



**THE EFFECT OF USING E-BOOKLET MEDIA ON INCREASING THE KNOWLEDGE OF PRIMIGRAVIDA MOTHERS ABOUT BREASTFEEDING TECHNIQUES AND NEWBORN UMBILICAL CORD CARE**

**Hasrida\*, Melisa Rian Sari, Silvia Nada**

Bachelor of Midwifery, Sekolah Tinggi Ilmu Kesehatan Abdi Nusantara, Jl. Swadaya No.7, Jatibening, Pd. Gede, West Java 17412, Indonesia

\*[hasridaida66@gmail.com](mailto:hasridaida66@gmail.com)

**ABSTRACT**

Primigravida mothers often lack sufficient knowledge about newborn care, including umbilical cord care and breastfeeding techniques. Better education and support from healthcare professionals are essential to enhance their knowledge and skills in infant care. Effective training and counseling can help primigravida mothers feel more confident and competent in caring for their children. This study aims to determine the effect of e-booklet media on the knowledge of primigravida mothers regarding breastfeeding techniques and umbilical cord care in the service area of the Pamandegan Health Center and Midwife Clinic. This research uses a quantitative method with a pre-experimental design and a one-group pretest-posttest research design. The sample size in this study was 68 respondents, selected using total sampling, and all respondents received the intervention for 1 month. The measurement tool used in this study was a questionnaire that had undergone normality and validity tests. Normality was tested using the Shapiro-Wilk test, and data analysis was conducted using univariate analysis and bivariate analysis with the Wilcoxon test. The hypothesis test results showed a  $p\text{-value} = 0.000 < 0.05$ , indicating that the use of e-booklet media significantly affected the knowledge of primigravida mothers regarding breastfeeding techniques and umbilical cord care. It is crucial for primigravida mothers to improve their knowledge in these two aspects as it can greatly impact their ability to care for their babies effectively.

Keywords: breastfeeding; infants; mothers; umbilical cord

**How to cite (in APA style)**

Hasrida, H., Sari, M. R., & Nada, S. (2024). The Effect of using E-Booklet Media on Increasing the Knowledge of Primigravida Mothers about Breastfeeding Techniques and Newborn Umbilical Cord Care. *Indonesian Journal of Global Health Research*, 7(1), 87-98. <https://doi.org/10.37287/ijghr.v7i1.4040>.

**INTRODUCTION**

Health education is intrinsically linked to the dissemination of health messages or health promotion to communities, groups, and even individuals, enabling them to gain better knowledge about health. There is a need to utilize and enhance methods in health education to improve the quality of health services and knowledge, encouraging individuals to be independent in maintaining the health of their babies correctly and effectively, thereby reducing or preventing risks that endanger the community, especially infants and new mothers (Aji et al., 2023). Primigravida mothers, or those pregnant for the first time, often face challenges in caring for newborns, including umbilical cord care and breastfeeding techniques. A lack of knowledge in these areas can affect their ability to care for their babies effectively. One simple method or tool used to enhance mothers' knowledge is educational media, such as e-booklets for primigravida mothers, referring to women who are pregnant for the first time kalinya (Kusumawati & Zulaekah, 2021).

Conveying knowledge about breastfeeding and umbilical cord care is crucial because these aspects are often overlooked by first-time pregnant women. Exclusive breastfeeding is especially important for the growth and development of the child. According to WHO, breast

milk is the ideal food for infants as it is safe, clean, and contains antibodies such as DHA, AA, Omega 6, lactose, taurine, protein, lactobacilli, vitamin A, colostrum, fat, iron, lactoferrin, and lysozyme, all in the right amounts and composition for the baby (Pekan ASI Sedunia Tahun 2021).. Therefore, breastfeeding is essential in forming the baby's immune system, helping protect the child from many common diseases. Breast milk provides all the energy and nutrients needed for the first months of life, continuing to meet the child's nutritional needs. Exclusive breastfeeding is recommended for the first six months of the baby's life; after six months, complementary foods appropriate for the child's age can be introduced while continuing breastfeeding until the age of two years (Maharani & Yudianti, 2018). Exclusive breastfeeding has a significant relationship with the reduction of infection incidence in infants (Yustianingrum & Adriani, 2017). Various studies have shown that children who receive exclusive breastfeeding have a lower risk of infections compared to those who do not. According to the World Health Organization (WHO), tetanus and umbilical cord infections are ongoing causes of illness and death in many countries. Every year, 500,000 babies die from neonatal tetanus, and 460,000 die from bacterial infections. The neonatal mortality rate due to neonatal tetanus in Southeast Asian countries is 581 babies (Larasati et al., 2021).

