

E-BOOK USE OPTIMIZES THIRD TRIMESTER PREGNANT WOMEN'S KNOWLEDGE OF EXCLUSIVE BREASTFEEDING

Atik Setyaningsih¹, Winarsih², Zumrotun Naim³

^{1,3} Undergraduate Midwifery Study Program, Estu Utomo Health College, Boyolali, Indonesia

²Midwifery Professional Study Program, Estu Utomo Health College, Boyolali, Indonesia

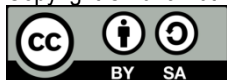
Corresponding Author: winarsihakbidyo@gmail.com

ABSTRACT

The coverage of exclusive breastfeeding at Tulang Bawang Baru Community Health Center in 2024 was 42.12% with a target of 80%, That it is necessary to provide education on the use of E-Books as an educational medium about exclusive breastfeeding. The purpose of this study was to determine the effect of education using e-books on the knowledge of third trimester pregnant women about exclusive breastfeeding. The quantitative research design used a pre-experimental design and a one group pretest-posttest approach. The population in this study was all third trimester pregnant women with a sample of 40 respondents using total sampling. Data collection was carried out using a questionnaire. Univariate and bivariate analysis were carried out using a t-test. The average knowledge of third trimester pregnant women about exclusive breastfeeding before being given education using E-Books was 62.83, and after being given education was 84.33. The paired sample t-test obtained a p-value of $0.000 < \alpha 0.005$. The educational use of e-books has significantly impacted the knowledge of exclusive breastfeeding among pregnant women in their third trimester in the Tulang Bawang Baru Community Health Center (Puskesmas). The Puskesmas can utilize e-books as an alternative educational medium in their health promotion programs.

Keywords: Exclusive Breastfeeding; E-book; Knowledge; Pregnant Women; Third Trimester

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INTRODUCTION

Exclusive Breast Milk (ASI) is breast milk that is given to baby since born during six month , without add and/ or replace with food or other drinks (except medicines, vitamins and minerals). Exclusive breastfeeding started in time one hour after born until baby aged 6 months (Wijaya, 2019). Children who receive breast milk show more results good on the test intelligence as well as possibility experience obesity and diabetes are more low (Anggraini, 2022). In addition, breast milk also provides benefit health, nutrition and emotional for children and mothers (Rosyida et al, 2020) Babies who do not breastfed in a way exclusive can own risk distant death more big consequence diarrhea or pneumonia than breastfed babies. In addition, breastfeeding support system immunity body baby and can protect they later day from condition chronic like obesity and diabetes. However, regardless from all benefit potential, less of 1 in 2 (48%) babies aged

0–5 months worldwide are breastfed in a way exclusive. South Asia has prevalence highest exclusive breastfeeding with 60% of babies breastfed in a way exclusive. In contrast, only 26% of babies 0–5 months old in North America who are breastfed in a way exclusive (UNICEF, 2023). Based on data from Indonesia Health Profile 2023, coverage baby The percentage of children receiving exclusive breastfeeding in Indonesia is 63.9%. The target achievement is 50 % (Ministry of Health of the Republic of Indonesia, 2024). Coverage baby getting exclusive breastfeeding in North Lampung Regency in 2023 was 73.7 % (Health Office) Lampung, 2024). Exclusive Breastfeeding Coverage in Community Health Centers Tulang Bawang Baru with a target of 80% in 2022 only reaching 45.57% of babies who are successfully exclusively breastfed, in 2023 it will be 43.71% and in 2024 it will be 42.12% (PKM Tulang Bawang Baru, 2025). Efforts to increase coverage This with give correct and accurate information about various benefits of exclusive breastfeeding

