Volume 14, Issue 2, 2026: 206-221
p-ISSN 2354-7642 e-ISSN 2503-1856
Accredited by Directorate General of Higher Education, Research and Technology, Republic of Indonesia No. 35/E/KPT/2019

Jurnal Ners dan Kebidanan Indonesia
(Indonesian Journal of Ners and Midwifery)
DOI : http://dx.doi.org/10.21927/jnki.2026.14(2).206-221
Available online at: http:ejournal.almaata.ac.id/index.php/JNKI

Optimizing breastfeeding succes post-cesarean: A quasi-experimental study on biological nurturing baby-led feeding video intervention

Rialike Burhan[1*], Desi Widiyanti[1], Elly Wahyuni[1], Novia Nuraini[2], Lia Artika Sari[3]

[1]Department of Midwifery, Politeknik Kesehatan Kemenkes Bengkulu, Bengkulu, Indonesia
Jalan Indragiri Pd. Harapan No.3, Padang Harapan, Kecamatan Gading Cempaka, Kota Bengkulu, Bengkulu , Indonesia
[2]Department of Health Promotion, Politeknik Kesehatan Kemenkes Jakarta III, Jakarta, Indonesia
Jalan Arteri JORR Jatiwarna, Pondok Melati, Kota Bekasi, Jawa Barat, Indonesia
[3]Department of Midwifery, Politeknik Kesehatan Kemenkes Jambi, Jambi, Indonesia
Jalan H. Agus Salim No.09, Kenali Asam Atas, Kecamatan Kota Baru, Kota Jambi, Jambi, Indonesia

**Corresponding author* : rialike@poltekkesbengkulu.ac.id

ABSTRACT

Background: *The coverage of exclusive breastfeeding in Bengkulu Province remains low, reaching 67.08% and even declining to 52.9% in 2022, which is below the national average of 71.58%. Mothers who undergo cesarean section (CS) deliveries are more likely to experience early breastfeeding failure. Approximately 68% of post-CS mothers face difficulties in caring for their newborns and moving in and out of bed due to post-surgical pain.*
Objectives: *This study aims to evaluate the effect of an educational video on Biologic Nurturing Baby-Led Feeding on the knowledge, attitudes, and breastfeeding success of post-cesarean section mothers in Bengkulu City.*
Methods: *This study employed a quasi-experimental design using a pre-post test group approach. The research was conducted in several three.Type C hospitals in Bengkulu City from January to November 2024. A total of 60 participants were divided into two groups: the intervention group, which received education through video media, and the control group, which used a pocket book as the educational tool. The data analysis included univariate analysis, bivariate analysis using the Independent Sample T-Test, and multivariate analysis using MANCOVA.*
Results: *Statistical analysis revealed that the use of Biologic Nurturing Baby-Led Feeding educational video had a significant impact on mothers' knowledge, attitudes, and breastfeeding success (p-value = 0.05). Effect Size : knowledge : 0.555, attitudes: 0,662 and breastfeeding success : 0.735*
Conclusions: *Health education can improve mothers' knowledge, attitudes, and breastfeeding success. However, the use of the Biologic Nurturing Baby-Led Feeding educational video proved to be more effective and was preferred by the respondents.*

KEYWORD*: attitude; breastfeeding success; knowledge; pocket book; video*

Article info : Received 22 August 2025; 1st revision 02 March 2026; 2nd revision 06 May 2026; accepted 13 May 2026; available online 02 June , 2026; published 30 June 2026

INTRODUCTION

Breast milk (ASI) is the largest source of nutrition for newborns. ASI is said to be exclusive if the baby is only given ASI without the help of other foods or drinks until the age of six months. The coverage of exclusive ASI in Indonesia in 2021 increased to 71.58% from before. However, most provinces have not yet reached the national target, such as Bengkulu Province which only reached 67.08% and even decreased to 52.9% in 2022. Postpartum mothers with SCC are more likely to have difficulty breastfeeding from the first day after surgery due to post-CS pain and adjustment to the pain. This causes the tendency of mothers not to breastfeed and choose to provide additional food, which can result in babies not getting exclusive ASI and increase the risk of stunting in the future (1,2).

