

Original Article

The Correct Breastfeeding Education on the Knowledge and Behavior of Postpartum Mothers in the NNICU Room

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ABSTRACT

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Background: In new mothers there is often a failure of administration early in life. The first day of birth becomes a very vulnerable day because breast milk usually has not come out or only slightly confuses the mother and gives drinks other than breast milk. Purpose of the study was to Analysis of the influence of education on the right way of breastfeeding on the knowledge and behavior of breastfeeding postpartum mothers in the NNICU room of RSUD dr. Soedono, East Java Province.

Methods: Research design: Pretest-Posttest Experiment Design. Independent variable: proper breastfeeding education: Dependent variable in: knowledge and behavior of postpartum mothers on proper breastfeeding. How to collect data: questionnaires for knowledge of how to breastfeed and observation sheets to measure appropriate breastfeeding behavior. Population: all postpartum mothers whose babies are being treated in the NNICU room in August – October 2023 is 165 people. Sample: a portion of a population of 28 people. Random random sampling technique. Statistical test using Chi Square test technique.

Results: The results of the study before education were carried out almost all (82.1%) postpartum mothers had good knowledge and most (67.9%) had proper breastfeeding behavior. After education: all (100%) postpartum mothers have good knowledge and proper breastfeeding behavior. The results of the Chi Square test analysis with $\alpha= 0.05$ p knowledge=0.018 and p attitude=0.007 there is an influence of breastfeeding education on knowledge and appropriate breastfeeding behavior in postpartum mothers

Conclusion: Breastfeeding education to postpartum mothers using a leaflet containing interesting pictures, carried out at any time before breastfeeding mothers and always practiced directly with the assistance of officers makes it easier for mothers to remember. Direct practice accompanied by officers makes mothers quickly able to breastfeed appropriately.

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Introduction

The first day of birth becomes a very vulnerable day because breast milk usually

has not come out or only a little. This results in the baby being given additional food or drink which will result in the failure of

exclusive breastfeeding at the beginning of the baby's life (Smith et al., 2017). The implementation of the Baby Care Hospital mandated by WHA Resolution 45.34 of 1992 is to encourage all health care facilities to implement the 10 steps towards successful breastfeeding. Breast milk (ASI) contains the most appropriate food for babies aged zero to six months because the formulation of breast milk is in accordance with the baby's digestive system. Nutrition in breast milk contains a very ideal source of nutrition with a balanced composition and adjusted to the baby's growth needs according to his age. Its dynamic composition and in accordance with the needs of the baby makes breast milk an optimal nutritional intake for babies. Breast milk and plasma have the same concentration of ions so babies do not need fluids or other additional food until six months of age. Breast milk contains the first and main food needed by babies (Lindsay et al., 2017). Infants aged zero to six months must receive exclusive breastfeeding. Exclusive breast milk is the provision of breastfed babies alone without other additional food or drinks including water, except medicines, vitamins and mineral drops from birth to six months old (Kemenkes RI, 2021).

Breastfeeding is very beneficial, especially for mothers and their babies. Mothers who breastfeed their babies will be able to reduce bleeding after childbirth, accelerate uterine reduction, economical, practical, provide satisfaction and pride for mothers who succeed in providing exclusive breastfeeding, and can reduce pregnancy. Breast milk will provide increased endurance, protect newborns from allergies, asthma, diarrhea, and have a balanced composition consisting of proteins, fats, vitamins, minerals, water, and enzymes needed by babies (Kemenkes RI, 2021).

Based on data in the NNICU room of RSUD dr. Soedono, East Java Province, from

January to March 2022, there were 172 babies who were cared for, both born at RSUD dr. Soedono, East Java Province, and referrals from outside RSUD dr. Soedono, East Java Province, consisting of 62 BBLR babies and 110 BBLC babies. While the dead were recorded as 24 babies. Here shows the high infant mortality rate while in treatment in the NNICU room of RSUD dr. Soedono East Java Province.

Babies with low immune systems tend to be susceptible to disease so that their growth and development become disrupted. Diseases that often attack babies with low immune systems, including asthma, eczema, and various other types of allergies. Babies also become overly sensitive to dust, weather, food, and various types of medications. Not only maintaining the baby's body immunity, breast milk given by the mother also has benefits for the child's body even long after the breastfeeding period is over. Children and adolescents who as infants are given exclusive breastfeeding intake are proven to have a lower risk of cancer, type 1 and 2 diabetes, colitis, and high blood pressure (Sumarmi, 2023).

