The influence of education packages on adequacy of breast milk and baby weight gains during the covid-19 pandemic

Nur Elly\textsuperscript{1}, Demsa Simbolon\textsuperscript{1}, Iin Nilawati\textsuperscript{2*}

\textsuperscript{1}Department of Nursing, Poltekkes Kemenkes Bengkulu, Jalan Indra Giri No. 3 Padang Harapan, Kota Bengkulu
\textsuperscript{2}Department of Midwifery, Sekolah Tinggi Ilmu Kesehatan Sapta Bakti, Jalan Mahakam Raya No. 16 Lingkar Barat Bengkulu
\*Corresponding author: nilawati_iin@yahoo.com

**ABSTRAK**

**Latar Belakang:** Proses menyusui pada masa awal kehidupan bayi sering terjadi kegagalan karena kurangnya produksi Air Susu Ibu (ASI). Edukasi ASI merupakan upaya yang perlu dilakukan untuk mencegah dan mengatasi kegagalan menyusui. Pada masa pandemi covid-19, dibutuhkan edukasi pada ibu hamil dan post partum yang dapat dilakukan secara online.

**Tujuan:** penelitian ini bertujuan mengetahui efektivitas pemberian paket “Edu-ASI” terhadap kecukupan ASI dan peningkatan berat badan bayi di Kota Bengkulu.

**Metode:** Penelitian ini menggunakan desain kuasi eksperimen dengan post test design with control group. Populasi dalam penelitian ini adalah ibu hamil trimester 3 (dengan usia kehamilan diatas 35 minggu yang melaksanakan ANC di BPM Kota Bengkulu) dikutuki hingga post partum hari ke empat belas. Jumlah sampel adalah 15 orang kelompok intervensi dan 15 orang kelompok kontrol yang diperoleh secara consecutive sampling. Pada kelompok intervensi diberikan paket edukasi dengan alat bantu media edukasi melalui Edu_ASI berupa 3 part video berisi konsep dan cara menyusui kemudian dilakukan pendampingan dan pengukuran post tes kecukupan ASI dan 2 minggu setelah persalinan bayi ditimbang berat badannya. Pada kelompok kontrol hanya diberikan edukasi oleh bidan sebagaimana edukasi yang biasa dilakukan bidan. Kecukupan ASI diukur berdasarkan indikator dari bayi serta peningkatan berat badan bayi dengan membandingkan penambahan berat badan lahir dengan berat badan bayi pada usia 2 minggu. Analisis dilakukan dengan uji T dan man witney.

**Hasil:** penelitian menunjukkan tidak ada perbedaan karakteristik responden kelompok kontrol dan kasus. Paket Edu-ASI efektif terhadap kecukupan ASI dengan nilai P value 0,007, dan paket Edu-ASI kurang efektif terhadap peningkatan berat badan bayi yang diukur 2 minggu setelah persalinan dengan hasil uji nilai p value 0,671.

**Kesimpulan:** Paket Edu-ASI diharapkan dapat mendukung keberhasilan program ASI Ekslusif terutama di masa pandemi covid-19.

**KATA KUNCI:** paket edu-asi; kecukupan asi; berat badan bayi

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**ABSTRACT**

**Background:** The process of breastfeeding in the early days of a baby's life often fails due to a lack of breast milk production. Breastfeeding education is an effort that needs to be done to prevent and overcome breastfeeding failure. During the COVID-19 pandemic, education for pregnant and postpartum women is needed that can be done online.

**Objectives:** The purpose of this study was to determine the effectiveness of the “Edu-ASI” package on the adequacy of breastfeeding and increasing infant weight in Bengkulu City.

**Methods:** This study uses a quasi-experimental design with a post-test design with a control
The population in this study were 3rd trimester pregnant women (with gestational age above 35 weeks who carried out ANC at BPM Bengkulu City followed by post partum on the fourteenth day. The number of samples was 15 people in the intervention group and 15 people in the control group obtained by consecutive sampling. In the intervention group, an education package was given with educational media tools through Edu_ASI in the form of 3 video parts containing the concept and how to breastfeed, then mentoring and post-test measurement of the adequacy of breastfeeding were carried out and 2 weeks after delivery the baby was weighed. In the control group only education was given by the midwife as education that is usually done by midwives. The adequacy of breast milk is measured based on indicators from the baby and the increase in baby weight by comparing the increase in birth weight with the baby’s weight at the age of 2 weeks.

