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Lactation Management Education Intervention (Momasi) On Primipara (0-3 Months) In The Sudiang Raya Community Health Center Makassar City

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Abstract

Primipara are often faced the difficulty and even failure in breastfeeding, the low of lactation management is the main cause. This research aimed to assess the difference in lactation management education media on increasing knowledge, attitude, and practice of lactation management in primipara aged 0-3 months at the Sudiang Raya Public Health Center Makassar City. The research method was a quasi-experimental design with a pre-posttest control group design. The total sample was 60 primiparas who had infants aged 0-3 months (30 intervention groups, 30 control groups). Sampling was done by a simple random sampling. The intervention group used modern media, namely an application based on smartphone called MOMASI (Mobile Lactation Management) used for 12 weeks and the control group used a conventional media, leaflets. Data were analyzed using Paired T-test, Independent T-test, Mann Whitney and Chi-Square. The results showed, before education there was no significant difference between the two groups on the average score of knowledge, attitude, and lactation management practice ($p=0.671, 0.910, 0.095; p>0.000$). In the intervention and control groups, there was a significant increase on the average score of knowledge, attitude, and practice of lactation management between before and after the intervention ($p=0.000$). After education, there was a significant difference between the two groups on the average score of knowledge, attitude, and practice of lactation management ($p=0.000$). In the difference on the average scores of knowledge, attitude, and practice of lactation management after the intervention, the MOMASI group was better than the Leaflet group. MOMASI and Leaflets can improve knowledge, attitude, and practice of lactation management. However, MOMASI is more efficient and effective in Communication, Information and Education (KIE), especially during the Covid-19 pandemic.

Keywords: Primipara, Lactation Management Education, Knowledge, Attitude, Practice

Introduction

Breastfeeding is the best investment for survival, improving health, social, economic development of individuals and nations (WHO, 2009). Exclusive breastfeeding can increase intelligence, reduce the risk of gastrointestinal infections, allergies, infant mortality, establish affection between mother and the infant (Roesli, 2008). Exclusive breastfeeding and continuing it for up to 2 years can also accelerate the return of maternal nutritional status, ⁷ reduce the risk of obesity, hypertension, and maternal breast cancer (Rahayu et al, 2018). The low level of exclusive breastfeeding will affect the success ³² of the First 1000 Days of Life (HPK) program. All the efforts to improve nutrition outside this period have been proven can not completely solved the nutritional problems of the community (Shekar, 2006). Primipara is a mother who has a child for the first time. Primiparas have a higher risk of premature cessation of breastfeeding due to difficulties in breastfeeding. The main cause is a lack of lactation management (Feenstra et al., and Salikhah et al, 2018).

Lactation management is an effort made to support the success of breastfeeding whose implementation begins during the pregnancy (antenatal), after childbirth (prenatal) and during breastfeeding (post-natal). Efforts that related to lactation management include lactation guidelines, ³⁰ knowledge about the benefits of breastfeeding for infants and breastfeeding mothers, and management of ASIP (Ministry of Health, 2005). The low coverage of exclusive breastfeeding (56%) at ²⁰ the Sudiang Raya Public Health Center is due to low lactation management, this is reinforced that there was never been a counseling on lactation management. The low management that is related to breastfeeding techniques and positions, infant attachment, frequency and duration ³¹ of breastfeeding, as well as management of squeezed breast milk (Yuniati, 2020). Mc Andrew et al also revealed the factors that cause premature cessation of breastfeeding are nipple blisters, the infant is difficult to suck because of the wrong position and the infant's attachment problems (Mc Andrew et al, 2018).

Various types of methods and media were developed as an effort to support lactation management education both offline and online, they were conventional and modern ³⁴ media. A systematic review and Meta Analysis by Pei (2019), there is no evidence showing that providing education directly (offline) is better than indirectly (online education). Sabaruddin (2020) and Tryta (2018), provided an online education can significantly improve a person's knowledge, attitudes, and practices (Sabaruddin et al, 2020 and Tryta et al, 2018). This Covid-19 pandemic required us to be able to limit mobilization to prevent its spread. In line with that, the researcher ¹¹ wanted to assess the differences between modern and conventional educational media in increasing knowledge, attitudes, and practices of lactation management. In this research, the modern media referred to an application based on smartphone, and conventional media using leaflets.

From the various themes of mobile phone applications that have existed, based on the observations of the researchers, there is no application specifically intended for lactation management as well as balanced nutrition for breastfeeding mothers. Mobile of Lactation Management (MOMASI), is an application based on smartphone which designed with various features of lactation management materials such as lactation management materials related to breastfeeding techniques and positions, infant attachment, frequency and duration of breastfeeding, squeezed breast milk, balanced nutrition materials for breastfeeding mothers. In addition, MOMASI also has a feature to calculate nutritional status based on weight and height (BMI). Another advantage of MOMASI is that it can be used without internet connection, so it doesn't make a difficult for users to use data or social network quotas. Because of that, the researchers aimed to assess the effect of educational media in increasing knowledge, attitudes, and practices of lactation management in primiparas aged 0-3 months in the working area of the Sudiang Raya Health Center Makassar City in 2021

