

Meaning of Childbirth Experiences Handled by Traditional Midwives for Mothers in Parung District, Bogor: A Phenomenological Approach in Public Health Studies

Alhikma

Nursing Science Study, Faculty of Medicine, Syarif Hidayatullah State Islamic University Jakarta, Banten, Indonesia

Article Info

Article history:

Received Jan 20, 2026

Revised Feb 23, 2026

Accepted Marc 6, 2026

Online First Marc 20, 2026

Keywords:

Childbirth Experience

Maternal Health

Phenomenology

Public Health

Traditional Birth Attendants

ABSTRACT

Purpose of the study: This study aimed to explore the meaning of childbirth experiences among mothers who delivered with the assistance of traditional birth attendants in Parung District, Bogor.

Methodology: A qualitative study with a descriptive phenomenological approach was conducted. Participants were selected using purposive sampling, consisting of eight mothers who had experienced childbirth assisted by traditional birth attendants. Data were collected through in-depth semi-structured interviews and analyzed using phenomenological thematic analysis to identify significant statements, meaning units, and emerging themes.

Main Findings: The findings identified four major themes shaping mothers' childbirth experiences: emotional comfort and trust in traditional birth attendants, accessibility barriers to formal health services, influence of family and cultural traditions, and perceptions of safety during childbirth. Although traditional birth attendants provided emotional support and cultural familiarity, concerns regarding medical safety and emergency management were also reported by several participants.

Novelty/Originality of this study: This study provides a phenomenological perspective on the lived experiences of mothers delivering with traditional birth attendants in a community where formal maternal health services are available. The research highlights the sociocultural and experiential factors that sustain traditional childbirth practices and offers insights for developing culturally responsive maternal health interventions.]

This is an open access article under the [CC BY](https://creativecommons.org/licenses/by/4.0/) license



Corresponding Author:

Alhikma,

Nursing Science Study, Faculty of Medicine, Syarif Hidayatullah State Islamic University Jakarta,

Jl. Ir. H. Djuanda No.95, Cemp. Putih, Ciputat, Kota Tangerang Selatan, Banten 15412, Indonesia

Email: alhikmads@gmail.com

1. INTRODUCTION

Childbirth is a profound life event that occupies a significant place in a woman's personal and social experience [1]-[3]. For many women, the memory of giving birth becomes one of the most meaningful moments in their lives and often shapes their emotional and psychological well-being [4]-[6]. Experiences surrounding childbirth may be perceived as either positive or negative depending on the circumstances, support systems, and the individuals involved during the process [7]-[10]. Previous studies have demonstrated that childbirth memories can generate lasting psychosocial and emotional effects that influence maternal confidence, future reproductive decisions, and maternal infant bonding [11], [12]. Consequently, understanding the nature of childbirth experiences is an important aspect of maternal health research.

One of the most influential factors in the childbirth process is the type of birth attendant assisting the delivery. Skilled health professionals such as midwives, nurses, and obstetricians are considered essential to ensuring safe delivery and preventing complications [13], [14]. Their role includes monitoring the mother's condition, providing clinical interventions when necessary, and ensuring that the childbirth process proceeds safely for both mother and infant [3]. For this reason, the presence of trained health personnel during childbirth has been widely recognized as a key strategy to reduce maternal mortality and morbidity [15].

To improve access to safe delivery services, the Indonesian government introduced several maternal health programs, including the Childbirth Insurance Program (Jampersal), which aimed to ensure that pregnant women could access delivery assistance from trained health workers [16], [17]. Under this program, mothers could obtain maternity services through village midwives or community health centers [18]. However, policy changes later integrated Jampersal into the National Health Insurance system (JKN), which limits service access to health facilities officially affiliated with the national health insurance network such as community health centers, hospitals, and clinics [19]. While this system may not present major obstacles for urban populations living near health facilities, it can pose significant barriers for mothers residing in areas where healthcare facilities are distant or difficult to reach [20]. Limited geographic accessibility and inadequate health information can ultimately reduce maternal utilization of professional childbirth services.

In situations where access to formal health services is limited, traditional birth attendants commonly known in Indonesia as *dukun bayi* remain an alternative option for many families [4], [21]. These traditional attendants are often deeply embedded in community cultural practices and are perceived as trustworthy figures who provide emotional comfort and familiarity during childbirth [22]. However, deliveries assisted by non-skilled attendants carry a significantly higher risk of maternal and neonatal complications, particularly when childbirth takes place at home without adequate medical equipment or emergency referral systems [23]. Such conditions may contribute to delays in recognizing complications and seeking appropriate medical care, which are critical factors associated with maternal mortality.