**Result:** The analysis was carried out using the T test and man witney. control and case respondents. The Edu-ASI package was effective for breastfeeding adequacy with a P value of 0.007, and the Edu-ASI package was less effective in increasing the baby’s weight gain which was measured 2 weeks after delivery with a p-value test of 0.671.

**Conclusions:** The Edu-ASI package is expected to support the success of the Exclusive Breastfeeding program, especially during the COVID-19 pandemic.

**KEYWORD:** edu-asi package; adequacy of breast milk; baby’s weight

**INTRODUCTION**

The outbreak of the corona virus (SARS-CoV-2) in Indonesia continues to show an increase in cases. This condition creates vulnerabilities for newborns, especially because the nutritional adequacy and immunity of infants depend on the coverage of nutrients that are only obtained from breast milk. Breast milk, besides containing complete nutrients that babies need for their growth and development process, also contains immunoglobulins to build the baby’s immune system as a fortress to avoid the corona virus.

Breastfeeding is often hampered in the early days of the baby’s birth because usually after giving birth the mother experiences fatigue or discomfort due to the physiological changes post partum, so often the baby is not breastfed immediately. Another reason is that breast milk has not yet come out due to the mother’s anxiety factor in facing childbirth, especially during this Covid-19 period so that the reflex that functions to produce breast milk does not work properly. In addition, the mother’s lack of knowledge and awareness of the efforts that can be done and prepared by the mother since pregnancy, and after birth to accelerate the release of breast milk. The study of Yaqub and Gul (1) describes the factors that cause mothers to fail to breastfeed, namely low milk production, working mothers, sick/weak mothers, anxiety and sick babies. Other studies mention relaxation and lack of anxiety, adequate knowledge about breastfeeding, adequate lactation skills, and support from others are the most important factors influencing the success of breastfeeding. Based on the results of the study Mahadewi et.all (2) showed that that knowledge, work, and family support were related to exclusive breastfeeding. This can have an impact on the failure of breastfeeding and have implications for the low coverage of exclusive breastfeeding.
Based on data from the World Health Organization (WHO) in 2020 about the coverage of exclusive breastfeeding in the world still 44%, although there has been an increase, but this number is not increasing quite significant, and that number is still below the target exclusive breastfeeding according to WHO is 50%. According to Riskesdas data, the coverage of exclusive breastfeeding in Indonesia in 2018 was 37.3% and in 2020 was 69.62% in pandemi covid era the coverage of exclusive breastfeeding in Indonesia has been significantly increased. When compared to the target set by the Indonesian Ministry of Health, which is 80%, the achievement of exclusive breastfeeding in Indonesia still has not met the target. For Bengkulu province, based on the 2019 government agency performance accountability report, the exclusive breastfeeding target is 50%, while the achievement has exceeded the target of 72.05% and for the city of Bengkulu with an achievement of 65.9%. Even though it has exceeded the achievement of regional targets, it is still quite far from the targets set nationally (3).

The Covid-19 pandemic has made many lifestyle changes, anxiety and restrictions on interacting with health facilities. This condition makes the possibility of babies not getting breast milk (ASI) due to failure to breastfeed. Therefore, it should be anticipated through education and lactation assistance that can be done online. The government has stipulated Government Regulation Number 33 of 2012 in Article 13 concerning Exclusive Breastfeeding: that health workers are required to provide information and education on exclusive breastfeeding to mothers and/or family members from the time of pregnancy examination until the period of exclusive breastfeeding is complete (4).

Babies who get adequate breast milk can be seen through signs of adequacy of breast milk from the mother and from her baby and can be seen from the baby’s weight gain every month as an indicator of the baby’s growth. The average weight gain of babies who are exclusively breastfed is 210 grams higher than babies who are partially breastfed (5). Therefore, this research needs to be carried out aiming to determine the effectiveness of the edu-ASI package on the adequacy of breast milk in infants and increase in infant weight. Based on the results of research Listyaningrum et al. 2016 shows that the relationship between knowledge about exclusive breastfeeding and mother’s motivation with exclusive breastfeeding for working mothers at PT. Globalindo Intimates, Klaten (6). Zahara’s research on the relationship between the level of knowledge, attitude and support of the husband of breastfeeding mothers with exclusive breastfeeding n the Village of Cinta Rakyat and Desa Tanjung Rejo 2020 shows that there is a significant relationship between mother’s knowledge and exclusive breastfeeding (p=0.005), there was a significant relationship between mother’s attitude and exclusive breastfeeding (p=0.002), there was a significant relationship between husband’s support and breastfeeding Exclusive (p = 0.015) (7)(8)(9).

