

Education Package Based On Family Centered Maternity Care To Increase Self Efficacy And Knowledge Of Breastfeeding Mothers in The Covid Pandemic

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ABSTRACT

Introduction: Exclusive breastfeeding is still below the set target. Breastfeeding behavior is influenced by knowledge and self-efficacy. Training packages based on family centered maternity care are needed to boost mothers' efficacy and knowledge about breastfeeding. The aim of this study is to evaluate the effect of an online education package based on Family Centered Maternity Care on the self efficacy and knowledge of breastfeeding mothers.

Materials and methods: This Study used a pre-experimental design method with a One-Group Pre-Post test design approach. We recruited 60 breastfeeding mothers in Padang, Indonesia, selected with consecutive sampling. Online Education Based On Family Centered Maternity Care was provided for the respondent. Data were collected using the Breastfeeding Self efficacy Scale ShortForm (BSE-SF) and The Breastfeeding Knowledge (BKQ) Questionnaires.

Results: The respondents had significant differences in self-efficacy and knowledge before and after the health education Based On Family Centered Maternity Care ($p < 0.001$).

Conclusion: After Education Package Based On Family Centered Maternity Care influenced the Self Efficacy And Knowledge of Breastfeeding Mothers. It could be provided as a nursing intervention to assist Breastfeeding Mothers.

KEYWORDS:

Breastfeeding, Education package, Family Centered Maternity Care

INTRODUCTION

Early breastfeeding initiation and exclusive breastfeeding aid in a child's survival and development of the antibodies necessary for illness defense. According to the World Health Organization, the coverage of exclusive breastfeeding in 2018 worldwide was only around 36% during the 2007-2014 period¹. The proportion breastfeeding in infants In West Sumatra the coverage of exclusive breastfeeding in 2016 was 75.1% with a target of 83 %².

Breastfeeding that does not reach the target can harm the baby's health³. The COVID-19 Pandemic period impacted all

aspects, including breastfeeding rates in Indonesia. According to the 2020 WHO, due to the COVID-19 pandemic, access to essential services such as breastfeeding counseling in hospitals, health clinics, and through home visits has been disrupted. The inaccurate information about breastfeeding safety has reduced the rate of breastfeeding mothers because postpartum mothers fear passing the disease on to their babies. Even though according to research, mothers who are suspected or confirmed of SARS-CoV-2 infection give birth to babies with negative test results or no results, it is recommended to breastfeed if possible, unless the mother's condition is seriously ill or in the ICU¹⁵.

In Indonesia, there was a decrease in the rate of breastfeeding during the COVID-19 pandemic. According to the 2021 Basic Health Research data, 52.5 percent or only half of the 2.3 million babies aged less than six months were exclusively breastfed in Indonesia, or decreased 12 percent of the 2019 figure. The early breastfeeding initiation rate has also decreased from 58.2 percent in 2019 to 48.6 percent in 2021¹⁶.

Self-efficacy and knowledge are the main factors to increase the behavior of exclusive breastfeeding⁴. The self-efficacy of mothers who feel they are unable to breastfeed is the main factor for mothers not to exclusively breastfeed or stop breastfeeding prematurely⁶. During the COVID-19 pandemic, the self-efficacy of breastfeeding mothers can decrease because the forming factors cannot be achieved with maximum. Self efficacy is influenced by mother's knowledge about breastfeeding. Increasing knowledge can be done by providing online education based on family centered maternity care.

Some online education is carried out by researchers and is effective for supporting breastfeeding mothers during a pandemic but there are still drawbacks to this method because it does not involve husbands and families as support for mothers while at home, so a more appropriate strategy is needed to increase mothers' confidence in breastfeeding.

Family Centered Maternity Care is a concept of providing family-centered maternity nursing care⁵. The combination of online education with the concept of family centered maternity care is a strategy to increase family participation in caring for postpartum mothers. Education package is given to postpartum mothers accompanied by the family,

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such as husbands or parents, as a support system for mothers in exclusive breastfeeding. According to Asmuji in 2016 the postnatal education model with the FCMC approach has several dimensions, including providing postnatal education by providing a discharge planning format, involving the closest family for postpartum mothers (eg husband, mother and in-laws) as social support, paying attention to the stages of the postpartum period consisting of: from the immediate postpartum phase (0-24 hours first), early postpartum (> 24 hours-1 first week) and late postpartum (> 1 week- 6/8 weeks), paying attention to the characteristics of postpartum mothers and families, including the culture used by them, educational topics tailored to the needs of mothers related to the stages of the postpartum period⁶.

This education package is designed while taking into account health protocols during the COVID-19 pandemic. Online education is carried out using the Zoom Cloud Meeting and WhatsApp Messenger applications because these applications are easily accessible and understandable for postpartum mothers. This education package is an innovation in providing health education that pays attention to health protocols during a pandemic.

