



The Effect of Educational Videos about Newborn Baby Care on the Knowledge Level of Postpartum Mothers

Pande Putu Indah Purnamayanthi¹⁾, Ni Made Egar Adhiestiani¹⁾*

¹Midwifery Study Program, Bina Usada Bali College of Health Sciences, Jl. Raya Padang Luwih, Dalung, Badung, phone (0361) 9072036

*Corresponding author:

E-mail: adhiestiani@gmail.com

ABSTRACT

Background: The existence of the baby involves the mother's mechanical and emotional skills. Factors that can affect the mother's skills in caring for newborns are the mother's readiness to reduce the risk of the health of the newborn. Educational video is one of Health Education Methods that can be done to increase mother's knowledge in caring for newborns. The purpose of this study was to determine the effect of educational videos about newborn care on the level of knowledge of postpartum mothers.

Methods: This study was conducted in Badung, Bali in March to April 2022. The method used in this research is Pre-Experimental Design with one group pre-test and post-test design. Sampling method with purposive sampling technique.

Result: The results of data analysis using the Wilcoxon Match Pairs Test statistical test obtained p value = 0.000 < (0.05). Then there is a significant effect between the pre and post averages after being given the Newborn Care Education Video and the z value of 5.448 and the z table with a value of = 1.96 which means that z count is greater than z table which can be concluded that there is an Effect of Educational Videos on Newborn Care on the Knowledge Level of Postpartum Mothers.

Conclusion: The conclusion of this study is that giving a video of Newborn Care Education can increase Postpartum Mother Knowledge about Newborn Care.

Keywords: Educational videos, Baby care, Newborn, Knowledge level, Postpartum mother

INTRODUCTION

In order to create a healthy life, it has to start from infancy because at this time the growth and development is rapidly determining growth and development in adulthood⁽¹⁾. A mother is a primary caregiver for her baby in physical, social, emotional, and cognitive

development. Therefore, a mother must understand how to take care of the baby properly so that the baby is healthy⁽²⁾. A mother must have good knowledge to care for and solve her baby's problems. Most mothers do not understand how to care for newborns because they lack knowledge or because they have never had any

experience at all because this is the first child, so this is what makes the first child often referred to as an experimental child. This will affect the baby's health if this situation is experienced by the mother continuously⁽³⁾.

According to a report by *United Nations Children's Fund (UNICEF)*, if the mother lacks knowledge, there will also be a risk of problems with the health of her baby. Conversely, if the mother's knowledge is good, it will also be good for maintaining the health of her baby. *UNICEF* reports, that during 1998-2007 the infant mortality rate for children of uneducated mothers was 73 per 1000 live births, while infant mortality in children of mothers with secondary education or higher is 24 per 1000 live births⁽⁴⁾. Health problems that may occur in her baby are difficulties in feeding the baby to nutritional disorders, infections in the baby, and other health problems. Health problems that occur in infants can cause babies to be vulnerable to death⁽⁵⁾.

If the mother does not have good knowledge from the start, then the mother will have difficulty carrying out her role as a mother⁽⁶⁾. Baby care a day includes Exclusive Breast Milk, Baby Massage, baby bathing, and umbilical cord care. Breast milk is a complete food for babies up to 6 months of age to achieve optimal growth and development⁽⁵⁾.

Baby massage is a way to give a touch to the baby by doing a gentle massage that aims to relax the baby, can increase the effectiveness of rest, strengthen the immune system, improve concentration, increase appetite, stimulate the activity of vagus nervus to improve breathing, increase the flow of oxygen and nutrients to cells⁽⁷⁾. When bathing the baby, the mother should pay attention to the principle of how to maintain the warmth of the baby after bathing and keep water from entering the nose, mouth or ears that can cause aspiration⁽⁸⁾.

The baby's umbilical cord detaches approximately after one week to 10 days

after the baby is born which will form granulation tissue and after healing form the umbilicus. The loose umbilical cord will see a few drops of blood when the baby cries and will recover on its own. Umbilical cord treatment is carried out with the aim that the newborn's umbilical cord remains dry and prevents infection⁽⁸⁾. So, it is important for postpartum mothers to know the daily care of the baby.

One way to increase knowledge is to use electronic media because it has advantages, that is: already known in the community, involving all five senses, easier to understand, more interesting, face to face, presentation can be controlled, reach covers a large target, and can be repeated. Hearing aids, such as video, are educational aids better known as Audio Visual Aids (AVA)⁽⁹⁾.

