

*Original Research*

# The Effect of Video-Based Education on Pregnant Women's Commitment to Facility-Based Delivery in a Riverine Area of Indonesia

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**ABSTRACT**

**Background:** Promoting facility-based delivery remains challenging in geographically isolated areas, where limited access to healthcare increases maternal and neonatal risks. Video-based education may strengthen pregnant women's commitment to choosing a health facility for delivery; however, evidence of its effectiveness in remote settings is limited. This study aimed to examine the effect of video-based education on pregnant women's commitment to choosing facility-based delivery in the Rakumpit Public Health Center working area. **Methods:** A quantitative pre-experimental one-group pretest-posttest study was conducted among 35 pregnant women selected through total sampling. Participants received video-based education on the importance of facility-based delivery, risks of non-facility births, benefits of skilled birth attendance, childbirth services, and birth preparedness. Commitment was measured before and after the intervention using a structured questionnaire and analyzed with a paired samples t-test. **Results:** The mean commitment score increased significantly from 65.10 to 99.28 after the intervention, with a mean difference of 34.18 points. The proportion of women committed to facility-based delivery increased from 62.1% to 100%. A significant difference was observed between pre- and post-intervention scores ( $p < 0.001$ ), indicating that video-based education effectively strengthened commitment to facility-based delivery. **Conclusion:** Video-based education effectively improves pregnant women's commitment to choosing facility-based delivery and may be integrated into routine antenatal care to increase the utilization of skilled delivery services in geographically disadvantaged areas.

**Keywords:** Video-based education; pregnant women; commitment; facility-based delivery; maternal health

## 1. INTRODUCTION

Maternal health continues to represent a critical public health concern worldwide, with the greatest burden occurring in low- and middle-income countries where maternal mortality remains unacceptably high. A large proportion of maternal deaths result from preventable complications arising during pregnancy, labor, delivery, or the postpartum period, emphasizing the need for accessible, timely, and high-quality maternal healthcare. The World Health Organization (WHO) estimated that approximately 260,000 women died from pregnancy- and childbirth-related causes in 2023, with most of these deaths occurring in resource-constrained settings. Ensuring that childbirth takes place in healthcare facilities under the supervision of skilled health professionals is widely recognized as a key intervention

for improving maternal and neonatal outcomes, as it facilitates prompt management of obstetric complications and reduces delays in receiving essential, life-saving care.<sup>(1-3)</sup>

In Indonesia, reducing maternal mortality remains a significant challenge in achieving the Sustainable Development Goals (SDGs) target of fewer than 70 maternal deaths per 100,000 live births by 2030. Data from the Long Form Population Census reported that the maternal mortality ratio in Indonesia was 189 per 100,000 live births, indicating the need for strengthened maternal health interventions, including increased utilization of facility-based childbirth services. National maternal healthcare policies encourage all deliveries to be conducted in health facilities supported by skilled healthcare professionals, including midwives and physicians, to reduce maternal and neonatal complications. However, disparities in healthcare access and utilization remain evident, particularly in rural and geographically isolated areas.<sup>(4,5)</sup>

The choice of delivery location is influenced by multiple factors, including educational level, health literacy, socioeconomic status, geographical accessibility, family support, cultural beliefs, and perceptions of healthcare services. In many rural communities, pregnant women continue to prefer home births or non-health facility deliveries due to transportation barriers, traditional practices, and inadequate understanding of childbirth risks. Previous studies have demonstrated that maternal education, knowledge, and family support significantly influence decisions regarding childbirth location. Women with better maternal health literacy tend to be more prepared and more likely to choose safer delivery options in healthcare facilities.<sup>(5,6)</sup>

