#### Effectiveness Of Video Media And Leaflets On Knowledge About Breast Massage Techniques In Postpartum Mothers At Gempol Health Center In 2022

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#### Abstract

**Backgrounds :** The puerperium is the period after childbirth, which is counted from after the placenta has come out, the puerperium is also called the recovery period, where the uterine devices will recover as before. Providing information about breast massage techniques to the public, especially to postpartum mothers is very important. Therefore efforts to provide information about breast massage techniques can be done through health promotion efforts. The results of a preliminary study conducted by researchers at the Gempol Health Center on 5 postpartum mothers using a questionnaire, of the 5 questions asked, 5 postpartum mothers answered that they did not know how to increase milk with breast massage techniques.

**Research Objectives** : To find out the effectiveness of video media and leaflets on knowledge about breast massage techniques for postpartum women at the Gempol Health Center in 2022

**Research Methods:**This type of research is quantitative with a quasi-experimental research design and a pretest-posttest group design. The pop ulation in this study was 117 postpartum mothers who were at the Gempol Health Center. The sample in this study were 54 respondents. Bivariate analysis using the Wilcoxon test.

**Research results :** The description of postpartum mothers' knowledge about breast massage techniques after being given leaflet media was mostly lacking as many as 32 people (59.3%). Postpartum mothers' knowledge about breast massage techniques after being given video media was mostly as good as many as 44 people (81.5%).

**Conclusions and Suggestions :** It can be concluded that video media is more effective for increasing knowledge about breast massage techniques in postpartum mothers than media leaflets. It is recommended that managing midwives facilitate mothers in receiving health counseling/education especially for postpartum mothers regarding breast massage techniques during the postpartum period.

Keywords : Video Media, Leaflets, Knowledge, Breast Massage Techniques, Postpartum Mothers

#### INTRODUCTION

The puerperium is the period after childbirth, starting from after the placenta has come out, the puerperium is also called the recovery period, where the uterine devices will recover as before. The puerperium is a time for the mother to recover the mother's health which generally takes 6-12 weeks (Nugroho, Nurrezki, Desi, & Wilis, 2018). Postpartum is the period from 6 hours to 42 days after delivery (Kemenkes, 2021).

Exclusive breastfeeding coverage in Southeast Asia does not differ much from each country, for example, in India it is only about 46%, in the Philippines 34%, in Vietnam 27% and Myanmar 24%. Children with sufficient exclusive breastfeeding coverage from six months after birth can survive 14x better than those without breastfeeding. Children with sufficient intake of breast milk from birth will reduce the risk of death by up to 45% (UNICEF, 2020).

According to Indonesia's 2020 health profile data regarding coverage of exclusive breastfeeding on a national scale for babies aged 0-5 months, namely 54.0%, and babies up to six months of age, namely 29.5% (Ministry of Health RI, 2020). The latest data obtained according to the 2021 Indonesia Health Profile shows that 55.97% of babies are breastfed in West Java, this shows that breastfeeding in babies in West Java is still low. Data on the prevalence of exclusive breastfeeding based on districts or cities in West Java that have not reached the target, namely Krawang District (Dinkes Kabupaten Karawang 2021).

Problems that occur during breastfeeding include blockage of the milk ducts which causes pain, fever, palpable red breasts, lumps that feel painful or swollen and hardened breasts, which are commonly referred to as breast milk dams. This incident is usually caused because the collected milk is not released so that a blockage occurs. Symptoms that often appear when breast milk is dammed include swollen breasts, breasts feeling hot and hard and the mother's body temperature rising. If this situation continues, it can lead to mastitis and breast abscess (Samson, 2017).

The smoothness of breastfeeding for breastfeeding mothers will facilitate the process of exclusive breastfeeding to achieve optimal growth and development conditions for infants from birth to six months as recommended by WHO. The smooth production of breast milk is influenced by many factors such as frequency of breastfeeding, baby's weight at birth, gestational age at birth, mother's age and parity, stress and acute illness, IMD, presence of smokers, consumption of alcohol, breast care, use of contraception and nutritional status. (Dewi 2020).