According to statistics from the World Health Organization, CS delivery accounts for around 10-15% of all births in developing countries. Meanwhile, the results of the 2018 RISKESDAS recorded the CS birth rate in Indonesia at 17.6% of 78,736 births. CS surgery causes tissue changes and pain due to surgery. This pain poses several challenges, where around 68% of post-CS mothers have difficulty caring for their babies, difficulty getting out of bed, and difficulty finding a comfortable breastfeeding position (3,4). The pain can cause mothers not to breastfeed their babies directly from the beginning of birth.(5)

General management of post-cesarean section (post-CS) pain generally involves the use of analgesics or pain-relieving medications. However, medication alone is not sufficient to improve the patient's ability to manage pain; therefore, a combination of pharmacological and non-pharmacological management is needed to accelerate recovery. Non-pharmacological management is required to reduce the duration of pain, which may last only a few seconds or minutes. One non-pharmacological method that can be used is *Biological Nurturing Baby-Led Feeding*. This method is a new approach that emphasizes the importance of early breastfeeding initiation in overcoming obstacles faced by mothers and babies, such as pain and low initial acceptance of breast milk. In this approach, the mother positions the baby by placing the baby on her abdomen, allowing direct and close contact between the mother and the baby. Breastfeeding education has a significant effect on the success of breastfeeding techniques in postpartum mothers (1,2,3,4,5). Previous studies on breastfeeding education in post-cesarean mothers have mostly relied on conventional

counseling methods, printed media such as leaflets or booklets, or verbal explanations. Although these methods can increase knowledge, several studies report that they are less effective in improving practical skills, maternal confidence, and long-term breastfeeding success, especially among mothers experiencing postoperative pain Printed materials do not always clearly demonstrate positioning techniques, and verbal counseling alone may be difficult to recall when mothers are in pain or under stress, leading to less optimal breastfeeding effectiveness In addition, limited visualization of breastfeeding positions may result in improper latch and persistent discomfort, affecting milk transfer and maternal satisfaction (6).

Research shows that new mothers feel more comfortable and are able to breastfeed longer if they are in a reclining or semi-reclining position. This technique can be done by the mother breastfeeding in a half-sitting position between 15°-64°, while the baby is placed on the chest and allowed to latch on naturally. This approach allows the mother to move the baby's position less, and both of the mother's hands caxn be used to support the baby to keep it safe. The mother also feels calmer, more energetic, and less tense, especially in the head, neck, shoulders, and back. In addition, the mother is not too burdened with the correct pattern or method of attachment (7). Mothers who experience decreased pain after CS are more likely to succeed in breastfeeding their babies. Successful breastfeeding is basically very dependent on the first weeks of the postpartum period which is a critical stage of the breastfeeding process. One of the media that can be used to provide education is through video media. Health education through video allows objects that look small to be clearer, can be reproduced through editing, can display illustrations according to the desired message, and store data for a certain time. Videos also attract the attention of the audience and can display the most up-to-date and relevant information. Video-based education is considered more effective in increasing a person's knowledge and abilities (1,2,4,5).

Video as a health information medium is presented in a visual format such as videos, slides, or film strips. The advantages of this medium include the ability to display miniature objects or objects that are not visible to the naked eye, reproduce image results, and present visuals that align with the intended message. In addition, videos allow information to be stored for a certain duration, attract the audience's attention, and provide actual and relevant images and information. Education using video media is conducted online, enabling mothers to access the material repeatedly (8,9,10).

The purpose of this study was to assess the impact of educational videos about Biological Nurturing Baby-Led Feeding on the knowledge, attitudes, and

success of breastfeeding of post-cesarean mothers in Bengkulu City.

MATERIALS AND METHODS

This study was conducted using the Quasi Experimental method approach with a pre-post test group design. This study was conducted in several three. Type C Hospitals in Bengkulu City, from January to November 2024, with a total of 60 respondents. Respondents were divided into two groups, namely the intervention group which was given Biologic Nurturing Baby-Led Feeding media treatment and breastfeeding teachings, and the control group which received information through a pocket book as an educational medium. The inclusion criteria for respondents included willingness to become participants, pregnant women in the third trimester with a gestational age of more than 36 weeks, had a history of Sectio Caesarea, was indicated to give birth by CS, and had an Android cellphone.

The instruments implemented in this study were questionnaires and breastfeeding behavior observation sheets The instruments used in this study were a knowledge questionnaire to measure knowledge, a questionnaire to measure attitudes, and a breastfeeding observation sheet to measure breastfeeding success. designed from the Breastfeeding Observation Sheet in the Breastfeeding Counseling Training Book (Ministry of Health of the Republic of Indonesia, 2017). In the intervention group, the video was shown 8 times, with the initial screening after the pre-test was conducted, followed by the first post-test after the screening of the film. Furthermore, the video was shown 7 times for about two weeks before the CS operation.

The second post-test measurement related to knowledge and attitudes was conducted after the 8th video screening, while the post-test measurement of breastfeeding behavior was conducted 1-3 days after the CS delivery. Meanwhile, in the control group, the same procedure was applied, but the media used was a pocket book that was read 8 times. For data analysis, the analysis used was univariate analysis, bivariate analysis using the Independent Sample T-Test, and multivariate analysis with the MANCOVA test.