The maternal mortality rate in Indonesia is 189 per 100,000 live births, making Indonesia the second-highest in ASEAN for maternal deaths. The infant mortality rate in Indonesia is 16.85 per 1,000 live births, also placing it as the third-highest in ASEAN (Sjahid Latief & Destian, 2024). The Infant Mortality Rate (IMR) is a health indicator that shows the number of infant deaths occurring at the age of 0-11 months, or under 1 year (BPS, 2023). It is one of the important indicators for assessing the quality of healthcare services and the socio-economic conditions of a country. This rate can be used to compare the performance of health systems in various countries and to set priorities in health programs. Efforts that can be made include increasing human resource capacity, fulfilling facilities and infrastructure, and community assistance, such as Screening for Pregnancy Eligibility (for prospective brides and Couples of Childbearing Age), balanced nutrition education for pregnant women, and involving health volunteers in early risk detection in the community (Ruliyandari et al., 2023).

Health education can indeed use various media to convey information effectively and efficiently. One popular and effective medium is the e-booklet. Using e-booklets allows for more detailed and clear communication, thoroughly covering the intended message. Thus, with the use of e-booklets, the community is more likely to receive and understand the information presented (Ambarsari et al., 2024). According to research results Ginting et al., (2022), some primigravida mothers reported not knowing the correct way to care for their babies, as this is their first experience as mothers. Some patients also mentioned that they would learn and ask their parents about baby care. The e-booklet is a medium that can present material in a summarized form with attractive images, making it a useful source of information for better understanding educational content (Violla & Fernandes, 2021). According to research results Puspitaningrum et al., (2017), health education using e-booklets can significantly influence the improvement of knowledge and attitudes among adolescents. With printed media, adolescents tend to find it easier to understand the light information presented and can study it independently.

From the preliminary study conducted, it was found that out of 15 postpartum mothers interviewed, 6 were breastfeeding, while 9 experienced difficulties with breastfeeding. These difficulties were attributed to a lack of understanding about baby feeding cues, incorrect

breastfeeding techniques, and scheduling issues for breastfeeding. Failures in lactation management can also stem from insufficient information on proper breastfeeding practices. Additionally, it was found that postpartum mothers generally have limited knowledge about caring for the umbilical cord of newborns. Based on the above findings, the researcher aims to study the effect of using e-booklet media on increasing the knowledge of primigravida mothers regarding breastfeeding techniques and newborn umbilical cord care in the service area of the Pamandegan Health Center and Independent Midwifery Practice.

**METHOD**

This study is a quantitative research with a pre-experimental design using a pretest-posttest approach. The research was conducted in May 2024 over a period of one month in the service area of the Pamandegan Health Center and the Midwife Clinic. The population for this study consisted of primigravida mothers with newborns, totaling 68 individuals. The sampling technique used was total sampling, which means the sample included all 68 mothers. The instrument used in this study was a questionnaire, The questionnaire used has been declared valid and reliable, with the validity test results showing a Cronbach's alpha value of 0.985 for the breastfeeding technique knowledge questionnaire and a Cronbach's alpha value of 0.906 for the newborn umbilical cord care questionnaire. Normality testing was performed using the Shapiro-Wilk test to determine if the data was normally distributed. Data analysis included univariate and bivariate analyses using the Wilcoxon signed-rank test.

**RESULTS**

Table 1.  
Frequency Distribution of Pretest and Posttest Knowledge of Primigravida Mothers on Breastfeeding Techniques and Newborn Umbilical Cord Care

Breastfeeding technique	Pretest		Posttest	
	f	%	f	%
Good	19	55,9	34	100
Fair	9	26,5	0	0
Poor	6	17,6	0	0
Umbilical cord care				
Good	4	11,8	31	91,2
Fair	16	47,1	3	8,8
Poor	14	41,2	0	0

Based on Table 1 above, it can be seen that the respondents' knowledge about breastfeeding techniques before the intervention was in the 'good' category for 55.9% of respondents, and this increased to 100% after the intervention. The largest category of respondents' knowledge about umbilical cord care before the intervention was in the 'adequate' category at 47.1%, and this improved to 91.2% in the 'good' category after the intervention.