The existence of socio-cultural factors, environment and family support also affect the breastfeeding phase. Health education related to factors that can increase the low quantity of breast milk can also inhibit the excretion of breast milk in postnatal mothers. Basically, after giving birth, not all mothers are able to express breast milk directly, because breast milk is produced through a complex mechanism between nerve and mechanical stimulation and hormones including oxytocin. (Agustina Nora, 2018).

Several things can be done to induce the hormones oxytocin and prolactin, namely expressing milk, doing breast care, early initiation of breastfeeding (IMD), frequency and duration of breastfeeding phases, and performing breast massage techniques. (Samsudin, 2020).

Breast massage techniques can be a solution in facilitating breastfeeding, namely by massaging the spine on ribs 5-6 to the scapula in the hope of being able to induce the work of the parasympathetic nerves to stimulate the posterior pituitary in the process of producing the hormone oxytocin. Breast massage technique can be said as a massage on the back to induce the hormone oxytocin which is able to heal wounds in childbirth such as placental implantation marks, reduces the risk of bleeding and is able to increase the amount of breast milk and provide comfort to the mother (Nurahmawati et al, 2021).

Providing information about breast massage techniques to the public, especially to postpartum mothers is very important. Because the period when a mother is pregnant with a potential baby is the period when the mother makes a decision whether to exclusively breastfeed her baby or not. Therefore efforts to provide information about breast massage techniques can be done through health promotion efforts. Health promotion efforts that have been carried out by the government currently aim to provide information to the public regarding health information that intends to improve the quality of public health, both individual and community health. (Snyder, 2019).

Provision of health information regarding breast massage techniques, especially for postpartum mothers, requires educational methods that are packaged in an attractive manner, using the media, the delivery of information and education can be carried out effectively and efficiently. According to Mulyana (2018) effective media is media that sees the level of community needs. The type of media chosen is print media, where the media is a tool that contains information or notes that will be conveyed in writing. At this time, print media is considered old-fashioned and less attentiongrabbing than electronic media and print media(Mulyana, 2018).

Then the technique of breast massage can be a solution in facilitating breastfeeding, namely, expressing milk using massage along the spine to the fifth-sixth costae and can induce the secretion of the hormones oxytocin and prolactin after childbirth. This massage is able to induce the hormone oxytocin and provide comfort to the mother so that breast milk will come out easily.

Based on the background above, the authors conducted a study entitled "Effectiveness of video media and leaflets on knowledge about breast massage techniques for postpartum women at the Gempol Health Center in 2022".

#### **RESEARCH METHODS**

This type of research is quantitative with a quasi-experimental research design and pretest-posttest group design. The population in this study were 117 postpartum mothers who were at the Gempol Health Center. The sample in this study were 54 postpartum mothers who were at the Gempol Health Center.

Bivariate analysis was carried out with the aim of seeing whether there was any influence between the independent variables and the dependent variable that appeared in the conceptual framework. The reason for bivariate examination is to see whether there is influence between two factors, especially the dependent variable and the independent factor. To examine the effect of the two variables in this study, researchers used a statistical test, namely the Wilcoxon test.

Characteristics	F	(%)
Age		
< 20 Years	12	22.2
20-35 Years	35	64.8
> 35 Years	7	13.0
Education		
SD	4	7.4
JUNIOR HIGH SCHOOL	32	59.3
SENIOR HIGH SCHOOL	15	27.8
РТ	3	5.6
Profession		
Work	15	27.8
Doesn't work	39	72.2
Parity		
Primipara	7	13.0
Multipara	40	74.1
Grande Multipara	7	13.0
Total	54	100.0