RESULTS AND DISCUSSION

The characteristics of respondents in this study included age, occupation, education level, parity, and history of cesarean section. These characteristics were analyzed to describe the distribution of respondents in both the intervention and control groups and to identify factors that may influence mothers' knowledge, attitudes, and breastfeeding success. The distribution of respondent characteristics can be seen in **Table 1.**

Table 1. Respondent characteristics

Variable	Group Intervention		Control Group	
	Amount N=30	Total (100%)	Amount N=30	Total (100%)
Age				
< 20 and > 35 Years	7	23,3	4	13,3
20-35 Years	23	76,7	26	86,7
Occupation				
Doesn't work	24	80	23	76,7
work	6	20	7	23,3
Education				
Elementary-Junior High School	4	13,3	6	20
High School-University	26	86,7	24	80
Parity				
> 2	6	20	4	13,3
≤ 2	24	80	26	86,7
Cesarean Section History				
Ever had a Cesarean Section	17	56,7	11	36,7
Never had a Cesarean Section	13	43,3	19	63,3

Table 1 shows that in the intervention group, most respondents (76.7%) were aged between 20-35 years, the majority were unemployed (80%), and the highest level of education attained was senior high school to university (86.7%). In terms of obstetric history, 80.0% had a parity of ≤ 2, and 56.7% had previously undergone a cesarean section In the control group, the majority of respondents (86.7%) were also in the 20-35 year age range, most were unemployed (76.7%), and 80% had completed senior high school or higher education. Additionally, 86.7% had a parity of ≤ 2, and 63.3% had a history of cesarean section. Based on the distribution of respondent characteristics, the majority were between 20 and 35 years old, accounting for 76.7% in the intervention group and 86.7% in the control group. This age range is regarded as the ideal period for women to undergo pregnancy, childbirth, and breastfeeding, as it is associated with peak fertility.According to (11) stated that age also affects the mother's understanding of what is learned and a person's mindset.

Based on the research findings, maternal age was found to influence the level of knowledge. Mothers of more mature age tend to have better knowledge compared to younger mothers.Therefore, it can be concluded that as age increases, it is expected that a person's thinking ability and comprehension will increase, which has a positive impact on the knowledge and information received. According to (12) notoadmojdo, age affects a person's level of

understanding and mindset in receiving and processing information Therefore, it can be concluded that as age increases, an individual's thinking ability and comprehension are also expected to improve, which has a positive impact on the knowledge and information received (12). Furthermore, women aged 20.35 years are generally considered to be in a productive and mature reproductive period, both physically and psychologically. At this age, mothers tend to have better emotional stability and readiness to care for their infants, including in practicing breastfeeding. Previous studies also indicate that mothers in the reproductive age group have a higher likelihood of successfully initiating and maintaining breastfeeding because they are more receptive to health information and more capable of applying new knowledge in daily practice.(13)

Based on job characteristics, most participants in the intervention group (80.0%) and the control group (76.7%) were unemployed. The results of the study by –(14) Sulymbona stated that mothers who do not work usually have more time to spend with their children, which can have a positive effect on the family, because they can focus on learning, parenting, and household management. According to the researcher, the role of mothers as housewives has more time than working mothers, therefore they have a greater opportunity to receive information to increase their knowledge. (14)

According to Notoadmodjo (12) stated that mothers who do not work usually have more time to spend with their children, which can have a positive effect on the family because they can focus on learning, parenting, and household management. According to the researcher, the role of mothers as housewives provides more time compared to working mothers; therefore, they have a greater opportunity to receive information that can increase their knowledge.(12)

In addition, mothers who stay at home tend to have more flexibility in managing their daily activities, allowing them to participate in health education activities such as maternal classes, breastfeeding counseling, and other health promotion programs. Adequate time availability also enables mothers to observe their baby's needs more closely, including feeding cues, comfort, and breastfeeding patterns. Continuous exposure to information from health workers and educational media can improve maternal knowledge and confidence in breastfeeding practices (15).

Based on educational characteristics, most respondents came from the last level of education at the high school and college level, with a percentage of 86.7% for the high school and college level groups, namely 86.7% for the intervention group and 80.0% for the control group. According to (2) that the level of education affects an individual's ability to absorb and understand

information. Therefore, the higher a person's level of education, the better their mindset and ability to absorb information. According to (12) Notoadmodjo , the level of education affects an individual's ability to absorb and understand information. Therefore, the higher a person's level of education, the better their mindset and ability to absorb information.(12)

Furthermore, individuals with higher educational backgrounds generally possess better cognitive abilities in processing new information and evaluating the accuracy of health messages. Education can influence a person's knowledge, attitudes, and behavior in maintaining health. Mothers with higher education levels tend to be more open to new information, including health education related to breastfeeding and infant care. This condition may facilitate mothers in understanding the educational material provided during the intervention, including information about appropriate breastfeeding techniques (15).