Health education has been recognized as an essential strategy to improve maternal decision-making and healthcare utilization. Among various educational approaches, video-based education has gained increasing attention due to its ability to deliver information in a more concrete, engaging, and understandable manner by simultaneously integrating visual and auditory stimuli. From the perspective of Social Cognitive Theory, observational learning through audiovisual media may enhance self-efficacy and influence health-related behavior through behavioral modeling. Recent evidence suggests that video-assisted health education effectively improves maternal knowledge, attitudes, birth preparedness, and utilization of maternal healthcare services. However, most previous studies have focused

on pregnancy danger signs, breastfeeding, or general maternal preparedness, while evidence concerning pregnant women's commitment to choosing facility-based delivery remains limited.<sup>(7-10)</sup>

This research gap is particularly relevant in geographically constrained areas, where physical barriers and limited access to healthcare information may affect childbirth decisions. Commitment to choosing a place of delivery is important because it may shape actual health behavior during labor and childbirth. Nevertheless, empirical evidence examining the effect of video-based education on pregnant women's commitment to selecting facility-based delivery, especially in riverine and remote settings, remains scarce.

The working area of Rakumpit Public Health Center, Palangka Raya, is characterized by riverine geography that presents substantial challenges to maternal healthcare access. Facility-based delivery coverage in this area remains suboptimal, and some pregnant women continue to prefer childbirth at home or in non-healthcare settings. Maternal education regarding childbirth location has primarily relied on verbal counseling and the Maternal and Child Health (MCH) handbook, highlighting the need for more adaptive and engaging educational innovations. The novelty of this study lies in evaluating the effectiveness of video-based education on pregnant women's commitment to choosing facility-based delivery in a riverine setting with geographical barriers, a context that remains underexplored in maternal health research in Indonesia. Therefore, this study aimed to determine the effect of video-based education on pregnant women's commitment to choosing delivery in health facilities in the working area of Rakumpit Public Health Center.

## 2. METHODS

### 2.1 Study Design

This study employed a quantitative approach using a pre-experimental design with a one-group pretest-posttest design to determine the effect of video-based education on pregnant women's commitment to choosing delivery in health facilities. This design enabled the assessment of changes in respondents' commitment levels before (pre-test) and after (post-test) the educational intervention within the same group without a comparison group. Baseline measurements were conducted prior to the intervention, followed by repeated

measurements after respondents received video-based education.

## **2.2 Research Setting, Population, and Sample**

This study was conducted from January to March 2026 in the working area of Rakumpit Public Health Center, Palangka Raya City, Central Kalimantan, Indonesia. The study site was selected because it faces challenges related to the low utilization of facility-based delivery services, geographical barriers to healthcare access, and the predominance of riverine settlements, which may influence pregnant women's decisions regarding childbirth location. The study population comprised all pregnant women residing in the study area during the research period. Using a total sampling technique, all eligible pregnant women were recruited, resulting in a final sample of 35 participants.

## **2.3 Sampling Technique and Inclusion-Exclusion Criteria**

A total sampling approach was employed to recruit all pregnant women who met the study eligibility criteria. Participants were eligible if they: (1) resided within the working area of Rakumpit Community Health Center, (2) voluntarily agreed to participate and provided written informed consent, (3) were able to communicate effectively, and (4) completed all study procedures, including the post-intervention assessment. Participants who did not complete either the intervention or the posttest assessment were excluded from the final data analysis.

## **2.4 Variables**

The independent variable in this study was video-based education, while the dependent variable was pregnant women's commitment to choosing delivery in health facilities. Respondent characteristics observed included age, educational level, employment status, household income, parity, antenatal care (ANC) visits, distance to health facilities, geographical conditions of residence, and history of participation in the Birth Planning and Complication Prevention (*Program Perencanaan Persalinan dan Pencegahan Komplikasi* or P4K).

## **2.5 Data Collection Instruments**

Data collection was conducted using a structured questionnaire consisting of 20 items to assess pregnant women's commitment toward choosing facility-based delivery before and after the intervention. The questionnaire included respondent characteristics and commitment-related items regarding childbirth location

preferences. Commitment scores were calculated based on the total responses, with higher scores indicating stronger commitment toward choosing delivery in health facilities.

