



## Factors Affecting the Action of Mothers to Massage in Infants at BPM Talitha In 2021

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### ABSTRACT

Data from BPM Talitha that the number of mothers who have babies 0-12 months as many as 32 people. The number of babies born with low birth weight (LBW) has increased over the last 2 years. In 2014 the number of babies born with underweight was 7 people, while in 2015 it increased to 10 people, and some babies were rarely given baby massage since birth. The purpose of this study was to determine the factors that influence mothers to massage their babies. This type of research is an analytic survey with a cross sectional approach. The research was conducted at BPM Talitha, Deli Serdang Regency. The total population is 32 people, and all of them are used as samples. Data were analyzed by univariate and bivariate using Chi-Square test. The results showed that the mother's knowledge was sufficient for 15 (46.9%) respondents, 18 (62.5%) negative attitudes, 20 (59.4%) respondents lacked support from health workers. The factors that influence mothers to massage their babies at BPM Talitha are knowledge ( $p = 0.005$ ), attitude ( $p = 0.003$ ), support from health workers ( $p = 0.004$ ). It is hoped that health workers will provide health education about the benefits and advantages of doing baby massage to mothers at BPM Talitha so that mothers' knowledge and attitudes become more positive.

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### 1. INTRODUCTION

Body weight is the most important anthropometric measure and is most often used in newborns (neonates), body weight is used to see normal babies or LBW. The Decree of the Minister of Health Number 900/MENKES/SK/VI/2002 concerning the registration and practice of midwives states that midwives are authorized to monitor infant growth and development through early detection and stimulation of growth and development. One form of stimulation that has been done by the community is baby massage. (1)

Baby massage is the oldest and most popular touch therapy known to man. Baby massage has long been practiced almost all over the world, including in Indonesia and has been passed

down from generation to generation. Touch and massage of the baby after birth can provide assurance of continuous body contact that can maintain a feeling of security in the baby. The oldest reports of the art of massage for medicine are recorded in the Ebers Papyrus, which is an ancient Egyptian medical record. Ayur-Veda is the oldest medical book in India (circa 1800 BC) which describes massage, diet, and exercise as the main healing methods of the time. About 5000 years ago doctors in China from the Tang Dynasty also believed that massage was one of the 4 important medical techniques. (2)

Many studies have shown that preterm infants who receive 10-15 minutes of massage 3 times per day gain 20-47% more weight per day than those who are not massaged. Research on term infants aged 1-3 months who were massaged 15 minutes, twice a week for 6 weeks experienced higher weight gain than the control group. (3)

Observations of T. Field quoted by dr. J. David Hull, a molecular virologist from the UK, in a paper entitled Touch Therapy: Science Confirms Instinct, mentions massage therapy for 30 minutes per day can reduce depression and anxiety in babies so that babies can sleep more soundly and calmly. Massage therapy performed 15 minutes for six weeks on infants aged 1-3 months also increased alertness (alertness). Followed by weight gain, improved psychological conditions, reduced levels of stress hormones, and increased levels of serotonin. Increased activity of the neurotransmitter serotonin will increase the capacity of receptor cells that bind to glucocorticoids (adrenaline). This process causes a decrease in levels of the hormone adrenaline (stress hormone), and will further increase the body's resistance. (4)

Dasuki's research on the effect of infant massage on weight gain of 4-month-old infants found that in the control group the weight gain was 6.16% while the massage group was 9.44%. According to Deddy Satriya Putra, this happens because touch therapy has a positive effect on the baby's health, because it affects the work of the Vagus Nerve, thereby improving gastrointestinal motility, including gastric emptying. This situation leads to better absorption of food and quality of sleep. (5)

Along with the development of science and technology, experts have proven that touch and massage therapy produces beneficial psychological changes in the form of increased growth, increased endurance, and better emotional intelligence. (1)

BPM Talitha is one of the clinics that provides primary services to mothers and babies. Based on Talitha's BPM data, data obtained that babies born with low birth weight (LBW) have increased over the last 2 years. In 2014 the number of babies born with underweight was 7 people, while in 2015 it increased to 10 people.