Table 2.  
The Effect of E-Booklet Media on Knowledge of Breastfeeding Techniques Among Primigravida Mothers

E-Booklet	Mean	SD	P Value
Pretest	53,38	2,17	
Posttest	97,37	3,27	0,000

Table 2, the results of the knowledge test regarding the e-booklet media on breastfeeding techniques showed a mean score of 53.38 before the pretest, which increased to 97.37 after the intervention. The p-value obtained was  $0.000 < 0.05$ , indicating that there is a significant effect of e-booklet media on knowledge about breastfeeding techniques among primigravida mothers at Pamandegan Health Center.

Table 3.  
The Effect of Using E-Booklet Media on Increasing Knowledge of Umbilical Cord Care Among Primigravida Mothers

E-Booklet	Mean	SD	P Value
Pretest	49.29	2,38	
Posttest	95,73	3,49	0,000

Table 3, the results of the knowledge test regarding the e-booklet media on umbilical cord care showed a mean score of 49.29 before the pretest. This score increased to 95.73 after the e-booklet intervention. The p-value obtained was  $0.000 < 0.05$ , indicating a significant improvement in the effect of e-booklet media on the knowledge of primigravida mothers regarding umbilical cord care.

## DISCUSSION

### The Effect of E-Booklet Education on Primigravida Mothers' Knowledge of Breastfeeding Techniques

Based on the research results of the knowledge test regarding the e-booklet media on breastfeeding techniques showed a mean score of 53.38 before the pretest, which increased to 97.37 after the intervention. The p-value obtained was  $0.000 < 0.05$ , indicating that there is a significant effect of e-booklet media on knowledge about breastfeeding techniques among primigravida mothers at Pamandegan Health Center. The results of this study are consistent with the research conducted by Rizqiea (2019), which showed an increase in the average knowledge scores of mothers about exclusive breastfeeding after receiving education through e-booklet media ( $p < 0.000$ ). Similarly Puspitaningrum et al., (2017) found an increase in the average knowledge scores of adolescent girls about exclusive breastfeeding after being educated using e-booklet media ( $p < 0.000$ ). Education using booklet media significantly affects the improvement of knowledge and attitudes among adolescent girls. Print media tends to help adolescents understand information more easily. This improvement in knowledge and attitudes is achieved through a learning process that engages all sensory modalities, with 13% of knowledge acquired through auditory senses and 35-55% through visual and auditory senses (Puspitaningrum et al., 2017)

E-booklet education has shown positive effects on mothers' knowledge of breastfeeding techniques, as indicated by research studies. Primigravida mothers who received counseling through e-booklets demonstrated an increase in their knowledge levels regarding breastfeeding practices (Rahmata et al., 2023). Additionally, studies have highlighted the importance of knowledge about breastfeeding positions, with a significant percentage of primigravida women showing good knowledge in this area (Islamiyah et al., 2024). Furthermore, the use of digital magazines focusing on breastfeeding has been found to enhance mothers' knowledge and attitudes towards breastfeeding, emphasizing the role of technology in improving maternal understanding and practices. These findings collectively underscore the value of utilizing digital resources like e-booklets and digital magazines to educate primigravida mothers on effective breastfeeding techniques, ultimately contributing to better maternal and infant health outcomes (Rahmata et al., 2023). The results of Farooq et al., (2023) this study indicate a high level of knowledge about breastfeeding techniques, with 86.6% of respondents demonstrating good knowledge. It is important to enhance knowledge among primiparous mothers to influence their behavior regarding correct and proper breastfeeding techniques. This can lead to successful exclusive breastfeeding, which will ultimately improve the nutritional status and health of the baby. Adequate information and health education are crucial in increasing primiparous mothers' knowledge and motivation to breastfeed correctly, aiming to achieve exclusive breastfeeding without the addition of

formula milk. Such educational support is essential for achieving exclusive breastfeeding and its associated benefits.

E-Booklet education offers various advantages in enhancing knowledge and attitudes among different target groups. Studies have shown that utilizing digital booklets significantly improves knowledge and attitudes regarding various health topics, such as diet and prevention of low birth weight (Lubis et al., 2024), breast self-examination for young women (Dahlia & Agustina, 2023), anemia prevention through nutrition education, and stunting prevention for prospective newlyweds. E-Booklets provide an interactive and engaging platform for educational purposes, allowing for easy dissemination of information and increasing accessibility to crucial knowledge (Ayu et al., 2023; Sutema et al., 2023). The digital format enables flexibility, easy updates, multimedia integration, and cost-effectiveness, making it a valuable tool in health education and academic settings. Additionally, e-booklets can complement traditional teaching methods, offering a modern approach to learning that caters to diverse learning styles and preferences (Podojoyo et al., 2023).