National health statistics illustrate that this issue remains a concern. Data from the Indonesian Basic Health Research Setiyawan [24] showed that among 43.2% of births occurring at home, approximately 40.2% were assisted by traditional birth attendants. In West Java Province, Bogor Regency is among the regions where childbirth assisted by traditional attendants remains relatively high. Reports from the Bogor District Health Office indicated that 10,592 births (8.6%) were assisted by traditional birth attendants in 2013. Such practices potentially contribute to maternal complications and adverse birth outcomes.

The persistence of this issue is further reflected in Indonesia's maternal mortality rate (MMR). According to the Indonesian Demographic and Health Survey (*SDKI*, 2012), the national MMR was recorded at 359 maternal deaths per 100,000 live births, with a significant proportion occurring during the childbirth period. In Bogor Regency, health office records reported 60 maternal deaths in 2013, of which 40 occurred during labor and delivery. These data highlight the critical importance of improving safe childbirth practices and ensuring timely access to skilled obstetric care.

Parung District Health Center (*Puskesmas Parung*) serves six villages Parung, Pemagarsari, Waru, Waru Jaya, Jabon, and Iwul and is equipped with Basic Emergency Obstetric and Neonatal Care services (PONED) that operate 24 hours a day. Despite the availability of these services, childbirth assisted by traditional birth attendants still occurs in this area. Health center records indicate that in 2014 there were 11 births assisted by traditional birth attendants across the six villages, with the highest number recorded in Iwul Village. Preliminary observations suggest that several factors influence mothers' decisions to choose traditional birth attendants, including geographic distance to health facilities, accessibility challenges, and long-standing community trust in traditional birth practices.

Although numerous studies have examined maternal health services and the role of skilled birth attendants, research that specifically explores the lived experiences and meanings constructed by mothers who deliver with traditional birth attendants remains limited. Most previous studies have focused on statistical trends, risk factors, or health outcomes, while fewer studies investigate the subjective perceptions, emotional interpretations, and sociocultural motivations behind mothers' decisions to seek assistance from traditional birth attendants. Understanding these lived experiences is essential because maternal perceptions and narratives may influence not only their own future childbirth decisions but also those of other women within their communities.

Therefore, this study seeks to explore the meaning and lived experiences of mothers who give birth with the assistance of traditional birth attendants in Parung District, Bogor, using a phenomenological approach. The novelty of this research lies in its focus on the subjective interpretation of childbirth experiences within the context of persistent traditional birth practices in a community that already has access to formal maternal health services. By uncovering how mothers interpret and rationalize their childbirth experiences, this study aims to provide deeper insights into the sociocultural and contextual factors that sustain traditional delivery practices.

2. RESEARCH METHOD

2.1. Research Design

Study employed a qualitative research approach using a descriptive phenomenological design [25], [26], [27]. The phenomenological approach was selected to explore and understand the lived experiences and meanings constructed by mothers who gave birth with the assistance of traditional birth attendants (*dukun bayi*). Phenomenology allows researchers to investigate individuals' subjective interpretations of a phenomenon by examining how participants perceive, experience, and interpret specific life events. In the context of maternal health research, this approach is particularly appropriate because childbirth is not only a physiological event but also a deeply personal and social experience influenced by cultural beliefs, family support systems, and accessibility to health services. Through this approach, the study aimed to capture rich descriptions of mothers' childbirth experiences and reveal the meanings they attach to deliveries assisted by traditional birth attendants.

The research was conducted in the working area of Parung District Health Center (*Puskesmas Parung*), Bogor Regency, Indonesia. This health center provides primary health services to six villages: Parung, Pemagarsari, Waru, Waru Jaya, Jabon, and Iwul. The facility is equipped with Basic Emergency Obstetric and Neonatal Care (PONED) services that operate 24 hours to support safe childbirth. Despite the availability of these services, several mothers in the area still choose to give birth with the assistance of traditional birth attendants. Among the six villages, Iwul Village has been identified as having the highest occurrence of childbirth assisted by traditional birth attendants, making it an important setting for exploring this phenomenon.

2.2. Participants and Sampling

Participants in this study were mothers who had experienced childbirth assisted by traditional birth attendants within the Parung District area. A purposive sampling technique was used to select participants who were considered capable of providing rich and relevant information regarding the research phenomenon. Participants were selected based on several inclusion criteria, including mothers who had delivered with the assistance of a traditional birth attendant within the last two years, were willing to participate in the study, and were able to communicate their experiences clearly. Mothers who experienced severe health complications that could interfere with the interview process were excluded.