When researchers interviewed 5 mothers about newborns (neonates) who had babies with low birth weight, one of the factors was that they rarely did baby massage after birth, and only brought them to baby massage when the baby was fussy (crying). Mothers also do not know what the benefits of doing massage on babies. Mothers tend to be less concerned about the health of the baby in relation to the baby's weight. Mothers only feed their babies if they are fussy, there is even an opinion of a mother who says that if her baby cries a lot, then the baby is being disturbed by a jinn or supernatural being.

## 2. RESEARCH METHODE

This study is an analytic survey with a cross sectional design, aiming to determine the factors that influence the mother's actions in doing massage to babies at Sari Husada Clinic. This population is all mothers who have babies aged 0-12 months who live at BPM Talitha 2021 as many as 32 people. The sample is part of the number and characteristics possessed by the population. The sample of this study was taken from the entire population (total sampling) as many as 32 people. Univariate analysis is data analysis conducted on research variables that are

only used to produce frequency distributions and percentages of each variable. Bivariate analysis is data analysis conducted on two variables that are thought to be related. The test used in this research is statistical test using Chi-Square ( $\chi^2$ ) with 95% confidence level ( $\alpha = 0.05$ ).

### 3. RESULT AND ANALYSIS

#### Respondent Identity

Based on the identity of the respondents, it shows that of the 32 respondents studied, most of them were aged 20-35 years as many as 24 (75.0%) respondents, a small portion aged > 35 years were 2 (6.2%) respondents. Most of the respondents had high school education as many as 20 (62.5%) respondents, a small portion had junior high school education as many as 12 (37.5%) respondents. Most respondents have 2 children as many as 15 (46.9%) respondents, a small proportion have children 3 people as many as 7 (21.9%) respondents.

#### Univariate Analysis

Based on knowledge, most of the respondents had sufficient knowledge about massage in infants as many as 15 (46.9%) respondents, a small portion had good knowledge of 7 (21.9%) respondents. Most of the respondents had a negative attitude as many as 18 (56.2%) respondents, a small number of respondents had a positive attitude as many as 14 (43.8%) respondents. Most stated that they did not receive support from health workers as many as 20 (62.5%) respondents, a small portion received good support from health workers as many as 12 (37.5%) respondents.

Based on the baby massage, most of the mothers did not massage the baby as many as 19 (59.4%) respondents, a small part of the mothers did massage to the baby as many as 13 (40.6%) respondents.

#### Bivariate Analysis

##### Relationship of Knowledge with Mother's Actions Doing Massage on Babies

Knowledge	Mother Doing Baby Massage				Total		<i>p.</i>
	Yes		No		f	%	
	f	%	f	%			
Good	5	15,6	2	6,3	7	21,9	0,005
Enough	8	25,0	7	21,9	15	46,9	
Not enough	0	0,0	10	31,2	10	31,2	
<b>Total</b>	<b>13</b>	<b>40,6</b>	<b>19</b>	<b>59,4</b>	<b>32</b>	<b>100,0</b>	

Based on the table above, it shows that from 7 respondents who have good knowledge, the majority of mothers do massage on babies as many as 5 (15.6%) respondents. Of the 15 respondents who had sufficient knowledge, the majority of mothers did massage on babies as many as 8 (25.0%) respondents. Of the 10 respondents who had less knowledge, none of them did massage on babies as many as 10 (31.2%) respondents. The results of the bivariate test using Chi-Square show that the probability value (p-value) is 0.005 < 0.05, meaning that there is a significant relationship between knowledge and the mother's actions to massage the baby at BPM Talitha 2021.