The education package consists of several educational topics arranged based on the postpartum phase. the immediate postpartum phase includes pain adaptation and early mobilization. Topics in the early postpartum phase include breast care, oxytocin massage, correct breastfeeding techniques, nutrition during breastfeeding, perineal care, personal hygiene, rest needs, postpartum gymnastics, exclusive breastfeeding, newborn care (bathing, umbilical cord care, and changing diapers). While topics in the late postpartum phase include contraception, sexuality, infant immunization, getting to know baby's behavior, baby's growth and development and baby's safety'. With increased knowledge and self-efficacy of mothers, the problem of low exclusive breastfeeding can be overcome.

The aim of this study is to evaluate the effect of an online education package based on Family Centered Maternity Care on the self-efficacy and knowledge of breastfeeding mothers in West Sumatra, Indonesia during the COVID-19 pandemic. Specific objectives include comparing rates of exclusive breastfeeding, assessing changes in self-efficacy, and evaluating knowledge acquisition before and after the implementation of the education package.

MATERIALS AND METHODS

This research used pre-experimental design because they provide little or no control of extraneous variables in the form of one-group pretest-posttest design. This research used pre-test and post-test to see the result of the treatment. We recruited 60 breastfeeding mothers in Lubuk Begalung Public health center Padang, Indonesia, and selected with consecutive sampling. Respondents' inclusion criteria in this study were are early postpartum mothers (24 hours until one week postpartum) who were not infected with the corona virus, able to communicate well, the respondent sight and informed consent sheet. Exclusion criteria were mothers who

had breast problems in breastfeeding, mothers who were sick. Data were collected using the Breastfeeding Self Efficacy Scale ShortForm (BSE-SF) and The Breastfeeding Knowledge (BKQ) Questionnaires. The BSES-SF consists of 14 statements covering techniques interpersonal thinking, and support (support). Every statement items are positive with a total score range of 14-70. Reliability test the BSES-SF instrument uses the Cronbach alpha coefficient and corrected items total correlation coefficient to test its validity. Results obtained is 0.94 with a mean of 55.8 (SD=10.85). While the results of the reliability test on the translated instrument shows the Cronbach alpha value coefficient of 0.872. The Breastfeeding Knowledge Questionnaire (BKQ) was used to assess participants' knowledge of breastfeeding [24]. This 26-item questionnaire has eight subscales: benefits (four items), component (two items), lactation mechanism (four items), skills (five items), breast problem management (three items), neonatal problem management (four items), contraindication (one item), and breast milk preservation (three items). Each correctly answered item was assigned a score of 1, and incorrectly answered items were assigned a score of 0. A previous study demonstrated that this scale has satisfactory psychometric properties. Cronbach's α for the BKQ used in this study was 0.80.

An online education and self-administered questionnaire were sent out between October 2020 and November 2020 via zoom and WhatsApp, and respondents were recruited on a voluntary basis. We conducted an educational package for 60 minutes with the frequency of 4 online meetings. The first online educational meeting on demonstrations of breastfeeding techniques that serve to create direct breastfeeding experiences, the second online educational meeting on breastfeeding videos which are expected to provide knowledge and model strategies for effective breastfeeding. The third online education in the form of verbal persuasion regarding exclusive breastfeeding is expected to motivate mothers to achieve exclusive breastfeeding success. The fourth online education about stress management is an intervention given to create positive coping strategies so that mothers have positive views and beliefs about their ability to breastfeed successfully. The pretest and posttest were carried out one day before and after the intervention using a questionnaire made in the form of a Google form that is easily accessible to respondents.

Information about the responders remained confidential and non-attributable. This study was approved by the Faculty of Medicine, Andalas University, and registered with ID 937/UN.16.2/KEP-FK/2020.

DATA ANALYSIS

Data collected were analyzed using the software Statistical Package for the Social Sciences (SPSS) version 26. Categorical variables are presented as frequency and percentage (%). The parametric Paired t-test was used to do a bivariate analysis with a 95% level of confidence. The use of this test is based on the normality test. the Asymp.sig significance value was 0.993, which means that the data is normally distributed.

RESULTS

We recruited 60 breastfeeding mothers in Lubuk Begalung Public health center Padang, Indonesia. The respondents are early postpartum mothers (24 hours until one week postpartum) who were not infected with the corona virus. The research result can be seen in the following table:

The result from the total 60 breastfeeding mothers, the average self-efficacy before treatment was 41.05. The average self-efficacy after treatment was 57.48. while knowledge before treatment was obtained at 14.55 and after treatment was obtained at 22.98. Table II describes the results of the paired T-test data analysis. It was found that there was an effect of education packages based on family-centered maternity care on self-efficacy and knowledge of breastfeeding mothers with a p-value < 0.001.

