J-Kesmas: Jurnal Fakultas Kesehatan Masyarakat
(The Indonesian Journal of Public Health)
Available at http://jurnal.utu.ac.id/jkesmas Open Access TYPE OF ARTICLE
p-ISSN: 2355-0643, e-ISSN: 2355-0988
Vol. 12, No. 2, October, 2025

The Relationship Between Educational Videos on Proper Pushing and Breathing Techniques and the Knowledge of Women of Reproductive Age in Kebun Dua Ratus, Kalideres District, Jakarta Barat

[1]Sumarti, [2]Hastin Catur Wulansari

[1, 2] Diploma 3 Midwifery study program, Kartini Polytechnic, Jakarta, Indonesia
Corresponding author: Sumarti, e-mail: dedesumarti420@gmail.com
Submitted:02/02/2026 **Revised:** 06/02/2026 **Accepted:** 16/02/2026 **Published online**: 18/02/2026

doi: https://doi.org/10.35308/j-kesmas.v12i2.14746 **How to cite this article**: Sumarti, Wulansari, H.C. 2025. The Relationship Between Educational Videos on Proper Pushing and Breathing Techniques and the Knowledge of Women of Reproductive Age in Kebun Dua Ratus, Kalideres District, Jakarta Barat. *J-Kesmas: Jurnal Fakultas Kesehatan Masyarakat (The Indonesian Journal of Public Health)*. 12 (2): 76-82

Abstract

Knowledge of proper pushing and breathing techniques is important for women of childbearing age (WCA) to prepare for a safe and comfortable delivery. Educational videos are considered an effective medium for increasing knowledge. This study aimed to determine the relationship between the provision of educational videos on proper pushing and breathing techniques and the knowledge of women of childbearing age in Kebun Dua Ratus, Kalideres District, West Jakarta. This study employed a cross-sectional design. The sample consisted of 30 women of childbearing age selected using purposive sampling. Data were collected using a questionnaire, and the study was conducted in RT 03 Kebun Dua Ratus. The analysis showed a p-value of 0.001, indicating a statistically significant relationship between the provision of educational videos and increased knowledge of proper pushing and breathing techniques among women of childbearing age. Women who received educational videos demonstrated better knowledge of proper pushing and breathing techniques compared to those who did not receive educational videos.

Keywords: Women, knowledge, video, pushing and breathing techniques

Introduction

Normal labor is the process of delivering a fetus occurring at full-term pregnancy (37–42 weeks), characterized by a spontaneous birth in the vertex presentation, lasting no more than 18 hours without complications for either the mother or the fetus. This process begins with the onset of true labor contractions, marked by progressive cervical changes, and concludes with the delivery of the placenta (Prawirohardjo, 2016). Furthermore, normal labor is defined as the process of expelling the viable products of conception from the uterus through the vagina into the external world in a vertex presentation, without the use of instruments or special interventions, ensuring no injury to the mother or infant, and generally occurring within less than 24 hours (Sholichah, 2017).

Smooth labor is supported by several factors, such as optimal bearing-down positions and correct breathing techniques. The bearing-down position itself should be one that provides comfort to the laboring mother. Mothers may change positions regularly during the second stage of labor, as this frequently accelerates labor progress and allows the mother to bear down effectively in a position she finds comfortable. Furthermore, appropriate instructions to guide the mother's efforts and positions that facilitate progress are essential to preventing trauma (Saifuddin 2014, in Darwis 2022).

Labor is a physiological process requiring physical and mental readiness, which every woman of childbearing age will encounter. Women of childbearing age (WCA) are defined as women with optimal reproductive organ function, typically within the age range of 20–45 years (Ministry of Health of the Republic of Indonesia, 2020). Critical knowledge for women of childbearing age in preparing for labor includes correct bearing-down and breathing techniques, as these methods can reduce labor pain, prevent exhaustion, accelerate cervical dilation, and minimize the risk of perineal lacerations (Yulizawati et al., 2019).