Methods

Research Design and Sample/Participants

This research used a quasi-experimental study design with a prepost-test control group design, carried out in the working area of the Sudiang Raya Public Health Center, Makassar City, South Sulawesi. The research started from July-October 2021. The population in this research were all the primiparas who were in the working area of the Sudiang Raya Health Center Makassar City, amounting to 86 people. Based on the calculation of the sample size of Dahlan (2010) and the consideration of the possibility of dropping out of 15%, it was obtained 60 primiparas with the criteria of having infants aged 0-3 months, giving breast milk, being born at term, single birth, having a smartphone and application (WhatsAPP), able to communicate well, and willing to sign the informed consent. Sampling technique using the simple random sample. The sample was divided into two groups, namely the intervention group using MOMASI media (n=30) and the control group using leaflet media (n=30). This research was conducted 20% in person and 90% via virtual (whatsApp, cellular phone, google form).

Data Collection

Demographic data of the sample used (i) the sample characteristics questionnaire while (ii) knowledge, (iii) attitudes, and (iv) lactation management practices were adopted from the Iowa Infant Feeding Attitude Scale (IIFAS) and Infat Young Child Feeding (IYCF) Questionnaire and also has been used in previous studies with the same sample variables and characteristics in Yunita, 2020. Questionnaire (i) a number of questions related to name, age, occupation, education, and income were only filled out once, namely when the sample was willing to be the research sample. The questionnaire (ii) contains 15 questions, (iii) contains 13 statements, (iv) contains 13 statements. Those 3 three of questions were given 2 times, namely during pretest and posttest. The pretest was filled directly face to face which was guided by the researcher, either

at the Puskesmas or at the sample house, conditioned by the agreement of both. The posttest was conducted 5 days after the intervention, the posttest questionnaire was filled out via the google form platform.

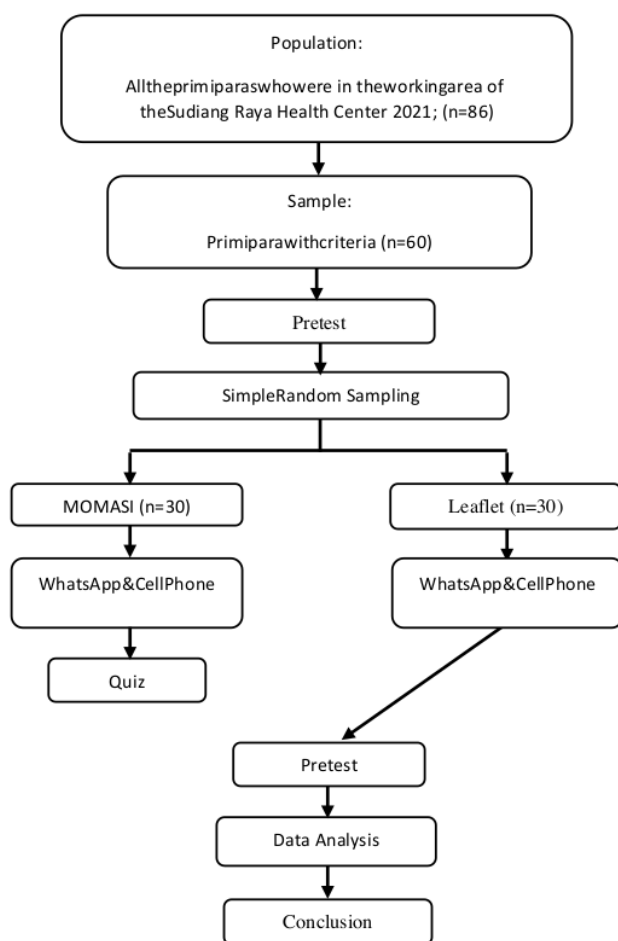
MOMASI Educational Media and Leaflet

MOMASI and this Leaflet have the same content. Related materials, Obligation of ³³exclusive breastfeeding and ²¹definition of exclusive breastfeeding, Benefits of exclusive breastfeeding, Getting to know breast anatomy, Breastfeeding techniques and positions, infant attachment, Frequency and duration of breastfeeding, ²¹How to squeeze breast milk, How to store breast milk, How to thaw and warm breast milk, and materials additional servings a day for nursing mothers, as well as nutritional problems in breastfeeding mothers. The media were given 5-7 days after the sample agreed to the informed consent and did the pretest. By doing so, the pretest questions have been forgotten by the sample so it does not affect the intervention process. The use of educational media continued for 12 weeks.

MOMASI is an application based on smartphone that will be installed directly by the researcher on the sample smartphone. This MOMASI was designed with the open access by name feature, which is entering a name every time you open the feature then give a notification to the researcher's WhatsApp, so it easier for researchers to find out the activity. In addition, this application is also equipped with a BMI calculation feature. To evaluate respondents opening and reading content, quizzes are given every weekend, for 11 weeks on Sundays at 15.00-17.00 WITA, quiz materials according to topics/content features per week as many as 5 questions via the google form platform. Rewards in the form of pulses were given to 5 respondents who managed to answer quickly and correctly. This group is controlled directly by the researcher via WhatsApp and cell phones.