Educational video is one method of Health Education that can be done to increase mother's knowledge in caring for newborns⁽¹⁰⁾. Caring for a newborn can be tricky and full of art, but it can be planned and learned⁽⁵⁾. Through these educational videos, mothers are expected to increase their knowledge so that mothers can behave well in caring for their babies. This educational video can provide information and education for mothers after giving birth about proper newborn care so as to minimize and indirectly reduce infant mortality.

The purpose of this research was to identify the level of knowledge of postpartum mothers before and after being given educational videos and to analyze the effect of educational videos about newborn care on postpartum mother's knowledge.

Based on this background, the authors are interested in conducting a research entitled "The Effect of Educational Video about Newborn Baby Care on Knowledge of Postpartum Mothers at PMB Dr. Putu Mastiningsih, S. ST., SH., M. Biomed.

METHODS

This type of research uses pre-experimental design research with one group pre-test and post-test design. This research was conducted for two (2) months. The sampling technique is non-probability sampling, which is purposive sampling. Purposive sampling is a technique for determining research samples with certain considerations with the aim that the data obtained will be more representative⁽⁹⁾. The sample in this study were 37 respondents. This sample was taken by looking at the inclusion and exclusion criteria.

Inclusion Criteria:

1. Postpartum mothers who gave birth normally or by cesarean section
2. Postpartum mothers with healthy babies (BB > 2500 grams)

Exclusion Criteria:

1. Postpartum mother who refuses to be a respondent
2. Postpartum mother with congenital disease

The method used to obtain data is using a questionnaire. Questionnaires were filled out to determine the level of knowledge before and after being given an educational video. Postpartum mothers are given educational videos about newborn care, containing exclusive breastfeeding, baby massage, bathing babies and umbilical cord care. Educational videos were given 2 times and then evaluated using a questionnaire. The data scale used is the ordinal scale.

In this study, the data that had been obtained were tested for normality of the data using the Kolmogrov Smirnov test. The hypothesis test used in this study is a non-parametric statistical test, namely the Wilcoxon Match Pairs Test which compares observations before and after treatment.

RESULTS

A. Characteristics of Respondents

This data analysis will present research results in the form of respondent's characteristics, including age, occupation, and last education, which are 37 respondents.

Table 1. Characteristics of respondents

Characteristics Respondents	n(%)
Age	
18- 20 years old	14 (37,8%)
>20 years old	23 (62,2%)
Educational level	
Elementary School	4 (10,8 %)
Junior High School	9 (24,3 %)
Senior High School	19 (51,4%)
Collage	5 (13,5%)
Profession	
Does not work	10 (27,1%)
Work	27 (72,9%)

Based on table 1 above, it shows that most of the respondents were >20 years old (62.2%), 19 (51.4%) respondents had high school education, and 27 (72.9%) respondents worked.

B. Results of Postpartum Mother's Knowledge Level

The results of the analysis the level of knowledge about postpartum mothers regarding newborn care before and after being given educational videos with 37 respondents.

Table 2. Distribution of Knowledge Level of Postpartum Mothers about Newborn Care Before and After Educational Videos Are Given

No	Knowledge	Pre test n(%)	Post test n(%)
1	Good	6 (16,2%)	8 (21,6%)
2	Sufficient	13 (35,1%)	26 (70,3%)
3	Less	18 (48,6%)	3 (8,1%)

Based on table 2 above, it shows that the level of knowledge of postpartum mothers before being given educational videos as many as 6 people (16.2%) had good knowledge, as many as 13 people (35.1%)

had sufficient knowledge, and as many as 18 people (48.6%) had less knowledge. After being given an educational video, it showed that 8 people (21.6%) had good knowledge, 26 people (70.3%) had sufficient knowledge, and 3 people (8.1%) had less knowledge.

C. Results of Analysis the Effect of Educational Videos about Newborn Care on the Knowledge Level of Postpartum Mothers.

The statistical test used to test the hypothesis is the Wilcoxon Signed Rank Test. Data analysis was conducted to analyze of The Effect of Educational Videos about Newborn Care on the Knowledge Level of Postpartum Mothers at PMB Dr. Putu Mastiningsih, S.ST., SH., M.Biomed, the results of the analysis as the table below:

Table 3. Analysis result about The Effect of Educational Video about Newborn Care on Level of Postpartum Mothers

Knowledge	Pre test n(%)	Post test n(%)	p Value	z
Good	6 (16,2%)	8 (21,6%)	0,000	5,448
Sufficient	13 (35,1%)	26 (70,3%)		
Less	18 (48,6%)	3 (8,1%)		

Based on table 3 above, it shows that the level of knowledge of postpartum mothers before being given educational videos as many as 6 people (16.2%) had good knowledge, as many as 13 people (35.1%) had sufficient knowledge, and as many as 18 people (48.6%) had less knowledge. After being given an educational video, it showed that 8 people (21.6%) had good knowledge, 26 people (70.3%) had sufficient knowledge, and 3 people (8.1%) had less knowledge.