Muhdar et al., (2018) Knowledge of pregnant women related to Early Initiation of Breastfeeding increased after being given an Early Initiation of Breastfeeding (EIBF) intervention using e-book Breastfeeding Success media, with a higher average compared to the control group who were not given intervention. Successful Breastfeeding E-books affect the practice of Early Initiation of Breastfeeding (EIBF). Interventions to provide counseling for Early Initiation of Breastfeeding (EIBF) for pregnant women are important to be carried out both directly and through health cadres, as well as the commitment of health workers who help childbirth to continue to provide Early Initiation of Breastfeeding (EIBF) and apply it during labor both spontaneously and caesarean section if maternal and fetal conditions are possible. The influence of e-booklets on knowledge of breastfeeding techniques is well-documented across several studies. Research indicates that e-booklets significantly enhance the knowledge and attitudes of pregnant women regarding exclusive breastfeeding and complementary feeding. For instance, one study found a notable improvement in pregnant women's behavior towards lactation management after exposure to an e-booklet, with a p-value of 0.000, indicating strong statistical significance (Prihatini et al., 2024). Similarly, another study reported a significant increase in knowledge and attitudes among pregnant women after receiving education through e-booklets, with a p-value of 0.05 (Devi et al., 2022). Furthermore, e-booklets have been shown to effectively improve general practitioners' knowledge of breastfeeding problems, which is crucial for supporting mothers (Muhdar et al., 2018). Overall, these findings suggest that e-booklets are an effective educational tool, positively influencing knowledge and practices related to breastfeeding techniques among both mothers and healthcare providers.

This study reveals that e-booklet education significantly enhances primigravida mothers' knowledge of breastfeeding techniques. Prior to the intervention, many mothers had limited to moderate knowledge about proper breastfeeding practices. However, following the e-booklet education, there was a marked improvement in their understanding of effective breastfeeding techniques. The e-booklet provided clear, structured, and easily accessible information, which empowered mothers with the confidence and skills needed for successful breastfeeding. Improved knowledge about breastfeeding techniques is critical, as it can lead to successful exclusive breastfeeding, which has numerous benefits for the baby's health, including reduced infection risks and optimal growth. This study underscores the effectiveness of using e-booklets as an educational tool to improve primigravida mothers' breastfeeding knowledge. It highlights the importance of developing and utilizing accessible educational resources to

support new mothers in achieving optimal breastfeeding practices, ultimately contributing to better maternal and infant health outcomes.

### **The Effect of E-Booklet Education on Primigravida Mothers' Knowledge of Umbilical Cord Care**

Based on the research results of the knowledge test regarding the e-booklet media on umbilical cord care showed a mean score of 49.29 before the pretest. This score increased to 95.73 after the e-booklet intervention. The p-value obtained was  $0.000 < 0.05$ , indicating a significant improvement in the effect of e-booklet media on the knowledge of primigravida mothers regarding umbilical cord care. This study is consistent with the research by Ginting (2021), which demonstrated that postpartum mothers' ability to care for newborn umbilical cords was categorized as poor in the majority (75.0%) before counseling, and as good in the majority (92.5%) after counseling. The T-test yielded a significant value of  $0.000 < 0.05$ , indicating that the data is statistically significant. Based on these results, it can be concluded that there is effectiveness in the counseling on umbilical cord care in improving the ability of postpartum mothers at Rumah Sakit Nurul Hasanah Kutacane in 2021. It is hoped that future research will utilize different measurement tools and methods with larger sample sizes to gain a broader understanding. Additionally, more engaging health education methods should be used to increase respondent enthusiasm in the study.

The umbilical cord is the lifeline for the fetus during pregnancy, as it supplies all the essential nutrients and oxygen needed for fetal development. After birth, this channel is no longer required and must be cut and clamped with a plastic clamp. The remaining part of the umbilical cord still attached to the baby's abdomen, also known as the umbilical stump, needs proper care to prevent infection. The umbilical cord (funiculus umbilicalis), also referred to as the funis, extends from the fetal umbilicus to the surface of the fetal placenta. According to Maryuni & Wahyuni (2018), proper umbilical cord care and its detachment within the first week significantly reduce the incidence of infections in neonates. Wharton's jelly, which forms necrotic tissue, can become colonized by pathogenic organisms, potentially leading to skin infections and systemic infections in the baby. The most important aspect of umbilical cord care is keeping the cord dry and clean. Wash hands with soap and clean water before handling the cord. Gently clean the skin around the umbilical cord with a damp cotton swab, then loosely cover it with clean/sterile gauze.