for Mother and baby so that can increase awareness public about importance exclusive breastfeeding for infants (Saputri, I. N., Ginting, D. Y., & Zendato, 2019). Efforts to overcome low Exclusive breastfeeding coverage in Indonesia is with empowering public through Group Mother's Supporter, socializing Regulation Government Regulation No. 33 of 2012 concerning exclusive breastfeeding and providing power breastfeeding counselor (Mirawati, Masdiputri, RSN, Puteri, MD, Hikmah, T., 2022) Exclusive breastfeeding can lower risk allergies, disorders respiratory problems, diarrhea, and obesity in children. Babies who do not receive exclusive breastfeeding risky more tall experience disturbance health, such as infection digestion, ARI, and infections ears, as well as more prone to to non- infectious diseases that affect nutritional status (Safitri, 2022). Risk death consequence diarrhea in babies without exclusive breastfeeding increased 3.94 times (Salamah, 2019). In addition, the risk lack nutrition increased 17.3 times, inhibiting growth and power stand body babies (Retnawati, 2022). Providing complementary feeding before six month increase risk diarrhea 17 times 3 times and ISPA 3 times compared to babies who receive exclusive breastfeeding (Listianingsih, 2024) According to study Sitohang et al. (2019) revealed that influencing factors in exclusive breastfeeding that is knowledge mother, support husband, preparation physical and mental, and the role counseling officer health about Exclusive Breastfeeding, then from That education or counseling about Exclusive Breastfeeding must done. Good knowledge about Exclusive Breastfeeding of course it is very important in support success Exclusive breastfeeding. Knowledge the must Already equipped since the pregnancy process and when approaching labor so that Mother Already Can prepare all something for the breastfeeding process. Selection Mother third trimester of pregnancy as target in study This based on considerations that phase This is very important period in prepare self facing the process of childbirth and breastfeeding. In the third trimester, the mother pregnant start focus prepare all aspect approaching birth babies, including readiness physical and mental for provide breast

milk. Therefore that, education regarding exclusive breastfeeding given during the period. This considered more effective because Mother is at in ready condition accept information and immediately will implement it after baby birth. In addition, education in the third trimester allows Mother For plan exclusive breastfeeding since early, including understand importance Initiation Early Breastfeeding (IMD) for a moment after baby birth. According to Aziz and Husaidah (2021), breastfeeding since beginning life babies are very important For guard health and survival life baby. Knowledge gained before labor will equip Mother with trust self and motivation For breast-feed in a way exclusive during six month First life babies. According to (Notoatmodjo., 2014) knowledge is results from know and happen after people do sensing to something object certain. Health education with media also can cause interest in the targets education health (Notoatmodjo., 2014) . Message in a medium used in activity education health have objective that is For give influence to target and also invite him For implement about material what has been given to the target (Mubarak, 2014). Previously, education regarding exclusive breastfeeding in the work area Community Health Center New Tulang Bawang in general done in a way conventional, namely through counseling face face by force health moment visit to integrated health post or health center. However, the limitations time, amount power health, as well as lack of variety of educational media make delivery information Not yet even and less maximum. Education tends to nature One direction and not all Mother pregnant get equal opportunity For get information in a way Comprehensive and in-depth. Using e-books as an educational medium regarding exclusive breastfeeding for Mother pregnant trimester III E-Book can accessible with easy through various 5 digital devices such as smartphones, tablets, or computer, so that allows Mother pregnant get information When anywhere and anytime without must present directly at the facility health (Safitri, 2022). In terms of efficiency, the use of E-Books also reduces need will material print, which means savings costs and support to sustainability environment through subtraction use paper. This

advantage become mark add, especially in demanding situation mobility limited or when access direct to facility health difficult carried out (Retnawati, 2022). In addition, mothers pregnant can repeat material in accordance with needs and speed learn each one, so increase understanding deep about the importance of exclusive breastfeeding. In general overall, the use of e-books in education health Mother pregnant No only make it easier access and delivery information in a way interactive, but also supports improvement sustainable knowledge. With Thus, e-books become effective choice of educational media in educate Mother pregnant about the benefits of exclusive breastfeeding, which ultimately can contribute to improving health status mothers and babies in the region. The results of the study preliminary held on February 20-27 February 2025 through interview against 10 mothers who were 32-38 weeks pregnant in the Work Area Community Health Center Tulang Bawang Baru. Results of interviews conducted is as following : Mrs. A, 27 years old , Age 38 weeks pregnant, high school education, parity 2, housewife occupation Mrs. A knows that exclusive breastfeeding important For baby, but He Still assume that baby 6 needs water additionally. He also revealed that pressure from family often make it consider giving more formula milk early, Mrs. B, 30 years old, Age 36 Weeks Pregnant, Diploma 3 Education, Parity 1, Occupation Private Employee. Mrs. B has sufficient understanding Good about Exclusive Breastfeeding and knowing the benefits For health baby . However, he still in doubt whether breast milk production Later will Enough For fulfil need the baby without additional formula milk. Mrs. C, 25 years old, Age 37 weeks pregnant, high school education, parity 3, housewife occupation Mrs. C considers that exclusive breastfeeding means provide breast milk together with food companion since 4 months old . He get information from his family and not yet Once get education direct from power health . Mrs. D, 28 years old, Age 39 Weeks Pregnant, Bachelor's Degree, Parity 2, Civil Servant Occupation Mrs. D understands the concept of exclusive breastfeeding and has get information from power health and digital media. He planning For implementing exclusive