Previous research has demonstrated that health education using video media increases pregnant women's knowledge regarding breathing techniques for labor preparation by 30% (Sari, 2020). Similarly, a study conducted by Shinta Kristianti found that the use of video as an educational medium is highly influential in reducing anxiety levels among third-trimester primigravida mothers. According to The Open University, health education can be delivered through lectures, group discussions, role-playing, printed media, and video. Video media is a form of audiovisual communication that conveys messages through a combination of moving images (visual) and sound (audio). Delivering information via audiovisual or video media is highly effective because it allows the audience to listen to explanations while simultaneously viewing text or animations. Furthermore, video-based delivery is more engaging and allows the recipient to replay the content repeatedly (Heller, 2024).

Various methods and health education media can be utilized to disseminate health information. To ensure that health education is realized effectively and reaches the intended targets and objectives, engaging media that is more easily accepted by the target audience is required. One such example is the use of video tutorial media. The application of this medium to provide information regarding correct bearing-down and breathing techniques can significantly influence the success of information absorption (Yulyana, 2017). Video media relies on the recipient's senses of hearing and sight. This medium engages nearly all learning senses within the human body; the more sensory organs involved in receiving and processing information, the greater the likelihood that the information provided will be easily understood and retained in memory (Supriani, 2021).

According to the results of a study conducted by (Agustin, 2024**)**, which examined the effect of education through animated videos on the knowledge and attitudes of third-trimester primigravida mothers regarding labor preparation, it was shown that mothers had significantly higher levels of knowledge and better attitudes after being exposed to video media ($p < 0.05$). This indicates that the use of video media has a significant influence on the knowledge and attitudes of primigravida expectant mothers in their third trimester.

Based on the preliminary study conducted by the author in Kebun Dua Ratus, Kalideres District, West Jakarta, regarding the knowledge of pregnant women concerning correct bearing-down and breathing techniques through interviews, it was found that among 10 women of childbearing age, 3 (30%) possessed good knowledge, while 7 (70%) had insufficient knowledge. Furthermore, interview results revealed that 3 of the women reported a lack of knowledge regarding proper bearing-down and breathing techniques due to a lack of prior experience.

Methods

This study was conducted in RT 03 Kebun Dua Ratus, Kalideres District, West Jakarta, utilizing a cross-sectional research design to examine the relationship between the provision of educational videos on correct bearing-down and breathing techniques and the knowledge of women of childbearing age. Data in this study were obtained through sample

collection using a questionnaire. The research sample consisted of women of childbearing age, with the inclusion criteria specifically targeting this demographic. This study employed a purposive sampling method, resulting in a total sample size of 30 respondents. The research instrument used was a questionnaire designed to assess the knowledge of women of childbearing age regarding proper bearing-down and breathing techniques. Data analysis was performed using the Pearson correlation test with a significance level of (α) 0.05 or a 95% Confidence Interval (CI).

Result

Univariate Analysis

Table 1. Knowledge of Women of Childbearing Age regarding Correct Bearing-Down and Breathing Techniques through Educational Videos

Knowledge for Pregnant Women	Freq	%
Good	19	63,3
Poor	11	36,7
Total	30	100

Based on Table 1, the frequency distribution of knowledge among women of childbearing age regarding correct bearing-down and breathing techniques following the educational video intervention indicates that the majority of respondents possessed a good level of knowledge. Out of a total of 30 women of childbearing age, 19 individuals (63.3%) were in the "good knowledge" category, while 11 individuals (36.7%) still had insufficient knowledge.

Table 2. Frequency Distribution of Knowledge Among Women of Childbearing Age Regarding Correct Bearing-Down and Breathing Techniques via Educational Videos, Categorized by Information Source

Source of Information	Freq	%
Exposed	17	56,7
Not Exposed	13	43,3
Total	30	100

Based on Table 2, the frequency distribution according to the source of information shows that among the total of 30 respondents, 17 women of childbearing age (56.7%) had been exposed to information sources, while 13 women (43.3%) had not been exposed to any information sources.