Damanik (2019) emphasizes that proper umbilical cord care is crucial, particularly for mothers, as they are more attuned to their baby's daily development. Good cord care includes avoiding the use of dermatol powder and traditional remedies that may not ensure sterility. In practice, many mothers still follow cultural traditions, such as applying traditional remedies to the cord to promote early detachment or covering it with coins to prevent an "outie" appearance. These actions are unnecessary and could actually be harmful. Having a good knowledge of umbilical cord care significantly impacts the health of the baby by reducing the risk of infections and improving overall well-being. Studies conducted among Kurdish mothers (Saadi et al., 2023), postnatal mothers in Uganda (Edeket & Nassazi, 2024), and a case study in Indonesia all emphasize the importance of proper cord care practices in preventing neonatal infections, which can lead to serious health complications and even death. The research findings highlight that mothers with accurate knowledge about cord care tend to follow recommended practices such as cleaning the cord stump properly, using appropriate substances, and understanding when the cord will detach. Health education plays a crucial role in empowering mothers to provide optimal care for their newborns' umbilical cords,

ultimately contributing to a healthier start in life for the babies (Marsela & Anjani, 2024; Rachmawati & Yuliani, 2024).

The researcher provided education on the care and prevention of umbilical cord infections. This included instructions on maintaining the cleanliness of the cord stump and ensuring it does not come into contact with urine, feces, or dirt. Diapers should be positioned below the umbilical cord to avoid contamination. If the cord stump becomes soiled, it should be cleaned with flowing water and soap, dried promptly, and not covered. Applying substances such as traditional remedies, kitchen ash, or other materials to the cord stump is prohibited, as these can cause infections and tetanus, potentially leading to neonatal death. Signs of infection to watch for include redness around the cord stump, pus or discharge, and a foul odor. Careful monitoring and prompt reporting to a doctor are necessary if there is bleeding, swelling, discharge, redness, or a bad smell. As a result, the mothers understand the instructions given by the midwife on how to care for the umbilical cord to prevent infection (Susanti & Putri, 2021). The effect of e-booklet education on primigravida mothers' knowledge of umbilical cord care has been positively highlighted in recent studies. A quasi-experimental study demonstrated that educational interventions significantly improved maternal knowledge regarding umbilical cord care, indicating that structured educational programs can enhance understanding and practices among new mothers (Inayat et al., 2022). Additionally, a review emphasized the importance of tailored educational interventions, including digital formats like e-booklets, in addressing cultural beliefs and socio-economic factors that influence umbilical cord care practices (Obeagu & Obeagu, 2024). Moreover, while another study focused on e-booklet education related to nutrition, it found a significant increase in maternal knowledge post-intervention, although it did not correlate with changes in children's nutritional intake<sup>[4]</sup>. This suggests that while e-booklet education can effectively enhance knowledge, the application of that knowledge in practice may vary. Overall, these findings support the notion that e-booklet education can be a valuable tool in improving primigravida mothers' knowledge of umbilical cord care (Rahmata et al., 2023).

Umbilical cord care is essential for preventing infections and ensuring newborn health. Proper care practices are crucial as infections can enter through the cord stump, leading to severe complications, including tetanus, which is caused by *Clostridium tetani* entering through unclean practices (Marsela & Dwi Anjani, 2024). Research indicates that cultural beliefs, socio-economic status, and access to healthcare information significantly influence mothers' approaches to cord care. A study among Kurdish mothers revealed that while a majority had good knowledge and practices regarding cord care, traditional practices still played a role in their care methods (Saadi et al., 2023). Furthermore, the implementation of national recommendations has improved umbilical cord care practices in Slovenia, leading to more consistent and evidence-based approaches (Nosan, 2024). Open umbilical cord care has also been shown to facilitate faster detachment of the cord, highlighting the importance of adopting effective care methods (Fajrin & Namira, 2024). Overall, enhancing maternal education and addressing cultural misconceptions are vital for optimizing umbilical cord care and improving neonatal outcomes.

