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# Effectiveness of empowering postpartum mothers to maintain exclusive breastfeeding with lactation management booklet media

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Abstract---Coverage of exclusive breastfeeding in Ogan Komering Ulu Regency in 2022 is 49.3% of the national target of 80%. The reason why exclusive breastfeeding fails is because the mother does not know how to manage lactation. The aim of the research is to analyze the influence of lactation management booklet media education on exclusive breastfeeding for postpartum mothers in the Tanjung Baru Baturaja Timur sub-district area. Pre-experimental design method with a one group pre-post test design approach. The sampling technique used was purposive sampling with a sample of 53 people. The instrument used was a lactation management observation sheet. The pre-test was carried out on the first day and the post-test was carried out on the 7th day after the intervention was given. The data obtained were statistically analyzed using paired t-test. The research showed that with empowerment regarding lactation management, the p-value was 0.000, it could be concluded that there was a significant difference in value between before and after empowerment. It was concluded that increasing postpartum mothers' understanding of lactation management could increase exclusive breastfeeding.

**Keywords---**Exclusive Breastfeeding, Lactation Management, postpartum mothers.

# Introduction

Maternal and child health is something that greatly influences improving the level of public health. This can also be seen in one of the goals of the MDG's (Millennium Development Goals) targets that have been set, namely reducing maternal and child mortality rates. This goal is reflected again in the 3rd SDG's (Sustainable Development Goals), namely Good Health and Well Being (Bappenas, 2024)

The role of the United Nations International Children's (UNICEF) in the 3rd SDG goal, one of which is ending the deaths of newborns and children under 5 years of age by 2030 with the hope of a Neonatal Mortality Rate of 12 per 1,000 KH and a Toddler Mortality Rate of 25 per 1,000 KH.

World Health Organization (WHO) and (UNICEF) in the Global Strategy for Infant and Young Child Feedingregulate the best feeding patterns for babies from birth to 2 years of age to improve the quality of health for babies and children by giving breast milk (ASI) to babies immediately within one hour after the baby is born, giving only breast milk or giving breast milk exclusively from birth until the baby is 6 (six) months old, provide complementary food with breast milk (MP-ASI) from the time the baby is 6 (six) months old to 24 months old and continue breastfeeding until the child is 24 months old or more. WHO in 2012 showed that only around 38 percent of babies aged 0-6 months worldwide were exclusively breastfed, with the target of exclusive breastfeeding increasing to 50 percent by 2025. Breastfeeding from 0-23 months can save the lives of more than 230,000 children under 5 years old. every year (WHO, 2024).

The benefits of exclusive breastfeeding for babies are that premature babies with very low birth weight who receive exclusive breast milk can avoid Retinopathy of Prematurity (ROP), prevent malnutrition, prevent pneumonia, protect against sepsis/infection, protect against asthma, allergic rhinitis, babies rarely suffer from diarrhea, reduces the risk of diabetes/diabetes, reduces the risk of obesity, reduces the risk of heart disease, reduces the risk of SIDS (Sudden Infant Death Syndrome), prevents tooth decay (Monica, 2018). ). However, if breast milk is not provided adequately and exclusively until the age of six months, the maturation process of the body's immune system is disrupted so that the baby is susceptible to infectious diseases and can result in death (Salamah, 2019). Meanwhile, according to the 2017 SDKI, IMR in Indonesia is around 32 per 1,000 live births, while in South Sumatra province it is 29 per 1,000 live births (SDKI, 2017).

The percentage of exclusive breastfeeding for babies aged 0-5 months in 2021 will be 71.58%, in 2022 it will be 71.58% and in 2023 it will be 73.97%. The percentage of female babies receiving exclusive breast milk is 75.02% compared to 72.99% for males. The percentage of economic status is higher in families with low economic status (BPS, 2023). However, this coverage is still far from the national target of 80%.

The government has issued various policies to increase exclusive breastfeeding in Indonesia. Based on Government Regulation No. 33 of 2012, the exclusive breastfeeding program is a promotion program for giving only breast milk to babies without providing other food or drink. The regulation of exclusive breastfeeding aims to guarantee the fulfillment of the baby's right to receive exclusive breastfeeding from birth to 6 (six) months of age by paying attention to growth and development, Providing protection to mothers in providing exclusive breastfeeding to their babies, Increasing the role and support of the family, community, regional government and the government regarding exclusive breastfeeding (RI, 2012).

Every newborn baby is required to receive essential neonatal health services according to quantity standards at least 3 times during the neonatal period (0-28 days) and quality standards include essential neonatal services at birth (0-6 hours) including Early Breastfeeding Initiation (IMD), Neonatal services essentials after birth (6 hours – 28 days) include newborn care counseling and exclusive breastfeeding. Meanwhile, during the postpartum period, mothers will receive health services, including recommendations to provide exclusive breastfeeding for 6 months (Dinkes OKU, 2023; Heryani, 2019).