#### RESULTS

### Table 1. Distribution of the frequency of characteristics of postpartum women atthe Gempol Health Center

Table 1 shows that in terms of age characteristics, there are 35 people (64.8%) aged 20-35 years, 32 people (59.3%) have more junior high school education, and 39 people don't work for jobs. people (72.2%), for parity more multiparous as many as 40 people (74.1%)

Table 2. Frequency distribution of knowledge description of postpartummothers about breast massage techniques after being given leaflets at theGempol Health Center in 2022

Knowledge is given by leaflet media	F	(%)	
Good	22	40.7	
Not enough	32	59.3	
Total	54	100.0	

Table 2. shows that the knowledge description of postpartum mothers about breast massage techniques after being given leaflets at the Gempol Health Center in 2022 is mostly lacking as many as 32 people (59.3%).

Table 3. Frequency distribution of postpartum mothers' knowledge about breast massage techniques after being given video media at the Gempol Health Center in 2022

Knowledge is given by video media	F	(%)
Good	44	81.5
Not enough	10	18.5
Total	54	100.0

From table 3, it shows that the knowledge of postpartum mothers about breast massage techniques after being given video media at the Gempol Health Center in 2022 is mostly good as many as 44 people (81.5%).

# Table 4. Effectiveness of video media and leaflets on knowledge about breastmassage techniques for postpartum women at Gempol Health Center in2022

Kelompok	N	Mean	Std.	Minimum	Maximum	Р
			Deviation			Value
Media Vidio	54	8.28	2.023	4	12	
Media Leaflet	54	6.91	2.397	3	12	0,0002

From table 4, it shows that the results of the Wilcoxon test analysis in the table obtained an average value of knowledge in the video media group of 8.28, a standard deviation of 2,023, a minimum of 4 maximum of 12. In the leaflet media group with an average of 6.91, a standard deviation of 2,397, minimum 3 maximum 12 with p-value

<  $\alpha$  (0.002 < 0.05). This means that video media is more effective for increasing knowledge about breast massage techniques in postpartum women than leaflet media.

#### DISCUSSION

This chapter discusses the results of research that has been conducted and analyzed based on existing literature and the results of similar studies that have been conducted. This chapter also discusses the limitations of the research and the implications of the research results.

#### A. Discussion of Research Results

1. An overview of the knowledge of postpartum mothers regarding breast massage techniques after being given leaflet media at the Gempol Health Center in 2022

The results show that the description of the knowledge of postpartum mothers regarding breast massage techniques after being given leaflet media at the Gempol Health Center in 2022 is mostly lacking as many as 32 people (59.3%).

This is consistent with the results of the study which showed that there were differences in knowledge after being given treatment in the intervention group. Some research results state that providing health education is proven to be able to increase respondents' knowledge about breast massage techniques.

This is as a result of receiving new information and providing media that can be read by respondents to increase understanding and information about breast massage techniques. The respondent's ability to capture information through the sense of hearing is very limited so that the knowledge obtained by each respondent will be different. Therefore, effective health education is needed.

Factors that influence the success of health education include educators (facilitators), curriculum, conditions of students, implementation process, facilities used as well as methods and media used. Learning media is able to influence the effectiveness of learning so that it is able to increase students' learning and is able to help increase material absorption and focus on knowledge information.

Knowledge is a very important domain in shaping a person's behavior or actions. Increased knowledge of postpartum mothers does not always lead to changes in behavior, but there has been much evidence of a positive relationship between the two. Changes in one's behavior occur one of them is because someone knows about good behavior and the benefits of this behavior. The behavior of postpartum mothers based on knowledge will be better than the behavior of postpartum mothers who are not based on knowledge.

The conclusion is that leaflet media has proven effective in increasing knowledge of breast massage techniques. Leaflet media has benefits, including helping educational targets to learn more and quickly, making educational targets interested and wanting to know more deeply to pass on messages received to others, facilitating the discovery of information by educational targets and encouraging people's desire to know and then deepen and finally get a better understanding. Suggestions are expected in counseling with leaflet media to change attitudes and behavior of individuals, families, special groups and communities to achieve optimal health status.

