



The Effect of Healthy Baby Massage Training Using Video Media on Mothers' Skills in Central Bengkulu Regency Bengkulu Province

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ABSTRACT:

Infancy is the golden *age* as well as the critical period of development of a baby at the age of 0-12 months. Baby massage is one treatment or form of stimulation that can stimulate baby growth. The purpose of this study was to determine the effect of healthy baby massage training using video media on maternal skills in Central Bengkulu Regency, Bengkulu Province.

The research design used a quasi-experimental design of *one group pre-test-post test*. The research was conducted in Central Bengkulu Regency. The study sample was parents who had babies aged 6 to 12 months as many as 31 babies. Bivariate analysis is used by the *Friedman statistical test* because the data are not normally distributed.

The results showed that the average skills of mothers in the first to fourth measurements increased by 70.53 (first), 88.64 (second), 94.4 (third) and 94.54 (fourth). The results of bivariate analysis using the *Friedman Test* obtained a *p-value* = 0.000, meaning that there is an effect of healthy baby massage training using video media on maternal skills in Central Bengkulu Regency, Bengkulu Province.

Introduction

Infancy is the golden *age* as well as the critical period of development of a baby at the age of 0-12 months. It is said to be a golden age because this period is short and cannot be repeated. It is said to be a critical period because at this time the baby is very sensitive to the environment and needs good nutritional intake and stimulation for growth and development (1)

World Health Organization in 2020 more than 200 million children under 5 years old in the world do not meet the maximum growth and development potential and most of them are children living in Asia and Africa. WHO data shows that growth problems are not only malnutrition, but also shortening and more nutrition. The prevalence of malnourished toddlers is 7.3%, overweight is 5.9% and stunting (short) toddlers is 21.9% (2). The number of children in Indonesia in 2019 reached 84.4 million, consisting of 43.2 million boys and 41.1 million girls. The percentage of children in Indonesia in 2019 was 31.6%, an increase of 1.5% from 2018 or an increase of around 4.9 million people. Prevalence of infants under five with a BB/UGizi index of 3.5%, undernutrition

11.3%, good nutrition 83.5% and more nutrition 1.6% (3)

One of the causes of growth problems (weight) is a child's appetite that falls. Thus one of the recommended stimuli and stimulation is baby massage. The first massage experience experienced by humans at birth through the mother's birth canal. Baby massage has been practiced almost all over the world since time immemorial, including Indonesia. The art of massage is carried out for generations. (4). Baby massage is a massage that is done closer to fine rubbing or tactile stimulation performed on the surface of the skin, manipulation of tissues or organs of the body aims to produce effects on nerves, muscles, and respiratory systems and facilitate blood circulation (5,6)

Health education about the benefits and techniques of baby massage can be provided to increase parents' knowledge so that parents can do baby massage independently. Health education is any planned effort to influence others whether individuals, groups or communities so that they do what is expected by education actors in the health sector. Providing baby massage training using videos of baby parents learning



independently about baby massage techniques so that the massage process is carried out in accordance with baby health standards. Giving baby massage videos to baby parents is one alternative that suits the condition of the baby's parents to be able to carry out the massage process optimally.

Method

The research design used a quasi-experimental design of *one group pre-test-post test*. The research was conducted

in Central Bengkulu Regency. The study sample was parents who had babies aged 6 to 12 months as many as 31 babies. Bivariate analysis is used by the *Friedman statistical test* because the data are not normally distributed.

Result

The results showed that the average skills of mothers in the first to fourth measurements increased by 70.53 (first), 88.64 (second), 94.4 (third) and 94.54 (fourth).