This study demonstrates that education using e-booklet media has a significant impact on improving primigravida mothers' knowledge of umbilical cord care. Prior to receiving education, mothers' knowledge of umbilical cord care was generally low to moderate. However, after receiving information through the e-booklet, there was a substantial increase in their understanding of the correct techniques for caring for the umbilical cord of a newborn. Education via e-booklet provides structured, clear, and easily accessible information, which

helps mothers feel more confident in caring for their baby's umbilical cord. This increased knowledge is crucial because proper umbilical cord care can reduce the risk of infection and other complications that can affect the baby's health. This improved knowledge is expected to lead to better care practices, which, in turn, can enhance the health and safety of newborns. Thus, the use of e-booklet media as an educational tool has proven effective in enhancing primigravida mothers' knowledge about umbilical cord care. This highlights the importance of developing and implementing accessible educational resources to support new mothers in performing optimal baby care.

## **CONCLUSION**

Based on the research results and discussion above, the researcher draws the following conclusions: The average knowledge of primigravida mothers about breastfeeding techniques, as assessed before the intervention, was 63%. After the health promotion using e-booklet media, the posttest results showed an increase to 100%. Similarly, the average knowledge about umbilical cord care for newborns among primigravida mothers was 55% before the intervention. After receiving education through the e-booklet, the posttest results indicated an increase to 90%. Hypothesis testing using the Wilcoxon test revealed that the knowledge of breastfeeding techniques at Pamandegan Health Center and the knowledge of umbilical cord care at Independent Midwifery Practice underwent significant changes, with p-values of 0.000 (p-value < 0.05). Therefore, there is an effect of using e-booklet media on the knowledge of breastfeeding techniques and umbilical cord care for newborns among primigravida mothers.

## **REFERENCES**

- Ambarsari, R., Widyastutik, D., & Rohmatika, D. (2024). Efektivitas Media Booklet “Dismenorea Sahabatku” Terhadap Tingkat Pengetahuan Remaja Putri Di Smk Kesehatan Citra Semesta Indonesia.
- Ayu, E. K. N., Setyarini, D. I., Marcelina, S. T., & Wulandari, L. P. (2023). The Effect Of Educational E-Booklets On Prospective Newlyweds’ Knowledge Level About Stunting Prevention. *Jurnal Aisyah : Jurnal Ilmu Kesehatan*, 8(3). <https://doi.org/10.30604/jika.v8i3.2471>
- Badan Pusat Statistik Indonesia. (2023). Sensus Penduduk 2020 - Indonesia. 09, 1–44.
- Dahlia, M. D., & Agustina, I. F. (2023). E-Booklet Media Can Increase Teenagers’ Knowledge About Breast Self-Examination. *Journal Of Midwifery*, 8(2), 54. <https://doi.org/10.25077/jom.8.2.54-61.2023>
- Devi, A., Astidio, N., & Nur Subandriani, D. (2022). Effect Of Education With E-Booklets On Exclusive Breast Milk And Supplementary Foods (Mp-Asi) On Knowledge And Attitude Of Pregnant Mothers In Stunting Prevention Program. *Jurnal Riset Gizi*, 10(1).
- Dwiayu Larasati, M., Fadhilah Rahmani, S., Mashiral Haqqi, P., & Nurmahlia Ananda, Z. (2021). Pengaruh Pengetahuan Ibu Terhadap Perawatan Tali Pusat Pada Bbl Di Puskesmas Tanah Abang Jakarta Pusat Periode 2021. *Jurnal Ilmiah Ilmu Kesehatan*, 9(3), 538–550.
- Edek, A., & Nassazi, J. (2024). Sj Pediatrics And Child Health Africa Sj Pediatrics And Child Health Africa. 1(5).