Based on parity history, most participants had a parity of ≤ 2, with 80% in the intervention group and 86.7% in the control group. Parity can influence a mother's knowledge, attitude, and success in breastfeeding, as greater experience with previous breastfeeding is generally associated with better preparedness.This was also conveyed by (16) Fazira. It has been suggested that the number of children a mother has can influence her knowledge of lactation management, as it is shaped by her prior experiences. Regarding the history of Cesarean section, 56.7% of mothers in the intervention group had previously undergone a CS, while 63.3% of those in the control group had no history of CS.(16)

This was also conveyed by (11) Notoadmodjo who stated that the number of children a mother has can influence her knowledge of lactation management because it is shaped by her prior experiences. In addition, multiparous mothers tend to have better coping strategies in dealing with breastfeeding challenges, which may contribute to improved breastfeeding outcomes.(12)

Regarding the history of Cesarean section, 56.7% of mothers in the intervention group had previously undergone a CS, while 63.3% of those in the control group had no history of CS. Mothers with a history of cesarean delivery may experience certain physical limitations, such as postoperative pain, delayed mobility, and discomfort during early breastfeeding initiation. These conditions can potentially affect the early establishment of breastfeeding if adequate support and education are not provided. However, appropriate breastfeeding education and support from health workers can help mothers overcome these barriers and successfully initiate breastfeeding even

Table 2. The influence of biologic nurturing baby led feeding educational video on knowledge, attitude and success of breastfeeding in post sectio caesarea mothers in Bengkulu City

Variable	N	Mean	Δx̄			P Value		
Knowledge								
Pretest	30	6,03						
Posttest 1	30	7,33	1,3	0,37	1,67	0	0,04	0
Posttest 2	30	7,7						
Attitude								
Pretest	30	27,77						
Posttest 1	30	29,67	1,9	0,1	2	0,005	0,904	0,003
Posttest 2	30	29,77						
Success								
Pretest	30	19,93						
Posttest 1	30	21,93	2	0,07	2,07	0,007	0,157	0,004
Posttest 2	30	22						

after cesarean delivery (17).

Table 2 shows that before being given education, most respondents in the intervention group had knowledge (6.03), after being given education via video there was an increase (7.33) in posttest 1 and (7.70) in posttest 2. Before education was given, most participants in the intervention group had a knowledge score of 6.03, after education via video, there was an increase to 7.33 in posttest 1 and 7.70 in posttest 2. This indicates a significant increase in maternal knowledge about Biological Nurturing Baby Led Feeding. In accordance with previous research conducted by (18) showed that most participants before health education had low knowledge (56%), Nevertheless, the intervention led to an increase in knowledge to a good level (76%-100%). According to (5) Knowledge refers to an individual's comprehension of a subject, acquired through information received via the senses—such as sight, hearing, smell, and touch. This is consistent with the findings of a study conducted by (16). The study demonstrated an improvement in the average knowledge of lactation management before and after viewing the educational video, with the pretest score of 69.00 rising to 87.66 in the posttest. Video media is seen as effective in capturing attention, as it engages both visual and auditory senses, making it more appealing and engaging for participants.

In addition, video-based education allows mothers to observe demonstrations and explanations simultaneously, which can help mothers better understand breastfeeding techniques and the correct positioning in Biological Nurturing Baby Led Feeding. Through visual demonstrations, participants are able to clearly see the breastfeeding process, making it easier for them to remember and apply the

information that has been provided (11). Based on the research results, the attitude score before education was given was 27.77. After education delivered through video, there was an increase in the score to 29.67 in posttest 1 and 29.77 in posttest 2. This shows that education through video can significantly improve mothers' attitudes. (p-value <0.001). In line with res earch by (19) showed a difference in the average attitude of pregnant women regarding stunting before and after receiving education through video media, where the attitude score increased from 9.19 to 14.16. Attitude is one of the elements that influences behavior, and positive behavior can be seen if the knowledge a person has is supported by a good attitude (20). Increased knowledge can also contribute to the development of positive attitudes, considering that the formation of attitudes is greatly influenced by the knowledge that has been obtained (1). In line with the research of V. A. (21) which stated that delivering health education through videos had a significant impact on increasing mothers' attitudinal responses regarding exclusive breastfeeding, namely there was an increase in attitude scores after education was provided (p-value = 0.001).

In addition, video-based education allows mothers to observe demonstrations and explanations simultaneously, which can help mothers better understand breastfeeding techniques and the correct positioning in Biological Nurturing Baby Led Feeding. Through visual demonstrations, participants are able to clearly see the breastfeeding process, making it easier for them to remember and apply the information that has been provided (11).