MATERIALS AND METHODS

The type and design in this study used a quasi-experimental design (quasi-experimental research), with a post-test only with control group design, measurement was only carried out at the end of the study, namely after the intervention group was given the “Edu_ASI” package, education about breastfeeding and breastfeeding in the form of videos delivered using an android mobile phone whatsapp group containing 3 (three) learning parts is given to the mother in stages, after being given through the WA group then mentoring is carried out through the WA group for 3 days, then continues with part education secondly, after 3 days the next part of the mentoring was given, during the mentoring process, there was a communication
process between the researcher and the respondent on things that the respondent did not understand. In the mentoring process, the researcher also believes that education has been learned by the respondents. Part 1 is about knowledge of breastfeeding (understanding, benefits of breastfeeding, nutritional needs of breastfeeding, signs of sufficient breast milk, IMD), part 2 contains breastfeeding techniques, part 3 about breast care & oxytosine massage). An assessment of the adequacy of breastfeeding was carried out. The study was conducted at an Independent Practice Midwife with a high number of visits to antenatal and intra-natal care services, in the working area of Bengkulu City. The time of the research was conducted in September-November 2020.

The population of this study were all 3rd trimester pregnant women (with gestational age above 35 weeks) who performed antenatal examinations at Independent Practice Midwives (BPM) in Bengkulu City and were followed up to 2 weeks post partum and their babies born. The number of research samples was 30 pregnant women and their babies. Sample selection was taken from the population with consecutive sampling technique. In the intervention and control groups each were 15 pregnant women and their babies. Sample selection was taken from the population with consecutive sampling technique. In the intervention and control groups each were 15 pregnant women and their babies. The inclusion criteria consisted of: Pregnant women with a single pregnancy, gestational age 35 weeks and intending to breastfeed their babies, mothers giving birth to healthy babies (weight 2,500 grams and without defects that can interfere with breastfeeding), and mothers having an Android mobile phone (specifically for the intervention group), normal delivery type, no nipple abnormalities. The exclusion criteria were mothers who refused to continue the intervention, stillbirths.

The types of data used include primary data where data obtained based on data collected by researchers include data on breast milk adequacy, infant weight, mother’s age, education, parity, occupation, mother’s knowledge and attitudes. The methods used in data collection included: interviews with mothers about mother’s characteristics (age, education, occupation, parity, mother’s knowledge and attitudes), direct observation of the adequacy of breastfeeding and measurement of baby’s weight at birth. Measurement of the adequacy of breast milk was carried out by midwives as educators and enumerators on the third day of the baby’s birth, including observations and interviews on the frequency of the baby’s urination for 24 hours, the baby is calm and not fussy, and observing the response of the baby’s satisfaction after feeding. The baby’s birth weight variable was measured on the 14th day after birth using a digital baby scale (Type SR 721 DM) with an accuracy of 0.01 grams. Measurements were carried out 2 times (to ensure the measurement results). If there is a difference in the measurement results, the measurement is repeated once again. Data collection tools in this study include: questionnaire sheets, observation and interview guidelines in the form of google form, and Edu_ASI videos. The data that has been obtained is analyzed, namely univariate and bivariate. Univariate analysis was used to describe the characteristics of the dependent variable and the confounding variable in the form of percentage, mean, median, standard deviation, max-min.

Bivariate analysis using Chi Square and Man witney test. Bivariate analysis was used to help analyze the effectiveness of Edu_ASI on breastfeeding adequacy and infant weight.

RESULTS AND DISCUSSION

Mother Characteristics

The results of the study based on Table 1 show that the maternal age group in the intervention group was the highest number of 8 people (53.3%) aged 20-35 years, while in the control group almost all respondents were 14 people (93.3%) aged 20-35 years. For
education status, in the intervention group and control group, each mother with low education status, namely 4 people (27%) and those with high education, each intervention group and control group were the same as many as 22 people (73%). On the characteristics of employment status, for the intervention group, most of the 11 people (73%) did not work, as well as in the control group, most of the 13 people (83%) did not work.