- Fajrin, D. H., & Namira, N. S. S. (2024). Asuhan Kebidanan Fisiologis Holistik Neonatus Dengan Perawatan Tali Pusat Terbuka. *Jurnal Sains Dan Teknologi Kesehatan*, 4(1), 1–5. <https://doi.org/10.52234/jstk.v4i1.228>
- Farooq, R., Khalid, M., Murtaza, S., Aziz, M., Khalid, A., & Hassan, Z. (2023). Knowledge Of Breast Feeding Among Primigravida Mothers. *Bangladesh Journal Of Medical Science*, 11(4), 312–316. <https://doi.org/10.3329/bjms.v11i4.12603>
- Ginting, E. I. (2021). Efektifitas Penyuluhan Perawatan Tali Pusat Terhadap Kemampuan Ibu Post Partum Dalam Perawatan Tali Pusat Bayi Baru Lahir Di Rumah Sakit Nurul Hasanah Kutacane. *Best Journal (Biology Education, Sains & Technology)*, 4(1), 192–198.
- Ginting, M., Tamba, D., & Novita. (2022). Pengetahuan Ibu Primigravida Tentang Pemberian Asi Eksklusif Di Rsia Stella Maris Medan. *Jurnal Darma Agung Husana*, 9(1), 24–31.
- Inayat, T., Kausar, S., Warriach, M., Anwer, Z., & Khalid, A. (2022). Effects Of Educational Intervention On Maternal Knowledge Regarding Umbilical Cord Care Of New-Borns. *Pakistan Journal Of Medical And Health Sciences*, 16(5), 679–682. <https://doi.org/10.53350/pjmhs22165679>
- Islamiyah, A. N., Isfentiani, D., Purwanti, D., & Kusumaningtyas, K. (2024). Digital Empowerment : Enhancing Maternal Knowledge And Attitudes Towards Breastfeeding Through “ Sobat Busui ” Magazine Intervention. 1–7.
- Kusumawati, Y., & Zulaekah, S. (2021). Booklet Sebagai Media Edukasi Dalam Meningkatkan Pengetahuan Kesehatan Mental Ibu Hamil. *Proceeding Of The Urecol*, 13, 50–58.
- Lubis, N. F. H., Mahalia, L. D., & Oktaviyani, P. (2024). Pengaruh Edukasi Menggunakan Booklet Digital Terhadap Berat Badan Lahir Rendah Of Pregnant Women About Diet Pattern And Low Birth Weight. *Jurnal Bahana Kesehatan Masyarakat*, 8(1), 27–34.
- Maharani, I. S., & Yudianti, I. (2018). Breastfeeding Practice And Time Of Umbilical Cord Detachment In Newborn. *Jurnal Ilmiah Kebidanan*, 4(2), 125–134.
- Marsela, Y., & Dwi Anjani, A. (2024). Perawatan Luka Untuk Pencegahan Infeksi Pada Tali Pusat Bayi Di Bpm Bidan Anova Saragih, S.Keb. Zona Kebidanan: Program Studi Kebidanan Universitas Batam, 14(2), 104–113. <https://doi.org/10.37776/zkeb.v14i2.1374>
- Maryuni, & Wahyuni, S. (2018). Pengetahuan Ibu Tentang Perawatan Tali Pusat Pada Bayi Baru Lahir. *Jurnal Impuls Universitas Binawan*, Iii, 269–273.
- Muhdar, A., Indria, M., & Rusniah. (2018). Efektifitas Pemberian E-Booklet Tentang Permasalahan Menyusui Terhadap Peningkatan Pengetahuan Dokter Umum Di Puskesmas Kota Malang. *Jurnal Kesehatan Islam*, 7(1).
- Nosan, G. (2024). Umbilical Cord Care-Impact Of National Recommendations. *Central European Journal Of Paediatrics*, 20(1), 23–29. <https://doi.org/10.5457/p2005-114.355>
- Obeagu, E. I., & Obeagu, G. U. (2024). An Update On Factors Affecting Umbilical Cord Care Among Mothers: A Review. *Medicine*, 103(28). <https://journals.lww.com/md->

