

THE EFFECTIVENESS OF EDUCATIONAL VIDEOS ON LACTATION MESSAGE VERSUS PRINTED BROCHURES ON HUSBANDS' KNOWLEDGE AND SUPPORT IN SUCCESSFUL BREASTFEEDING

Lismaya Puspita Dewi¹⁾, Teni Nurlatifah HR²⁾, Suparni³⁾, Ma'mun Sutisna⁴⁾, Udin
Sabarudin⁵⁾, Hidayat Wijayanegara⁶⁾

Email: maya.sujiandono@gmail.com¹⁾, teninhr08@yahoo.co.id²⁾, nsuparni@upnvj.ac.id³⁾,
mamun.sutisna@polban.ac.id⁴⁾, drusrso@yahoo.co.id⁵⁾, hwnegara@gmail.com⁶⁾

^{1,2)}Master's Program in Midwifery, STIKes Dharma Husada Bandung, Jalan Terusan Jakarta No. 75.

³⁾Public Health Study Program, University of Pembangunan Nasional Veteran, Jakarta.

⁴⁾State Polytechnic of Bandung, Gegerkalong Hilir, Ciwaruga, West Bandung

⁵⁾Immanuel Hospital Bandung, Jalan Raya Kopo No. 161

⁶⁾Master's Program in Midwifery, STIKes Dharma Husada Bandung, Jalan Terusan Jakarta No.75.

Article Information

Received:

July 12, 2025

Revised:

November 12, 2025

Accepted:

December 12, 2025

Abstract

The exclusive breastfeeding program represents a strategic government effort to strengthen the quality of human resources. One effective non-pharmacological approach to addressing this issue is lactation massage, which stimulates milk production and supports the breastfeeding process. This study aimed to evaluate the effectiveness of lactation massage educational videos compared with printed leaflets in improving husbands' knowledge and roles in supporting successful breastfeeding at the Ciangsana Bogor Independent Midwife Practice in 2025. A quantitative approach with a quasi-experimental design was employed. The study involved 74 husbands of postpartum breastfeeding mothers who accompanied their wives during February–March 2025. Husbands' knowledge and roles were assessed using structured questionnaires administered prior to the intervention and seven days afterward. Data were analyzed using a paired sample t-test, while the level of effectiveness was determined through gain score analysis. The findings revealed significant differences in both knowledge and roles between husbands who received lactation massage educational videos and those who received printed leaflets. The effectiveness analysis demonstrated that educational videos produced greater improvements, with a 57% increase in knowledge and a 56% increase in husbands' roles, both classified as moderately effective. In conclusion, lactation massage educational videos are more effective than printed leaflets in strengthening husbands' knowledge and roles in supporting breastfeeding success. The use of engaging and visually rich educational media may serve as a valuable strategy to foster meaningful husband participation and promote optimal breastfeeding outcomes.

Keywords: *Effectiveness, Leaflet, Knowledge, Husband's role, Educational video*

@2026PoliteknikHarapanBersama

Correspondence:

Lismaya Puspita Dewi, The Grand Sentul Cluster Primerose Blok B.1-11 No.8 Rt.02 Rw.05 Cadas
Ngampar – Sukaraja, Bogor.
maya.sujiandono@gmail.com

1. Introduction

The World Health Organization (WHO) reports that 78 million infants worldwide are not breastfed within the first hour after birth, placing infants at greater risk of neonatal mortality and preventable diseases, particularly in low- and middle-income countries [1]. In response to this global challenge, one of the key strategies to reduce infant mortality is the promotion of exclusive breastfeeding as the sole source of nutrition during the first six months of life [2].

In line with this global recommendation, Indonesia has undertaken various efforts to reduce the Neonatal Mortality Rate (NMR), including strengthening counseling on the importance of exclusive breastfeeding. This commitment is formally regulated through Government Regulation No. 33 of 2012 on the national implementation of exclusive breastfeeding. However, data from West Java Province show that only 349,968 infants aged 0–6 months received exclusive breastfeeding out of a total of 754,438 infants, representing just 46.4% [2].

These figures highlight the importance of breastfeeding as a critical period in infant growth and development, during which breast milk serves as the primary source of nutrition supporting physical growth, cognitive development, and immune function [1]. Accordingly, the WHO and UNICEF recommend exclusive breastfeeding for the first six months of life, followed by continued breastfeeding up to two years of age with appropriate complementary feeding [2].