There are many factors that cause mothers to fail in providing breast milk, one of which is knowledge. Research conducted by Cindy et al (2019) found that mothers who have high knowledge of lactation management will have good behavior in providing exclusive breastfeeding.

Lactation management is an effort made by mothers to support successful breastfeeding which can start from the antenatal period, early postpartum, late postpartum and sick mothers. Breastfeeding problems start from the antenatal period, early postpartum, late postpartum, and breastfeeding problems in special circumstances and problems in babies. During the antenatal period, such as when the mother lacks/wrong information, the nipples come in or set in. Breastfeeding problems in early postpartum such as sore nipples, swollen breasts, breast abscess (mastitis). Late postpartum such as lack of breast milk syndrome and working mothers. Breastfeeding problems in special situations such as mothers giving birth by caesarean section, sick mothers (HIV, AIDS, Hepatitis, TB, mothers who require treatment, pregnant women, breastfeeding mothers and medication. Problems in babies such as babies crying often, babies with nipple confusion, premature babies and small babies, jaundiced babies, twins, sick babies, cleft babies, babies with short tongues, babies who need care (Perinasia, 2018).

Mothers who have good knowledge about lactation management will try to provide exclusive breastfeeding because respondents who have less knowledge about the efforts made to support successful breastfeeding will be easily influenced by providing breast milk substitutes if there are problems in breastfeeding and feel hopeless if problems arise during breastfeeding (Afrinis et al, 2020).

Exclusive breastfeeding coverage for OKU district in 2022 is. 49.3% but still far below the National Exclusive Breastfeeding achievement target of 80%. Based on a preliminary survey conducted on 30 postpartum mothers, 21 mothers made

mistakes in using the correct breastfeeding technique. A total of 24 postpartum mothers did not know the signs that the baby was getting enough breast milk and how to burp the baby (Dinkes Kab.OKU, 2023).

Even though in this digital era there are many media that can be used as intermediaries to convey messages. In 2020 internet use in Indonesia has reached 196.7 million people or 73.7% of the total population. In the use of communication media, 57.5% used social media, 20.9% in face-to-face sessions and 8.1% in leaflets such as flyers/brochures. In communication channels, 83.17% use Whatsapp, 8.33% use telephone (Kemenkes RI, 2022).

Research conducted by Dauphin C (2020) states that providing messages via social media can strengthen and educate women about breastfeeding and has the potential to provide lactation support and research conducted by Emilda (2024) states that lactation management counseling using booklet media is very effective in increasing maternal knowledge regarding lactation management as an effort to increase exclusive breastfeeding coverage.

Booklet is a medium for conveying information in the form of a book with a smaller size. The thing that needs to be considered when making a booklet is how we organize the material as attractively as possible (Fitriyah L & Zaini, 2020). This study aims to analyze the effectiveness of lactation management booklet media education on providing exclusive breastfeeding to postpartum mothers.

# Method

The type of research used in this research is a pre-experiment design with a One Group Pretest-Posttest design. In this design there is no comparison group (control) but previously a first observation (pretest) has been carried out which allows researchers to test changes changes that occur after the experiment (Notoadmodjo, 2018) This form of research uses a One Group Pretest-Posttest design. This research was conducted with the target being postpartum mothers in the Tanjung Baru Baturaja Timur village. The research population was 53 people. The entire population was taken as a research sample (total sampling) which was carried out from October 2023 – January 2024.

The independent variable in this study is exclusive breastfeeding and the dependent variable is social media and booklets about lactation management. Research data includes lactation management knowledge data. The instrument used was a lactation management knowledge questionnaire. Data on knowledge of lactation management of postpartum mothers was obtained from a knowledge questionnaire with a total of 21 questions which had been tested for validity and reliability. If the answer is correct then a score of 1 is given and if it is wrong a score of 0 is given.

This research uses data analysis with a paired simple t-test. Bivariate analysis is carried out using a computerized system to see the relationship between two variables (dependent variable and independent variable) using the Chi-Square statistical test with a p value <0.05 so it is said there is a relationship and if the p value is >0.05 then there is no relationship.

## **Results and Discussion**

Results Characteristics Respondent Characteristics

Table 1. Respondent Characteristics

Variable	f	%
Age		
≤ 35 years old	42	79.2
> 35 years	11	20.8
Amount	53	100.0
Parity		
≤ 2	29	54.7
> 2	24	45.3
Amount	53	100.0
Educational status		
Health	19	35.8
Non Health	34	64.2
Amount	53	100.0
Work		
Work	22	41.5
Housewife	31	58.5
Amount	53	100.0

Based on table 1, it shows that most of the respondents in the research were aged  $\leq 35$  years as much as 79.2%, some respondents had  $\leq 2$  children as much as 54.7%, most of them had non-health education status as much as 64.2%, and most 58.5% of respondents were housewives.