Based on research findings, the breastfeeding success score before education was 19.93, while after education via video, the score increased to 21.93 in posttest 1 and 22.00 in posttest 2. Many factors influence breastfeeding success, including the mother's readiness when breastfeeding and the mother's confidence in her ability to provide breast milk (22). In line with research by Walance also showed that videos can increase mothers' beliefs and attitudes, supporting breastfeeding success for up to 6 months after receiving education (18). In the research of (8), there an improvement in the quantity of correct responses from respondents before and after the intervention using the smart mother ASI video media; from 44 to 50 correct answers. Previous research has shown that providing videos on correct breastfeeding techniques via smartphones to postpartum mothers has a positive effect on mothers' self-confidence and ability to breastfeed, so that they can face challenges and achieve breastfeeding success (22). The improvement in breastfeeding success scores after video education indicates that multimedia-based interventions can enhance both cognitive and practical skills of mothers. Videos provide visual and auditory demonstrations of breastfeeding

positions, latch techniques, and infant cues, which help mothers translate knowledge into action more effectively. This is consistent with the theory of adult learning, which emphasizes experiential and multimodal learning to improve behavioral outcomes (21).

Table 3. The influence of the biologic nurturing baby led feeding educational pocket book on knowledge, attitude and success of breastfeeding in post sectio caesarea mothers in Bengkulu City

Variable	N	Mean	$\Delta\bar{x}$			P Value		
Knowledge								
Pretest	30	4,93						
Posttest 1	30	6,1	1,17	0,9	2,07	0	0	0
Posttest 2	30	7						
Attitude								
Pretest	30	25						
Posttest 1	30	26,97	1,97	0,76	2,73	0	0,04	0
Posttest 2	30	27,73						
Success								
Pretest	30	20,7						
Posttest 1	30	21,23	0,53	0,37	0,9	0,039	0,008	0,004
Posttest 2	30	21,6						

Table 3 shows that before being given education, most respondents in the control group had knowledge (4.93), after being given education through pocket book media there was an increase (6.10) in posttest 1 and (7.00) in posttest 2.

Before receiving education, most respondents in the control group had an understanding with a score of 4.93. After being given education using a pocket book, there was an increase in posttest 1 to 6.10 and 7.00 in posttest 2. This shows a significant increase in mothers' knowledge about Biological Nurturing Baby Led Feeding. Reflecting the findings of the study by (9), also supports this finding, where there was an increase in the post-test score regarding exclusive breastfeeding at the Balowerti Health Center after being given education using pocket book media. Pocket books as a health promotion tool are very effective in conveying information and increasing knowledge because of the clear message and ease of taking home (23). Some of the advantages of pocket books are the process of conveying information that is easier to understand, an attractive design to arouse the enthusiasm of the reader, and its small size, making it easy for mothers to carry it anywhere (4).

Findings reported by Hadara et al., (2024) found that out of 15 pregnant women before intervention with pocket books, 12 people (80%) had poor knowledge, while

after the intervention, 11 people (73.3%) showed good knowledge. This indicates that pocket books have a positive impact on increasing the The level of comprehension pregnant women have about exclusive breastfeeding at the UMMI Bengkulu Hospital in 2021. These results suggest that pocket books serve as a convenient reference that mothers can revisit multiple times, reinforcing learning and aiding memory retention. In addition, the small, portable nature of pocket books allows for repeated exposure to content at the mother's own pace, which supports long-term retention and application of correct breastfeeding practices (15).

The data revealed that, before the educational session, the attitude score (25.00), after being given education through a pocket book there was an increase (26.97) in posttest 1 and (27.73) in posttest 2. This shows that providing education through pocket books can significantly improve mothers' attitudes (p-value <0.001. Aligned with research evidence conducted by (25) which stated that the use of pocket book media in health education showed positive results in increasing adolescent knowledge and attitudes regarding anemia (P-value <0.05).

Attitude is known as an individual's reaction or response to a particular stimulus or object. Predisposition facto (10) rs are basic elements that form a person's attitude (26). So if predisposition factors such as individual knowledge are strong, it will affect how the individual behaves. In line with research (27) which used pocket book media to improve adolescent knowledge and attitudes about sexually transmitted infections, the attitude score in the pre-test was 29.71 ± 2.38 and in the post-test it increased to 31.69 ± 2.93 A p-value of 0.000 (<0.05) suggests that the use of pocket book media significantly improves adolescent attitudes toward sexually transmitted infections.

