DIGITAL BASED EDUCATION: SMART MOM BREASTFEEDING

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Abstract
Post partum period mothers, especially primipara, often experience problems in the breastfeeding process, this is due to a lack of mother's knowledge, including the lack of information obtained by mothers from health workers and the mother's lack of ability to understand the information obtained, and also do not have experience giving birth. The objectives of this study was to increase the knowledge and ability of mothers in breastfeeding and the baby's ability to breastfeed so that breastfeeding was smooth. This type of research is descriptive in the form of a case study. The subjects studied were 2 patients with the same nursing cases and problems, namely patients with primiparous mothers with ineffective breastfeeding at Muhammadiyah Hospital Palembang. This research was conducted on March 9, 2022 to March 11 2022 and April 12 to April 14 2022. After implementing digital-based education on the audiovisual method for smart breastfeeding mothers, digital-based education results showed that smart mother breastfeeding can increase mothers’ knowledge and ability to breastfeeding as well as babies’ ability to suckle and breastfeeding smoothly. Implementation of digital-based education: smart mother breastfeeding can be applied.

Keywords: Digital-Based Education, Smart Mom, Breastfeeding.

INTRODUCTION
The biggest gift for a family, especially for women is giving birth, after giving birth every woman will experience the puerperium or also known as the puerperium. The reproductive organs will slowly experience changes from the previous good changes physiological or psychological during the puerperium. Primiparous mothers (those who have given birth for the first time) certainly differ in preparation and coping mechanisms when facing childbirth, the postpartum period, and breastfeeding with multiparous mothers (mothers who have given birth). Therefore, knowledge and skills are needed for a mother in caring for newborns (BBL), such as a good way of breastfeeding to provide exclusive breastfeeding (Sholehah, Kholisotin, and Munir 2019).

The United Nations Children Fund (UNICEF) and the World Health Organization (WHO) in 2018 recommend optimal nutrition for babies, namely exclusive breastfeeding which is given for the first six months of life and can be continued with appropriate complementary foods until the age of 2 years in order to reduce morbidity and child mortality, based on 2018 data only 41% of babies under 6 months are exclusively breastfed worldwide, this figure has only increased slowly over the last few decades (UNICEF 2018). Based on data from the Ministry of Health of the Republic of Indonesia (2019) the coverage of exclusive breastfeeding in Indonesia 2018, the percentage of coverage for babies aged 0 to 6 months getting exclusive breastfeeding is still quite low at 65.16% with a target of 80% (Widgery 2018).
Based on data from the South Sumatra Province Health Profile (2019), the coverage of exclusive breastfeeding collected in the South Sumatra Province in 2018 was 60.7%. Coverage only increased by 0.7% compared to 2017 with 60% coverage. The achievement of exclusive breastfeeding coverage is influenced by many factors, one of which is the level of understanding of the mother about the importance of breastfeeding during the first 6 months of the baby's birth (Supliyani and Djamilus 2021). Post partum mothers, especially primiparas, often experience problems in the breastfeeding process, this is due to a lack of knowledge of the mother, including the lack of information that the mother obtains from health workers and the lack of ability of the mother to understand the information obtained, and also does not have experience giving birth (Astuti and Anggarawati 2021). According to Puspita's research (2018) it states that 61.9% of primiparous mothers are still not correct in their breastfeeding technique. Many mistakes lie in breastfeeding positions and breastfeeding steps (Andriani 2018).

Based data at Palembang Muhammadiyah Hospital were obtained in 2016, postpartum mothers with normal delivery numbered 690, there were no postpartum mothers who experienced breastfeeding problems, in 2017 there were postpartum mothers with normal delivery 754 there were 11 postpartum mothers who experienced breastfeeding problems such as swelling of the breasts, while in 2018 there were 104 postpartum mothers with normal deliveries and 16 of them experienced breastfeeding problems (Susulo and Murbiah 2018). Based on data from the Medical Records of Palembang Muhammadiyah Hospital (2022) there were 673 mothers who gave birth by normal delivery in 2020, while in 2021 there were 583.

The mother's ability to breastfeed properly, especially for primiparous mothers, was very high support the success of mothers in breastfeeding with the correct technique. Breastfeeding with the wrong technique will have an impact such as the nipples become chafed and the milk does not come out optimally thus affecting milk production, then the mother is reluctant to breastfeed her baby, this causes the baby's milk needs not to be fully fulfilled. This situation shows that there are still many breastfeeding mothers who have not been able to use the correct technique. Knowledge (education) regarding proper breastfeeding techniques was needed to achieve successful breastfeeding. Mothers can carry out breastfeeding actions properly if they are equipped with knowledge and have a positive attitude from health workers (Astuti and Anggarawati 2021).