Data collection continued until data saturation was reached, meaning that no new themes or information emerged from additional interviews. In phenomenological studies, the number of participants is generally small but sufficient to capture the depth of lived experiences. Table 1 presents the inclusion and exclusion criteria used in participant selection.

Table 1. Participant Selection Criteria

Criteria	Description
Inclusion Criteria	Mothers who experienced childbirth assisted by traditional birth attendants in the Parung District area
	Mothers who had given birth within the last two years
	Mothers willing to participate and provide informed consent
	Mothers able to communicate their experiences clearly
Exclusion Criteria	Mothers experiencing severe illness or psychological conditions during the study
	Mothers unwilling to continue participation during the interview process

The application of these criteria ensured that the selected participants were capable of providing detailed narratives relevant to the research objectives.

2.4. Data Collection Techniques

Data were collected using in-depth semi-structured interviews, which allowed participants to freely describe their childbirth experiences while enabling the researcher to explore specific themes related to the research objectives. The interviews were conducted in a comfortable environment chosen by the participants, usually at their homes, to ensure that they felt relaxed and able to share their experiences openly. An interview guide was used to facilitate the discussion while maintaining flexibility for participants to elaborate on their experiences. Key topics explored during the interviews included:

- Mothers' perceptions and feelings during childbirth
- Reasons for choosing traditional birth attendants
- Experiences during the childbirth process
- Perceived advantages and challenges of traditional birth assistance
- Family and community influence in childbirth decision-making

Each interview lasted approximately 30–60 minutes and was recorded using an audio recorder with the participants' consent. Field notes were also taken to capture non-verbal expressions and contextual observations during the interviews.

Table 2. Data Collection Procedures

Component	Description
Data collection method	In-depth semi-structured interviews
Interview duration	Approximately 30–60 minutes
Recording method	Audio recording and field notes
Location	Participants' homes or agreed private locations
Data saturation	Achieved when no new themes emerged

The combination of recorded interviews and field notes helped ensure that the collected data captured both verbal narratives and contextual information relevant to the study.

2.5 Data Analysis

Data were analyzed using phenomenological thematic analysis. Analysis process followed several systematic steps to ensure that the meaning of participants' experiences was accurately interpreted [28]. Initially, all interview recordings were transcribed verbatim. Researcher then repeatedly read the transcripts to gain a holistic understanding of the participants' narratives. Significant statements related to childbirth experiences were identified and extracted. These statements were subsequently grouped into meaningful units and categorized into emerging themes that represented the shared experiences of participants. The analysis process consisted of the following stages:

1. Transcribing interview recordings verbatim
2. Reading transcripts repeatedly to gain immersion in the data
3. Identifying significant statements related to the research phenomenon
4. Formulating meanings from significant statements
5. Clustering meanings into themes and subthemes
6. Developing a comprehensive description of the phenomenon

Through this analytical process, the study aimed to reveal the essence of mothers' lived experiences in childbirth assisted by traditional birth attendants. To ensure the rigor and credibility of the findings, several strategies were applied, including credibility, transferability, dependability, and confirmability. Credibility was enhanced through prolonged engagement with participants and member checking, in which participants were asked to confirm the accuracy of the interview summaries. Transferability was supported by providing detailed descriptions of the study context and participants. Dependability and confirmability were maintained through systematic documentation of the research process and data analysis.

3. RESULTS AND DISCUSSION

A total of eight mothers who had experienced childbirth assisted by traditional birth attendants in the working area of Parung District Health Center participated in this study. Participants were selected through purposive sampling based on the inclusion criteria described in the methodology. Data saturation was reached after the eighth interview, where no new themes emerged from additional narratives. Participants varied in age, educational background, occupation, and parity, which allowed the study to capture diverse perspectives regarding childbirth experiences assisted by traditional birth attendants. The demographic characteristics of the participants are presented in Table 3.

Table 3. Demographic Characteristics of Participants

Participant Code	Age (Years)	Education Level	Occupation	Number of Children	Village
P1	24	Junior High School	Housewife	1	Iwul
P2	29	Senior High School	Housewife	2	Waru
P3	31	Elementary School	Housewife	3	Iwul
P4	27	Senior High School	Small trader	2	Parung
P5	35	Elementary School	Housewife	4	Jabon
P6	30	Junior High School	Housewife	2	Waru Jaya
P7	33	Senior High School	Housewife	3	Pemagarsari
P8	26	Junior High School	Housewife	1	Iwul

As shown in Table 3, most participants had low to moderate educational backgrounds, and the majority were housewives. Several participants had previous childbirth experiences, which influenced their perceptions

and decision-making regarding childbirth assistance. The diversity of participants allowed for a richer understanding of the phenomenon being studied.