In the last two decades, the role of maternal self-efficacy in initiation and during the breastfeeding process has increasingly proven to be very important. High maternal self-efficacy results in longer breastfeeding duration by mothers because of the confidence they have in its continuity. This is confirmed by different studies that have shown that there is a positive correlation between maternal self-efficacy and the duration of breastfeeding. There is a possibility of extension of this duration when the mother receives appropriate nursing intervention, ongoing support and evaluation that can take the form of educational programs introduced to promote breastfeeding. According to a study by Pugin, providing breastfeeding skills-based education to pregnant women

before birth increases breastfeeding rates. It emphasizes that early introduction of appropriate and effective interventions will also help mothers achieve the recommended six months of exclusive breastfeeding (Agrina et al., 2019).

Methods

The research design used Pretest-Posttest Experiment. The independent variable is the educational aspect of how to breastfeed properly. Dependent variable: knowledge and proper breastfeeding

behavior. Research instruments: using questionnaires for knowledge and observation sheets using cheklists for behavior. Sampling: with a simple random probability sampling technique. Population: all postpartum mothers whose babies are treated in the NNICU room of RSUD dr. Soedono East Java Province during August – October 2023 totaling 165 people. Sample: a total of 28 respondents and who met the inclusion criteria. The results of the analysis used the Chi Squar test with $\alpha = 0.05$.

Results

Table 1 . General Data of Postpartum Mothers In the NNICU Room dr Soedono, East Java Province 2023

No		Frequency	Percent (%)
1	Age		
	19-25	24	86
	26-30	1	4
	31-35	3	11
2	Education		
	Junior High School	2	7.1
	Senior High Scholol	22	78.6
	Perguruan Tinggi	4	14.3
3	Pregnancy		
	First	25	89.3
	Second/more	3	10.7
4	Work		
	Work	21	75
	No/work	7	25

From table 1: almost all (86%) respondents are aged 19-25 years, most (78.6%) respondents have a high school education. Almost all (89.3%) respondents with a first pregnancy. Most (75.0%) respondents are employed.

Table 2. Knowledge of postpartum mothers in the NNICU Room dr Soedono, East Java Province 2023

No	Knowledge Before Education	Frequency	Percentage	Knowledge after education	Frequency	Percentage
1	Good	23	82.1	Good	28	100.0
2	Enough	5	17.9	Enough	0	0.0
	Sum	28	100	Sum	28	100

From the analytical test Chi Square test, knowledge $\rho = 0.018$ with $\alpha = 0.05$ means that there is an educational influence on the knowledge of postpartum mothers. From table 2 it is obtained : before education almost all (82.1%) respondents had good knowledge, after education all (100%) respondents had good knowledge.

Table 3. Postpartum mother's behavior in the NNICU Room dr Soedono, East Java Province 2023

No.	Behavior Before Education	Frequency	Percentage	Post-educational behavior	Frequency	Percentage
1	True	19	67.9	true	28	100.0
2	Not quite right	9	32.1	Not quite right	0	0.0
	Sum	28	100	Sum	28	100

From the analytical test Chi Square test, the attitude $\rho = 0.007$ with $\alpha = 0.05$ means that there is an educational influence on the attitude of postpartum mothers. From table 3, data were obtained before education, most (67.9%) breastfeeding behavior right after education was given all (100%) respondents had the right breastfeeding behavior.

Discussion

Puerperal mother's knowledge of how to properly breastfeed

Based on table 2: that the knowledge of postpartum mothers about the correct way to breastfeed before education is almost entirely good and after all education (100%) is good. Based on table 1: almost all (86%) respondents aged 19-25 years., all (78.6%) respondents have a high school education. Almost all (89.3%) respondents were with their first pregnancy. Most (75.0%) respondents are employed. Some factors that influence knowledge are formal education level, age, environment and information (Notoatmodjo, 2014). Factors of knowledge and education of mothers who are still lacking will affect breastfeeding. Knowledge gained from formal and non-formal education about breast care will result in smooth breastfeeding and can increase the baby's weight (Qomarasari, 2023). The age of the mother will affect the emotional readiness of the mother, for example in mothers who are married and pregnant too young can cause

physiological and psychological conditions are not ready to be mothers, this can affect pregnancy and parenting of children (Merben & Abbas, 2023).

There is a meaningful relationship between the Level of Knowledge and Attitudes with Breastfeeding Techniques in Postpartum Mothers, there are still breastfeeding mothers who have never received information about breastfeeding techniques, so it is recommended to local health workers to continue to strive to provide information about breastfeeding practices in the right way through the distribution of posters, leaflets, and other extension media, and regularly conduct individual and group counseling counseling at the Wori Health Center or posyandu activities (Keni et al., 2020).