Before implementation in the main study, the instrument underwent validity and reliability testing among respondents with characteristics similar to the study population. The results demonstrated that all questionnaire items met the validity criteria ( $p \leq 0.001$ ), and the instrument showed excellent reliability with a Cronbach's Alpha coefficient of 0.993, indicating its suitability for data collection.

## **2.6 Video-Based Educational Intervention**

The intervention consisted of health education delivered through an educational video with a duration of 4 minutes and 15 seconds, which was played twice during a single educational session. The intervention was conducted directly with researcher assistance to ensure optimal information delivery and participant engagement. The educational content included: (1) the importance of delivery in health facilities, (2) risks associated with home or non-health facility childbirth, (3) benefits of skilled birth attendants, (4) delivery service procedures in primary healthcare centers and hospitals, and (5) birth preparedness through the Birth Planning and Complication Prevention Program (P4K). Video-based education was selected because audiovisual media can simultaneously deliver visual and auditory information, making health messages easier to understand among pregnant women with varying educational and health literacy backgrounds.

## **2.7 Statistical Analysis**

Data analysis was conducted using univariate and bivariate approaches. Univariate analysis was used to describe respondent characteristics and summarize commitment scores before and after the intervention in terms of means, frequencies, percentages, and score ranges. Before inferential analysis, normality testing was performed using the Shapiro-Wilk test due to the sample size being fewer than 50 respondents. The results indicated that the data were normally distributed; therefore, hypothesis testing was conducted using the paired sample t-test to evaluate differences in mean commitment scores before and after the video-based educational intervention. Statistical significance was determined at a 95% confidence interval (CI) with a

significance level of  $\alpha = 0.05$ , where  $p < 0.05$  was considered statistically significant.

## 2.8 Ethical Considerations

Ethical clearance for this study was granted by the Health Research Ethics Committee of Palangka Raya Health Polytechnic, Indonesia (Approval No. 50/I/KE.PE/EXM/2026) on January 2, 2026. All research procedures were conducted in accordance with the ethical principles outlined in the Declaration of Helsinki. Prior to data collection, each participant provided written informed consent after receiving an explanation of the study objectives and procedures. Participation was entirely voluntary, and participants were free to withdraw from the study at any stage without any adverse consequences. To protect participants' privacy, all collected data were anonymized, securely stored, and made accessible only to members of the research team.

## 3. RESULTS

### 3.1 Characteristics of Respondents

A total of 35 pregnant women participated in this study. Most respondents had a low level of education (60.0%), were unemployed (82.9%), and had household incomes below the regional minimum wage (68.6%). The majority of respondents lived relatively far from healthcare facilities (74.3%) and resided in riverine areas (71.4%). In addition, most respondents had attended antenatal care (ANC) visits and received counseling through the Birth Planning and Complication Prevention Program. These findings indicate that most participants experienced geographical and socioeconomic constraints that may influence decisions about childbirth location.

### 3.2 Changes in Pregnant Women's Commitment Before and After Video-Based Education

The study results demonstrated an increase in pregnant women's commitment scores following the video-based educational intervention regarding childbirth location selection. Before the intervention (pretest), the mean commitment score was 65.1, with a score range of 37.59–75.00. After the intervention (posttest), the mean commitment score increased to 99.28, with a score range of 75.00–100.00, resulting in a mean increase of 34.18 points.

In addition to the increase in commitment scores, the proportion of pregnant women committed to choosing delivery in health facilities also increased.

Before the intervention, 62.1% of respondents reported commitment to facility-based delivery, whereas after the intervention, all respondents (100%) expressed commitment to choosing childbirth in health facilities. These findings indicate a positive change in pregnant women's commitment following video-based education.