Based on the parity variable, in the intervention group, more than half of the respondents were primigravida pregnancies as many as 8 people (53.3%), while in the control group, most of the respondents’ pregnancies were multigravida as many as 11 people (73.3%). The highest was 7 people (46.7%) having knowledge about breastfeeding and lactation in the sufficient category, on the contrary in the control group the highest frequency was 6 people (40%) having less knowledge, while for the case group the frequency of knowledge was sufficient (46.7%). Meanwhile, in the post-test, the knowledge value in the case group showed a shift and the highest increase became sufficiently knowledgeable (60%) and good knowledge (40%) and 0% less knowledge.

**Adequacy of breast milk and baby weight**

The description of the characteristics of adequacy of breast milk and weight gain is as follows:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Case Group</th>
<th>Control Group</th>
<th>P Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adequacy of breast milk</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not enough</td>
<td>4</td>
<td>6</td>
<td>0.037</td>
</tr>
<tr>
<td>Enough</td>
<td>7</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Well</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Adequacy of baby weight</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not enough</td>
<td>0</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Enough</td>
<td>9</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Well</td>
<td>6</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

Based on Table 2 shows that babies whose mothers came from the intervention group (getting the Ed_ASI package), almost all
14 babies (93.3%) showed signs of adequacy of breastfeeding, while in the control group, 9 babies (60%) showed signs of adequacy of breastfeeding. For the weight status of babies in their mothers who belonged to the intervention group after 2 weeks of birth, almost all babies were 12 babies (80%) with weight gain in accordance with the standard of infant weight gain, which was >125gr. Likewise in the case group, there were 11 infants (73.7%) with weight gain >125gr.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Case group</th>
<th></th>
<th>Control group</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Adequacy of breast milk</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not enough</td>
<td>1</td>
<td>6.7</td>
<td>6</td>
<td>40</td>
</tr>
<tr>
<td>Enough</td>
<td>14</td>
<td>93.3</td>
<td>9</td>
<td>60</td>
</tr>
<tr>
<td>Increase Baby's BB</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;125 mg</td>
<td>3</td>
<td>29</td>
<td>4</td>
<td>26.7</td>
</tr>
<tr>
<td>&gt;125 mg</td>
<td>12</td>
<td>80</td>
<td>11</td>
<td>73.3</td>
</tr>
</tbody>
</table>

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Furthermore, before conducting a bivariate analysis of the effect of Edu_ASI on breast milk adequacy and infant weight gain, a data normality test was conducted to determine whether the research data were normally distributed or not. In this study, the Shapiro-Wilk normality test was used with a significance level of 0.05. The results of the data normality test showed that the two data were not normally distributed. After the normality test of the data, it was continued with the homogeneity of variance test. The homogeneity of variance test is used to see whether the data in the 2 population groups are homogeneous or not. The homogeneity test of variance for categorical data uses the chi square test. The results showed that there was no significant difference in the variables of breastfeeding adequacy and infant weight in the case group and the control group with p value 0.05.

Effect of Edu_ASI on Adequacy of Breast Milk in Babies

The results in Table 4 show that in infants from mothers who entered the intervention group after being given the Edu_ASI package and in infants from mothers who entered the control group, statistical tests obtained a p value of 0.007 <0.05, which means that there is a difference in the adequacy of breastfeeding between the case group and the group. control. Thus, the Edu_ASI Package is quite effective on the adequacy of breast milk for babies.

The Effect of the Edu_ASI Package on the Improvement of the Baby's Body

The results in Table 5 show that in infants from mothers belonging to the intervention group compared to infants from mothers in the control group, the results of statistical tests using Man Witney obtained a p value of 0.671 > from 0.05 which means that there is no significant effect of increasing infant weight on mothers who received the Edu_ASI package compared to mothers who did not receive the Edu_ASI package. In other words, the Edu_ASI package was not effective in increasing the baby’s weight.
DISCUSSION