At the national level, data from the 2023 Indonesian Basic Health Survey (Riskesdas) show that exclusive breastfeeding coverage remains at only 37.3%, far below the national target [3]. Growing evidence indicates that breastfeeding success is strongly shaped by social and familial factors, particularly the role of husbands. Limited knowledge, unsupportive attitudes, and minimal involvement of husbands have been

identified as key barriers to successful breastfeeding. Conversely, active spousal involvement has been shown to significantly improve breastfeeding outcomes through emotional encouragement and practical support, including lactation massage to facilitate milk flow [4].

Lactation massage is a simple, non-invasive technique that stimulates oxytocin release, enhances milk flow, and reduces breast engorgement [5]. However, husbands are often excluded from breastfeeding education, especially in primary maternal health service settings such as Independent Midwifery Practices. This gap is particularly evident in the Ciangsana area of Bogor Regency, where breastfeeding service utilization is high but educational interventions targeting husbands remain limited.

The effectiveness of husband-focused breastfeeding education largely depends on the choice of educational media. While printed leaflets are commonly used, they offer limited capacity to convey procedural knowledge and hands-on skills. In contrast, audiovisual media, such as educational videos, provide clearer demonstrations, greater engagement, and improved comprehension of practical techniques such as lactation massage [6].

Therefore, this study addresses an important gap by comparing the effectiveness of lactation massage educational videos and printed leaflets in improving husbands' knowledge and involvement in supporting breastfeeding success in Independent Midwifery Practices in the Ciangsana area of Bogor. The findings are expected to contribute practical evidence for optimizing educational strategies aimed at strengthening spousal involvement in breastfeeding promotion and maternal and child health programs.

2. Method

This study used a quantitative approach with a quasi-experimental two-group pretest–posttest design. A non-probability consecutive sampling

technique was used, whereby participants who met the study inclusion criteria were recruited consecutively within a defined time period until the required sample size was reached.

The study population consisted of 74 husbands of postpartum breastfeeding mothers who accompanied their wives during the study period from February to March 2025. Husbands' knowledge and involvement in breastfeeding success were assessed using a questionnaire administered prior to the intervention and again seven days after the intervention. Data were analyzed using the paired sample t-test, and the effectiveness of the intervention was evaluated using gain scores.

3. Results and Discussion

Table 1. Frequency Distribution of Respondent Characteristics

Characteristics	Educational Video Group (n=37)		Leaflet media group (n=37)	
	(n)	(%)	(n)	(%)
Age (years)				
17-25	6	16.2	8	21.6
26-35	28	75.7	26	70.3
36-45	3	8.1	3	8.1
Education Level				
Elementary School	0	0	0	0
Junior High School	3	8.1	2	5.4
Senior High School	30	81.1	25	67.6
Higher Education	4	10.8	10	27.0
Employment Status				
Employed	26	70.3	22	59.5
Unemployed	11	29.7	15	40.5

Based on Table 1, most respondents in both groups were aged 26–35 years, reflecting the typical reproductive and parenting age. The majority had completed senior high school (High School/Vocational High School), and most were employed. These characteristics indicate that the

respondents were generally within a productive age range and had an educational background that allowed them to receive and process health-related information effectively.

Table 2. Pretest and Posttest Results of Knowledge on Breastfeeding Success Using Lactation Massage Educational Videos Compared with Printed Leaflets

Knowledge	Pretest (N=37)		Posttest (N=37)	
	(n)	(%)	(n)	(%)
Educational Videos				
Poor	6	16.2	0	0
Moderate	25	67.6	2	5.4
Good	6	16.2	22	59.5
Excellent	0	0	13	35.1
Total	37	100	37	100
Printed Leaflets				
Poor	9	24.3	0	0
Moderate	18	48.6	8	21.6
Good	10	27.1	20	54.1
Excellent	0	0	9	24.3
Total	37	100	37	100

Table 2 illustrates changes in respondents' knowledge of breastfeeding success before and after the intervention. Prior to the intervention, respondents in the educational video group predominantly had a moderate level of knowledge (67.6%). After exposure to the lactation massage educational video, a clear improvement was observed, with most respondents reaching a good (59.5%) or excellent (35.1%) level of knowledge. In contrast, respondents in the printed leaflet group initially showed lower levels of knowledge, with nearly half categorized as having poor knowledge. Although knowledge levels improved after receiving the leaflet, most respondents only reached a moderate level (54.1%). Overall, both interventions contributed to increased knowledge; however, the improvement was more pronounced in the group that received educational videos.