Table 3. Frequency Distribution of Knowledge Among Women of Childbearing Age Regarding Correct Bearing-Down and Breathing Techniques via Educational Videos, Categorized by Educational Level.

Knowledge	Freq	%
Low	14	46,7
High	16	53,3
Total	30	100

Based on Table 3, the frequency distribution of educational levels among the 30 respondents shows that 14 women (46.7%) had a low educational level, while 16 women (53.33%) had a higher educational level.

Table 4. Frequency Distribution of Knowledge Among Women of Childbearing Age Regarding Correct Bearing-Down and Breathing Techniques via Educational Videos, Categorized by Prior Experience in the Area

Experience	Freq	%
Has given birth	21	70
Has never given birth	9	30
Total	30	100

Based on Table 4. the frequency distribution of childbirth experience among the 30 respondents shows that 21 women (70%) had previous childbirth experience (multiparous), while 9 women (30%) had no previous childbirth experience (nulliparous).

Bivariate Analysis

Based on the results of the bivariate analysis in Table 5 regarding the relationship between information sources (the use of educational videos) and the knowledge of women of childbearing age concerning correct bearing-down and breathing techniques, it was found that among women exposed to information sources, 15 individuals (50.0%) possessed good knowledge, while 2 individuals (6.7%) had poor knowledge. Conversely, among women not exposed to information sources, 4 individuals (13.3%) had good knowledge, whereas 9 individuals (30.0%) had poor knowledge. Statistical testing yielded a p-value of 0.001, which is lower than the significance level (α) of 0.05. Therefore, the alternative hypothesis (Ha) is accepted, indicating that there is a significant relationship between the source of information (use of educational videos) and the knowledge of women of childbearing age regarding correct bearing-down and breathing techniques.

Table 5. The Relationship between Information Source (the Use of Illustrative Videos) and the Knowledge of Women of Childbearing Age regarding Correct Bearing-Down and Breathing Techniques

Knowledge for Pregnant Women	Source of Information				Total		P Value
	Exposed		Not Exposed				
	n	%	n	%	n	%	
Good	4	13,3	15	50,0	19	63,3	0,001
Poor	9	30,0	2	6,7	11	36,7	
Total	13	43,3	17	56,7	30	100	

Discussion

The study results indicate that among 30 respondents of childbearing age in the Kebun Dua Ratus area, Kalideres, West Jakarta, the majority possessed a good level of knowledge regarding correct bearing-down and breathing techniques following the provision of educational videos, totaling 19 individuals (63.3%). Conversely, 11 individuals (36.7%) still demonstrated insufficient knowledge. Knowledge is influenced by various factors, including age, education, information sources, occupation, experience, and environment. Knowledge is acquired through sensory processes—primarily through the senses of sight and hearing—which play a significant role in information reception (Notoatmodjo, 2003; Suwanti and Aprilin, 2017, in Darsini, 2019)

Proper bearing-down techniques should be performed in synchronization with uterine contractions without holding the breath, accompanied by rest periods between contractions, and avoiding actions that could increase the risk of labor complications (Yulizawati, 2019). The findings of this study are consistent with research by Sari (2020**)**, which demonstrated that video-based education can improve pregnant women's knowledge of labor breathing techniques, as well as the study by Shinta Kristianti, which proved that video media is an effective tool for maternal education. The use of video media is considered effective because it engages both the visual and auditory senses simultaneously, thereby facilitating the reception and comprehension of information by the respondents.

The research results show that among the 30 respondents of childbearing age in the Kebun Dua Ratus area, Kalideres, West Jakarta, 16 individuals (53.3%) had a higher educational level, while 14 individuals (46.7%) had a low educational level. Education plays a crucial role in enhancing an individual's ability to receive and comprehend health information, thereby influencing their overall level of knowledge (Notoatmodjo in Ramadhesia, 2022). These findings are consistent with a study by Khasanah (2019), which indicated that mothers with higher educational levels possess better knowledge regarding maternal health. The higher a person's educational level, the more easily they can absorb information and enhance their knowledge through educational media, including videos.