The increase in attitude scores after pocket book education suggests that knowledge alone is not enough to change behavior; attitudes must also be addressed. Pocket books allow mothers to read and reflect on the content repeatedly, which helps internalize positive beliefs about breastfeeding. Improved attitudes are likely to motivate mothers to consistently apply breastfeeding techniques correctly, demonstrating that health education materials that combine knowledge and behavioral cues are more effective in changing health outcomes (22).

Table 4 below, presents the results of the Mann-Whitney test, showing that the average knowledge score in the Educational Video group was 7.70, while in the Pocket Book group it was 7.00, with a mean difference of 0.70 and a p-value of 0.028 (<0.05). This indicates a significant difference in knowledge levels between the two groups. The average attitude score was 29.77 for the Educational Video group and 27.73 for the Pocket Book group, with a

Table 4. Effectiveness of biologic nurturing baby led feeding educational video on knowledge, attitude and success of breastfeeding in post sectio caesarea mothers in Bengkulu City

Variable	Mean	Mean Difference	P-Value	Effect Size
Knowledge				
Educational Video	7,7	0,7	0,028	0,555
Pocket Book	7			
Attitude				
Educational Video	29,77	2,04	0,001	0,662
Pocket Book	27,73			
Breastfeeding Success				
Educational Video	22	0,4	0,003	0,735
Pocket Book	21,6			

mean difference of 2.04 and a p-value of 0.001 (<0.05), indicating a significant difference in attitudes. The mean score for breastfeeding success was 22.00 in the Educational Video group and 21.60 in the Pocket Book group, with a mean difference of 0.4 and a p-value of 0.003 (<0.05), also showing a significant difference. These findings suggest that the Biologic Nurturing Baby-Led Feeding Educational Video is more effective than the Pocket Book in improving knowledge, attitudes, and breastfeeding success among post-Cesarean section mothers in Bengkulu City.

Findings from the study suggest that breastfeeding success score before education was (20.70). After education via video, the score increased to (21.23) in posttest 1 and (21.60) in posttest 2. As demonstrated in the study by (10), it shows that education using pocket books and flipcharts can affect the success of exclusive breastfeeding in the Banyumulek Health Center area, Kediri District, West Lombok. Health education plays an important role in increasing maternal knowledge, which is one of the initial factors in forming positive behavior and motivation in providing breast milk to their babies (28) Booklets or pocket books are small media that convey health messages in the form of writing and pictures. This media is effective and efficient for learning, and is designed clearly and uses easy-to-understand language, covering various educational backgrounds, from elementary to high, with the hope of increasing the knowledge of breastfeeding mothers. Research conducted by (29) shows that education about breastfeeding using booklets has a positive impact on mothers' success in breastfeeding.

Researchers believe that health education using videos has a significant effect on maternal knowledge, attitudes, and breastfeeding success. In line with research (30) which states that the use of videos for education brings significant changes to

maternal knowledge and attitudes about exclusive breastfeeding, as seen from the increase in scores after the intervention. In general, health education in the form of videos makes it easier to understand information, because it combines video, sound, and images that can illustrate difficult situations that cannot be seen directly (21). Videos have their own appeal to respondents, making them more attentive to the information conveyed. With a short video duration and material presented in a concise and clear manner, information will be easily accepted by respondents (7). In line with research (31) which shows the influence of education about breastfeeding through video media on maternal confidence in breastfeeding.

The increase in breastfeeding success scores after video and booklet education demonstrates that multimedia and written educational tools complement each other. Videos provide dynamic, real-life demonstrations of breastfeeding techniques, including proper latch and positioning, which help mothers translate knowledge into practice immediately. Meanwhile, pocket books serve as portable references that mothers can revisit at home, reinforcing learning and boosting confidence (21).

This combination of media addresses both cognitive and behavioral domains. By enhancing knowledge and shaping positive attitudes, mothers are more motivated and prepared to overcome challenges such as infant refusal, sore nipples, or low milk supply. Health education using videos and booklets supports maternal self-efficacy, which is strongly correlated with the successful initiation and continuation of exclusive breastfeeding (23).

CONCLUSION AND RECOMMENDATION

Based on the research conducted, it was found that health education, regardless of the media used, was able to provide a positive impact on knowledge, attitudes, and breastfeeding success for mothers undergoing Sectio Caesarea. However, the use of video media showed better effectiveness because it used more senses and provided clearer visualization compared to pocket books. It is hoped that midwives and other health workers can utilize the Biologic Nurturing Baby Led Feeding Educational Video media for pregnant women undergoing Sectio Caesarea as one way to increase.

REFERENCES

1. Adiati CC, Firdaus R, Nurwahidin M. Efektivitas video animasi terhadap hasil belajar siswa. Akademika. 2023;12(01):69–81.https://doi.org/10.34005/akademika.v12i01.
2. Ulfa, A. F., & Wardani, T. A. (2025). Pengaruh edukasi menyusui terhadap keberhasilan tehnik menyusui pada ibu post partum. Jurnal Ilmiah Keperawatan (Scientific Journal of Nursing), 11(2), 377–381.