Table 2. Respondents' knowledge before and after being given booklet media about lactation management

Knowledge of postpartum mothers	Mean	elementary school	Min-max
Before	5.92	2,533	2 - 13
After	17.70	1,825	14 – 21

Based on table 2, the average between knowledge before and after being given the media booklet about lactation management was obtained with a mean value of 5.92 with a standard deviation of 2.533. Knowledge of postpartum mothers about lactation management after being given Health Education with a mean value of 17.70 with a standard deviation of 1.825.

Table 3. Effectiveness of Empowering Postpartum Mothers to Increase Exclusive Breastfeeding Using Lactation Management Booklet Media

Knowledge of postpartum mothers	Mean	elementary school	S.E	P-Value	N
Before After	11,774	1,577	2,533 1,825	0,000	53

Based on table 3 above, there is an influence of booklet media on postpartum mothers' knowledge about lactation management. It is known that there is a difference in the mean value between knowledge before and after being given the booklet with a mean value of 11.774, standard deviation 1.577. The statistical test results obtained a p-value of 0.000, so it can be concluded that there is a significant difference in value between first knowledge and second knowledge.

## Discussion

Based on the research results, it was found that the knowledge of postpartum mothers before empowerment was carried out through booklets on lactation management, obtained an average value of 5.92 with the correct answer value ranging from 2-13. After empowering through booklets on lactation management, an average score of 17.70 was obtained with correct answer scores ranging from 14-21. This shows that empowering postpartum mothers through booklets on lactation management can increase the knowledge and understanding of postpartum mothers to maintain or increase exclusive breastfeeding.

The research results showed that booklet media had an influence on postpartum mothers' knowledge about lactation management with a p-value of 0.000. This research is in line with research conducted by Seyyedi et al (2021) on mothers who have children < 3 months with intervention and control groups totaling 40 samples using social media which consists of the importance of breastfeeding, giving complementary foods to breast milk, manual pumping and expressing, general handling related to breastfeeding problems, breastfeeding tips in special situations and general questions obtained a p-value of 0.001, which means that education using social media about breastfeeding has a positive influence.

Santos et al 2022 said that the use of booklets has proven to be strategic in providing information about exclusive breastfeeding. Qualitative research conducted on prisoners in prison during the Covid-19 outbreak said that booklets were useful for promoting, protecting and supporting breastfeeding. Booklet as a public policy strategy to promote, protect and support breastfeeding. Health workers can use the booklet to promote knowledge about breastfeeding.

The postpartum period or puerpurium begins after the placenta is born and ends when the uterine organs return to their pre-pregnancy state, which lasts approximately 6 weeks or 42 days (Norma, 2019). The aim of providing midwifery care to postpartum mothers is to maintain the health of the mother and baby

both physically and psychologically, carry out comprehensive screening, be able to detect problems with the mother and baby, treat or refer if complications occur in the mother and baby and provide health education about personal health care, nutrition, family planning, providing immunizations, caring for healthy babies and breastfeeding (Wahyuningsih, 2018).

During the postpartum period, midwives make at least 4 visits to assess the condition of the mother and baby. At the first visit, which occurs 6 hours after delivery, the midwife must help the mother provide initial breast milk. At the second visit which occurred 6 days after delivery, the midwife ensured that the mother was breastfeeding her baby well. At the third visit which occurs after 2 weeks of delivery, the midwife also ensures that the mother is breastfeeding her baby well. At the fourth visit which occurs after 6 weeks of delivery, the midwife must assure the mother that there are no complications experienced by the mother and baby (Walyani & Purwoastuti, 2022).

Lactation management is an effort made to support successful breastfeeding in mothers. International guidelines recommend exclusive breastfeeding for the first 6 months based on scientific evidence about the benefits of breast milk for the baby's survival, growth and development (Muthoharoh et al., 2022). Breast milk provides all the energy and nutrition a baby needs for the first 6 months of his life. Exclusive breastfeeding reduces the rate of infant mortality caused by various diseases that commonly affect children, such as diarrhea and pneumonia, as well as speeding up recovery if sick and helping to space births (Dinkes Kab OKU, 2023).

According to researchers' assumptions, postpartum mothers tend to stop giving exclusive breastfeeding when breast milk does not come out 2 hours after the baby is born because the baby starts to fuss so the mother assumes that the baby is hungry. In the Australian Breastfeeding Association (2022) One of the most common reasons why babies don't want to breastfeed is because the milk isn't flowing. Full breasts and babies who cannot suck or are slow to suck make mothers disappointed and decide to use breast milk substitutes. At birth the baby can survive 2 days without breastfeeding because of the fat reserves. A 1 day old baby has a stomach the size of a cherry which can hold 5-7 ml. 3 days old has a stomach the size of a candlenut which can hold 22-27 ml. Babies who are used to the instant and fast flow from the bottle may not want to latch on if the milk doesn't come out.

# Conclusion

It can be concluded that booklet media as a tool for conveying information is very effective. From the evaluation carried out after and before being given the booklet media on lactation management, there was an increase in knowledge among postpartum mothers to maintain exclusive breastfeeding for babies.

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