The control group or called the leaflet group received three leaflets, namely exclusive breastfeeding leaflets, lactation management, and balanced nutrition leaflets for breastfeeding mothers. These three leaflets were given coincide and explained only once directly. Furthermore, the researchers kept in touch with the sample via WhatsApp or commented on the status of the sample while asking about the situation during breastfeeding and also via cell phone.

Research Stage



Statistical Analysis

Data analysis using Paired T-test, Independent T-test, Mann Whitney and Chi-Square significant confidence 5% ($\alpha = 0.05$)

Results and Discussion

A total of 60 primiparas with infants aged (0-3 months) participated the lactation management intervention for 12 weeks. The intervention group or called the MOMASI group contained with 30 people and the control group or called the Leaflet group contained with 30 people. As shown in Table 1, the samples in the MOMASI and Leaflet groups were homogeneous, there was no significant difference ($p > 0.05$) between the two groups regarding the socio-demographic characteristics of the parents, the characteristics of infants aged 0-3 months, and the mother's culture of breastfeeding.

Table 1. Socio-Demographic Characteristics, Infant's Characteristics, and Mother's Practice in Breastfeeding in the Work Area of the Sudiang Raya Health Center Makassar City.

| Variable ¹ | Group | | p-Value ^{2,3,4} |
|----------------------------|---------------|----------------|--------------------------|
| | MOMASI (n=30) | Leaflet (n=30) | |
| Mother's age | | | |
| <20 years | 1 (3.3) | 2 (6.7) | 0.870 ² |
| 20-25 years | 16 (53.3) | 16 (53.3) | |
| 26-30 years | 11 (36.7) | 12 (40.0) | |
| >30 years | 2 (6.7) | 0 (0.0) | |
| Father's age | | | |
| <20 years | 1 (3.3) | 0 (0.0) | 0.517 ² |
| 20-25 years | 10 (33.4) | 8 (26.6) | |
| 26-30 years | 16 (53.3) | 18 (60.1) | |
| >30 years | 3 (10.0) | 4 (13.3) | |
| Mother's Education | | | |
| No School | 2 (6.7) | 0 (0.0) | 0.283 ³ |
| Elementary School | 2 (6.7) | 2 (6.7) | |
| Junior High School | 5 (16.7) | 4 (13.3) | |
| Senior High School | 15 (50.0) | 16 (53.3) | |
| Diploma | 2 (6.7) | 1 (3.3) | |
| Bachelor Degree | 4 (13.3) | 7 (23.3) | |
| Father's Education | | | |
| Elementary School | 1 (3.3) | 1 (3.3) | 0.548 ³ |
| Junior High School | 5 (16.7) | 2 (6.7) | |
| Senior High School | 18 (60.0) | 21 (70.0) | |
| Diploma | 1 (3.3) | 1 (3.3) | |
| Bachelor Degree | 5 (16.7) | 5 (16.7) | |
| Mother's Occupation | | | |
| Civil Servant | 2 (6.7) | 1 (3.3) | 0.417 ⁴ |
| Employee | 7 (23.3) | 4 (13.3) | |
| Housewife | 21 (70.0) | 24 (80.0) | |
| Trader | 0 (0.0) | 1 (3.3) | |
| Father's Occupation | | | |

| | | | |
|--------------------------------------|-----------|-----------|--------------------|
| Civil Servant/INAF/Indonesian Police | 2 (6.7) | 2 (6.7) | 0.637 ⁴ |
| Employee | 14 (46.7) | 16 (53.3) | |
| Trader | 3 (10.0) | 4 (13.3) | |
| Entrepreneur | 1 (3.3) | 0 (0.0) | |
| Laborer | 7 (23.3) | 4 (13.3) | |
| Security | 1 (3.3) | 0 (0.0) | |
| Online Driver | 1 (3.3) | 3 (10.0) | |
| Honorary | 0 (0.0) | 1 (3.3) | |
| Does not work | 1 (3.3) | 0 (0.0) | |

| Variable ¹ | Group | | p-Value ^{3,4} |
|--|---------------|----------------|------------------------|
| | MOMASI (n=30) | Leaflet (n=30) | |
| Income/Month (UMK 2021) | | | |
| <Rp.3.255.423 | 23 (76.7) | 21 (70.3) | 0.450 ³ |
| ≥Rp.3.255.423 | 7 (23.3) | 9 (29.7) | |
| Ethnic | | | |
| Bugis | 16 (53.3) | 16 (53.3) | 0.271 ⁴ |
| Makassar | 12 (40.1) | 10 (33.3) | |
| Toraja | 1 (3.3) | 2 (6.7) | |
| Jawa | 0 (0.0) | 2 (6.7) | |
| Flores | 1 (3.3) | 0 (0.0) | |
| Infant's Characteristics (0-3 Months) | | | |
| Gender | | | |
| Male | 16 (53.4) | 19 (63.3) | 0.791 ⁴ |
| Female | 14 (46.6) | 11 (36.7) | |
| Infant's Age | | | |
| <1 month | 2 (6.7) | 1 (3.3) | 0.560 ⁴ |
| 1 month | 4 (13.3) | 8 (26.7) | |
| 2 months | 11 (36.7) | 11 (36.7) | |
| 3 months | 13 (43.3) | 10 (33.3) | |
| Mother's Practice in Breastfeeding | | | |

| Infant's Practice of feeded food/drink (honey, sugar, etc) after birth | | | |
|---|-----------|------------|--------------------|
| Yes | 2 (6.7) | 0 (0.0) | 0.150 ⁴ |
| No | 28 (93.3) | 30 (100.0) | |
| Infant's Practice feeded except exclusise breastfeeding before 6 months | | | |
| Yes | 5 (16.7) | 3 (10.0) | 0.448 ⁴ |
| No | 25 (83.3) | 27 (90.0) | |