Factors that influence knowledge in breastfeeding the baby correctly are the age, education, parity, and occupation of the respondents (Fidayanti & Sholihah, 2023). Almost all (86%) respondents aged 19-25 years and almost all (92.9%) respondents have upper secondary education who are young adults. Where in that phase there is a

great desire to know for something new related to his health and the health of his baby. In the 5.0 era, all information can be accessed through electronic media, most of which at this age they already understand how to use electronic media that can increase their knowledge. For young mothers who want to give their milk immediately after birth can easily access it on electronic media. Most working respondents have better knowledge than non-working respondents because those who work can share experiences with their friends at work. Most (89.3%) of first child pregnancies/parity respondents have no experience, but almost all of them have good knowledge, this is likely because most respondents can access knowledge on how to breastfeed correctly through various available media, many by sharing interesting methods.

Postpartum mother's behavior on how to properly breastfeed

Based on table 3 that the behavior of postpartum mothers before before education was mostly (67.9%) good, but almost half (32.1%) still behaved inappropriately, after being fully educated (100%) postpartum mothers behaved appropriately in breastfeeding

Analyzes that what causes a person to behave health is influenced by, thinking and behavioral determinants Utilization of feelings (thought and feeling), namely in the form of knowledge, perception, belief, and assessment of a person towards objects (health) (Juniar et al., 2023). In accordance with the results of research from (Batjo et al., 2021) who took the object of research on postpartum mothers in the Kalibagor Health Center area, it also concluded that providing education to breastfeeding mothers is very significant support in the practice of breastfeeding babies correctly. This result is also supported by

Marliandiani and Ningrum (2015) who stated that as an effort to improve and condition breastfeeding techniques.

Health workers to be able to conduct counseling on the correct way to breastfeed infants and counseling with the practice of using the model (phantom) directly to the community so that the knowledge and attitudes of breastfeeding mothers will increase (Saloma & Alvionita, 2021). There needs to be an increase in maternal behavior in exclusive breastfeeding (Lady, 2022). There is a significant influence between the provision of breastfeeding education on breastfeeding behavior of postpartum mothers at Balung Jember Regional Hospital (Wahyuni, 2021). These results suggest that breastfeeding education can be given to postpartum mothers to increase knowledge of breastfeeding behavior.

Health behaviors are things related to a person's actions or activities in maintaining and improving his health. It also includes measures to prevent disease, personal hygiene, choosing food, sanitation, breastfeeding. The behavior of postpartum mothers in breastfeeding is influenced by various factors, education, information, previous experience in terms of seizing will affect an ospostum mother in giving breast milk to her baby. The mother's behavior in breastfeeding is greatly influenced by the knowledge or information received. Information received by a mother if done repeatedly and directly practiced with the assistance of health workers will be easy to remember and mothers are easy to do what is obtained when educated on how to breastfeed properly which in the end mothers will always breastfeed in accordance with what is taught by health workers who are in direct practice and use illustrated leaflets (Lady, 2022).

The influence of education on the knowledge and behavior of postpartum mothers on the correct way to breastfeed

From the analytical test of the Chi Square Test, knowledge $p = 0.018$ with $\alpha = 0.05$ means that there is an educational influence on the knowledge of postpartum mothers and *Chi Square Test* attitude $p = 0.007$ with $\alpha = 0.05$ means that there is an educational influence on the attitude of postpartum mothers. Health education is the right solution for postpartum mothers because health education is a process of providing information that aims to change individual behavior. Providing health education can increase the duration of breastfeeding, so this can be done by promoting, namely through counseling or health education about breastfeeding information, the benefits of breastfeeding, overcoming obstacles in breastfeeding, the correct position and way of breastfeeding, milking and storing breast milk (Mulcahy et al., 2022).

Health Education is an activity in an effort to increase individual or individual health knowledge at least regarding the management of disease risk factors and clean and healthy living behavior in an effort to improve the health status of participants, prevent the recurrence of disease and recover disease (Hanafi et al., 2014).

Education on the right way to breastfeed with the right method using picture leaflets and assistance of health workers at all times to postpartum mothers who will breastfeed before the mother returns home is useful and influential in increasing knowledge and proper breastfeeding behavior because education with various methods will be easily accepted and can be directly done by mothers (Fisabilillah et al., 2023).

Conclusion

Before the education, almost all postpartum mothers had good knowledge and most had proper breastfeeding behavior. After education: all (100%) postpartum mothers have good knowledge and proper breastfeeding behavior. There is an educational influence using illustrated leaflets and assistance by health workers at any time the mother will breastfeed before returning home.

Authors Contributions

The authors worked collectively throughout the research process, with one member primarily responsible for study design and methodology, another member conducting literature review and data analysis, and a third member contributing to manuscript writing and revision. All authors have given final approval of the version to be published.

Conflicts of Interest

The authors collectively affirm that no conflicts of interest, either direct or indirect, have impacted the integrity or outcomes of this study, ensuring unbiased and reliable results.

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