The results showed that there was no difference in age, education level, occupation, and parity of respondents between the control and case groups. In general, both in the case group and in the control group, pregnant women were of productive age (20-35 years). This is in accordance with the standard gestational age for pregnant women classified as productive age, which is 20-35 years. The results of this study support the previous study conducted by (10) conducted in Lebak Regency on 47 breastfeeding mothers, most of whom were in the productive age (20-23 years old and with low education). Low level of education may contribute to limited education. the mother’s ability to absorb and respond to the information contained in the breastfeeding education package. Low education is generally relatively less exposed to information and the ability to respond to new information is not as fast as other mothers who are accustomed to thinking more critically at a higher level of education. As for the work of mothers, both groups the majority of cases and controls do not work, this provides a great opportunity for pregnant women to access information. According to the results of (11) mothers who do not work have more opportunities to access information than mothers who work. The average parity of respondents is mothers with multigravida. Based on the results of research regarding the relationship between mother’s work and parity on breastfeeding for infants 0-6 months stated that parity status is related to breastfeeding attitudes (11).

The results of this study also showed that there was a difference between the knowledge of the case group and the control group. Knowledge in the case group tends to increase after the intervention (after the provision of the Edu_ASI package and mentoring). The results of the bivariate analysis showed that there was an effect of giving the Edu_Asi package on the knowledge of pregnant women. This is also in line with the results of the Samaria 2020 research showing that there is an increase in knowledge of breastfeeding mothers after being given the Elsinak Package (which includes the provision of materials using power points, booklets, educational videos, demonstrations of techniques and breastfeeding positions) (10).

This study is in line with the results of research Qudriani (2018) (12) that there is a significant difference between the knowledge of breastfeeding mothers before being given health education and after being given health education. This study also is line with Afini (2019) that showed the influence of health education through demonstration methods to treat the position and attachment to the adequacy of breast milk there

<table>
<thead>
<tr>
<th>Group</th>
<th>Breastfeeding Adequacy Group</th>
<th>Total</th>
<th>P-Value</th>
<th>CI 95.0 %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Enough breast milk</td>
<td>Not enough breast milk</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Case group</td>
<td>14</td>
<td>93.3</td>
<td>1</td>
<td>6.7</td>
</tr>
<tr>
<td>Control</td>
<td>9</td>
<td>60</td>
<td>6</td>
<td>40</td>
</tr>
</tbody>
</table>

<table>
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<tr>
<td></td>
<td>Enough breast milk</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Case</td>
<td>12</td>
<td>80</td>
<td>3</td>
<td>20</td>
</tr>
<tr>
<td>Control</td>
<td>11</td>
<td>73.3</td>
<td>4</td>
<td>26.7</td>
</tr>
</tbody>
</table>
are infants aged 0-6 months in Karang Pule Village (13)66%, cakupan ini turun jika tahun 2016 sebesar 86,63%. Berdasarkan data Dinas Kesehatan Kota Mataram tahun 2018 cakupan ASI Eksklusif (AE5). Knowledge is obtained through information, namely reality (facts) by seeing, hearing for yourself, and through communication tools (14). With the information conveyed about breastfeeding through the Edu_ASI package to mothers, it can affect their knowledge. The more a person is exposed to information, the more knowledge he will get. The results of this study are also in line with research Faridah which states that there is an increase in knowledge of breastfeeding mothers before and after counseling at Dr. RSUD. Harjono Ponorogo (9) (15).

The Edu_Asi package given to the case group did not have an effect on the mother’s attitude in breastfeeding. Attitudes tend to be difficult to change. According to the theory, the factors that influence attitudes apart from knowledge are personal experience, the influence of other people who are considered important, the influence of culture, mass media, educational institutions and religious institutions and the influence of emotional factors (2).

The results of this study showed that in the case group after being given treatment and monitored for up to 2 weeks, almost all infants, namely 14 babies (93.3%) showed signs of adequacy of breastfeeding as seen from several indicators including: frequency of urination, calmness and comfort/not fussy. According to Arif (2009), a baby is considered to be getting enough breast milk if: there is significant weight gain baby feels satisfied and full after feeding then baby can sleep soundly for 2-4 hours, and the baby can urinate or defecate with a frequency of at least six times in a day (16).