¹Expressed as (n,%). ²Independent T-test (for continuous data). ³Difference between group using Mann Whitney, and ⁴Pearson Chi-Square test (for categorical data).

Table 2. Knowledge, Attitudes, and Practices of Lactation Management in Primipara (0-3 months) at the Sudiang Raya Health Center Makassar City

| Variable ¹ | Before (0 week) | After (12 weeks) | Change (Δ) | p-value ⁵ |
|---|-----------------|------------------|--------------|----------------------|
| Lactation Management Knowledge² | | | | |
| MOMASI ³ | 54.22±13.07 | 99.77±1.21 | ↑45.55±12.87 | 0.000* |
| Leaflet ³ | 56.00±18.66 | 80.66±11.65 | ↑24.66±13.11 | 0.000* |
| p-value⁴ | 0.671 | 0.000* | 0.000* | |
| Lactation Management Attitude² | | | | |
| MOMASI ³ | 78.22±8.41 | 99.55±1.09 | ↑21.35±8.24 | 0.000* |
| Leaflet ³ | 77.95±9.10 | 91.99±5.78 | ↑14.04±8.38 | 0.000* |
| p-value⁴ | 0.910 | 0.000* | 0.000* | |
| Lactation Management Practice² | | | | |
| MOMASI ³ | 53.58±12.37 | 94.87±5.47 | ↑41.29±11.33 | 0.000* |
| Leaflet ³ | 60.00±16.58 | 85.38±9.11 | ↑25.38±14.16 | 0.000* |
| p-value⁴ | 0.910 | 0.000* | 0.000* | |

¹Expresses as mean±SD. ²Scale 0=extremely low; 100=extremely high. ³Totally sample (n=30). ⁴Difference between groups use Independent T-test. ⁵Difference before and after use Paired T-test. *Significant at p-value <0.05 (two-tailed).

Table 2 shows the two groups, MOMASI and Leaflet, had a significant difference in maternal knowledge about lactation management before and after the intervention with p value = 0.000 (p<0.05). The results of the Independent T-test showed that there was no significant difference in knowledge of lactation management before the intervention was given between the two groups with p value = 0.671 (p>0.05) and there was a significant difference in knowledge of lactation management after the intervention was given

between the two groups with p value = 0.000 ($p < 0.05$). The increase of scores in knowledge of lactation management in the MOMASI group was significantly higher than in the Leaflet group. The difference in average scores (Δ) after the three months of intervention in the MOMASI group was 45.55 points compared to 24.66 points in the Leaflet group.

The variable of lactation management attitude in the two groups, MOMASI and Leaflet also showed a significant difference to the mother's attitude about lactation management before and after the intervention with p value = 0.000 ($p < 0.05$). The results of the Independent T-test showed that there was no significant difference in the attitude of lactation management before the intervention was given between the two groups with p value = 0.910 ($p > 0.05$) and there was a significant difference in knowledge of lactation management after the intervention was given between the two groups with p value = 0.000 ($p < 0.05$). The increase in the lactation management attitude score in the MOMASI group was significantly higher than in the Leaflet group. The difference in average score (Δ) after the three months of intervention in the MOMASI group was 21.35 points compared to 14.04 points in the Leaflet group.

The variable of lactation management practice also showed a significant difference to the mother's attitude about lactation management before and after the intervention was given to both groups with p = 0.000 ($p < 0.05$). The results of the Independent T-test showed that there was no significant difference in the attitude of lactation management before the intervention was given between the two groups with p value = 0.910 ($p > 0.05$) and there was a significant difference in knowledge of lactation management after the intervention was given between the two groups with p value = 0.000 ($p < 0.05$). The increase in the lactation management attitude score in the MOMASI group was significantly higher than that in the Leaflet group. The difference in average score (Δ) after the three months of intervention in the MOMASI group was 21.35 points compared to 14.04 points in the Leaflet group.

Lactation Management Knowledge

Knowledge will lead individuals to think and try to behave in a healthy manner. Individual knowledge about health will raise awareness and cause people to behave according to their knowledge (Notoadmodjo, 2019). What mothers need to know about lactation management includes the benefits of breastfeeding, breastfeeding techniques and positions, infant attachment, frequency and duration of breastfeeding until squeezed breast milk (squeezing, storing and warming breast milk (Azwar, 2016).