Efforts are being made to increase mother's knowledge about correct breastfeeding techniques, namely by education. The education provided must be more effective and in accordance with the goals and objectives, so that media was needed the attractive and acceptable to the target. Effective learning media in the educational process was audiovisual media. The audiovisual method relies on hearing as well as sight from the target. The use of audiovisual involves all learning senses, therefore, the more senses that are used to capture and process information, the more likely it is that the information can be understood and remembered clearly. Various kinds of media are used in education such as leaflets given to mothers, flipcharts, and screening of films or videos as visual aids because they are able to
stimulate the senses of sight and hearing and are more interesting (Supliyani and Djamilus 2021).

This is in line with the opinion of (Alini and Indrawati 2018) about the ability of audiovisual media in health promotion is more effective and attracts more attention because it provides a stimulus on hearing and vision simultaneously, so that the results obtained are maximized. Research conducted by (Batjo et al. 2021) states that there is an effect of health promotion with video media on pregnant women's knowledge of breastfeeding techniques. This was also proven by (Idris and Enggar 2019) with the results of research which stated that there was an effect of exclusive breastfeeding counseling with audiovisuals on the knowledge of pregnant women.

Nurses have a role as providers of education/education, so that nurses can increase the level of knowledge and provide information. Health education is a learning process experienced by individuals, families, groups, and communities to change behavior and improve abilities in various knowledge (Astuti and Anggarawati 2021). From the description above, the application of nursing care in the framework of digital-based breastfeeding education: the audiovisual method for primiparous mothers with ineffective breastfeeding needs to be implemented. The aim of this research is to obtain a picture of digital-based education: the audiovisual method for primiparous mothers who breastfeed is not effective through a nursing care approach.

LITERATURE REVIEW

Ineffective breastfeeding is a condition where the mother and baby experience dissatisfaction or difficulty when breastfeeding (Tim Pokja SDKI DPP PPNI 2017). Failure in the breastfeeding process is often caused by the emergence of several problems, both problems in the mother or in the baby. For some mothers who do not understand this problem, failure to breastfeed is often seen as a problem caused only by their child. Breastfeeding problems can also be caused due to special circumstances, apart from that mothers often complain that their babies cry or refuse to breastfeed so that mothers think that their milk is not enough, or that their milk is not good, not good, so that it often causes mothers to make decisions to stop breastfeeding (Sutanto 2018).

According to the (Tim Pokja SDKI DPP PPNI 2017) the causes of mothers experiencing ineffective breastfeeding are: inadequate milk supply, barriers to neonates (for example, prematurity, cleft), maternal breast anomalies (for example, inverted nipples), inadequate oxytocin reflex, inadequate baby's sucking reflex, swollen breasts, history of breast surgery, and twin births. According to (Sutanto 2018) there are several problems that cause mothers to be reluctant to breastfeed their babies, namely: (1) lack or misinformation, (2) flat or immersed nipples, (3) cracked or cracked nipples, (4) swollen breasts (Engorgement), and (5) mastitis or breast abscess.

According to (Dewi 2021) factors that can influence mothers to experience ineffective breastfeeding are: (a) internal factors consisting of knowledge, education, employment, maternal health conditions, and external factors, namely important people as family
references, socio-economics, influence of advertising formula, culture. Exclusive breastfeeding is partly due to a lack of knowledge, but is also constrained because the mother refuses to breastfeed her child because it will affect the physical shape of the mother's body which is getting fatter if the baby breastfeeds, besides that the baby's mother feels hungry quickly and always wants to eat, so her body gets fatter (less beauty). Therefore, the baby's mother tries to stabilize her body, even though her child is still 0-4 months old by only using formula milk from the promotion of complementary food products and formula milk (Alim, Samman, and B 2020).

Health education was a learning process experienced by individuals, families, groups, and communities to change behavior and improve abilities in various knowledge (Astuti et al., 2020). Health education techniques are a medium for conveying messages or transforming health behavior to the public (Amalia and Susanti 2020). Health education on correct breastfeeding techniques including demonstrations on how to wash hands properly, how to grease nipples with breast milk, how to place the baby, how to latch on properly, how to latch on to the baby's mouth properly, how to hold the breast, how to feed alternately with breasts, how to clean baby's mouth after feeding, how to burp a baby. After being given health education, it is hoped that the mother will be able to do it right for her baby (Amalia and Susanti 2020).