DISCUSSION

Based on the results of research from the age group of respondents, the largest number of respondents is > 20

years, namely 23 people, this age is included in the middle age group, one of the developmental tasks of which is fostering intimate relationships through marriage and procreation. When entering adulthood, a person is able to take responsibility in carrying out all the tasks and challenges of life⁽¹¹⁾.

The highest education is Senior High School with as many as 19 people. A mother with higher education will more easily understand the knowledge provided because education will affect a person to be able to receive new information⁽¹²⁾. With education, we can be more mature because education has a very positive impact on us, can eradicate illiteracy, and will provide skills, mental abilities, and so on⁽⁹⁾. Education is everything something used in an effort to achieve a goal education, whether in the form of actions, behavior, situations or media that deliberately prepared⁽¹³⁾.

Most of the mother's occupations were mothers who worked as many as 27 people. Work forms one's identity so that one's quality of life depends on the quality of his work. Work also means having a purpose which is an outlet for creativity and personal fulfillment. Having a job can also increase one's self-esteem⁽⁹⁾. In this era of globalization, many women choose to work as career women, this is due to the many needs that must be met⁽¹⁴⁾.

Table 3 shows that the level of knowledge of postpartum mothers before being given educational videos about daily baby care, as many as 18 respondents had less knowledge, but after being given educational videos it increased, namely the majority were knowledgeable enough as many as 26 respondents. This shows that by providing educational videos, the information that has been given can be conveyed properly to postpartum mothers so that there is an increase in knowledge in carrying out daily baby care at home.

According to Jusmiyati's research after being given knowledge level health

education and the ability to care for a newborn baby it is higher than before provided with health education with using audiovisual media⁽¹⁵⁾. Media Audiovisual relying on hearing and vision of the target, where audiovisual use involves all the tools of the learning senses, so that more and more there are many sensory devices involved, receiving and processing information, the more most likely the content of the information can be understood and maintained in memory⁽¹⁶⁾.

The results of the analysis of the effect of educational videos about newborn care on postpartum mothers' knowledge level, namely p value = 0.000, which means that there is an effect of educational videos about newborn care on postpartum mother's knowledge levels. Knowledge is the result of knowing and this occurs after people have sensed a certain object. Some of a person's knowledge is obtained from the eyes and ears, such as posters, magazines, or various sources of information in the form of sound such as seminars, counseling, educational videos, or talks from other people. Health knowledge can be increased by providing education about health through health education or promotion⁽¹⁷⁾.

Health education aims to change unfavorable behavior to be good which means it can change one's knowledge. Educational delivery in this study was carried out by providing educational videos about daily baby care. This is in accordance with the theory put forward by Sulastri, that health education media through educational video media has several advantages, namely being more interesting and easier to understand⁽¹⁷⁾.

By watching videos a person can learn on their own, can be repeated in certain parts for clarity, and can watch the care in detail so that it can be done at home. This is in accordance with what was stated by Sulastri, that video can provide a stimulus to a person's views and theories by stimulating the psychomotor,

behavioral, and cognitive principles. So that, the multimedia is expected to evoke thoughts, feelings, attention and willpower so as to encourage changes in knowledge⁽¹⁸⁾.

In this study, video media had an influence in increasing the knowledge of postpartum mothers in daily baby care. This is in line with Kirana's research in 2019 on the Effect of Video Media in the Class of Pregnant Women on Knowledge of Attitudes and Behavior in the Selection of Childbirth Aid which states that video media for pregnant women increases knowledge and attitudes about choosing a place of delivery compared to existing standard media. So that, the video media in the class of pregnant women is more effective in increasing the knowledge and attitudes of pregnant women in choosing birth attendants⁽¹⁹⁾. According to Kapti (2013) audiovisual media as Health education media is effectively used to provide increased knowledge to the mother and change the attitude of the mother to Better⁽²⁰⁾.