Table 1 Average infant massage skills in mothers

No	Variable	Min	Max	Mean±SD	<i>p-value</i>
1.	First Skill	38	100	70.53 ±18.06	0,000
2.	Second Skill	7,7	100	88.64±17.6	
3.	Third Skill	80	100	94.4±5.7	
4.	Fourth Skill	80	100	94.54±12.8	

The results of the study were obtained using the *Friedman Test*, obtained a value of *p-value* = 0.000, meaning that there is an effect of healthy baby massage

training using video media on the skills of mothers in Central Bengkulu Regency, Bengkulu Province

Table 2 The effect of healthy infant massage training using video media on maternal skills in Central Bengkulu Regency Bengkulu Province

No	Variable	Speakers Mean±SD	Control Mean±SD	<i>p</i>
1.	First Skill	70.53 ±18.06	Priced 38.41±24.58	0,000
2.	Second Skill	88.64±17.6	38.62±16.0	
3.	Third Skill	94.4±5.7	62.36±20.4	
4.	Fourth Skill	94.54±12.8	78.68±12.88	

Discussion

The results of the study obtained that the average skill of mothers in doing baby massage has increased significantly starting from the first measurement to the fourth measurement. Mothers' skills that are still lacking before being given assistance to mothers who have babies say that they often feel that by doing baby massage they are cured of illness, as a result of which mothers are of the view that massage done by baby shamans is the best. This condition causes the mother's attitude to be negative. In addition to the mother's experience, the culture of society that causes a positive

perception of baby massage can actually be used to better introduce baby massage in the sense of baby massage in accordance with health rules. The baby massage that is carried out today in baby healers is still a massage massage and not a stimulating process in infants.

Wardani (2023) research that before the implementation of baby massage assistance, out of 40 respondents had less skills in doing baby massage, with an average value of 57.85%, after an evaluation of the assistance, 40 respondents experienced an average value change of 86.24% (Good Skills). Based on these results, there was



an increase in the skills of respondents from before the mentoring to after the evaluation, which was 28.39%(7) The same thing is also stated in Silitonga's (2023) study, namely the skilled average (82.98%) with a standard deviation of 9.092. The results of this study show that the post test is better than the pretest results (8). After treatment in the form of health education, the mother is skilled in massaging the baby. This is in accordance with Ayudia's research (2020), namely the change in attitude from negative to positive after infant massage health education conducted using video (9). According to Notoatmodjo (2012) through the learning process, there is a process of changing the knowledge, attitudes, and skills of individuals, groups and communities towards positive things.

The results of this study are in line with Hamzah's research (2021) where there was an increase in the average score (mean) of respondents' skills in doing baby massage independently, where at the time of the pretest a mean value of 18.37 was obtained after being given a baby massage intervention at the time of the post-test a mean value of 22.60 (10) was obtained. Another supporting study is the results of Tamu *et al* (2019) research showing that descriptively there was an increase in massage skills of baby mothers after being given videos about baby massage where the majority of baby mothers in the treatment group as many as 10 people (66.67%) had skills in the skilled category, and as many as 5 people (33.33%) had skills in the moderately skilled category (11)

The assumption of researchers is that the training provided using video media can foster interest in respondents because this media provides information in a more attractive package, it seems that respondents pay attention to video views seriously and focus so that it is easy to remember. Furthermore, it will increase confidence in the mother because knowing the steps to do baby massage that has been demonstrated using video media, the results of knowing the mother about the steps of baby massage form the behavior of wanting to practice what she knows about baby massage. So, the mother is able to do independently about baby massage.

Audiovisual relies on hearing and target vision, where the use of audiovisual involves all the sensory tools of learning, so that the more sensory devices involved, receiving and processing information, the more likely the content of the information can be conveyed. understood and maintained in memory By watching videos one can learn on their own, can be repeated in certain parts to

make it clearer, and can witness the treatment in detail so that it can done at home(12)(13)

This is in line with the theory put forward by Edgar Gale with his theory entitled "Edgar-Dale's learning experience cone" saying that the learning experience obtained by watching *videos* and demonstrations will be absorbed in memory as much as 50%, if added again with the participation of participants for discussion and question and answer, the material will be absorbed in memory as much as 70%. Audiovisual media is able to stimulate the senses of hearing and vision so that the results obtained are maximized.