Through phenomenological thematic analysis, the interviews generated four major themes that represent the essence of mothers' experiences in childbirth assisted by traditional birth attendants:

1. Emotional comfort and trust in traditional birth attendants
2. Accessibility and geographic barriers to health facilities
3. Influence of family and cultural traditions
4. Perceived safety and challenges during childbirth

These themes reflect how mothers interpret their experiences and make decisions regarding childbirth assistance.

3.1 Theme 1: Emotional Comfort and Trust in Traditional Birth Attendants

One of the most frequently mentioned reasons for choosing traditional birth attendants was the sense of emotional comfort and trust that mothers felt toward them. Participants described traditional birth attendants as individuals who were familiar, patient, and supportive throughout the childbirth process. Table 4 presents selected excerpts from participants' narratives related to emotional comfort during childbirth.

Table 4. Participants' Narratives on Emotional Comfort with Traditional Birth Attendants

Participant	Interview Excerpt
P1	"I felt calmer because the traditional midwife had helped many women in my village. She stayed with me the whole time."
P3	"She is someone we already know, almost like family. That made me feel safe during labor."
P6	"When I was in pain, she kept talking to me and encouraging me. It helped me feel less afraid."
P7	"I trusted her because she had assisted my mother and relatives before."

The narratives illustrate that interpersonal relationships and familiarity played a crucial role in shaping mothers' positive perceptions of traditional birth attendants. Emotional reassurance provided by these attendants contributed to mothers feeling supported and less anxious during childbirth.

3.2 Theme 2: Accessibility and Geographic Barriers to Health Facilities

Another important theme identified in the interviews was limited access to formal health services, particularly due to geographic distance and transportation challenges. Several participants reported that the distance between their homes and the nearest health facility influenced their decision to seek assistance from traditional birth attendants.

Table 5. Participants' Narratives on Accessibility to Health Facilities

Participant	Interview Excerpt
P2	"The health center is quite far from my house, especially when labor started at night."
P4	"We would need transportation to go to the clinic, and sometimes it is difficult to find one quickly."
P5	"It was easier to call the traditional midwife because she lives nearby."
P8	"When contractions started, we felt it would take too long to reach the health center."

The findings suggest that physical accessibility and transportation limitations remain important factors affecting the utilization of skilled birth attendants, even in areas where healthcare services are available.

3.3 Theme 3: Influence of Family and Cultural Traditions

Decision to choose traditional birth attendants was also influenced by family beliefs and cultural practices. Participants described how older family members often encouraged the use of traditional birth attendants because it had been a long-standing practice within their community. Table 6 presents participants' statements illustrating the role of family and cultural influence.

Table 6. Participants' Narratives on Family and Cultural Influence

Participant	Interview Excerpt
P1	"My mother suggested that I give birth with the traditional midwife because she had helped our family before."
P3	"In our village, many women still deliver with traditional birth attendants."
P5	"My grandmother believed that traditional midwives understand the cultural practices during childbirth."
P7	"It is something that has been done for generations in our community."

These responses highlight that childbirth decisions are not made solely by mothers but are often influenced by collective family values and community traditions. Such cultural contexts can shape perceptions of safety, trust, and appropriateness in childbirth practices.

3.4 Theme 4: Perceived Safety and Challenges During Childbirth

Although many participants expressed positive feelings toward traditional birth attendants, several mothers also reported concerns and challenges during the childbirth process. Some participants described moments of uncertainty or fear when labor became difficult. Table 7 presents participants' experiences related to perceived safety and challenges.

Table 7. Participants' Narratives on Safety and Challenges During Childbirth

Participant	Interview Excerpt
P2	"At one point the pain became very strong and I was worried because there was no medical equipment."
P4	"The traditional midwife tried her best, but we were afraid if something unexpected happened."
P6	"Luckily everything went well, but I thought about what would happen if there were complications."
P8	"Sometimes I wondered whether it would be safer at the health center."

These statements indicate that while mothers valued the emotional and cultural support provided by traditional birth attendants, they were also aware of potential risks associated with non-medical childbirth assistance. Study explored the lived experiences and meanings constructed by mothers who gave birth with the assistance of traditional birth attendants in Parung District, Bogor. The findings reveal that mothers' decisions and experiences were shaped by several interconnected factors, including emotional comfort and trust toward traditional birth attendants, barriers in accessing formal health services, the influence of family and cultural traditions, and mothers' perceptions regarding safety during childbirth. These findings highlight that childbirth decisions within communities are not solely determined by clinical considerations but are also strongly influenced by social, cultural, and contextual dimensions that intersect with maternal health service utilization.