Table 3. Pretest and Posttest Results of Husbands' Roles in Breastfeeding Success Using Lactation Massage Educational Videos Compared with Printed Leaflets

Husbands' Roles	Pretest (N=37)		Posttest (N=37)	
	(n)	(%)	(n)	(%)
Educational Videos				
Poor	23	62.2	2	5.4
Moderate	13	35.1	14	37.8
Good	1	2.7	21	56.8
Total	37	100	37	100
Printed Leaflets				
Poor	22	59,5	11	29,7
Moderate	14	37,8	15	40,5
Good	1	2,7	11	29,7
Total	37	100	37	100

Changes in husbands' roles in supporting breastfeeding success are presented in Table 3. Before the intervention, most husbands in both groups demonstrated limited involvement in breastfeeding support. Following the educational video intervention, a substantial shift was observed, with more than half of the husbands demonstrating a good level of involvement. In the leaflet group, although some improvement was noted, most husbands reached only a moderate level of involvement. These findings suggest that educational videos may be more effective in encouraging husbands to actively support breastfeeding, as they provide clearer, more practical guidance that is easier to understand and apply.

Table 4. Knowledge of Breastfeeding Success Between the Lactation Massage Educational Video Group and the Printed Leaflet Group

Group	Knowledge	N	Mean Differences	Correlation	P-value
Educational Videos	Pretest	37	-26.08	0.861	0.000
	Posttest	37			
Printed Leaflets	Pretest	37	-17.97	0.710	0.000
	Posttest	37			

* Uji Paired Samples T-Test

Statistical analysis of knowledge related to breastfeeding success in the lactation massage educational video group showed a p-value of 0.000 ($p < 0.05$), indicating that the use of lactation massage educational videos was effective in improving knowledge of breastfeeding success. Similarly, in the printed leaflet group, statistical test results yielded a p-value of 0.000 ($p < 0.05$), demonstrating that printed leaflets were also effective in improving knowledge of breastfeeding success. These findings indicate that both educational approaches contributed positively to improving breastfeeding-related knowledge, although differences in the magnitude of their effects were observed.

Educational videos were found to have a greater impact on improving understanding of exclusive breastfeeding [7]. This stronger effect may be explained by the ability of video-based media to present information in a more comprehensive and engaging manner. Lactation massage refers to massage movements applied to specific areas of the body, including the head, neck, shoulders, back, and breasts, with the aim of facilitating the breastfeeding process. In certain conditions, lactation massage can be used to stimulate breast milk production, such as in breastfeeding induction for adoptive mothers or mothers who have never breastfed [8].

Lactation massage educational videos function as a practical educational tool for postpartum mothers and their families by demonstrating massage techniques that aim to support breast milk production. The video content shows massage movements along the back, particularly following the spinal area, which are intended to stimulate milk flow and facilitate the breastfeeding process [8]. Educational videos represent an effective approach to improving breast milk production, as they allow recipients to repeatedly review the material and gradually practice the techniques independently. This flexibility supports better skill acquisition and retention.

Factors that may influence the effectiveness of educational videos for postpartum mothers include individual characteristics, frequency of exposure, age, education level, employment status, and gravida status [9].

From a broader perspective, one educational medium that can be used to improve husbands' knowledge regarding their role in facilitating breast milk production is educational media that utilizes current advances in information and communication technology, particularly interactive user-based platforms such as educational videos. Educational videos are digital publications that integrate text, images, and audio, and can be accessed through computers as well as electronic devices such as smartphones and tablets. Compared to conventional printed materials, this format allows for more interactive and self-paced learning. Educational videos represent an evolution of traditional printed books, transforming conventional reading materials into more dynamic and engaging learning resources [10].

Table 5. Husbands' Roles in Breastfeeding Success Between the Lactation Massage Educational Video Group and the Printed Leaflet Group

Group	Husband's Roles	N	Mean Differences	Correlation	P-value
Educational Video	Pretest	37	-25.94	0.815	0.000
	Posttest	37			
Printed Leaflet	Pretest	37	-15.13	0.631	0.000
	Posttest	37			

*paired sample t-test result

The paired samples t-test analysis revealed a strong correlation between pretest and posttest scores in the lactation massage educational video group, with a correlation coefficient of 0.815. This finding indicates a substantial improvement in husbands' roles following the intervention. The statistical test yielded a p-value of 0.000 ($p < 0.05$), confirming that lactation massage

educational videos were effective in enhancing husbands' roles in supporting breastfeeding success. In the printed leaflet group, the statistical analysis also demonstrated a significant improvement, with a p-value of 0.000 ($p < 0.05$). These results suggest that while both educational approaches were effective, the video-based intervention produced a stronger effect on husbands' involvement.

