitative study. *Heliyon.* 2023; 9(2): e13304.
20. Daradkeh M. Navigating the Complexity of Entrepreneurial Ethics: A Systematic Review and Future Research Agenda. *Sustainability (Switzerland).* 2023; 15(14): 1–30.
21. Schmidt AT, Engelen B. The ethics of nudging: An overview. *Philos Compass.* 2020; 15(4): 1–13.
22. Nguyen NTT, Nguyen NP, Thanh Hoai T. Ethical leadership, corporate social responsibility, firm reputation, and firm performance: A serial mediation model. *Heliyon.* 2021; 7(4): e06809.
23. Guo K. The Relationship Between Ethical Leadership and Employee Job Satisfaction: The Mediating Role of Media Richness and Perceived Organizational Transparency. *Front Psychol.* 2022; 13(5): 1–13.
24. Buljac-Samardzic M, Doekhie KD, van Wijngaarden JDH. Interventions to improve team effectiveness within health care: a systematic review of the past decade. *Hum Resour Health.* 2020; 18(1): 2–12.
25. Zhang W, Zeng X, Liang H, Xue Y, Cao X. Understanding How Organizational Culture Affects Innovation Performance: A Management Context Perspective. *Sustainability.* 2023; 15(8): 6644–56.
26. Baldwin A, Capper T, Harvey C, Willis E, Ferguson B, Browning N. Promoting nurses' and midwives' ethical responsibilities towards vulnerable people: An alignment of research and clinical practice. *J Nurs Manag.* 2022; 30(7): 2442–7.
27. Cheraghi R, Valizadeh L, Zamanzadeh V, Hassankhani H, Jafarzadeh A. Clarification of ethical principle of the beneficence in nursing care: an integrative review. *BMC Nurs.* 2023 Mar 30; 22(1): 89.
28. Intensive Care Society State of the Art (SOA) 2022 Abstracts. *J Intensive Care Soc.* 2023 May 21; 24(1_suppl): 1–117.
29. Raghupathi V, Raghupathi W. The influence of education on health: An empirical assessment of OECD countries for the period 1995-2015. *Archives of Public Health.* 2020; 78(1): 1–18.
30. Darling-Hammond L, Flook L, Cook-Harvey C, Barron B, Osher D. Implications for educational practice of the science of learning and development. *Appl Dev Sci.* 2020 Apr 2; 24(2): 97–140.
31. Søvold LE, Naslund JA, Kousoulis AA, Saxena S, Qoronfle MW, Grobler C, et al. Prioritizing the Mental Health and Well-being of Healthcare Workers: An Urgent Global Public Health Priority. *Front Public Health.* 2021 May 7; 9.
32. Chimezie RO. Health Awareness: A Significant Factor in Chronic Diseases Prevention and Access to Care. *J Biosci Med (Irvine).* 2023; 11(02): 64–79.
33. Cerf ME. The social-education-economy-health nexus, development and sustainability: perspectives from low- and middle-income and African countries. *Discover Sustainability.* 2023 Sep 4; 4(1): 37.
34. Rehmann-Sutter C, Timmermans DRM, Raz A. Non-invasive prenatal testing (NIPT): is routinization problematic? *BMC Med Ethics.* 2023; 24(1): 1–11.

35. Hastings-Tolsma M, Temane A, Tagutanazvo OB, Lukhele S, Nolte AG. Experience of midwives in providing care to labouring women in varied healthcare settings: A qualitative study. *Health SA Gesondheid*. 2021; 26(Un 2015): 1–12.
36. Honkavuo L. Midwifery students' experiences of support for ethical competence. *Nurs Ethics*. 2022 Feb 27; 29(1): 145–56.
37. Simbar M, Kiani Z, Nazarpour S, Babaei F. Development and validation of the code of ethics for midwives in Iran. *BMC Med Ethics*. 2023 Oct 4; 24(1): 76.
38. Filby A, McConville F, Portela A. What Prevents Quality Midwifery Care? A Systematic Mapping of Barriers in Low and Middle-Income Countries from the Provider Perspective. *PLoS One*. 2016 May 2; 11(5): e0153391.