breastfeeding for 6 months full . Mrs. E, 24 years old, Age 35 weeks pregnant , junior high school education, parity 2, housewife occupation Mrs. E has very limited knowledge regarding Exclusive Breastfeeding . He consider that baby need given water since born and worried about breast milk only No Enough For fulfil need nutrition baby. Based on results interview against 10 mothers 7 out of 10 mothers No know that exclusive breastfeeding means only provide breast milk without addition food or drink others, including water, for 6 months First life babies. Some mothers Still consider giving 7 formula milk or food companion since age 3-4 months as It 's a natural thing. The benefits of exclusive breastfeeding mentioned by mothers Still limited to benefits general like " making baby healthy," without explanation specific about other benefits such as prevention infection and support development brain baby . Source information Mother more Lots originate from experience family or tradition local , with only 2 out of 10 mothers get it information from power health or digital media. The obstacles experienced Mother in exclusive breastfeeding covering Lack of breast milk production pressure from family For giving formula milk. Belief that baby need water other than breast milk. From the findings this, can concluded that knowledge Mother pregnant TM III regarding Exclusive Breastfeeding in this region Still limited, good from aspect definition, benefits, and practice. Therefore that, is necessary more education effective and easy accessible, such as through use of e-books, for increase understanding Mother as well as support the success of the Exclusive Breastfeeding program. Based on background back above researchers interested do study with title "Influence education using E-Books against Knowledge of Pregnant Women in TM III Regarding Exclusive Breastfeeding in the Work Area Community Health Center "New Tulang Bawang, North Lampung Regency ".

METHOD

This study employed a quantitative approach using a pre-experimental one-group pretest-posttest design without a control group. The research was conducted in April 2025 in the

working area of the Tulang Bawang Baru Community Health Center, North Lampung Regency, which consists of eight villages. The population included all third-trimester pregnant women in the area, and total sampling was applied, resulting in 40 respondents. Data collection involved administering a pretest, providing an educational intervention using an e-book on exclusive breastfeeding, and conducting a posttest to assess changes in respondents' knowledge.

The research instrument was a knowledge questionnaire adopted from Suryaningsih, (2022), consisting of 15 multiple-choice questions covering understanding of exclusive breastfeeding, colostrum, breastfeeding time and duration, benefits and content of breast milk, breastfeeding frequency, and breastfeeding techniques. Each correct answer was scored 1 and incorrect answers scored 0. The questionnaire had been tested for validity ($r = 0.813$; range 0.578–0.884) and reliability, with a Cronbach's Alpha value of 0.864, indicating good internal consistency. The intervention was conducted in two sessions (morning and afternoon) to facilitate respondent mobilization across villages.

Data were collected through self-administered questionnaires, including respondent characteristics such as age, education, occupation, and gestational age. The data were analyzed descriptively and inferentially using SPSS software. The difference between pretest and posttest knowledge scores was analyzed using a paired sample t-test. Ethical principles were strictly applied, including informed consent, voluntary participation, and confidentiality, with assurances that the data collected would be used solely for the development of scientific knowledge. This research has been subjected to an ethical test for similarity of titles which has been approved by the Estu Utomo Health College library.

RESULTS

Characteristics Mother pregnant (age, education, and occupation) in the Work Area Community Health Center New Tulang Bawang, North Lampung Regency

Table 4.1

Characteristics respondents (age, occupation, and education) in Working area Community Health Center New Tulang Bawang, North Lampung Regency

Variables	Category	Frequency	Percent
Age	20 – 35 years	36	90.0
	< 20 and >35 years	4	10.0
	housewife	28	70.0
Work	civil servant	1	2.5
	Self-employed	11	27.5
	S1	1	2.5
Education	Senior High School	34	85.0
	Junior High School	5	12.5
Total		40	100.0

Source : Primary Data (2025)

Based on table 4.1 is known that from 40 respondents as many as 36 (90.0%) with aged 20-35 years, as many as 28 (70.0%) respondents with work as housewives and as many as 34 (85.0%) respondents with high school education.