To better understand this finding, husbands' involvement in breastfeeding can be viewed through the concept of the breastfeeding father, which refers to a husband's active and consistent support for his wife throughout the breastfeeding process [11]. Such support is reflected in attitudes, acceptance, and concrete actions toward the mother and represents a key determinant of breastfeeding success. Stronger support from husbands has been associated with higher rates of successful breastfeeding [12]. In addition, husbands' support plays a crucial role in shaping maternal emotional well-being and sustaining motivation to continue breastfeeding [13].

In practice, this support extends beyond emotional encouragement to include practical assistance during the postpartum period. Optimal spousal support including motivation, reassurance, and assistance with lactation massage techniques has been shown to significantly improve exclusive breastfeeding outcomes [14]. Emotional closeness fostered through supportive marital relationships may also enhance relationship harmony, creating a positive psychosocial environment that benefits breastfeeding mothers [15].

One form of practical support that husbands can provide is assisting with lactation massage to stimulate the oxytocin reflex. Lactation massage involves gentle stimulation along the cervical spine and back, extending along the vertebral column to the fifth and sixth ribs. Oxytocin plays a central role in breast milk ejection; when stimulated,

alveolar cells in the mammary glands contract, allowing milk to flow through the ducts and be released through the nipple for infant feeding [16].

During daily breastfeeding practices, simple actions such as providing gentle back massage when the mother is breastfeeding or experiencing fatigue can enhance maternal comfort and psychological relaxation, thereby facilitating milk flow [17]. In addition, husbands can offer practical support by assisting with infant care and accompanying the mother during breastfeeding sessions. Such involvement helps foster a positive emotional atmosphere, promotes positive maternal thinking, and supports the activation of prolactin and let-down reflexes essential for successful breastfeeding [13].

Table 6. Effectiveness of Knowledge and Husbands' Roles in Breastfeeding Success Between the Lactation Massage Educational Video Group and the Printed Leaflet Group

Variable	N	N-Gain Score	N-Gain Persen	Interpretation
Knowledge Educational Video	37	0.57	57%	Cukup Efektif
Knowledge Printed Leaflete	37	0.40	40%	Kurang Efektif
Husbands' Role Educational Video	37	0.56	56%	Cukup Efektif
Husbands' Role Educational Video	37	0.31	31%	Tidak Efektif

* Uji efektivitas N-Gain Percent

Based on the N-Gain effectiveness analysis, the effectiveness of knowledge regarding breastfeeding success in the lactation massage educational video group was classified as moderately effective, with an N-Gain score of 57%. In contrast, the printed leaflet group demonstrated lower effectiveness, with an N-Gain score of 40%.

These findings indicate that educational videos were more effective than printed leaflets in improving knowledge related to breastfeeding success.

A similar pattern was observed for husbands' roles in supporting breastfeeding. The lactation massage educational video group showed a moderately effective outcome, with an N-Gain score of 56%, whereas the printed leaflet group was classified as ineffective, with an N-Gain score of 31%. Taken together, these results suggest that the use of lactation massage educational videos was more effective in enhancing both knowledge and husbands' roles in breastfeeding success compared with printed leaflets.

Beyond improving knowledge, these findings demonstrate that educational videos also encourage behavioral change and greater active involvement of husbands in supporting breastfeeding. This effect can be explained through a behavioral framework, such as the Health Belief Model (HBM), which posits that behavior change is influenced by individuals' perceptions of benefits and their confidence in taking action [18]. Videos that present concrete examples of husbands' support such as performing lactation massage and engaging in empathetic communication may strengthen these perceptions and motivate husbands to participate more actively [10].

In contrast, printed leaflets have limitations in conveying emotional elements and practical demonstrations, which may reduce their effectiveness in translating knowledge into actual behaviour [11]. Changes in supportive roles require more than theoretical understanding; they also depend on affective and visual learning experiences. Such experiences are more readily facilitated through educational videos, which allow viewers to observe, relate to, and internalize supportive behaviors in a realistic context [12].

4. Conclusion

This study demonstrates that lactation massage educational videos are more effective than printed leaflets in improving husbands' knowledge regarding breastfeeding success. In addition, the use of lactation massage educational videos is more effective in enhancing husbands' roles in supporting successful breastfeeding. These findings highlight the potential of video-based educational media as a strategic approach to strengthening both cognitive understanding and active involvement of husbands in breastfeeding practices.