#### 2. An overview of the knowledge of postpartum mothers regarding breast massage techniques after being given video media at the Gempol Health Center in 2022

The results showed that the knowledge of postpartum mothers regarding breast massage techniques after being given video media at the Gempol Health Center in 2022 was mostly good as many as 44 people (81.5%).

This statistical analysis proves previous research and theories that video media facilitates, accelerates and improves the quality of teaching and learning (Wati, 2016). Fitriani (2018) states that videos are varied in their presentation so that they affect the level of learning speed. The results of Tarigan's research (2016) state that video media is more effectively applied to postpartum mothers as a media for counseling, video can lead to a tendency for postpartum mothers to enjoy the storyline on the video so that it is easy to capture the messages implied in the story in the video.

Besides that, it can also prove Ismowati's research (2018) which states that knowledge increases after being given counseling using audiovisual media because it is clearer and more realistic in conveying information.

The advantage of video media that is not owned by the snake and ladder media is that snakes and ladders cannot convey material clearly because there are only pictures in the media. Meanwhile, in delivering material, we should use more than one sense that we can use so that we can understand the material. Snakes and ladders media only uses the sense of sight, while video uses the senses of sight and hearing. Video media can display various kinds of material in an interesting and varied way, while snakes and ladders only have one definite rule in a game. It can be concluded that the implementation of providing health education about breast massage techniques using video media is more effective so that the initial hypothesis is different from the research results obtained.

The conclusion is that video media has proven to be more effective in increasing knowledge of breast massage techniques. Video media can display various kinds of material in an interesting and varied way, while snakes and ladders only have one definite rule in a game. It can be concluded that the implementation of providing health education about breast massage techniques using video media is more effective so that the initial hypothesis is different from the research results obtained. Suggestions are expected for Gempol health centers to use video media in delivering counseling regarding breast massage techniques.

## 3. The effectiveness of video media and leaflets on knowledge about breast massage techniques for postpartum women at the Gempol Health Center in 2022

The results show that the results of the Wilcoxon test analysis in the table obtained an average value of knowledge in the video media group of 8.28, a standard deviation of 2,023, a minimum of 4 a maximum of 12. In the leaflet media group with an average of 6.91, a standard deviation of 2,397, a minimum of 3 maximum 12 with p-value <  $\alpha$  (0.002 < 0.05). This means that video media is more effective for increasing knowledge about breast massage techniques in postpartum women than leaflet media.

Video media is more effective than leaflets because video media has a more concrete level of experience compared to leaflets because with video a person will be better able to combine the two senses not only limited to sight, so it is possible to imagine a more complete picture of an action.

Ardianto in Sasmitha et al., (2017) explains that video media has the advantage of being able to convey understanding or information in a more concrete or real way than can be conveyed through spoken words or in this case also through writing. This will make someone more enthusiastic, not feel bored to get health education, in this case knowledge about breast massage techniques. This is also in accordance with the demands of the times where information technology is developing so rapidly. An educator is required to be able to follow the flow of these developments so that learning will be more effective and efficient.

According to Ika Septiana's research (2015), counseling about breast massage techniques affects the level of knowledge. More attention is needed in the community regarding education about breast massage techniques, for example improving communication, collaboration between the Ministry of Education, the Ministry of Health, and other relevant ministries to work together so that counseling activities regarding breast massage techniques can be developed (Eryani 2015).

The increase in knowledge is due to the learning process by the respondent and occurs because of an increase in the subject's sensitivity or readiness for the test given to the respondent. Knowledge is the result of knowing what happens after people sense a certain object. Sensing occurs through the senses of sight, hearing, smell and touch. Most of human knowledge is obtained through the eyes and ears. Video media is one type of audio-visual media. Audio-visual media is media that relies on the senses of hearing and sight. Audio visual media is one of the media that can be used in listening learning.