One of the digital educational media is the audiovisual method. According to (Supliyani and Djamilus 2021) audiovisual media relies on the hearing and sight of the target. The use of audiovisual media involves all learning senses, therefore, the more senses that capture and process information, the more likely it is that the contents of the information can be understood and stored in memory. Audiovisual media that emphasizes the function of communication include films, stories, advertisements and videos. Education about correct breastfeeding techniques is how to provide breast milk to babies with the correct attachment and position of mother and baby. To achieve success in breastfeeding requires knowledge of correct breastfeeding techniques.
Breast care is an action to care for the breast, especially during the puerperium or breastfeeding to facilitate the release of milk. Breast care is a method to increase milk production and one way to expedite the breastfeeding process is by carrying out regular breast care or breast care which aims to improve blood circulation and prevent blockage of the milk ducts so as to facilitate smooth milk production, maintain cleanliness, and treat nipples. immersed flat milk (Fatmawati, Syaiful, and Wulansari 2019).

Figure 2.9 Compressing The Nipples

Source: (Mas’adah and Rusmini 2015)
METHOD

This case study was taken using a descriptive design to explore the problem of implementing audiovisual nursing education nursing in primiparous mothers with ineffective breastfeeding. The approach used is the nursing care approach which includes assessment, nursing diagnoses, interventions, implementation and evaluation. Subjects in this case study were two ineffective breastfeeding patients with the initials Mrs.D who was 20 years old and the second patient with the initials Mrs.Y who was 20 years old. Nursing care is carried out in the midwifery room in a private hospital in the city of Palembang. The process of taking nursing care Mrs. D from 9 to 11 March 2021 and Mrs. Y from 12 to 14 March 2022

This research procedure was carried out after obtaining approval from the hospital and then submitting informed consent to both subjects with due observance of ethical principles which include the right to self-determination; the right to privacy and dignity; right to anonymity and confidentiality. Then proceed with the nursing care process first conducting an assessment on the two patients first, then proceed with determining the diagnosis and preparing the nursing plan to be carried out and finally carrying out the nursing evaluation of the actions applied in the SOAP format until the nursing care process ends. Data collection is done through interviews, observation, physical examination, and implementation or action.

Data collection tools or instruments use the diagnostic assessment format, planning, implementing, and evaluating with applicable regulations, interview guides, observation
sheets, activity scheduling sheets, questionnaire sheets. The data analysis used in this case study is a descriptive analysis presented in a textual/narrative way. The analysis was carried out by analyzing the data from the results of the initial study and data from the results of the study during the ongoing nursing care process, formulation of nursing diagnoses, implemented breastfeeding education interventions and evaluation results. The results of the analysis are presented in descriptive as a result of research, then interpreted, compared with the theory and results of previous relevant research to provide research recommendations.

**RESULTS AND DISCUSSION**

**Results**

Nursing care for the patient Mrs. D 20 years and Mrs. Y years with ineffective breastfeeding problems are described through the stages of nursing care. Nursing care as an approach is described through assessment, determination of nursing diagnoses, planning, implementation and evaluation.

**Assessment**

The assessment was carried out through a history review with interviews and physical examination head to toe obtained nursing data as follows: Mrs. D and Mrs. Y are both 20 years old and have just given birth to their first child. The two patients have low educational backgrounds, namely junior high school. Mrs. D does not only work as a housewife, while Mrs. Y works as a day-to-day trader. Both of them have no history of illness. There is no history of diseases such as tuberculosis, hepatitis, mastitis and AIDS. The main complaint to Mrs. D and Mrs. Y said they were tired after giving birth and were afraid that the baby's nutrition would not be fulfilled because breast milk would not come out. The milk does not drip and looks restless, the baby seems unable to attach to the breast, there is tenderness/abrasions on the breast and is not confident because the baby is fussy, refuses to suckle, the breasts and nipples look dirty.

**Diagnosis**

Nursing diagnosis in patient 1 Mrs. D and patient 2 Mrs. Y namely ineffective breastfeeding related to inadequate supply of breast milk as evidenced by complaining of fatigue after giving birth, looking anxious and afraid that the baby's nutrition is not being fulfilled because the milk does not come out, the baby is unable to attach to the mother's breast, the milk does not drip, there is pain Blisters on the nipples, and not confident to breastfeed because the baby is fussy and refuses to breastfeed, the mother's ability to position the baby is not right, the breasts and nipples look dirty

**Nursing Intervention**

From the formulation of the diagnosis of ineffective breastfeeding, the goals of nursing services were formulated for each patient, namely after 3 treatments the milk supply increased. Planned nursing actions include: observation: identification of readiness, ability
to receive information and identification of goals for wanting to breastfeed. Therapeutic: provide health education materials and media, schedule health education according to agreement, provide opportunities to ask questions, support mothers to increase confidence in breastfeeding, and involve support systems such as husbands, families, health workers and the community and Education: Provide breastfeeding counseling, explain the benefits of breastfeeding for mothers and babies, teach the 4 breastfeeding positions and placement (lacth on) correctly, and teach postpartum breast care (breast massage) while teaching interventions antepartum breast care by compressing with cotton that has been given coconut oil was not taken because the two patients were post partum.