5. Acknowledgement

The authors would like to express their sincere gratitude to Dr. Siti Sugih Hartiningsih, S.Si., M.Kes, as the Head of STIKes Dharma Husada Bandung, the owner of TPMB Ciangsana Region, Bogor, as well as family members and colleagues who provided support and assistance in the completion of this scientific work.

6. References

- [1] World Health Organization, "Global Strategi for Infant and Young Child Feeding," America, 2020.
- [2] WHO, "Breastfeeding education for increased breastfeeding duration," 2023.
- [3] Kementerian Kesehatan RI, "Badan Kebijakan Pembangunan Kesehatan," Jakarta, 2024.
- [4] M. Rianda, F. & Megasari, "Metode Pijat Laktasi Pada Ibu Nifas Untuk Melancarkan Pengeluaran Asi Di Klinik Pratama Arrabih," *J. Kebidanan*, vol. 1, no. 2, pp. 159–169, 2022.
- [5] A. R. R. Febriyeni, "Pengaruh Pendidikan Kesehatan Menggunakan Media Audio Visual Terhadap Pengetahuan Dan Sikap Ibu Menyusui Tentang ASI Eksklusif," Program Studi Kebidanan Fakultas Kesehatan Universitas Fort De Kock Bukit tinggi, 2020.
- [6] D. F. Supliyani E, "Efektivitas media video tutorial penatalaksanaan ASI eksklusif terhadap keterampilan ibu dalam menyusui," *J. Ris. Kesehat. Poltekkes Depkes Bandung*, vol. 13, no. 1, pp. 143–151, 2021.
- [7] N. A. Yuliani DR, Winarso SPW, Amalia R, "Media edukasi video untuk meningkatkan breastfeeding self efficacy," *J. Sains Kebidanan*, vol. 4, no. 2, pp. 1–8, 2022.
- [8] K. N. Putri D, "Pengaruh pijat laktasi terhadap pengeluaran ASI pada ibu postpartum di RSUD Cengkareng," *J. Midwifery*, vol. 11, no. 1, pp. 145–153, 2023.
- [9] C. A. Yilmaz MP, Oren B, Yilmaz I, "Comparison of face to face and video based breastfeeding education methods on breastfeeding success," *Discov. Public Heal.*, vol. 21, no. 1, p. 148, 2024.
- [10] Z. Yushida, "Efektivitas pijat oksitosin dengan penyuluhan teknik menyusui menggunakan leaflet terhadap produksi ASI pada ibu post partum primipara," *J. SAGO Gizi dan Kesehat.*, vol. 3, no. 2, pp. 25–32, 2021.
- [11] Imelda, "Edukasi melalui video digital tentang simulasi perawatan payudara dan pijat oksitosin untuk mendukung keberhasilan ASI," *Indones. Berdaya*, vol. 5, no. 1, pp. 10–18, 2022.
- [12] S. T. Muzayyarah, "Pengetahuan dan sikap suami tentang pijat oksitosin pada ibu menyusui," *J. Oksitosin*, vol. 4, no. 1, pp. 1–7, 2023.
- [13] Y. R. Zubaidah N, Ramadhani L, "Pengaruh peran suami dalam melakukan pijat oksitosin terhadap kelancaran ASI pada ibu nifas," *J. Obstet. dan Ginekol.*, vol. 4, no. 1, pp. 58–64, 2022.
- [14] P. S. Cyntia PR, "Pengaruh penyuluhan dengan media booklet terhadap pengetahuan

- dan sikap ibu hamil tentang ASI eksklusif di Sukoharjo,” Universitas Muhammadiyah Surakarta, 2019.
- [15] D. M. Utami T, Hartatik S, “Pengaruh edukasi video teknik laktasi terhadap keterampilan menyusui pada ibu postpartum,” *J. Noncommunicable Dis.*, vol. 3, no. 2, pp. 45–52, 2022.
- [16] Kementerian Kesehatan RI, “Petunjuk Teknis Pijat Oksitosin dan Pijat Laktasi,” Jakarta, 2018.
- [17] B. E. Pérez Escamilla R, Curry L, Minhas D, Taylor L, “Impact of breastfeeding promotion, support and education interventions on breastfeeding outcomes: review of evidence,” *Public Heal. Nutr.*, vol. 24, no. 2, pp. 329–352, 2021.
- [18] H. J, “Introduction to Health Behavior Theory,” 2nd ed. Bu., 2014.