The study results indicate that among the 30 respondents of childbearing age in the Kebun Dua Ratus area, Kalideres, West Jakarta, 21 individuals (70%) were nulliparous (had never given birth), while 9 individuals (30%) were multiparous (had previously given birth). Childbirth experience is a factor that can influence an individual's knowledge, as experience is shaped by prior events and contributes to an individual's readiness to face similar situations in the future (Paganda & Siahaan, 2024). These findings are consistent with research by Khasanah (2019), which showed that primigravida mothers represent a larger proportion of those receiving health education compared to multigravida and grandemultipara mothers. This may occur because women who have not yet given birth or are experiencing their first pregnancy tend to have more time and greater motivation to seek and receive health information compared to mothers with more children

The study results indicate that among the 30 respondents of childbearing age in the Kebun Dua Ratus area, Kalideres, West Jakarta, 17 individuals (56.7%) had been exposed to information sources, while 13 individuals (43.3%) had not. Information sources play a vital role in knowledge formation, as information consists of processed data or facts designed to be understood and provide benefits to the recipient (Ridho, 2021). These findings are consistent with research by Khasanah (2019), which demonstrated that providing information through health counseling can increase mothers' knowledge regarding pain reduction techniques during labor. Proper exposure to information, particularly

through educational media such as videos, helps enhance the understanding of women of childbearing age, especially those who have no prior experience with pregnancy or childbirth.

The statistical analysis yielded a p-value of 0.001, which is lower than the significance level α = 0,0, the alternative hypothesis (Ha) is accepted. This indicates a significant relationship between the source of information—specifically the use of educational videos—and the knowledge of women of childbearing age regarding correct bearing-down and breathing techniques in the Kebun Dua Ratus area, Kalideres, West Jakarta, in 2025. Educational media play a critical role in disseminating information and enhancing public knowledge. According to Anwas (2012) and Schramm (in Nasution, 2007), mass media functions as a means of information dissemination and a supporting tool for the educational process. As an audiovisual medium, video is capable of presenting information more engagingly through a combination of moving images and sound, thereby facilitating the recipient's comprehension of the message (Marliani, 2021).

These findings are consistent with Agustin et al. (2024), who stated that education using animated videos has a significant effect on improving the knowledge and attitudes of third-trimester primigravida mothers in preparation for childbirth. Based on the research results and observations, video media is proven effective in increasing the knowledge of women of childbearing age because it engages both the visual and auditory senses simultaneously. This dual engagement assists the brain in processing and absorbing information regarding correct bearing-down and breathing techniques more optimally.

Conclusion

Based on the research findings regarding the relationship between the provision of educational videos on correct bearing-down and breathing techniques and the knowledge of women of childbearing age in the RT 03 Kebun Dua Ratus area, Kalideres, West Jakarta, it can be concluded that there is a significant relationship between the provision of educational videos and the knowledge level of women of childbearing age, with a significance value (p-value) of 0.001 ($p < 0.05$).

Acknowledgments

The author would like to express their gratitude to the Head of RT 03 and all parties who assisted in the data collection process and the preparation of this research.

References

Agustin, A., *et al.* (2024). Pengaruh edukasi melalui video animasi terhadap pengetahuan dan sikap ibu hamil primigravida trimester III tentang persiapan persalinan. *Jurnal Kesehatan Ibu dan Anak, 15*(1), 45–52.

Darwis, D. (2022). *Asuhan kebidanan persalinan*. CV Media Sains Indonesia.

Heller, R. (2024). *Using video and audio-visual media for effective health education*. The Open University.

Kementerian Kesehatan Republik Indonesia. (2020). *Buku kesehatan ibu dan anak*. Kementerian Kesehatan RI.

Kristianti, S. (2021). Pengaruh penggunaan media video terhadap tingkat kecemasan ibu primigravida trimester III dalam menghadapi persalinan. *Jurnal Kebidanan Indonesia, 12*(2), 85–92.