**Nursing Implementation**

Implementation is given based on the diagnosis raised by focusing on priority issues, namely ineffective breastfeeding for primiparous mothers. Researchers provide implementation of breastfeeding education through observation, therapeutic and education. Actions taken are providing health education materials and media in the form of leaflet media, videos containing correct breastfeeding techniques and breast care, identifying the readiness of the ability to receive information and the patient's desire to breastfeed using an interview guide (attached) and a checklist sheet, making a health education schedule according to the agreement, provide counseling and education about the benefits and correct breastfeeding techniques (understanding, benefits, position and attachment of the baby to the breast) with the audiovisual method, namely using leaflets and playing videos about breastfeeding techniques and practicing on patients, explaining (understanding, how to care for breasts) and teaching post partum breast care (breast massage) with audiovisual methods, namely using leaflets and playing breast care video, supporting mothers to increase self-confidence in breastfeeding by inviting them to think positively, and observing mothers and babies after giving implementation using breastfeeding observation sheets.

In addition, the authors also provide implementation of sleep support nursing in the second diagnosis given to both patients. Implementation of sleep support is given for 3 days of treatment, on the first day the patient is educated about the importance of getting enough sleep, on the second day the patient is advised to have a regular sleep schedule so that he has the right bedtime. On the third day the authors evaluated both patients and the patient had better sleep hours than before.

**Evaluation**

During three days of treatment through the nursing care approach breastfeeding was not effective in patient 1 Mrs.D and patient 2 Mrs.Y it was concluded that after nursing actions for 3x treatments the ability of the mother to breastfeed and attachment of the baby in patient 1 Mrs.D and patient 2 Mrs.Y increases and breast milk comes out.
Discussion Results

The implementation of nursing in patients with breastfeeding was not effective for Mrs.D and Mrs.Y. It was carried out in the Siti Walidah room, Palembang Muhammadiyah Hospital on March 9, 2022 until March 14, 2022. The activities carried out are nursing care including nursing assessment, nursing diagnosis, nursing intervention, nursing implementation and nursing evaluation. In nursing care activities, the author contracts in advance with the two patients so that they can be ready both physically and psychologically in receiving nursing care.

Actual or risk nursing problems according to the (Tim Pokja SDKI DPP PPNI 2017) in theory there are 3 nursing problems that often arise in postpartum patients, namely ineffective breastfeeding, sleep pattern disturbances and acute pain. Priority nursing diagnoses in this case study are ineffective breastfeeding related to inadequate supply of breast milk due to complaints felt by both patients during the assessment that must be addressed immediately because it can cause the mother to think that her milk is not enough, or the milk is not tasty, not good, so the mother makes a decision to stop breastfeeding. This nursing diagnosis is supported by the results of the nursing assessment and is in accordance with the theoretical nursing diagnoses in patient 1 Mrs.D and Mrs.Y. Nursing diagnoses aim to identify individual, family and community client responses to situations related to health (Tim Pokja SDKI DPP PPNI 2017). After finding a nursing diagnosis, the next step is to develop a nursing action plan to address the nursing problems faced by the patient. Action planning is prepared based on the theory that has been prepared to be implemented properly and can obtain results in accordance with the objectives to be achieved and the specified outcome criteria.

In planning nursing action directly focusing on the problem of breastfeeding is not effective. In this implementation there is no gap between the existing theory and the facts in the field because the patients cooperate well. The implementation was carried out from March 9 2021–14 March 2022.

Carrying out observational actions: Identification of readiness, ability to receive information and desire to breastfeed.

Observation by identifying the readiness of the ability to receive information and the desire to breastfeed to find out how much the patient was ready to receive information and the patient's desire to breastfeeding, so that nurses can provide appropriate action for the problem of ineffective breastfeeding in patients (Tim Pokja SIKI DPP PPNI 2018). How to identify the patient's readiness and desire to breastfeed, namely using an interview guide format for primiparous mothers with ineffective breastfeeding problems and asking about their goals and intentions to breastfeed, social support or the role of the closest person to breastfeeding, access to information about breastfeeding, efforts and obstacles faced patient while breastfeeding. Patients were also asked to fill out a checklist sheet to identify the level of knowledge before and after the actions and observations of breastfeeding in mothers and babies were carried out, then documented the patient's response in a notebook. The author
found similarities between patient 1 and patient 2 at the time of first observation where patient 1 Mrs. D and patient 2 Mrs. Y has the same goals and intentions to breastfeed and complaints, this can be caused by factors from the mother herself and the baby's factor that is not good at sucking the mother's nipples.