According to Telly Khatarina and Yuliana's research with the title Effect of Counseling Through Audio Visual with Knowledge Results After Counseling, the result is that there is an influence of counseling on breast massage techniques through audio visual with the result of knowledge after counseling(Khatarina and Yuliana 2017). This research is in line with Lia Kurniasari's research (2017) which shows that knowledge can be influenced by the provision of video media because video can reflect a more effective absorption of information by using the senses of sight and hearing and can increase knowledge compared to only using the sense of sight. (Kurniasari 2017).

Leaflets are small (half quarto) and thin books, no more than 1 double-sided sheet containing writing and pictures. The term leaflet comes from a book and a leaflet means that leaflet media is a combination of leaflets and books with a small format (size) like a leaflet. The structure of the contents of a leaflet resembles a book, it's just that the way the contents are presented is much shorter than that of a book (Simamora 2015). The advantage of leaflet media is that it can be used as a medium or tool for self-study and can learn its contents easily. According to Agustin Wahyu Prabandari's research (2018) with the title the effect of providing counseling with video media and leaflets on the level of knowledge with the result that there was a difference in increasing knowledge in the experimental group, namely counseling with video media and the control group, namely counseling with leaflet media. Counseling with video media has a greater effect on the level of knowledge compared to leaflet media(Prabandari 2018).

The results of this study are in line with the results of Nyndia Kurniawati's research, namely that video media is better than leaflet media for increasing pregnant women's knowledge about how to deal with complaints during pregnancy at Surakarta City Hospital. This difference is indicated by the significance value (0.000) and the mean value of the video group (9.40) > the leaflet group (5.80).

However, the surgery with the results of the writing of Susy Hermaningsih and Nargis. The results of statistical tests to determine the effect of behavioral scores using an independent sample T-test showed a p of 0.600 (p > 0.05). thus there is no significant difference between leaflet and video media, meaning that Ho failed to be rejected. This shows that there is no significant difference between leaflet and video media in changing self-care behavior.

In conclusion, both media, both electronic media (video) and print media (leaflets) have an influence on increasing knowledge about breast massage techniques in postpartum mothers. Where the comparison of the Mean posttest results on the two counseling methods shows that the video counseling method is better than the leaflet method counseling because the mean value of video posttest knowledge is 8.28 higher while the mean value of leaflet posttest knowledge is only 6.91.

#### CONCLUSION

#### A. Conclusion

- 1. The description of the knowledge of postpartum mothers regarding breast massage techniques after being given leaflet media was mostly lacking as many as 32 people (59.3%).
- 2. The description of the knowledge of postpartum mothers regarding breast massage techniques after being given video media was mostly good as many as 44 people (81.5%).
- 3. The difference in the average value of knowledge in the video media group is 8.28, the standard deviation is 2.023, the minimum is 4, the maximum is 12. In the leaflet media group, the average is 6.91, the standard deviation is 2.397, the minimum is 3, the maximum is 12 with a p-value < $\alpha$  ( 0.002 <0.05). This means that video media is more effective for increasing knowledge about breast massage techniques in postpartum women than leaflet media.

#### **B.** Suggestion

1. For the Gempol Health Center

It is expected that managing midwives will facilitate mothers in receiving counseling/health education especially for postpartum mothers regarding breast massage techniques during the postpartum period so that it is hoped that this can help reduce maternal problems during the postpartum and breastfeeding process.

2. For Writers

It is hoped that this can be useful additional knowledge to find out about the effect of counseling with video media and leaflets on knowledge about breast massage techniques in postpartum mothers.

3. For Further Researchers

It is necessary to conduct research with different tests and explore other variables that are able to influence the knowledge of postpartum mothers about breast massage techniques and other problems during the postpartum period so that it is expected to reduce maternal morbidity and mortality due to complications that arise during the postpartum period and breastfeeding.

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