**Table 1.** Demographic characteristics of study participants of Rakumpit Community Health Center, Palangka Raya, Indonesia, 2026 (n = 35)

| Variable                                                            | n  | %    |
|---------------------------------------------------------------------|----|------|
| Educational level                                                   |    |      |
| Low (elementary–junior high school)                                 | 21 | 60.0 |
| High (senior high school/university)                                | 14 | 40.0 |
| Age                                                                 |    |      |
| <20 years                                                           | 2  | 5.7  |
| 20–35 years                                                         | 31 | 88.6 |
| > 35 years                                                          | 2  | 5.7  |
| Occupation                                                          |    |      |
| Unemployed                                                          | 29 | 82.9 |
| Employed                                                            | 6  | 17.1 |
| Household income                                                    |    |      |
| Below the regional minimum wage                                     | 24 | 68.6 |
| Above the regional minimum wage                                     | 11 | 31.4 |
| Parity                                                              |    |      |
| High (>2)                                                           | 6  | 17.1 |
| Low (<2)                                                            | 29 | 82.9 |
| ANC visits                                                          |    |      |
| Incomplete                                                          | 19 | 54.3 |
| Complete                                                            | 16 | 45.7 |
| Distance to health facility                                         |    |      |
| Far                                                                 | 26 | 74.3 |
| Near                                                                | 9  | 25.7 |
| Geographical area                                                   |    |      |
| Riverine area                                                       | 10 | 28.8 |
| Land area                                                           | 25 | 71.2 |
| Birth Planning and Complication Prevention Program (P4k) counseling |    |      |
| Never                                                               | 5  | 14.3 |
| Ever                                                                | 30 | 85.7 |

### 3.3 The Effect of Video-Based Education on Pregnant Women's Commitment to Choosing Delivery in Health Facilities

Before hypothesis testing, normality testing was performed and showed that the data were normally

distributed. Therefore, inferential analysis was continued using the paired sample t-test. The results demonstrated a statistically significant difference between commitment scores before and after the intervention ( $p < 0.001$ ). Thus,

video-based education had a significant effect on pregnant women’s commitment to choosing delivery in health facilities in the working area.

**Table 2.** Changes in pregnant women’s commitment scores before and after video-based education

| Variable                              | Measurement | Mean  | SD    | Minimum | Maximum | Mean increase |
|---------------------------------------|-------------|-------|-------|---------|---------|---------------|
| Commitment to facility-based delivery | Pre-test    | 65.1  | 11.56 | 37.59   | 75.00   | 34.18         |
|                                       | Post-test   | 99.28 | 4.22  | 75.00   | 100.00  |               |

**Table 3.** The effect of video-based education on pregnant women’s commitment to choosing facility-based delivery (n = 35)

| Variable                              | Pre-test mean ± SD | Post-test mean ± SD | Mean difference | 95% CI      | p-value |
|---------------------------------------|--------------------|---------------------|-----------------|-------------|---------|
| Commitment to facility-based delivery | 65.10± 11.56       | 99.28± 4.22         | 34.18           | 30.14-38.22 | <0.001* |

\*Notes: Paired sample t-test, statistically significant at  $p < 0.05$

#### 4. DISCUSSION

The findings of this study demonstrated that video-based education significantly improved pregnant women’s commitment to selecting healthcare facilities as their place of delivery in the working area of UPTD Rakumpit Public Health Center. Following the intervention, the average commitment score increased from 65.1 at baseline to 99.28, representing a mean improvement of 34.18 points. Statistical analysis using the paired sample t-test confirmed that this increase was highly significant ( $p < 0.001$ ). These results suggest that educational interventions delivered through video are effective in reinforcing pregnant women’s commitment to facility-based childbirth. A marked improvement was also observed in the proportion of respondents committed to delivering in healthcare facilities. Before the intervention, 62.1% of participants expressed such a commitment, whereas after receiving the video-based education, all respondents (100%) reported their intention to give birth in a healthcare facility. This finding indicates that audiovisual educational media not only enhance participants’ understanding of maternal health information but also positively influence their decision-making regarding safe childbirth.