**Therapeutic Action**

In the implementation of therapeutic nursing the author prepares health education materials and media. The media used are audiovisual media in the form of leaflets and videos containing correct breastfeeding techniques and breast care as well as making agreements on scheduling activities to carry out health education. Implementation of supporting mothers to increase self-confidence in breastfeeding by inviting positive thinking also has a major effect in fostering a sense of enthusiasm for patients who are trying to breastfeed their babies. Involve the support system (husband, family, health workers, and community) by inviting the family to always accompany and support the patient. The results of this study are in line with (Sutanto 2018) which states that important people such as husbands or family can usually influence a mother's behavior in breastfeeding. If the person is very trusted in his life then whatever that person says or does is immediately followed and emulated, for example in breastfeeding, then support from the family is very much needed in the smooth process of breastfeeding the baby.

**Educational Action**

Providing education with audiovisual methods can increase patient knowledge about the benefits of breastfeeding, breastfeeding techniques and breast care. When providing education the author uses language that is easily understood by patients 1 Ny. D and patient 2 Mrs. Y was very cooperative with the material presented by the author and when the education was given, the patient was accompanied by the people closest to him, such as his mother and husband. The results of this case study are in line with the results of research by (Alini and Indrawati 2018) that the ability of audiovisual media in health promotion is more effective and attracts more attention because it provides a stimulus to hearing and vision simultaneously, so that the results obtained are maximized. Research conducted by (Batjo et al. 2021) stated that there was an effect of health promotion using video media on pregnant women's knowledge of breastfeeding techniques. This was also proven by (Idris and Enggar 2019) with research results which stated that there was an effect of exclusive breastfeeding counseling with audiovisuals on pregnant women's knowledge. During the implementation of the two patients with the same method, namely breastfeeding education with the audiovisual method, the authors found no difference between the education in the case studies and the nursing interventions that had been prepared.
CLOSING

Conclusion

1. The results of the initial assessment of patients with breastfeeding problems were not as effective as in patient 1 Ny.D and 2 Ny.Y found subjective data and objective data that describe the problem breastfeeding in both patients and patient knowledge before being given education for 3 treatments, obtained a score of 9 in patient 1 Mrs.D and a score of 8 in patient 2 Mrs.Y from the results of filling out the checklist sheet with a value range of 7-13 for moderate knowledge.

2. The priority diagnoses taken in this study were ineffective breastfeeding related to an inadequate supply of breast milk as evidenced by complaining of tiredness after giving birth, looking anxious and afraid that the baby's nutrition would not be fulfilled because the milk did not come out, the baby was unable to attach to the mother's breast, the milk did not drip, there are sores/abrasions on the nipples, and not confident to breastfeed because the baby is fussy and refuses to breastfeed, the mother's ability to position the baby is not right, the breasts and nipples look dirty.

3. The planned interventions include observational, therapeutic and educational actions which include: identify readiness for the ability to receive information and desire to breastfeed, provide health education materials and media, schedule health education according to the agreement, provide opportunities to ask questions, support mothers to increase self-confidence in breastfeeding, involve support systems: husband, family, health workers and community, provide counseling breastfeeding, explain the benefits of breastfeeding for mothers and babies, teach 4 (four) breastfeeding position and placement (lacth on) correctly, teach postpartum breast care (eg expressing milk, breast massage, oxytocin massage).

4. Post test obtained knowledge increased from before with a score of 19 in patient 1 Ny.D and a score of 18 in patient 2 Mrs.Y so that the problem of ineffective breastfeeding experienced. The patient gradually decreased because both patients already understood. The results of the implementation of breastfeeding educational nursing with the audiovisual method for primipara mothers have proven to be successful in overcoming the problem of ineffective breastfeeding nursing in patient 1 Mrs.D and patient 2 Mrs.Y at Muhammadiyah Palembang Hospital in 2022.

Suggestions and Acknowledgments (if any)

Patients and families are expected to be able to repeat and teach digital-based education: audiovisual methods that have been given to close family members or others to deal with problems related to breastfeeding are not effective. For the development of nursing science and technology: breastfeeding education audiovisual method was applied in clinical practice, especially in maternity nursing to improve quality in the implementation of nursing education audiovisual nursing education implementation in primipara Mothers with ineffective breastfeeding.
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