Average knowledge of pregnant women in TM III regarding exclusive breastfeeding before given education use Work Area E-Book Community Health Center New Tulang Bawang

Table 4.2

Average Knowledge of Pregnant Women in the Third Month of Pregnancy Regarding Exclusive Breastfeeding after given education use *E-Books* in the Work Area Community Health Center New Tulang Bawang

Variables	Mean	Sd	Min	Max	N
Before intervention	62.83	10.10	40.0	73.3	40

Source : Primary Data (2025)

Based on table 4.2 above It is known that the average knowledge of pregnant women in TM III regarding exclusive breastfeeding before given education use *E-Book* is 62.83 with mark *standard deviation* 10.10, minimum value 40.0 and value maximum 73.3

Average Knowledge of Pregnant Women in the Third Month of Pregnancy Regarding Exclusive Breastfeeding after given education use *E-Books* in the Work Area Community Health Center New Tulang Bawang

Table 4.3

Average Knowledge of Pregnant Women in the Third Month of Pregnancy Regarding Exclusive Breastfeeding after given education use *E-Books* in the Work Area Community Health Center New Tulang

Variables	Mean	Sd	Min	Max	N
After intervention	84.33	9.61	66.7	100.0	40

Source : Primary Data (2025)

Based on table 4.3 above It is known that the average knowledge of pregnant women in TM III regarding exclusive breastfeeding after given education use *E-Book* is 84.33 with mark *standard deviation* 9.61, minimum value 66.7 and value maximum 100.0

Data Normality Test

Testing analysis in research This clear Already filled Because sample study taken in a way random to Mother pregnant in the third trimester in the work area Community Health Center Tulang Bawang Baru, North Lampung Regency. It is known level accuracy in taking sample , then done testing condition another analysis is the normality test use mark *Shapiro-Wilk*, when mark *Shapiro-Wilk* > 0.05, then the distribution is normal.

Table 4.4

Data Normality Test

Variables	<i>E-Book</i>	<i>Shapiro-Wilk</i>	Note
Knowledge Mother pregnant	Before	0.060	Normal
	After	0.073	Normal

Source : Primary Data (2025)

Based on Table 4.4 above tests the normality of the data using *Shapiro-Wilk* the For variables knowledge Mother pregnant before and after given education use *e-book* obtained mark significant > 0.05 which means the data is normal so the test

that will be carried out used that is *paired sample t-test* .

Influence education use *E-Book* on Knowledge of Pregnant Women in TM III Regarding Exclusive Breastfeeding in the Work Area Community Health Center New Tulang Bawang

Table 4.5

Influence education using *E-Books* against Knowledge of Pregnant Women in TM III Regarding Exclusive Breastfeeding in the Work Area Community Health Center New Tulang Bawang

Knowledge Mother pregnant	N	Mean Difference	Elementary School	<i>t-test</i>	<i>P-Value</i>
Before and after being given education using <i>e-books</i>	40	21.50	6.32	21.50	0,000

Source : Primary Data (2025)

Based on Table 4.5 above , the results of the *paired sample t-test* obtained mark *p-value* = 0.000 (*p-value* < α = 0.05) which means There is influence education use *E-Book* to Knowledge of Pregnant Women in TM III Regarding Exclusive Breastfeeding in the Work Area Community Health Center New Tulang Bawang, North Lampung Regency .

DISCUSSION

a. Knowledge of Pregnant Women in TM III Regarding Exclusive Breastfeeding before given education use *E-Book*

Based on results study It is known that the average knowledge of pregnant women in TM III regarding exclusive breastfeeding before given education use *E-Book* is 62.83 with mark *standard deviation* 10.10, minimum value 40.0 and value maximum 73.3

In line with Epiphani, (2024) research, the average score for knowledge before intervention was 73.99. Rizqiea's (2019) research found that knowledge before education using booklets was 28.90. Rahmiyati, R., Widyasih, H., & Santi, (2019) researchThe

average increase in knowledge scores before the experimental group was 84.82.