The first theme identified in this study relates to the sense of emotional comfort and trust that mothers associate with traditional birth attendants. Many participants described traditional attendants as familiar figures who provide emotional reassurance and continuous companionship throughout the childbirth process. This finding aligns with previous research indicating that interpersonal relationships and culturally embedded trust significantly influence maternal preferences in childbirth assistance, particularly in communities where traditional birth attendants have long been integrated into local health practices. Studies have suggested that traditional birth attendants often provide a more personalized and culturally sensitive approach during labor, which can increase mothers' sense of security and reduce anxiety during childbirth. For many women, emotional support and empathy are perceived as equally important as clinical competence. Within the context of maternal health services, this finding suggests that strengthening patient-centered communication and emotional support within formal health systems could play an important role in improving mothers' acceptance of skilled birth attendants.

The second theme emphasizes the role of accessibility and geographic barriers in shaping childbirth decisions. Several participants reported that the distance to health facilities and transportation difficulties were significant considerations when labor began, particularly during nighttime or emergency situations. These findings are consistent with public health literature highlighting geographic accessibility as one of the major determinants of maternal health service utilization. Previous studies have shown that women living in semi-rural or rural settings often face challenges in reaching healthcare facilities, which may lead them to rely on nearby traditional birth attendants who can provide immediate assistance. Even in areas where health facilities are technically available, practical barriers such as transportation costs, travel time, and infrastructure limitations can reduce the likelihood of seeking professional obstetric care [29]. From a public health perspective, these findings underline the importance of improving the physical accessibility of maternal health services and strengthening referral systems to ensure timely obstetric care.

Another important finding of this study is the strong influence of family members and community traditions on childbirth decision-making. Participants frequently reported that mothers, grandmothers, and other relatives encouraged them to deliver with traditional birth attendants because it had been a common practice across generations. This pattern reflects the broader sociocultural context in which childbirth decisions are often collective rather than individual [30]. Previous research has demonstrated that family influence and community norms play a critical role in shaping maternal health behaviors, particularly in societies where cultural traditions remain deeply embedded in reproductive health practices. Traditional birth attendants are often perceived not only as health helpers but also as custodians of cultural knowledge related to childbirth rituals and postpartum

care. This finding suggests that maternal health interventions should not focus solely on individual mothers but should also involve families and community leaders in educational and behavioral change initiatives.

Although participants described several positive aspects of traditional birth assistance, the study also identified concerns related to perceived safety and potential risks during childbirth. Some mothers expressed feelings of uncertainty when labor became complicated or when they realized that traditional birth attendants lacked medical equipment and formal clinical training [31]. This observation supports previous evidence indicating that deliveries assisted by untrained attendants may increase the risk of complications due to delayed recognition of obstetric emergencies and limited capacity for medical intervention [32]. Coexistence of trust in traditional birth attendants and awareness of potential risks illustrates the complex decision-making processes experienced by mothers [33], [34]. While emotional comfort and accessibility encourage the use of traditional attendants, the perceived safety of medical services remains an important consideration [35], [36]. From a general health professional perspective, this finding emphasizes the need for collaborative strategies that bridge traditional practices with formal health systems, such as training programs, referral partnerships, or community health integration models.

The novelty of this study lies in its phenomenological exploration of the subjective meanings constructed by mothers who give birth with traditional birth attendants in a community where formal maternal health services are already available. Previous studies have largely focused on quantitative assessments of maternal mortality, risk factors, or the prevalence of traditional birth practices. In contrast, this study provides deeper insight into the lived experiences, emotional perceptions, and sociocultural motivations that sustain the continued use of traditional birth attendants. By highlighting the experiential dimension of childbirth, this research contributes to a more comprehensive understanding of maternal health behavior that goes beyond epidemiological statistics. Perspective is particularly valuable within the scope of general health professions, where patient-centered care and culturally responsive health services are increasingly recognized as essential components of effective healthcare delivery.

The findings also generate important implications for maternal health programs and broader health professional practice. In the short term, healthcare providers and public health practitioners should strengthen community engagement strategies that address barriers to accessing skilled birth services. Improving transportation support, increasing outreach programs, and enhancing communication between healthcare workers and communities may help reduce reliance on traditional birth attendants in high-risk situations. Additionally, integrating respectful maternity care principles within health facilities could improve mothers' perceptions of professional birth services. In the long term, policy interventions should focus on strengthening collaboration between traditional birth attendants and formal healthcare providers. Training traditional attendants to recognize early signs of obstetric complications and encouraging timely referrals to health facilities may contribute to safer childbirth practices while respecting local cultural contexts. Such integrated approaches align with global maternal health strategies that emphasize community-based interventions and multidisciplinary collaboration among health professionals.