The effectiveness of the video intervention in this study can be explained through the characteristics of audiovisual media, which enable health messages to be delivered in a more concrete, engaging, and easily understandable manner. The video used in this study contained information regarding the importance of childbirth in healthcare facilities, the risks associated with

home or non-health facility deliveries, the benefits of skilled health professionals, the childbirth service pathway in healthcare facilities, and childbirth preparedness through the Birth Planning and Complication Prevention Program. The simultaneous presentation of visual and audio information facilitated pregnant women’s understanding of both the risks and benefits associated with maternal health decisions. Recent systematic reviews have demonstrated that video-based approaches to health education significantly improve knowledge, influence attitude changes, and enhance individual engagement in health-related decision-making, as information is delivered more concretely and interactively compared to conventional educational methods based on lectures or printed media.<sup>(11,12)</sup>

These findings are consistent with the perspective of the Social Cognitive Theory, which explains that health behavior is influenced by the process of observational learning, whereby individuals learn through observing behavioral models and their consequences. In this study, the educational video functioned as a form of behavioral modeling by illustrating the benefits of childbirth in healthcare facilities and the risks associated with delivery without assistance from skilled healthcare professionals. Such visual exposure has the potential to enhance pregnant women’s self-efficacy, defined as the confidence in their ability to make safer and more well-informed childbirth decisions. Recent studies in maternal health have demonstrated that constructs such as self-efficacy, outcome expectations, and behavioral modeling play a

significant role in shaping maternal health decision-making during pregnancy.<sup>(13-15)</sup>

The substantial increase in commitment scores observed in this study may also have been influenced by the relatively optimal intervention design. The educational video, with a duration of 4 minutes and 15 seconds, was played twice, allowing participants to reinforce their understanding through the mechanism of information repetition (repetition effect). Recent literature suggests that educational videos designed using a microlearning approach, typically lasting 3-5 minutes, tend to be more effective in maintaining audience attention compared to longer videos, as they deliver focused messages without causing information overload. In addition, repeated exposure to educational content has been shown to improve information retention and strengthen positive changes in health attitudes. Therefore, the combination of a short-duration video and repeated viewing in this study may have contributed to the substantial improvement in pregnant women's commitment following the intervention.<sup>(16,17)</sup>

The findings of this study should also be understood within the context of the respondents' characteristics and the research setting. The majority of respondents had low educational attainment, were unemployed, had incomes below the regional minimum wage, lived far from healthcare facilities, and mostly resided in river basin areas. These conditions may limit access to maternal health information and adequate healthcare services. Recent studies have shown that women living in rural areas are less likely to utilize healthcare facilities for childbirth compared to those in urban settings due to geographical barriers, economic constraints, and limited health literacy. In such contexts, educational videos may serve as a more adaptive medium because they deliver health information in a simple, visual, and more easily understandable format for populations with limited literacy. Therefore, the increase in commitment observed in this study may reflect the effectiveness of video-based education in bridging disparities in access to maternal health information among vulnerable populations.<sup>(18-20)</sup>

The findings of this study are consistent with previous research demonstrating the effectiveness of video-based media in improving pregnant women's preparedness and decision-making. Recent studies have shown that video-based educational interventions for pregnant women significantly enhance knowledge, attitudes, self-efficacy, and preparedness for childbirth

and neonatal care. Digital interventions in antenatal care have also been proven to increase maternal engagement in health-related decision-making and promote more optimal utilization of maternal healthcare services. Therefore, the findings of this study further strengthen the empirical evidence that video-based media can be used as an effective maternal health promotion strategy, particularly in antenatal care services at primary healthcare facilities.<sup>(7,21,22)</sup>

Nevertheless, this study has several limitations. The use of a pre-experimental one-group pretest-posttest design without a control group means that the influence of external factors on changes in commitment could not be fully eliminated. In addition, the relatively small sample size and the limited research setting restrict the generalizability of the findings and therefore require cautious interpretation. Despite these limitations, the substantial increase in the mean commitment score (34.18 points), accompanied by strong statistical significance, suggests that video-based education has considerable potential to be implemented as an innovative maternal health promotion strategy. This approach may be particularly beneficial in areas facing geographical challenges and limited access to health information, such as the working area of Rakumpit Public Health Center.