DISCUSSION

The results of the Cheema et al study in 2020 explained that breast milk should not be withheld from infants because of the overall safety of breast milk and the short and long term nutritional, immunological, and developmental benefits of breast milk for newborns. During a pandemic, the mother's care arrangements, the severity of the mother's infection and the availability of resources may influence breastfeeding decisions, the role of joint decision-making about breastfeeding between mother and doctor needs to be emphasized¹⁵. This condition supports the mother's self efficacy to maintain breastfeeding.

This study was not in line with the results of research conducted by Pradinie (2015) regarding the breastfeeding self-efficacy education package and the success of breastfeeding in postpartum mothers, showing that there was no difference between the treatment and control groups after being given breastfeeding support package intervention

($p=0.410$)⁷. Differences can occur due to differences in sample characteristics. The majority of samples in previous studies had previous breastfeeding experience. Mothers who have had direct experience with breastfeeding tend to be more confident in continuing to breastfeed, especially since the beginning. Most respondents have high enough breastfeeding self-efficacy to make them more persistent in continuing breastfeeding⁸.

Self-efficacy and knowledge in breastfeeding mothers are very important. This is evidenced by research by Zakiah (2012), which states that mothers with high self-efficacy breastfeed longer than those with low self-efficacy and there is a positive correlation between self-efficacy on the first day of breastfeeding and the length of breastfeeding at two months breastfeeding⁹.

In this study, the intervention was carried out with innovations from previous studies. Combining online education with family-centered maternity care is a strategy to increase family participation in postpartum maternal care. Family-centered maternity care is a concept of providing family-centered maternity nursing care¹⁰.

This model has the advantage that in optimizing a mother's understanding of her role and function in maternal adaptation and newborn care, the family is actively involved in this effort¹¹. The impact of the increased understanding of postpartum mothers will have the ability to competent mothering optimally¹².

The results of this study are also by the theory put forward by Lunenburg (2011) that breastfeeding self-efficacy can be influenced by four factors: performance accomplishment, vicarious experiences, verbal persuasion, and physiological response. Physiological responses¹³. The online education method with the concept of family-centered maternity care

Table I: Demographic characteristics

Variable	Category	Frequency	Percentage
Age	< 25	12	20
	25 – 35	21	35
	> 35	27	45
Parity	<2	33	55
	≥ 2	27	45
Education Level	low education	26	43.3
	secondary education	30	50
	higher education	4	6.7
employment status	housewife	46	76.7
	employee	14	23.3

Table II: Differences in average self efficacy and knowledge of respondents before and after being given an Education Package based on family centered maternity care

Variable	Measurement Time	mean	N	Std. Deviation	95% CI	P value
Self efficacy	Pretest	41.05	60	4.188	39.97-42.13	0.000
	Posttest	57.48	60	4.742	56.26-58.71	
Knowledge	Pretest	14.55	60	2.27	13.96-15.13	0.000
	Posttest	22.98	60	2.03	22.45-23.51	

includes the verbal persuasion factor, which is additional support from the husband and is expected to increase self-efficacy further. Verbal persuasion is support from other influential people such as friends, family, lactation consultants, and health practitioners. Reinforcement or advice given by influential people is a source of strength for mothers to breastfeed their babies¹⁴.

Health services always conduct education as one of the health promotion work programs. Health workers explain how important it is to give breast milk exclusive breastfeeding, nutrients or ingredients in breast milk as well as the benefits of breast milk which include cheap breast milk, no hassle to make it, as an anti-infection factor, and can establish a closer loving relationship between mother and child. There is a special record at the health center regarding babies who are given exclusive breastfeeding. To find out the number of babies who are getting exclusive breastfeeding, the health worker usually makes a mark on the examination book or immunization book baby about development and breastfeeding. Before the Pandemic, special and face-to-face counseling about exclusive breastfeeding and even counseling about proper breastfeeding methods had also been carried out in the Health Service Area.

The limitation of this research is that the number of respondents is only 60 people, of course it is still lacking describe the real situation. In the data collection process, the information obtained through questionnaires sometimes does not reflect the opinions of the respondents actually, this happens because sometimes there are differences in thinking, assumptions and different understanding of each respondent, as well as other factors such as honesty factor in filling out the opinions of respondents in the questionnaire.

CONCLUSION

This study concludes that there is an effect of online education packages based on Family Centered Maternity Care on self-efficacy and knowledge of breastfeeding mothers. There is a difference in the average acquisition of knowledge before and after the implementation of the education package.

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CONFLICT OF INTEREST

We have no conflicts of interest.

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