The results of the study found that there was an effect of healthy baby massage training using video media on the skills of mothers in Central Bengkulu Regency, Bengkulu Province. The results of this study are in line with Hayati's (2023) research that there is an influence of health education about baby massage on mothers' knowledge and skills in massaging babies independently in Karya Jaya Village, Tebing Tinggi City in 2022. The skills of mothers who were given education were 3.5 times more effective in improving the mother's ability to massage babies independently than mothers who were not given health education (14)

The researchers' assumption that baby massage videos are one of the audio-visual media that displays massage techniques in babies. This video was designed by researchers and demonstrated by competent midwives using the help of baby doll props. Through baby massage videos, baby mothers can learn massage techniques professionally, so that baby mothers can apply these techniques to their babies to provide stimulation through proportional pressure to babies as one of the effective efforts to improve the baby's motor skills.

The use of audiovisual demonstration methods as a medium for delivering information has the advantage that the process of receiving material will be more memorable in depth so as to form a good understanding that has an impact on improving individual knowledge and behavior. The easier the delivery of information received by individuals will encourage increased knowledge and behavior change in the individual. (15)

This is supported by the theory put forward by Lalita (2023) video flexibility can make it easier for mothers who have babies to learn massage techniques as a whole. Harun *et al* (2023) also suggested that one of the conveniences in video playback is that if there are still techniques that are not fully understood in the first screening, they can play back the video to see clearly the



techniques that are not yet understood. In addition, the live demonstration of the cast in the video also makes it easier for them to adjust to the massage that will be done on their baby (16)(14).

The same research was also conducted by Puspita (2022) research using an android application for baby massage showed positive results, with guidelines that can be accessed anytime and anywhere, parents can do baby massage regularly and purposefully, so that there is a significant increase in the average baby's weight and baby growth and development, and there is an influence of Baby Massage Education Intervention through the android application on baby development(17)

Another factor that supports the success of video media in an effort to improve mothers' skills in doing baby massage is the assistance carried out by midwives during the implementation of baby massage classes. The guidance of medical personnel in helping mothers perform baby massage has proven effective in improving the mother's ability to do baby massage. Baby massage seems to be the right choice to teach parents sensitivity as parents. Despite reporting brief interventions, the study showed that participating fathers were helped by improving feelings of competence, role acceptance, partner support, attachment, and health as well as by reducing feelings of isolation and depression (18).

Furthermore, the assistance carried out by Midwives in providing baby massage training is carried out directly to mothers. Providing information directly will increase the mother's knowledge which will affect the mother's skills. This is supported by Salamah's research (2021) where there is a significant relationship between information sources and infant massage knowledge and OR scores: 10.8% means that mothers who get information sources directly have a 10.8 times chance of having good knowledge compared to mothers who get information sources indirectly(19)

Support from health workers regarding the implementation of baby massage is a very important domain because it is a foothold in supporting mothers to perform baby massage on their own babies. Health professionals should provide information about the importance of baby massage to increase the baby's weight. In addition to providing information, health workers must also tell the technique or how to do the correct baby massage so that the mother can do it herself at home. If the mother is educated by health workers in a health care facility, then when the mother practices baby massage herself, she is accompanied by the waiting

family and at the time of implementation the mother gets information contrary to that provided by the health worker(20)

Research Limitations

In the process of implementing interventions and measurements carried out at the Puskesmas, the number of respondents is not always complete because the respondents are mothers of children aged 6-12 years, the location of residence is far from the Puskesmas, children have fever, besides that because no one looks after their children so that when learning the practice of baby massage mothers while nurturing, so the research assistant must go to the respondent's home to provide intervention and measurement of maternal skills of baby massage using dolls.

Conclusion

The average skill of mothers in the first to fourth measurements increased by 70.53 (first), 88.64 (second), 94.4 (third) and 94.54 (fourth). There is an effect of healthy baby massage training using video media on the skills of mothers in Central Bengkulu Regency, Bengkulu Province

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