Prawirohardjo, S. (2016). *Ilmu kebidanan* (Edisi ke-4). PT Bina Pustaka Sarwono Prawirohardjo.

Saifuddin, A. B. (2014). *Ilmu kebidanan* (Edisi ke-4). PT Bina Pustaka Sarwono Prawirohardjo.Sari, D. P. (2020). Pengaruh penyuluhan menggunakan media video terhadap pengetahuan ibu hamil tentang teknik pernapasan dalam persiapan persalinan. *Jurnal Kesehatan Ibu dan Anak, 14*(1), 45–52.

Sholichah, N. (2017). *Asuhan kebidanan persalinan dan bayi baru lahir*. Kementerian Kesehatan Republik Indonesia.

Supriani, D. (2021). Pengaruh penggunaan media video terhadap peningkatan pengetahuan kesehatan. *Jurnal Pendidikan Kesehatan, 10*(2), 112–119.

Yulizawati, Y., Bustami, B., & Marlina, R. (2019). *Asuhan kebidanan pada persalinan*. Deepublish.

Yulyana, E. (2017). Efektivitas media video tutorial dalam pendidikan kesehatan terhadap peningkatan pengetahuan peserta. *Jurnal Promosi Kesehatan Indonesia, 12*(1), 45–52.

Darsini. (2019). *Pengaruh sumber informasi terhadap tingkat pengetahuan kesehatan*. Jurnal Ilmu Kesehatan, 7(2), 45–52.

Notoatmodjo, S. (2003). *Pendidikan dan perilaku kesehatan*. Jakarta: Rineka Cipta.

Sari, D. P. (2020). Pengaruh penyuluhan menggunakan media video terhadap pengetahuan ibu hamil tentang teknik pernapasan dalam persiapan persalinan. *Jurnal Kesehatan Ibu dan Anak*, 14(1), 45–52.

Suwanti, & Aprilin, H. (2017). Faktor-faktor yang memengaruhi pengetahuan ibu tentang kesehatan reproduksi. *Jurnal Keperawatan dan Kesehatan*, 6(1), 30–38.

Yulizawati, Y. (2019). *Asuhan kebidanan pada persalinan*. Yogyakarta: Deepublish.

Kristianti, S. (2021). Pengaruh penggunaan media video terhadap tingkat kecemasan ibu primigravida trimester III dalam menghadapi persalinan. *Jurnal Kebidanan Indonesia*, 12(2), 85–92.

Khasanah, U. (2019). Pengaruh pendidikan kesehatan terhadap pengetahuan ibu tentang kesehatan persalinan. *Jurnal Kebidanan*, 8(1), 25–32.

Notoatmodjo, S. (2003). *Pendidikan dan perilaku kesehatan*. Jakarta: Rineka Cipta.

Paganda, R., & Siahaan, R. (2024). Pengaruh pengalaman terhadap kesiapan dan pengetahuan ibu dalam menghadapi persalinan. *Jurnal Kesehatan Ibu dan Anak*, 18(1), 15–23.

Ramadhesia, R. (2022). Hubungan tingkat pendidikan dengan pengetahuan kesehatan ibu. *Jurnal Ilmu Kesehatan Masyarakat*, 13(2), 101–108.

Agustin, D., Sari, R. P., & Lestari, N. (2024). *Pengaruh edukasi video animasi terhadap pengetahuan dan sikap ibu hamil primigravida trimester III dalam persiapan persalinan*. Jurnal Kesehatan Ibu dan Anak, 15(2), 85–94.

Anwas, O. M. (2012). *Pemberdayaan masyarakat di era global*. Bandung: Alfabeta.

Marliani, R. (2021). *Psikologi pendidikan dan pembelajaran*. Bandung: Pustaka Setia.

Nasution, Z. (2007). *Komunikasi pembangunan: Pengenalan teori dan penerapannya*. Jakarta: RajaGrafindo Persada.

Schramm, W. (1964). *Mass media and national development: The role of information in the developing countries*. Stanford, CA: Stanford University Press.