There was a significant increase in knowledge before and after the intervention in the MOMASI and Leaflet groups ($p=0.000$). Before the intervention there was no significant difference between the two groups, it means that the initial state of knowledge of the two groups was the same or homogeneous ($p=0.671$). After 12 weeks of intervention, there was a significant difference between the two groups ($p=0.000$). The difference in average score (Δ) after intervention in the MOMASI group was 45.55 points compared to

24.66 points in the Leaflet group. It means that although both groups experienced an increase in knowledge of lactation management and statistically the MOMASI group was better than the Leaflet group.

The MOMASI group is better than the Leaflet group, the researchers suspected because of the MOMASI group was more often exposed to the content of the application. The MOMASI group takes quizzes every week, so inevitably it will be more frequent and scheduled to read. In contrast to leaflets, which have a higher risk of being scattered, damaged or even lost. Isti'Aroh et al (2015) leaflets can be used as educational media but cannot be used for a long time. Bitch et al (2019) knowledge can increase in an instant way but not necessarily can be implemented, it will takes longer time.

Knowledge is closely related to education, and it is hoped that with higher education, the person will have more extensive knowledge. However, it should be emphasized, it does not mean that someone with low education is absolutely low in knowledge. Purwanti et al (2020) increasing knowledge is not absolutely obtained from formal education, but can be obtained through non-formal education (Purwanti et al, 2020). Based on the observations of researchers, respondents who have low education are no less competitive with those with higher education. The enthusiasm and intention that was built to provide exclusive breastfeeding made the respondents active in participating in this research. Wang et al (2021) high morale will form a person's mindset to the point of success (Wang et al, 2021).

This kind of Non-formal education can save people who do not get formal education. Especially, in the Covid-19 pandemic, all activities that cause crowds are of course limited, so that the mobilization of outreach activities at the puskesmas will be difficult to carry out. The health center also admitted that there had never been any counseling related to lactation management for breastfeeding mothers. Grubestic& Durbin et al (2020), in the United States, namely Urban Ohio, developed a strategy to support breastfeeding mothers. The use of social media such as Skype, Facetime and Facebook are connected between breastfeeding counselors and breastfeeding mothers, but the obstacles are the availability of networks for all regions and the heavy capacity of these applications make this strategy does not work for longer (Toni et al, 2020). In contrast to MOMASI, this application is designed for users not to require an internet network and data, also only requires a media storage capacity of 25 Kb, making it more effective and less burdensome for respondents. Watkins et al (2017), media which difficult to use and uninteresting will be more easily abandoned by their readers (Watkins et al, 2017).

Che et al (2018), the use of flip chart media or other conventional media can increase mothers' knowledge of exclusive breastfeeding, but when compared to mothers who are given flip charts and mentoring, changes in the level of knowledge will be higher and manifest in the form of practice (Che et al. , 2018). In line with this research, conventional media in this case leaflets can still be used as educational media and of course there is an increase in knowledge change. Although it is undeniable that other factors such as the

mother's experience during the breastfeeding journey can affect the increase in knowledge or the influence of other media. These factors are not feasible to control in this research and thus deserve to be explored in other future research.

Lactation Management Attitude

A person's attitude means feelings of support or favor (favorable) as well as feelings of being unsupportive or unfavorable on a particular object, and attitude is a potential tendency to react in a certain way if the individual is expected to respond to a stimulus that requires a response (WHO, 2013). Cohen et al (2018), attitudes can be formed when a person receives information and then able to determine likes or dislikes, and agree or disagree to be done (Cohen et al, 2018). The attitude in this research is a mother's view or response or reaction to the importance of lactation management. Attitude ²⁹ is one of the reinforcing factors in determining a person's behavior.

There was a significant increase in the attitude of lactation management before and after the intervention in the MOMASI group and the Leaflet ¹⁵ group ($p=0.000$). Before the intervention there was no significant difference between the two groups it means that the initial state of the lactation management attitude of the two groups was the same or homogeneous ⁷ ($p=0.910$). After 12 weeks of intervention, ¹ there was a significant difference between the two groups ($p=0.000$). The difference in average score (Δ) after intervention in the MOMASI group was 21.35 points compared to 14.04 points in the Leaflet group. It means that even both groups experienced an increase in lactation management attitudes and statistically, the MOMASI group was better than the Leaflet group.

Some respondents said they agreed that the ultimate benefit of breastfeeding was only when the infant was breastfed. This shows that the concept of breastfeeding has not been well exposed to them. Zielińska (2017), mothers who do not know the benefits of breastfeeding, tend not to survive until exclusive breastfeeding. Yunita (2020), a mother who has a negative attitude in breastfeeding, is also low in knowledge, especially her breastfeeding practice. Roesli (2008), exclusive breastfeeding can increase intelligence, reduce the risk of gastrointestinal infections, allergies, infant mortality, establish affection between mother and infant (Roesli, 2008). Exclusive breastfeeding and continuing breastfeeding for up to 2 years can also accelerate the return of the mother's nutritional status, ⁷ reduce the risk of obesity, hypertension, and maternal breast cancer (Rahayu et al, 2018). It is true that being a mother is not heeded to act apathetic, especially when it comes to parenting information. Some people also claim that because of the first experience lead to the less knowledge.