Exclusive Breast Milk (ASI) is breast milk given to babies from birth for six months, without adding and/or replacing it with other foods or drinks (except medicines, vitamins, and minerals). Exclusive breastfeeding begins within one hour of birth until the baby is 6 months old (Wijaya, 2019).

Efforts to increase this coverage include providing accurate and precise information about the various benefits of exclusive breastfeeding for both mothers and babies, thereby increasing public awareness of the importance of exclusive breastfeeding for babies (Saputri, I. N., Ginting, D. Y., & Zendato, 2019). Efforts to address the low coverage of exclusive breastfeeding in Indonesia include empowering communities through Mother Support Groups, disseminating Government Regulation No. 33 of 2012 concerning exclusive breastfeeding, and providing breastfeeding counselors (Mirawati, Masdiputri, RSN, Puteri, MD, Hikmah, T., 2022).

Based on the analysis, the researchers assumed that the level of knowledge of pregnant women in their third trimester about exclusive breastfeeding before being educated using *the e-book* was still considered adequate but not optimal, as seen from the average score of 62.83, indicating a gap in mothers' understanding of the importance of exclusive breastfeeding. This indicates the need for appropriate educational interventions, as suboptimal knowledge can influence attitudes and practices regarding exclusive breastfeeding after delivery.

Before receiving education using the e-book, several respondents still fell into the "poor knowledge" category. This group indicates that some pregnant women in their third trimester do not fully understand the concept of exclusive breastfeeding. Some still believe that babies need additional food or drink from an early age, while others are unaware of the specific benefits of exclusive breastfeeding for both infant and maternal health. This situation confirms that some individuals still require more

intensive educational intervention to improve their understanding.

The majority of respondents fell into the adequate category. In this group, mothers already had basic knowledge about exclusive breastfeeding, such as understanding the importance of breastfeeding during the first six months. However, their understanding was not comprehensive, with some lingering doubts about adequate breast milk production or the appropriateness of breastfeeding practices. This indicates that although they had basic awareness, more systematic information reinforcement was needed to achieve a good level of knowledge.

According to researchers, the low level of knowledge among pregnant women in their third trimester prior to education is due to several factors, including limited access to credible sources of information, the continued strong influence of culture and myths surrounding supplementary feeding, and previously more conventional and less interactive counseling methods. This results in mothers receiving incomplete information, resulting in partial knowledge that fails to fully support their understanding of the importance of exclusive breastfeeding.

b. Knowledge of Pregnant Women in TM III About Exclusive Breastfeeding after being given education using *E-Books*

Based on the research results, it is known that the average knowledge of pregnant women in TM III regarding exclusive breastfeeding after being given education using *the E-Book* is 84.33 with a *standard deviation value* of 9.61, a minimum value of 66.7 and a maximum value of 100.0.

In line with Rizqiea, (2019) research, the average knowledge score after education using booklets was 35.76. Epiphani, (2024) research found that the average knowledge score after intervention was 86.37. Rahmiyati, R., Widyasih, H., & Santi, (2019) researchThe average increase in knowledge scores before the experimental group was 97.94.

Exclusive breastfeeding can reduce the risk of allergies, respiratory disorders, diarrhea, and

obesity in children. Infants who are not exclusively breastfed are at higher risk of health problems, such as digestive infections, acute respiratory infections (ARI), and ear infections, and are more susceptible to non-infectious diseases that affect nutritional status (Safitri, 2022). The risk of death from diarrhea in infants not exclusively breastfed increases 3.94-fold (Salamah, 2019). Furthermore, the risk of malnutrition increases 17.3-fold, inhibiting infant growth and immunity (Retnawati, 2022). Providing complementary foods before six months increases the risk of diarrhea 17-fold and acute respiratory infections three-fold compared to infants who are exclusively breastfed (Listianingsih, 2024).

According to research by Sitohang et al. (2019), factors influencing exclusive breastfeeding include maternal knowledge, husband's support, physical and mental preparation, and the role of health workers in providing counseling on exclusive breastfeeding. Therefore, education and counseling on exclusive breastfeeding are essential. Good knowledge of exclusive breastfeeding is crucial for the success of exclusive breastfeeding.

Health education through media can also generate interest in the target audience (Tazkiah, 2020). The message in a medium used in health education activities aims to influence the target audience and encourage them to implement the material provided (Mubarak, 2014).