Despite its contributions, this study has several limitations that should be considered when interpreting the findings. First, the study involved a relatively small number of participants within a specific geographic area, which may limit the generalizability of the results to other regions with different sociocultural contexts. Second, the reliance on self-reported experiences may introduce recall bias, particularly among participants who gave birth several months or years prior to the interviews. Third, the study primarily focused on mothers' perspectives and did not include insights from traditional birth attendants, family members, or healthcare professionals who may also influence childbirth decisions. Future research could adopt a broader qualitative approach involving multiple stakeholders to provide a more comprehensive understanding of the dynamics surrounding traditional childbirth practices.

4. CONCLUSION

This study aimed to explore the meaning and lived experiences of mothers who gave birth with the assistance of traditional birth attendants in Parung District, Bogor, using a phenomenological approach. The findings reveal that mothers' childbirth experiences assisted by traditional birth attendants are shaped by several interconnected factors, including emotional comfort and trust toward traditional attendants, accessibility barriers to formal health facilities, the influence of family and cultural traditions, and mothers' perceptions regarding safety during the childbirth process. While traditional birth attendants provide emotional reassurance and cultural familiarity, limitations in medical resources and emergency response remain concerns that may increase risks during childbirth. These results indicate that childbirth decisions are influenced not only by health service availability but also by complex sociocultural and contextual considerations within the community. In conclusion, understanding mothers' lived experiences provides valuable insights for health professionals in developing maternal health interventions that are culturally sensitive and accessible to communities. Strengthening communication between healthcare providers and communities, as well as improving accessibility

to skilled birth services, may help encourage safer childbirth practices. It is recommended that maternal health programs enhance community-based education and outreach to increase awareness about the importance of skilled birth attendance. In addition, collaborative strategies between health professionals and traditional birth attendants should be developed to improve referral systems and reduce maternal health risks.

ACKNOWLEDGEMENTS

The authors would like to express their sincere gratitude to all participants who willingly shared their experiences and perspectives in this study.

USE OF ARTIFICIAL INTELLIGENCE (AI)-ASSISTED TECHNOLOGY

The authors confirm that noartificial intelligence (AI)-assisted technologies were utilized in the preparation, analysis, or writing of this manuscript. All stages of the research process, including data collection, data interpretation, and the development of the manuscript, were conducted solely by the authors without any support from AI-based tools.