## 5. CONCLUSION

The findings support the hypothesis that video-based education is effective in strengthening pregnant women's commitment to choosing facility-based delivery. These results suggest that audiovisual education is a promising health promotion strategy for enhancing informed decision-making regarding safe childbirth, particularly in geographically disadvantaged areas. Integrating video-based education into routine antenatal care may increase the utilization of skilled birth services and contribute to reducing the risk of maternal and neonatal complications. Future research should employ experimental designs with control groups, include larger and more diverse study populations, and evaluate the long-term effects of the intervention on actual childbirth location decisions as well as maternal and neonatal health outcomes.

## Ethical Approval

This study received ethical approval from the Health Research Ethics Committee of Poltekkes Kemenkes

Palangka Raya under approval number 50/I/KE.PE/EXM/2026.

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## Competing Interests

All the authors declare that there are no conflicts of interest.

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No funds were received for this study.

## Underlying Data

Derived data supporting the findings of this study are available from the corresponding author on request.

## REFERENCES

- World Health Organization (WHO). Maternal mortality. Geneva: World Health Organization; 2025. Available from: <https://www.who.int/news-room/fact-sheets/detail/maternal-mortality> (Accessed on 2 Jun 2026)
- World Health Organization (WHO). Maternal mortality ratio (per 100 000 live births). Geneva: World Health Organization; 2023. Available from: <https://www.who.int/data/gho/data/indicators/indicator-details/GHO/maternal-mortality-ratio> (Accessed on 2 Jun 2026)
- United Nations Children's Fund (UNICEF). Maternal mortality. New York: United Nations Children's Fund; 2025. Available from: <https://data.unicef.org/topic/maternal-health> (Accessed on 2 Jun 2026)
- Statistics Indonesia. Maternal Mortality Rate/MMR. The Long Form SP2020 (Population Census 2020) results by province in Indonesia, 2020. Jakarta: Statistics Indonesia; 2023. Available from: <https://www.bps.go.id/id/statistics-table/1/MjIxOSMx/> (Accessed on 2 Jun 2026)
- Syairaji M, Nurdianti DS, Wiratama BS, Prüst ZD, Bloemenkamp KWM, Verschueren KJC. Trends and causes of maternal mortality in Indonesia: a systematic review. *BMC Pregnancy and Childbirth*. 2024;24(1):515. <https://doi.org/10.1186/s12884-024-06687-6>
- Ministry of Health Republic of Indonesia. Indonesia Health Profile 2023. Jakarta: Ministry of Health Republic of Indonesia; 2023. Available from: <https://www.kemkes.go.id/id/> (Accessed on 2 Jun 2026)
- Fadhilah U, Muliani SP. Impact of Video Education on Mothers' Knowledge of Early Initiation of Breastfeeding in Impact of Video Education on Mothers' Knowledge of Early Initiation of Breastfeeding in Makassar. 2025;16(4):1896–1905. Available from: <https://ejournal.seaninstitute.or.id/index.php/health/article/view/7771> (Accessed on 2 Jun 2026)
- Harizopoulou VC, Saranti E, Antonakou A, Vivilaki V. The importance of online childbirth preparation courses. *European Journal of Midwifery*. 2024;8(April):14. <https://doi.org/10.18332/ejm/185867>
- Nisman WA, Khoironi NC, Haryani OD. The impact of health education videos on the level of knowledge and attitudes of pregnant women about danger signs in pregnancy. *Journal of Community Empowerment for Health*. 2025;8(1):1-6. <https://doi.org/10.22146/jcoemph.82985>
- Nilawati W, Ismawati R, Monalisa D. The Influence of Video-Based Nutrition Education on Knowledge of Pregnancy Nutrition in Pregnant Women in Sinar Pasemah Village. *Journal of Educational Innovation and Public Health*. 2024;3(1):01–11. <https://doi.org/10.55606/innovation.v3i1.3295>
- Morgado M, Botelho J, Machado V, Mendes JJ, Adesope O, Proença L. Full title: Video-based approaches in health education: a systematic review and meta-analysis. *Scientific Reports*. 2024;14(1):23651. <https://doi.org/10.1038/s41598-024-73671-7>
- Wang J, Tang N, Jin C, Yang J, Zheng X, Jiang Q, Li S, Xiao N, Zhou X. Association of Digital Health Interventions With Maternal and Neonatal Outcomes: Systematic Review and Meta-Analysis. *Journal of Medical Internet Research*. 2025;27:e66580. <https://doi.org/10.2196/66580>
- Ariyani NW, Wirawan IMA, Pinatih GNI, Jaya Kusuma AAN. The effect of an application-based educational intervention with a social cognitive theory model on pregnant women in Denpasar, Bali, Indonesia: a randomized controlled trial. *Osong Public Health and Research Perspectives*. 2022;13(2):153–161. <https://doi.org/10.24171/j.phrp.2021.0209>
- Indriyani R, Murti B, Anggraini NA, Puspitasari Y. Addressing chronic energy deficiency among Indonesian pregnant women: A social cognitive theory perspective. *Social Sciences & Humanities Open*. 2025;12(May):102122. <https://doi.org/10.1016/j.ssaho.2025.102122>
- Rismawati NL, Pamungkasari EP, Novika RGH. Applying Social Cognitive Theory to Exclusive Breastfeeding Behavior: A Path Analysis Model. *Journal of Maternal and Child Health*. 2025;9(5):836–848. <https://doi.org/10.26911/thejmch.2024.09.05.09>
- Ho C-M, Yeh C-C, Wang J-Y, Hu R-H, Lee P-H. Preclass video nanolearning or microlearning in blended medical education. *Frontiers in Medicine*. 2025;12:1639475. <https://doi.org/10.3389/fmed.2025.1639475>
- Yunianti NPW, Khaerudin, Kusumawardani D. Microlearning As a Digital Learning Strategy in Higher Health Education: Literature Review. *Jurnal Pendidikan Teknologi dan Kejuruan*. 2025;22(1):1–11. <https://doi.org/10.23887/jptkuniksha.v22i1.90686>