After feeding and emptying of breast milk. Meanwhile, in the control group, only 6 babies (60%) had enough breast milk. Based on the results of the statistical test, the p value was 0.007 < 0.05. Thus the results of the study prove that there is an effect of the Edu ASI Package on the adequacy of breastfeeding. These results can be related that the selection of the form of education that is packaged in the 3 part “Edu_ASI Package” given to pregnant women, allows mothers to obtain a complete information package about breastfeeding (starting from how mothers can recognize basic concepts about breastfeeding, factors that can affect breastfeeding failure, to what efforts can be done by mothers to stimulate milk production through nutrition, massage and environmental support). This information is very much needed by pregnant women in supporting the success of the lactation process, especially in fulfilling the adequacy of infant milk. Furthermore, the Edu-ASI package, which is delivered using video, allows mothers to gain an overview of specific practices that are not usually achieved through didactic counselling. After watching a video pack, it allows moms to try different practices as they go live, increasing mom’s engagement and memory retention. In addition, it allows mothers to be able to repeat material about breastfeeding at any time to the content of the material that they feel has not been understood. The use of audiovisual media is effective in increasing the behavior of pregnant women towards the implementation of IMD practices at the Tinggimoncong Health Center (17). The results of this study are also in line with the results of research which shows that there is a significant relationship between the provision of the Success ASI package with maternal satisfaction and increased milk production (18).

This study also showed that the Edu_ASI package had no effect on increasing the baby’s weight after 2 weeks postpartum. Body weight is one of the anthropometric parameters that can be used to determine the nutritional status and growth of children in the first year of life to determine whether the physiological needs of children are met (19). According to Arifin and Husin (2018), newborns can experience weight
loss in the first 5-7 days of life. Babies will experience weight gain after the age of 10-14 days. Neonatal weight changes at the age of 2 weeks the average increased of 102.9 grams. During the second week, there are neonates experiencing weight loss. According to research from Conita (2013) neonates term will experience weight loss about 4-7% of birth weight during the week first life. Then at the age of 3 weeks the average change neonate weight gain of 388.89 grams. Furthermore, at the age of 4 weeks of mean weight change of neonates increased by 650 grams. Ascension on average in the fourth week already according to the mean increase in neonates according to Soetjiningsih (2005), which is a minimum of 600-800 grams in the first month of a baby’s life (16).

The results of this study support the results of a systematic review and meta-analysis of 35 studies of promotion of breastfeeding which reported no significant relationship between breastfeeding and changes in child weight (20). This can be attributed to several factors that influence the increase in infant weight, namely internal and external factors, not only influenced by the intake and adequacy of breast milk. The results of the study that support this are the results of research (11) showing that maternal factors, namely the mother’s educational background, daily diet, breast care significantly affect the baby’s weight gain ($p < 0.05$). In addition, it can also be related to the time interval for evaluating the baby’s weight gain after 2 weeks of birth, which may be too close. It is recommended to see changes in weight gain after birth with a longer time, namely after 4 weeks or 1 month after birth.

In addition, especially in the era of the COVID-19 pandemic, to prevent transmission, which is followed by an emergency response status and the policy of Large-Scale Social Restrictions (PSBB), it is certain that it can have an impact on decreasing pregnant women, breastfeeding mothers as well as infants and toddlers to make visits to receive services from health facilities. The policies provided by the Indonesian Ministry of Health as stated in the guidelines for nutritional services during the COVID-19 emergency response to non-urgent or emergency health services can be carried out by utilizing information technology or other media as needed, such as virtual media, telephone calls, SMS, video, or using an online face-to-face application (video call) (21). Therefore, videos can also be used as a form of alternative educational media to support the success of breastfeeding for babies.

During the covid 19 pandemic, after the research intervention was carried out, it turned out to have an impact on pregnant women, namely an increase in knowledge of pregnant women about preparation for lactation and lactation, and mothers in the intervention group gave breast milk and babies were breastfed enough.

**CONCLUSION AND RECOMMENDATION**

The edu-ASI package had no effect on increasing the baby’s weight. However, it is proven to have an influence on the adequacy of breast milk in infants which is very useful as an educational medium during the COVID-19 pandemic so that it can support the success of the Exclusive Breastfeeding program, especially during the Covid-19 pandemic. It is recommended for health care providers, especially independent practice midwives, for specific and innovative health education on preparation for lactation in pregnant women. The Edu-ASI package is expected to support the success of the Exclusive Breastfeeding program, especially during the COVID-19 pandemic.

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