The Use of *E-Books* as an Educational Medium on Exclusive Breastfeeding for Pregnant Women in the Third Trimester *E-Books* can be easily accessed through various digital devices such as smartphones, tablets, or computers, allowing pregnant women to obtain information anytime and anywhere without having to go directly to a health facility (Safitri, 2022). In terms of efficiency, the use of *E-Books* also reduces the need for printed materials, which means cost savings and supports environmental sustainability through reduced paper use. This advantage is an added value, especially in situations requiring limited

mobility or when direct access to health facilities is difficult (Retnawati, 2022). In addition, pregnant women can repeat the material according to their individual needs and learning pace, thereby increasing in-depth understanding of the importance of Exclusive Breastfeeding. Overall, the use of *e-books* in maternal health education not only facilitates access and interactive delivery of information but also supports continuous knowledge improvement.

Based on the analysis results, researchers assumed that there was an increase in the average knowledge of pregnant women in the third trimester from 62.83 before the intervention to 84.33 after being given education using *E-books*, indicating that *E-book* media was effective in increasing understanding of exclusive breastfeeding. This increase shows that more flexible, interactive, and repeatable access to information according to the mother's needs can strengthen the absorption of material. This is in line with previous theories and research that emphasize that educational media plays an important role in fostering interest, facilitating understanding, and influencing health behavior. Thus, it can be assumed that education using *E-books* not only increases pregnant women's knowledge about exclusive breastfeeding, but also has the potential to encourage positive changes in attitudes and practices in providing exclusive breastfeeding after delivery.

After receiving education using the e-book, the majority of respondents achieved a good knowledge score. Individuals in this group demonstrated a comprehensive understanding of exclusive breastfeeding, including its definition, benefits, and proper practices. Many achieved near- or even maximum scores, indicating that the information conveyed through the e-book was well-received. This demonstrates that interactive digital media can enhance knowledge absorption more effectively than conventional methods.

Although the majority of respondents were in the good category, there were still a number of respondents in the adequate category. While

individuals in this group have seen improvement compared to before the intervention, their understanding is not yet fully comprehensive. Some may still have doubts about the practice of exclusive breastfeeding, for example, regarding sufficient breast milk production or belief in prevailing myths. Nevertheless, this condition has shown significant improvement compared to before the education program, as no respondents were in the poor category.

The change from baseline to post-education levels showed that no respondents had low levels of knowledge. This demonstrates the effectiveness of e-books as an educational tool, reaching individuals with diverse educational backgrounds and experiences. The systematic presentation of the material, complemented by illustrations, and flexible access to information have been shown to increase the motivation and understanding of pregnant women in their third trimester to prepare for exclusive breastfeeding.

According to the researchers, the success of this knowledge increase is inseparable from the practical, accessible, and repeatable nature of e-books, which can be studied repeatedly according to individual needs. This makes information easier to remember and understand in depth. The increase in the average score from "fair" to "good" for the majority of respondents indicates that previous barriers such as limited access to information and the dominance of conventional methods have been successfully overcome with digital media innovation. Thus, education using e-books not only increases knowledge but also has the potential to encourage positive behavioral changes in exclusive breastfeeding practices.

c. Influence education use *E-Book* on Knowledge of Pregnant Women in TM III Regarding Exclusive Breastfeeding

Based on *paired sample t*-test results obtained mark *p-value* = 0.000 ($p\text{-value} < \alpha = 0.05$) which means There is influence education use *E-Book* to Knowledge of Pregnant Women in TM III Regarding Exclusive Breastfeeding in

the Work Area Community Health Center New Tulang Bawang, North Lampung Regency .

In line with study Rahmiyati, R., Widiasih, H., & Santi, (2019) is there influence *e-booklet* about exclusive breastfeeding to knowledge Mother third trimester pregnant with $p\text{-value} = 0.001$. Research Epiphany (2024) statistical test results show results that giving education with influential video media to level knowledge and attitudes Mother regarding exclusive breastfeeding ($p\text{-value}=0.001$, i.e. <0.05 Research Rizqiea, (2019) shows difference meaningful knowledge between before given a booklet with after booklet provision obtained p result 0.000 ($p<0.05$)

E-Book is distribution cargo content book digital form . In this case this , the internet acts as heart in the system service *E-Book* with various convenience and speed his search . purpose from e-book creation is For preserve collection library , providing service digital library , efficiency room Because *E-Book* more save room , creating an unfinished collection limited space and time , and costs more cheap (Sunardo , 2015).