Before the intervention was carried out, both groups, MOMASI and Leaflet, showed the same attitude, namely agreeing or even strongly agreeing that formula milk is the right choice for working mothers. The change of this attitude was most visible from the two of groups after being given education. Some

respondents admitted that they just found out that ASIP management will assist in breastfeeding the infant even though the mother is busy or working. Mohamed et al (2018), mothers believe formula milk is a better choice for working mothers, which implies a negative attitude towards aspects of breastfeeding (Mohamed., et al, 2018). Breast milk contains immune substances that formula milk does not have and is very much needed by infants in the first month after birth (Prasetyono, 2009).

Notoatmodjo (2007) argued that attitude is a reaction response that is still closed, cannot be seen directly. This means that a person's attitude may be formed but not necessarily in accordance with the behavior that is applied daily. Azwar (2016) said that the attitude obtained through experience will have a direct influence on subsequent behavior and the existence of factors, culture, mass media, and emotional factors from the individual himself (Azwar, 2016). Knowledge of lactation management has a significant effect on attitudes in breastfeeding infants $p = 0.010$ (Karatte et al, 2021).

After 12 weeks of intervention, the researcher observed that the sample was more confident in taking a stand, who previously answered agree to strongly agree or previously answered disagree to strongly disagree. In contrast to the Leaflet group, they seemed to be more careful in determining their attitude so that the attitude score of the Leaflet group varied. Researchers suspected, this happened because the knowledge gained in education will increase self-confidence so as to form a more assertive attitude. Juei et al (2020), mothers with good knowledge will form a positive attitude and have good efficacy in breastfeeding (Juei et al, 2020). Che et al (2019) also revealed that if there is a change in knowledge, it will also change the mother's attitude in exclusive breastfeeding even though using conventional educational media (Che et al, 2019). The formation of lactation management attitudes will affect the success of mothers in exclusive breastfeeding (Quinn et al, 2020).

Lactation Management Practices

Breastfeeding is an ideal infant feeding process, with a long-term goal of healthy growth and development in infants and also has important implications for maternal health (Almohanna, et al. 2020). However, lack of information or support can result in mothers often stopping breastfeeding in the early weeks of experiencing problems during breastfeeding (Lopes et al, 2013). The purpose of breastfeeding education is to increase knowledge, develop positive attitudes in breastfeeding so as to improve mother's skills, and see mothers when breastfeeding (U.S. Department of Health and Human Services, 2013).

There was a significant improvement in the practice of lactation management before and after the intervention in the MOMASI and Leaflet groups ($p=0.000$). Before the intervention there was no significant difference between the two groups, meaning that the initial state of the lactation management practices of the two groups was the same or homogeneous ($p=0.095$). After 12 weeks of intervention, there was a significant difference between the two of groups ($p=0.000$). The difference in average score (Δ) after

intervention in the MOMASI group was 41.29 points compared to 25.38 points in the Leaflet group. It means that although both groups experienced an increase in lactation management practices and statistically, the MOMASI group was better than the Leaflet group.

However, it should be noted that the form of lactation management practice questions adopted from ⁷ *Infant and Young Child Feeding* (WHO, 2013) regarding the practice of squeezing breast milk, especially in question points F9, F10, F11 are interrelated questions. In this research, for example, mothers who did not breastfeed from the beginning even though at the end of the intervention the mother already knew and was able to do it and another incident was that there were mothers who squeezed breast milk but were not stored because they were given directly to the infant at that time. The two examples of these cases will certainly affect the score of lactation management practices.

Rahmawati et al (2016) the formation of human behavior does not just happen, but a continuous process between individuals around them. It can be said that humans behave because they are demanded by internal impulses, while encouragement is an attempt to meet needs. So behavior arises because of encouragement in order to meet needs (Rahmawati, et al 2016). Therefore, as a form of business, one of them is attending breastfeeding education or breastfeeding education such as the activities in this research. According to Sitepu et al (2010) the success rate of a health education is influenced by appropriate methods and attractive packaging in conveying the message so that participants become interested and do not feel bored when receiving the material (Sitepu et al, 2010).

Some respondents admitted that they were not sure that they could give exclusive breastfeeding to their infants because they often had blisters on their nipples, so they thought it was better to give formula milk. Mc Andrew (2012), nipple blisters occur due to errors in lactation management, namely the technique and position of breastfeeding and attachment of the infant's mouth to the mother's breast. Thuileipy et al (2021) Mothers who have less knowledge about lactation management will find it difficult to overcome problems in the lactation process and prefer to stop breastfeeding. Astari et al (2020) also revealed that mothers who have knowledge of lactation management ¹ have a significant effect on the incidence of nipple abrasions $p = 0.002$ (Astari et al, 2020). There is no directly question about this that much, but for researchers one respondent's honesty can represent other respondents as all, that is what they need.

Mother's breastfeeding practice increased after being given "peer support on whatsapp" education for 4 weeks but there was no increase in the group given 1 week counseling while in hospital (Natalia et al, 2021). Kellams et al (2018) also showed that there was no change in lactation management practices in mothers who were given lactation management education through videos. The video was given once before giving birth and seeing the changes in the 4th week after giving birth. However, there was an increase in the 10th week, the researchers revealed that mothers who succeeded in improving their

practice in breastfeeding were those who were able to learn from the experience or process during breastfeeding.