3. Artati E, R. P, D W. Pengaruh Media Booklet Teknik Menyusui Yang Benar Terhadap peningkatan Keterampilan Menyusui Ibu Nifas Di Wilayah Kerja Puskesmas Cawas II Intisari. Skripsi. Setiyaningsih A, Wahyuningsih W, Wijayanti T. Pengaruh Pendidikan Kesehatan Dengan Media Buku Saku Terhadap Pengetahuan Ibu Dalam Pencegahan Stunting Di Desa Kanoman Kecamatan Ngemplak Kabupaten Boyolali. Jurnal Kebidanan. 2022;14(02):173–182.https://doi.org/10.35872/jurkeb.v14i02.5
4. Deade FM, Ernita L da. N, M.A. Gambaran Tingkat Pengetahuan terhadap Kesiapan Remaja Putri Pra-Pubertas dalam Menghadapi Menarche Di Panti Asuhan Aisyiyah Bukittinggi Tahun 2021. E-Journal PSIK. 2022;6(1):67–74. https://doi.org/10.31004/jn.v6i1.3911.
5. Rahmawati DT, Syafrie IR, Hadara H. Pengaruh edukasi kesehatan terhadap keberhasilan pemberian ASI eksklusif pada ibu postpartum. Journal of Midwifery. 13(1):4552. http://ejournal.poltekkesdenpasar.ac.id/index.php/JPMS/article/view/jpms1205
6. Sofiya Z, Jeniawaty S, Alfiah S. Pengaruh Edukasi Video Teknik Menyusui Terhadap Produksi ASI Pada Ibu Nifas Di Puskesmas Kwanyar Bangkalan Madura: The Effect of Breastfeeding Technique Video Education on Breast Milk Production in Postpartum Mothers at Puskesmas Kwanyar Bangkalan Madura. Journal of Midwifery Science and Women's Health. 2023;3(2):58–62.https://doi.org/10.36082/jmswh.v3i2.1079
7. Delvina V, Riastamy SA, Sari VK, Miharti SI. Pengaruh Penggunaan Media Video Ibu Pintar ASI (IPISI) Terhadap Pengetahuan dan Breastfeeding Self Efficacy. Human Care Journal. 2024;9(2):439–449.
8. Ernawati Y, Afriyana Y, Noviani Z, Indra A, Puspitasari Y. Strategi Peningkatan ASI Eksklusif dengan Media Buku Saku di Puskesmas Balowerti Kediri. Jurnal Kreativitas dan Inovasi. 2022;2(1):18–24.https://doi.org/10.24034/kreanova.v2i1.5286
9. Fatmasari BD, Faizaturrahmi E. Pengaruh Edukasi Berbasis Buku Saku dan Lembar Balik Terhadap Keberhasilan ASI Eksklusif di Wilayah Kerja Puskesmas Banyumulek Kecamatan Kediri Lombok Barat. ProHealth Journal. 2022;17(1).
10. Artati E, R. P, D W. Pengaruh Media Booklet Teknik Menyusui Yang Benar Terhadap peningkatan. 2022.
11. Notoatmodjo S. Promosi Kesehatan dan Perilaku Kesehatan. Jakarta: Rineka Cipta; 2012.
12. U.N.I.C.E.F. State of the World's Children 2020: Nutrition, Growth and Development. New York: UNICEF;

Sulymbona N, Soviyati E, Kartikasari A, Hamsah N. Hubungan Antara Karakteristik Ibu Hamil Dengan Tingkat Pengetahuan Tentang Manajemen Laktasi Di Wilayah Kerja UPTD Puskesmas Pasawahan Kabupaten Kuningan. Journal of Nursing Practice and Education. 2021;1(2):124–140. https://doi.org/10.34305/jnpe.v1i2.265