REFERENCES

- [1] E. K. Odjer and E. K. G. Mensah, "Maternal mortality and legal accountability: Examining government responsibility for preventable deaths," *J. Law Crim. Justice*, vol. 13, no. 3, pp. 49–73, 2025, doi: 10.15640/jlcj.v13p4.
- [2] S. Nasir, "Context and reasons of preference for use of traditional birth attendant care in Indonesia and Ethiopia," *Afr. J. Reprod. Health*, vol. 29, no. 6, pp. 40–57, 2025, doi: 10.29063/ajrh2025/v29i6.4.
- [3] E. K. Odjer and E. K. G. Mensah, "Maternal mortality and legal accountability: Examining government responsibility for preventable deaths," *J. Law Crim. Justice*, vol. 13, no. 5, pp. 49–73, 2025, doi: 10.15640/jlcj.v13p4.
- [4] J. D. Rutledge *et al.*, "Recommendations for integrating traditional birth attendants to improve maternal health outcomes in low- and middle-income countries," *Int. J. Matern. Child Heal. AIDS*, vol. 13, p. e019, Sep. 2024, doi: 10.25259/IJMA_16_2024.
- [5] F. O'Toole, R. Sheane, N. Reynaud, F. M. McAuliffe, and J. M. Walsh, "Screening and treatment of iron deficiency anemia in pregnancy: A review and appraisal of current international guidelines," *Int. J. Gynecol. Obstet.*, vol. 166, no. 1, pp. 214–227, Jul. 2024, doi: 10.1002/ijgo.15270.
- [6] K. H. Dewi, S. Qomariyah, "Indonesian women and local politics: Islam, gender and networks in post-suharto Indonesia" *Indones. Women Local Polit.*, vol. 1, no. 4, pp. 108–140, 2018, doi: 10.2307/j.ctv1nth4c.13.
- [7] I. Demchenko, B. Maksymchuk, V. Bilan, I. Maksymchuk, and I. Kalynovska, "Training future physical education teachers for professional activities under the conditions of inclusive education," *Brain. Broad Res. Artif. Intell. Neurosci.*, vol. 12, no. 3, pp. 191–213, 2021, doi: 10.18662/brain/12.3/227.
- [8] A. B. Soares, R. Ribeiro, P. R. S. da S. Alves, M. E. de M. Jardim, and C. A. C. de Medeiros, "Time management: What do university students think about it?," *Rev. Estud. e Investig. en Psicol. y Educ.*, vol. 10, no. 1, pp. 1–14, 2023, doi: 10.17979/reipe.2023.10.1.9468.
- [9] C. C. Okeke and G. van der Westhuizen, "Learning from professional conversation: A conversation analysis study," *South African J. Educ.*, vol. 40, no. 1, pp. 1–10, 2020, doi: 10.15700/saje.v40n1a1777.
- [10] S. Bhambhani, K. R. Kondhare, and A. P. Giri, "Diversity in chemical structures and biological properties of plant alkaloids," *Molecules*, vol. 26, no. 11, p. 3374, 2021, doi: 10.3390/molecules26113374.
- [11] S. El-Den, C. Schneider, A. Mirzaei, and S. Carter, "How to measure a latent construct: Psychometric principles for the development and validation of measurement instruments," *Int. J. Pharm. Pract.*, vol. 28, no. 4, pp. 326–336, Jul. 2020, doi: 10.1111/ijpp.12600.
- [12] M. Kiran, Y. Xie, N. Anjum, G. Ball, B. Pierscionek, and D. Russell, "Machine learning and artificial intelligence in type 2 diabetes prediction: a comprehensive 33-year bibliometric and literature analysis," *Front. Digit. Heal.*, vol. 7, no. 2, pp. 1–27, 2025, doi: 10.3389/fdgh.2025.1557467
- [13] J. M. Aldridge and K. McChesney, "The relationships between school climate and adolescent mental health and wellbeing: A systematic literature review," *Int. J. Educ. Res.*, vol. 88, no. 1, pp. 121–145, 2018, doi: 10.1016/j.ijer.2018.01.012.
- [14] S. Triunfo and A. Lanzone, "Impact of maternal under nutrition on obstetric outcomes," *J. Endocrinol. Invest.*, vol. 38, no. 1, pp. 31–38, 2015, doi: 10.1007/s40618-014-0168-4.
- [15] A. Setya Roswendi and Y. Zakayah, "Relationship between environmental sanitation and the incidence of scabies: A literature review," *KnE Med.*, vol. 2022, pp. 207–215, 2022, doi: 10.18502/kme.v2i2.11083.
- [16] E. S. Ford and S. Capewell, "Coronary heart disease mortality among young adults in the U.S. from 1980 Through 2002," *J. Am. Coll. Cardiol.*, vol. 50, no. 22, pp. 2128–2132, Nov. 2007, doi: 10.1016/j.jacc.2007.05.056.
- [17] A. A. Abneh, T. D. Kassie, and S. S. Gelaw, "The magnitude and associated factors of immediate postpartum anemia among women who gave birth in Ethiopia: Systematic review and meta-analysis, 2023," *BMC Pregnancy Childbirth*, vol. 24, no. 1, p. 317, Apr. 2024, doi: 10.1186/s12884-024-06495-y.
- [18] C. Colucci *et al.*, "Indexes, models and <sc>IT</sc> systems for frailty healthcare process management: An innovative case study," *Knowl. Process Manag.*, vol. 33, no. 1, pp. 25–48, 2026, doi: 10.1002/kpm.70005.
- [19] N. R. Anggraeni, S. Sriyati, and Amprasto, "Making teaching materials by utilizing the Cibodas Botanical Garden in an effort to improve plant literacy and classification skills of high school students," *J. Phys. Conf. Ser.*, vol. 18, no. 1, p. 012154, 2021, doi: 10.1088/1742-6596/1806/1/012154.