In line with this research, the leaflet group was also able to show an increase in the score of lactation management practices after three months, even though they only received one explanation at the beginning of the meeting. Researchers suspected that this increase is supported by experiences during the mother's breastfeeding process. Prokop et al (2021), knowledge and experience are two factors that influence the success of exclusive breastfeeding. Suspenson (2021), practice is a form of change in human behavior experienced from the learning process. The process of change is largely determined by individual conditions and needs. Behavioral changes will occur when a person begins to apply and considers that the information is true, and is applied for more than 10 weeks (Suspenson, 2021).

These results prove that lactation management education is needed to increase exclusive breastfeeding. If someone has a good knowledge of lactation management, it will also have a good impact on the behavior of mothers in breastfeeding, especially exclusive breastfeeding (Ibrahim et al, 2018). At the end of the research, the researcher made a comment column and respondents' suggestions for the MOMASI application. One representative revealed that, if this application was equipped with a lactation management video, it would be better. In addition, respondents also suggested completing the MOMASI application with materials to improve the quality and quantity of breast milk, giving complementary feeding to children, so that they can be used for a long time. It is hoped that this MOMASI application can be used in general or can be downloaded freely without the permission of the researcher.

Scope of the Research

The limitations of the sample for expressing opinions and honesty are difficult to control because the post-test questionnaire filling is only done through telephone interviews and online questionnaires in the form of google form not through direct observation to the research location, so that researchers cannot consider the factors that can change the sample response

CONCLUSION

There was no significant difference between the two groups in the average score of knowledge, attitudes, and practices of lactation management ($p=0.671, 0.910, 0.095; p>0.000$). There was a significant increase in the MOMASI and Leaflet groups in the average score of knowledge, attitudes, and practices of lactation management between before and after lactation management education ($p=0.000$). After education, there was a significant difference between the two groups in the average score of knowledge, attitudes, and practices of lactation management which was significant ($p=0.000$). The difference in average scores (Δ) after the intervention of Knowledge (45.55; 24.66), Attitudes (21.35; 14.04), and Practice (41.29; 25.38). It means that MOMASI and Leaflets can improve knowledge, attitudes, and practices of lactation

management. However, MOMASI is better than leaflet media. It is hoped that further researchers can develop variables, intentions and efficacy of breastfeeding and then can be associated with success in exclusive breastfeeding. This kind of educational media is very helpful, more efficient and effective in Communication, Information and Education (KIE), especially during the Covid-19 pandemic. So that other new application breakthroughs are needed, such as the MP-ASI assistance application as a continuation.

REFERENCES

- Almohanna, A. A., Win, K. T., & Meedy, S. (2020). Effectiveness of internet-based electronic technology interventions on breastfeeding outcomes: systematic review. *Journal of medical Internet research*, 22(5), e17361.
- Angka, A. T., Karatte, S., Riswan, R., & Hasmiruddin, O. (2021). Hubungan Pengetahuan Tentang Cara Menyusui Yang Benar Dengan Perilaku Menyusui Di Puskesmas Tolala Kolaka Utara. *Jurnal Komunitas Kesehatan Masyarakat*, 3(1), 95-103.
- Astari Amalia Disva. Asfeni. Dian Roza Adila. 2020. *Lentera Ners Journal*. Vol 8(1); p.48-62.
- Azwar, S. (2016). *Metode Penelitian*. Yogyakarta: Pustaka Belajar.
- Bich, T. H., Long, T. K., & Hoa, D. P. (2019). Community-based father education intervention on breastfeeding practice—Results of a quasi-experimental study. *Maternal & child nutrition*, 15, e12705.
- Cohen, E., Berry, J. G., Sanders, L., Schor, E. L., & Wise, P. H. (2018). Status complexicus? The emergence of pediatric complex care. *Pediatrics*, 141(Supplement 3), S202-S211.
- Feenstra, M. M., Kirkeby, M. J., Thygesen, M., Danbjørg, D. B., & Kronborg, H. (2018). Early breastfeeding problems: A mixed method study of mothers' experiences. *Sexual & Reproductive Healthcare*, 16, 167-174.
- Grubestic, T. H., & Durbin, K. M. (2020). The complex geographies of telelactation and access to community breastfeeding support in the state of Ohio. *Plos one*, 15(11), e0242457.
- Ibrahim, I. A., Azriful, A., & Humairah, H. (2014). Gambaran pengetahuan dan sikap ibu tentang manajemen laktasi di wilayah kerja Puskesmas Samaenre Kabupaten Sinjai tahun 2014. *Al-Sihah: The Public Health Science Journal*, 6(2).
- Kellams, A. L., Gurka, K. K., Hornsby, P. P., Drake, E., & Conaway, M. R. (2018). A randomized trial of prenatal video education to improve breastfeeding among low-income women. *Breastfeeding Medicine*, 13(10), 666-673.
- Lopes, S. D. S., Laignier, M. R., Primo, C. C., & Leite, F. M. C. (2013). Baby-friendly hospital initiative: evaluation of the ten steps to successful breastfeeding. *Revista Paulista de Pediatria*, 31, 488-493.
- Mohamed, M. J., Ochola, S., & Owino, V. O. (2018). Comparison of knowledge, attitudes and practices on exclusive breastfeeding between primiparous and multiparous mothers attending Wajir District