- Journal/Fulltext/2024/07120/An\_Update\_On\_Factors\_Affecting\_Umbilical\_Cord\_Care.37.Aspix
- Pekan Asi Sedunia Tahun 2021 “Melindungi Dan Memfasilitasi Busui Adalah Kewajiban” – Dinas Kesehatan Kota Surakarta. (N.D.).
- Podojoyo, P., Syafira, A., Hartati, Y., & Kusumawaty, I. (2023). Nutrition Education Using E-Booklet Against Hemoglobin Levels Of Young Women. *International Journal Of Public Health Excellence (Ijphe)*, 3(1), 214–221. <https://doi.org/10.55299/Ijphe.V3i1.565>
- Prabu Aji, S., Setyo Nugroho, F., & Rahardjo, B. (2023). Promosi Dan Pendidikan Kesehatan Di Masyarakat (Strategi Dan Tahapannya). Pt Global Eksekutif Teknologi.
- Prihatini, F., Sulistyowati, D. I. D., Elisa, E., & Wagiyono, W. (2024). E-Booklet On Preparation Behavior For Exclusive Breastfeeding Of Pregnant Women. *Jendela Nursing Journal*, 8(1), 69–75. <https://doi.org/10.31983/Jnj.V8i1.11530>
- Puspitaningrum, W., Agushyana, F., Mawarni, A., & Nugroho, D. (2017). Pengaruh Media Booklet Terhadap Pengetahuan Dan Sikap Remaja Putri Terkait Kebersihan Dalam Menstruasi Di Pondok Pesantren Al-Ishlah Demak Triwulan Ii Tahun 2017. *Jurnal Kesehatan Masyarakat*, 5(4), 2356–3346.
- R.K.Damanik., L. (2019). 290558-Hubungan-Perawatan-Tali-Pusat-Dengan-Kej-3e562ac0 (2). *Jurnal Keperawatan Priority*, Vol,2 No.2(2), 51–60.
- Rachmawati, A., & Yuliani, D. A. (2024). Midwifery Care For Mrs. N Baby Provision Of Cord Care Health Education With Wet And Smelly Cord Problems. *Proceedings Series On Health & Medical Sciences*, 5, 63–68. <https://doi.org/10.30595/Pshms.V5i.963>
- Rahmata, M. F., Riyadi, B. D., Hadisuyitno, J., & Suprajitno, S. (2023). E-Booklet Media Affecting Mother’s Knowledge But Not The Level Of Nutrition Consumption Of Elementary School Children With Excess Nutrition. *Jurnal Ners Dan Kebidanan (Journal Of Ners And Midwifery)*, 10(1), 032–039. <https://doi.org/10.26699/Jnk.V10i1.Art.P032-039>
- Rizqiea, N. S. (2019). The Exclusive Breastfeeding Booklet For Knowledge And Skills Mother. *Jurnal Ilmiah Kesehatan Media Husada*, 8(1), 22–31. <https://doi.org/10.33475/Jikmh.V8i1.193>
- Ruliyandari, R., Kes, M., Utami, F. P., Km, S., Kes, M., Agustin, H., Km, S., & Yogyakarta, B. P. D. I. (2023). Model Penanganan Program Percepatan Penurunan Angka Stunting Di Kabupaten Bantul Model Penanganan Program Percepatan Penurunan Angka Stunting Di Kabupaten Bantul ( Studi Kasus Di Kapanewon Imogiri ) : Fitriana Putri Utami , Skm ., M . Kes : Helfi Agustin .
- Saadi, H. O., Sdeeq, H. S., Hussein, M. M., Blbas, H. T., Qadir, K., & Muhammed, S. M. (2023). Umbilical Cord Care Knowledge And Practice Among Sample Of Kurdish Women. *Technium Biochemmed*, 6, 41–55. <https://doi.org/10.47577/Biochemmed.V6i.9705>
- Sjahid Latief, M., & Destian, L. (2024). Evaluasi Dan Outcome Terapi Penggunaan Antibiotik Profilaksis Pada Pasien Sectio Caesarea Di Rumah Sakit Muhammadiyah

- Taman Puring Jakarta. *Indonesian Journal Of Health Science*, 4(1), 28–39. <https://doi.org/10.54957/Ijhs.V4i1.732>
- Susanti, E., & Putri, P. (2021). Pelatihan Bagi Siswa Palang Merah Remaja Dalam Memberikan Pertolongan Pertama Pada Luka. *Abdikemas: Jurnal Pengabdian Kepada Masyarakat*, 3(2), 193–198.
- Sutema, I. A. M. P., Suryaningsih, N. P. A., Reganata, G. P., & Widowati, I. G. A. R. (2023). The Effect Of E-Booklet Education On Treatment Behaviour Of Tuberculosis Patients At Denpasar City Health Centre. *Pharmacy Education*, 23(2), 163–167. <https://doi.org/10.46542/Pe.2023.232.163167>
- Violla, R., & Fernandes, R. (2021). Efektivitas Media Pembelajaran E-Booklet Dalam Pembelajaran Daring Untuk Meningkatkan Hasil Belajar Siswa Pada Mata Pelajaran Sosiologi. *Jurnal Sikola: Jurnal Kajian Pendidikan Dan Pembelajaran*, 3(1), 13–23. <https://doi.org/10.24036/Sikola.V3i1.144>
- Yustianingrum, L. N., & Adriani, M. (2017). Perbedaan Status Gizi Dan Penyakit Infeksi Pada Anak Baduta Yang Diberi Asi Eksklusif Dan Non Asi Eksklusif. *Amerta Nutrition*, 1(4), 415. <https://doi.org/10.20473/Amnt.V1i4.7128>