18. Adusei-Mensah F, Muthelo L, Ngwenya MW, Mphasha MH, Kauhanen J. Digital health interventions for pregnant women and mothers with under 5-year-olds in low- and middle-income countries: a scoping review. *Global Health Journal*. 2025;9(2):113–123. <https://doi.org/10.1016/j.glohj.2025.06.008>
19. Rachmawati T, Supriyanto S, Faisal DR, Tarigan IU, Indriasih E, Rukmini R, Susianti N, Putro G, Nurlinawati I, Afifah T, Siahaan S, Minhat HS. Understanding the drivers associated with maternal delivery choices: comparative study between urban and rural women in Indonesia. *Korean Journal of Family Medicine*. 2025;47(2):119–126. <http://dx.doi.org/10.4082/kjfm.24.0145>
20. Nelson JR, Gren LH, Dickerson TT, Benson LS, Manortey SO, Ametepey R, Avorgbedor YE, Alder SC. Using the health belief model to explore rural maternal utilisation of skilled health personnel for childbirth delivery: A qualitative study in three districts of the eastern region of Ghana. *Journal of Global Health Reports*. 2021;5:e2021102. <http://dx.doi.org/10.29392/001c.29883>
21. Metin A, Baltacı N. The effects of video-assisted breastfeeding education given to primiparous pregnant women on breastfeeding self-efficacy: randomized controlled study. *BMC Pregnancy Childbirth*. 2024;24(1):142. <https://doi.org/10.1186/s12884-024-06317-1>
22. Wika AT, Asrina A, Mahmud NU, Yusriani, Idris FP, Sumiaty. Effectiveness of an Interactive Educational Video on Exclusive Breastfeeding Knowledge Among Pregnant Women in Indonesia : A Quasi-Experimental Study. *An Idea Health Journal*. 2026;6(1):79–85. <https://doi.org/10.53690/ihj.v 6i01.613>