- hospital, Wajir County, Kenya: a cross-sectional analytical study. *International breastfeeding journal*, 13(1), 1-10.
- Natalia, R., Rustina, Y., & Efendi, D. (2021). Combining breastfeeding education and support to improve breastmilk production, frequency of breastmilk expression, and partial breastfeeding in low-birth-weight infants. *Journal of Neonatal Nursing*.
- Notoatmodjo, S. (2007). *Pendidikan dan Perilaku Kesehatan*. Jakarta: PT. Rineka.
- Notoatmodjo. (2010). *Promosi Kesehatan dan Ilmu Perilaku*. Jakarta: Rineke Cipta
- Pei, L., & Wu, H. (2019). Does online learning work better than offline learning in undergraduate medical education? A systematic review and meta-analysis. *Medical education online*, 24(1), 1666538.
- Prasetyono (2012). *Buku Pintar ASI Eksklusif*. Yogyakarta.
- Prokop, N., Sim, J., & Meedy, S. (2021). A qualitative descriptive study of new graduate nurses' experiences supporting breastfeeding women in neonatal settings. *Nurse Education in Practice*, 55, 103172.
- Purwanti, S., & Lestari, N. C. A. (2021). Gambaran Tingkat Pendidikan Dan Pengetahuan Ibu Tentang Pemberian Makanan Pendamping Asi Pada Bayi Di Puskesmas S. Parman Banjarmasin. *Zona Kebidanan: Program Studi Kebidanan Universitas Batam*, 10(2).
- Quinn, P., & Tanis, S. L. (2020). Attitudes, perceptions, and knowledge of breastfeeding among professional caregivers in a community hospital. *Nursing for women's health*, 24(2), 77-83.
- Rahayu, A., Rahman, F., Marlinae, L., Husaini, H., Meitria, M., & Yulidasari, F. (2018). *Buku Ajar Gizi 1000 Hari Pertama Kehidupan*. Yogyakarta: CV Mine.
- Rahmawati, A., Bahar, B., & Salam, A. (2013). Hubungan Antara Karakteristik Ibu, Peran Petugas Kesehatan dan Dukungan Keluarga dengan Pemberian ASI Eksklusif di Wilayah Kerja Puskesmas Bonto Cani Kabupaten Bone. [Skripsi]. Makassar (ID): Universitas Hasanuddin.
- Rahmawati, W., Wirawan, N. N., Wilujeng, C. S., Fadhilah, E., Nugroho, F. A., Habibie, I. Y., ... & Ventyaningsih, A. D. I. (2016). Gambaran Masalah Gizi pada 1000 HPK di Kota dan Kabupaten Malang (Illustration of Nutritional Problem in the First 1000 Days of Life in Both City and District of Malang, Indonesia). *Indonesian Journal of Human Nutrition*, 3(1), 20-31.
- Roesli, U. (2008). *Inisiasi Menyusu Dini Plus ASI Eksklusif*. Jakarta: Pustaka Bunda
- Shekar, M., Heaver, R., & Lee, Y. K. (2006). *Repositioning nutrition as central to development: A strategy for large scale action*. World Bank Publications.
- Sitepu, A. (2008). Efektivitas penyuluhan kesehatan menggunakan metode ceramah disertai pemutaran vcd dan tanpa pemutaran vcd dalam meningkatkan pengetahuan dan sikap ibu tentang penyakit pneumonia pada balita di Kecamatan Stabat Kabupaten Langkat. repositori.usu.ac.id

Nat. Volatiles & Essent. Oils, 2021; 8(4):14184-14200

Wang, N., Ma, S., & Wang, Y. (2021). Uniting in the letter but breaching in the spirit: Contract flexibility and interfirm collaboration based on the Contracts as Reference Points Theory. *Industrial Marketing Management*, 97, 193-204.

Watkins, A. L., Dodgson, J. E., & McClain, D. B. (2017). Online lactation education for healthcare providers: A theoretical approach to understanding learning outcomes. *Journal of Human Lactation*, 33(4), 725-735.

WHO & UNICEF. (2009). *Global Strategy: Breastfeeding Critical for Child Survival*. New York: WHO/UNICEF.

WHO. (2013). *Infant and Young Child Feeding*. IAP Textbook of Pediatrics.

Yuniaty Ismail, D. (2020). *Gambaran Perilaku Manajemen Laktasi Pada Ibu Menyusui 0-6 Bulan Di Wilayah Puskesmas Sudiang Raya Kota Makassar Tahun 2020* (Doctoral dissertation, Universitas Hasanuddin).

Zielinska, M. A., Sobczak, A., & Hamulka, J. (2017). Breastfeeding knowledge and exclusive breastfeeding of infants in first six months of life. *Roczniki Państwowego Zakładu Higieny*, 68(1).

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