The results of this study are also in line with Meliani's research in 2020, namely by providing techniques for bathing babies through audio visuals, it can improve the knowledge and skills of postpartum mothers⁽²¹⁾. According to Rahmawati (2007) Audiovisual it is the most appropriate tool today because the knowledge that exists in a person is received through the senses reaching 75%-85% of knowledge and 13% - 25% through the sense of hearing⁽²²⁾.

CONCLUSION

Based on the research, it can be concluded that there is an effect of educational videos about newborn care on the level of knowledge of postpartum mothers with p value = 0.000.

Further research should be carried out by taking the consideration to the sampling technique of simple random sampling because all research populations have the same opportunity to become

research samples and the results of research on the population can be used in general.

REFERENCES

1. Siswanto H. Pendidikan Kesehatan Anak Usia Dini. Yogyakarta: Pustaka Rihama; 2010.
2. Lowdermik J. Buku Ajar Keperawatan Maternitas. Jakarta: EGC; 2012.
3. Rahmi. Merawat Bayi Prematur Dengan Metode Kangguru. Dari <http://www.harianglobal.com>. Diakses pada tanggal 20 Agustus 2021. 2088.
4. United Nations Children's Fund (UNICEF). (2014). The State of the World's Children 2014 in Numbers: every child counts. USA: United Nations Children's Fund.
5. Wong, L. Donna. (2009). Buku Ajar Keperawatan Pediatrik Vol 1. Edisi 6. Jakarta: EGC.
6. Amabarita & Wulandari. 2015. Asuhan Kebidanan Nifas. Yogyakarta: Nuha Medika.
7. Riksani R. Cara Mudah dan Aman Pijat Bayi. Jakarta: Dunia Sehat; 2017.
8. Hidayat. (2008). Buku Saku Praktikum Anak. Jakarta: EGC.
9. Sugiyono. 2013. Metode Penelitian Kuantitatif, Kualitatif, Dan R & D. Bandung: ALFABETA.
10. George, Andrigaansz. 2007. Dibalik Angka. WHO. Jakarta.
11. Perry & Potter. 2005. Konsep Perkembangan dan Peran Keluarga. Jakarta: Salemba Medika.
12. Meliano. 2007. Pendidikan Kesehatan Dalam Keperawatan. Jakarta: Puspa Swara.
13. Rahmad Hidayat dan Abdulah. Ilmu Pendidikan "Konsep, Teori dan Aplikasinya." Medan: Lembaga Peduli Pengembangan Pendidikan Indonesia; 2019.
14. Fitriyani. Peran Ibu Yang Bekerja Dalam Pemenuhan Kebutuhan Dasar Anak. 2016;VOLUME: 3:HAL: 1-154.
15. Jumiati. 2012. Efektifitas Pendidikan Kesehatan Menggunakan Media Audiovisual Terhadap Tingkat Pengetahuan Dan Kemampuan Ibu Merawat Bayi Baru Lahir. Repositori Universitas Riau.
16. Juliantara. (2009). Media Audiovisual. Jakarta : EGC.
17. Effendi, Nasrul. 2012. Dasar – Dasar Keperawatan Kesehatan Masyarakat (Ed. 2). Jakarta: EGC.
18. Majid A. 2006. Perencanaan Pembelajaran. Bandung.: Remaja Rosdakarya.
19. Sulastri, Ridwan M., Syamsar. 2012. Pengaruh Penyuluhan Kesehatan Menggunakan Video dalam Pemeriksaan Payudara Sendiri (SADARI) terhadap Perubahan Pengetahuan dan Sikap Remaja Putri di SMAN 9 Balikpapan Tahun 2012. Skripsi. Balikpapan. Fakultas Kesehatan .
20. Kirana Candra Sari. 2019. Pengaruh Media Video pada Kelas Ibu Hamil terhadap Pengetahuan Sikap dan Perilaku Pemilihan Penolong Persalinan. pp. 5 – 15. DOI: 10.30994/jqwh.v2i2.32.
21. Meliani, et.al. 2020. Pengaruh

- Teknik Memandikan Bayi Melalui Audio Visual Terhadap Pengetahuan Dan Keterampilan Ibu Nifas. Jurnal Kesehatan komunitas Indonesia Vol 16 no 2
<https://jurnal.unsil.ac.id/index.php/jkki/article/viewFile/2577/1573>.
22. Clara D, Yani W dan Surjani. 2017. Efektivitas Media Pembelajaran Audiovisual (video) Terhadap Pengetahuan Siswa Putri Tentang SADARI DI SMK YPKK 2 Sleman. Tugas Akhir. Unpublished. Yogyakarta : Universitas Gadjah Mada.