Use *E-Book* as an educational medium regarding exclusive breastfeeding for Mother third trimester pregnancy *E-Book* can accessible with easy through various digital devices such as smartphones, tablets, or computer , so that allows Mother pregnant get information When anywhere and anytime without must present directly at the facility health (Safitri, 2022). In terms of efficiency , use *E-Books* also reduce need will material print , which means savings costs and support to sustainability environment through subtraction use paper . This advantage become mark add , especially in demanding situation mobility limited or when access direct to facility health difficult carried out (Retnawati, 2022). In addition , mothers pregnant can repeat material in accordance with needs and speed learn each one, so increase understanding deep about the importance of exclusive breastfeeding . In general overall , use *e-book* in education health Mother pregnant No only make it easier access and delivery information in a way interactive ,

but also supports improvement sustainable knowledge . With thus , *e-book* become effective choice of educational media in educate Mother pregnant about the benefits of exclusive breastfeeding , which ultimately can contribute to improving health status mothers and babies in the area

According to researchers giving education with use *e-book* this is very useful and important For performed on the mother breast-feed For increase knowledge Mother that exclusive breastfeeding is the best for her baby and improve motivation for mothers breastfeeding . Based on statistical test results with paired sample t-test which shows p - value = 0.000 ($p < 0.05$), researcher assume that education use *E-book* proven influential significant in increase knowledge Mother pregnant women in the third trimester regarding exclusive breastfeeding . These results strengthen findings study previously used various educational media , such as booklets and videos, which are both show existence improvement knowledge Mother after given intervention . Use *E-book* as an educational medium assessed more superior Because nature flexible , easy accessible When anywhere and anytime , and allows Mother pregnant repeat material in accordance need so that understanding more deep . With thus , it can assumed that *E-book* is an effective , efficient and sustainable educational media For increase knowledge Mother pregnant about exclusive breastfeeding , which is expected to also have an impact on attitudes and practices exclusive breastfeeding after give birth to .

In addition to the statistical test results which show existence influence education using e-books against improvement knowledge Mother pregnant in the third trimester regarding exclusive breastfeeding , researchers also obtained findings strengthening field results said . At the time study ongoing , there is One mother who has give birth to four day previous and researchers do visit House For see practice breastfeeding is carried out . From the results observation , mother the direct provide breast milk to the baby without additional formula milk.

This show that knowledge gained through education previously can direct applied in practice real , even in the days beginning after labor . Findings This support assumptions that education using e-books no only increase knowledge , but also encouraging Mother For implementing exclusive breastfeeding since early , appropriate with recommendation health. With Thus , the results study This No only proven in a way statistics , but also confirmed in practice directly in the field

CONCLUSION

Respondent characteristics indicate that the majority of pregnant women in their third trimester are of safe reproductive age, are housewives, and have a secondary education. This situation represents a target group with sufficient potential to receive health education interventions, particularly regarding exclusive breastfeeding. This demographic background supports the effectiveness of information delivery because respondents have sufficient time, readiness, and cognitive capacity to understand the educational material provided.

The results of the study indicate that the level of knowledge of pregnant women in their third trimester regarding exclusive breastfeeding before receiving e-book-based education was still in the moderate category. After the educational intervention, there was a significant increase in knowledge. This confirms that e-books are an effective educational tool in increasing pregnant women's understanding of the importance of exclusive breastfeeding, including the benefits of colostrum, correct breastfeeding techniques, and the understanding that babies do not need additional food or drink until six months of age. Visual, flexible, and repeatedly accessible education has been shown to facilitate the internalization of information.

Based on these findings, e-book-based health education is recommended for optimal use by pregnant women to prepare for breastfeeding after delivery. Community health centers and health workers, particularly village midwives, are expected to integrate e-books as an alternative educational medium in various health service and

promotion activities, such as prenatal classes, integrated health posts (Posyandu), and ANC visits. Furthermore, the results of this study can serve as a reference for educational institutions in developing learning and community service, as well as a basis for further research by comparing various health education media to improve knowledge and behavior regarding exclusive breastfeeding.

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