13. World Health Organization. Data Stunting 2022. Geneva: WHO; 2022.
14. Fazira MA, Agrina A, Sari TH. Efektivitas Video Edukasi Terhadap Pengetahuan Ibu Hamil Tentang Manajemen Laktasi Di Wilayah Pesisir Pekanbaru. JUKEJ: Jurnal Kesehatan Jompa. 2023;2(1):96–104. https://doi.org/10.57218/jkj.Vol2.Iss1.702
15. Who. who. 2021 [dikutip 10 Mei 2025]. Monitoring health for the SDGs. Tersedia pada: https://apps.who.int/gho/data/node.sdg.2-2-viz-l?lang=en#content.
16. Handayani S, Marsheila RF. Pendidikan Kesehatan Tentang Teknik Pemberian ASI pada Ibu yang Bekerja Ditinjau Dari Tingkat Pengetahuan Ibu (Health Education About Breastfeeding Techniques in Working Mothers Based on Mother's Knowledge). Jurnal Kebidanan; 2022.
17. Novia SS, Rusydi AR, Idris FP. Pengaruh Edukasi Melalui Video terhadap Sikap Ibu Hamil Tentang Stunting di Pos Kesehatan Desa Gorontalo Tahun 2022. Window of Public Health Journal [Internet]. 2023;4(1):8–15.https://doi.org/10.33096/woph.v4i1.456
18. Hana, I. A., Jaladri, I., Dewintha, R., & Mulyanita. Penggunaan Video Sebagai Media Penyuluhan Terhadap Pengetahuan Gizi Pada Ibu Menyusui. Pontianak Nutrition Journal (PNJ). 2021. 4(2), 124–128. https://doi.org/10.30602/pnj.v4i2.907.
19. Safitri VA, Pangestuti DR, Kartini A. Pengaruh Video Edukasi Terhadap Pengetahuan dan Sikap Ibu dalam Pemberian ASI Eksklusif di Puskesmas Bulu Lor 2021. Media Kesehatan Masyarakat Indones [Internet]. 2021;20(5):342–348. https://doi.org/10.14710/mkmi.20.5.342-348
20. Sari DN, Fajri UN. Videohowright breastfeeding through smartphone can affect breastfeeding self efficacy on public mothers in the Regency of Banjarnegara. JNKI (Jurnal Ners dan Kebidanan Indonesia). 2022; 10(2): 110–115.https://doi.org/10.21927/jnki.2022.10(2).110-115
21. Taamu N, Wijayanti F. Penggunaan Buku Saku Sebagai Media Untuk Meningkatkan Pengetahuan Dan Keterampilan Mencuci Tangan Anak JPP. Jurnal Kesehata Poltekkes Palembang [Internet]. 2020;15(2): 80–87.https://doi.org/10.36086/jpp.v15i2.556
22. Hadara H, Syafrie IR, Rahmawati DT. Pengaruh Buku Saku Untuk

Meningkatkan Pengetahuan Ibu Hamil Tentang Pemberian ASI Eksklusif di Rumah Sakit Umum Ummi Bengkulu Tahun 2024. Journal of Midwifery. 2024;12(2):261–267.
23. Wijaya H, Susilaningrum R, Nurwulansari F. Pengaruh Edukasi Media Buku Saku Terhadap Pengetahuan dan Sikap Anemia Pada Siswi SMK Islam (Tikung Kabupaten Lamongan): Pengaruh Edukasi Media Buku Saku Terhadap Pengetahuan dan Sikap Anemia Pada Siswi SMK Islam (Tikung Kabupaten Lamongan). Gema Bidan Indonesia [Internet]. 12(1):22–30.https://doi.org/10.36568/gebindo.v12i1.185
24. MRL A, Jaya I mad. M, Mahendra ND. Buku Ajar Promosi Kesehatan. 2019.
25. RM LI, Aprilina HD. Efektivitas Media Buku Saku Penjaga Kespro Terhadap Tingkat Pengetahuan dan Sikap Remaja Tentang Infeksi Menular Seksual di SMP Negeri 7 Purwokerto. Proceeding Series on Health and Medical Sciences [Internet]. 2023;4:100–103.https://doi.org/10.30595/pshms.v4i.565
26. Oktarina OO, Wardhani YF. Perilaku Pemenuhan Gizi pada Ibu Menyusui di Beberapa Etnik di Indonesia. Buletin Penelitian Sistem Kesehatan. 2020;22(4):236–244.
27. Lisnawati N, Purantira WP, Rizkika A. Edukasi Pemberian ASI pada Bayi yang Baik dan Benar pada Ibu Menyusui Melalui Media Booklet. Jurnal Kreativitas Pengabdian kepada Masyarakat (PKM) [Internet]. 2023;6(3):948–961.https://doi.org/10.34305/jhrs.v3i01.765
28. Safitri NN. Pengaruh Media Video dan Leaflet terhadap Pengetahuan tentang Infeksi Menular Seksual di SMAN 2 Takalar. Window of Public Health Journal [Internet]. 3(6):1110–1120. https://doi.org/10.33096/woph.v3i6.556
29. Yuliani DR, Winarso SP, Amalia RA, Naufal AF. Media Edukasi Video untuk Meningkatkan Breastfeeding Self-Efficacy (Efikasi Diri Menyusui). Jurnal Sains Kebidanan. 2022;4(2):79–84. https://doi.org/10.31983/jsk.v4i2.9289