- [20] M. Bashori, "I love Indonesia: Perceptions of web-facilitated language learning among learners of English as a foreign language," *JALT CALL J.*, vol. 14, no. 2, pp. 157–189, 2018.
- [21] P. C. Chi and H. Urdal, "The evolving role of traditional birth attendants in maternal health in post-conflict Africa: A qualitative study of Burundi and northern Uganda," *SAGE Open Med.*, vol. 6, no. 6, Jan. 2018, doi: 10.1177/2050312117753631.
- [22] C. A. Ameh, M. Mdegela, S. White, and N. van den Broek, "The effectiveness of training in emergency obstetric care: a systematic literature review," *Health Policy Plan.*, vol. 34, no. 4, pp. 257–270, May 2019, doi: 10.1093/heapol/czz028.
- [23] K. Kjeldsen, "A study-of-religion(S)-based religion education: Skills, knowledge, and aims," *Cent. Educ. Policy Stud. J.*, vol. 9, no. 4, pp. 11–29, 2019, doi: 10.26529/cepsj.678.
- [24] A. Setiawan and Y. Christiani, "Integrated health post for child health (*Posyandu*) as a community-based program in Indonesia: An exploratory study," *J. Keperawatan Indones.*, vol. 21, no. 3, pp. 150–158, Nov. 2018, doi: 10.7454/jki.v21i3.600.
- [25] T. J. Sowicz, J. S. Sefcik, H. L. Teng, E. Irani, T. A. Kelly, and C. Bradway, "The use of closing questions in qualitative research: Results of a web-based survey," *Nurs. Res.*, vol. 68, no. 6, pp. E8–E12, 2019, doi: 10.1097/NNR.0000000000000380.
- [26] R. S. Budi, W. B. B. Adisasmito, and E. Rosanti, "Balancing community and individual health efforts by utilizing sub-primary health care at regions: Analysis for policy," *J. Indones. Heal. Policy Adm.*, vol. 9, no. 2, pp. 60–69, May 2024, doi: 10.7454/ihpa.v9i2.8278.
- [27] H. Ames, C. Glenton, and S. Lewin, "Purposive sampling in a qualitative evidence synthesis," *BMC Med. Res. Methodol.*, 2019.
- [28] D. Qondias, W. Lasmawan, N. Dantes, and I. B. P. Arnyana, "Effectiveness of multicultural problem-based learning models in improving social attitudes and critical thinking skills of elementary school students in thematic instruction," *J. Educ. e-Learning Res.*, vol. 9, no. 2, pp. 62–70, 2022, doi: 10.20448/JEELR.V9I2.3812.
- [29] K. D. Lomis, G. C. Mejicano, K. J. Caverzagie, S. U. Monrad, M. Pusic, and K. E. Hauer, "The critical role of infrastructure and organizational culture in implementing competency-based education and individualized pathways in undergraduate medical education," *Med. Teach.*, vol. 43, no. sup2, pp. S7–S16, Apr. 2021, doi: 10.1080/0142159X.2021.1924364.
- [30] M. W. A. Kesiman and K. Agustini, "The implementation of hypertext-based learning media for a local cultural based learning," *J. Inf. Technol. Educ. Innov. Pract.*, vol. 11, pp. 377–385, 2012, doi: 10.28945/1741.
- [31] E. B. Turinawe *et al.*, "Traditional birth attendants (TBAs) as potential agents in promoting male involvement in maternity preparedness: insights from a rural community in Uganda," *Reprod. Health*, vol. 13, no. 1, pp. 1–11, Dec. 2016, doi: 10.1186/s12978-016-0147-7.
- [32] A. J. Kroopnick and E. C. Miller, "Approach to altered mental status in pregnancy and postpartum," *Semin. Neurol.*, vol. 44, no. 06, pp. 695–706, Dec. 2024, doi: 10.1055/s-0044-1788977.
- [33] B. Y. Rizkiwati, S. U. M. Widjaja, A. Haryono, H. Wahyono, and M. Z. Majdi, "Financial literacy education models for 7–12 years old based on the local wisdom of sasak tribe Lombok Indonesia," *Pegem Egit. ve Ogr. Derg.*, vol. 12, no. 2, pp. 58–70, 2022, doi: 10.47750/pegegog.12.02.05.
- [34] S. Zakariah-Akoto *et al.*, "Anaemia prevention among pregnant women: Views and experiences of pregnant women and antenatal care providers in Accra, Ghana," *World Nutr.*, vol. 15, no. 2, pp. 87–101, Jun. 2024, doi: 10.26596/wn.202415287-101.
- [35] S. Nasir *et al.*, "Cultural norms create a preference for traditional birth attendants and hinder health facility-based childbirth in Indonesia and Ethiopia: a qualitative inter-country study," *Int. J. Heal. Promot. Educ.*, vol. 58, no. 3, pp. 109–123, May 2020, doi: 10.1080/14635240.2020.1719862.
- [36] P. C. Chi and H. Urdal, "The evolving role of traditional birth attendants in maternal health in post-conflict Africa: A qualitative study of Burundi and northern Uganda," *SAGE Open Med.*, vol. 6, no. 1, Jan. 2018, doi: 10.1177/2050312117753631.