### Relationship of Attitude with Mother's Actions Doing Massage on Babies

Attitude	Mother Doing Baby Massage				Total		<i>p.</i>
	Yes		No		f	%	
	f	%	f	%			
Positive	10	31,3	4	12,5	14	43,8	0,003
Negative	3	9,3	15	46,9	18	56,2	
<b>Total</b>	<b>13</b>	<b>40,6</b>	<b>19</b>	<b>59,4</b>	<b>32</b>	<b>100,0</b>	

Based on the table above, it shows that of the 14 respondents who have a positive attitude, the majority of mothers do massage on babies as many as 10 (31.3%) respondents. Of the 18 respondents who had a negative attitude, the majority of mothers did not massage their babies as many as 15 (46.9%) respondents. The results of the bivariate test using Chi-Square show that the probability value (p-value) is  $0.003 < 0.05$ , meaning that there is a significant relationship between attitudes and the mother's actions to massage the baby at BPM Talitha 2021.

### Relationship between Health Workers Support and Mother's Actions to Massage Babies

Health Worker Support	Mother Doing Baby Massage				Total		<i>p.</i>
	Ya		Tidak		f	%	
	f	%	f	%			
Positive	10	31,3	4	12,5	14	43,8	0,003
Negative	3	9,3	15	46,9	18	56,2	
<b>Total</b>	<b>13</b>	<b>40,6</b>	<b>19</b>	<b>59,4</b>	<b>32</b>	<b>100,0</b>	

Based on the table above, it shows that of the 12 respondents who received good support from health workers, the majority of mothers did massage on babies as many as 9 (28.1%) respondents. Of the 20 respondents who lacked support from health workers, the majority of mothers did not massage their babies as many as 16 (50.0%) respondents. The results of the bivariate test using Chi-Square showed that the probability value (p-value) was  $0.004 < 0.05$ , meaning that there was a significant relationship between the support of health workers and the mother's actions to massage the baby at BPM Talitha in 2016

### Relationship of Knowledge with Mother's Actions Doing Massage on Babies

Based on the results of the study, it shows that there is a relationship between knowledge and the mother's actions to massage the baby at BPM Talitha 2021,  $p = 0.005$ . The results of this study are in line with research conducted by Dewi in Wadung Getas Village, Wonosari Klaten District, which found that there was a relationship between the mother's level of knowledge about infant massage and the mother's action of doing baby massage ( $p = 0.041$ ). (17)

Knowledge is the result of knowing, and this occurs after people have sensed a certain object. Sensing occurs through the five human senses, namely the senses of sight, hearing, smell, taste, and touch. The majority of human knowledge is obtained through the senses of sight (eyes) and hearing (ears). (14) Meanwhile, according to Taufik (15), knowledge is a learning process using the five senses that is carried out by a person on certain objects to be able to produce knowledge and skills.

Knowledge of baby massage is the result of knowledge and impressions in health care and medicine by using movement games in infants to stimulate growth and development as well as optimal movement abilities of babies. The knowledge that mothers need to know includes the meaning of baby massage, when it's time to massage a baby, who can do baby massage, what needs to be prepared when going to massage a baby and how to do baby massage. (2)

According to the researcher, the results of this study indicate that the level of knowledge of mothers about the benefits of baby massage is in the sufficient category and some mothers have less knowledge and need to be increased so that their level of knowledge becomes better. Because if the mother has good knowledge about the benefits of baby massage, the mother will know and understand that by massaging the baby will provide many benefits, especially for babies such as weight gain, increasing growth, increasing endurance, and others. Many respondents who have sufficient knowledge may be due to the majority of respondents' education being secondary, while respondents who are knowledgeable lack basic education and get information from the environment. The higher a person's knowledge and education will increase the willingness to do baby massage.

### **Relationship of Attitude with Mother's Actions Doing Massage on Babies**

Based on the results of the study, it showed that there was a relationship between attitudes and the mother's actions to massage the baby at BPM Talitha 2021,  $p = 0.003$ . The results of this study are in line with research by Mulyati (19) at the Pamulang Health Center that 35 respondents (50%) had positive attitudes, while 35 respondents (50%) had negative attitudes. So, it can be concluded that the mothers who were respondents in this study had a balanced attitude between positive and negative towards infant massage. The results of statistical tests showed that there was a significant relationship between the attitude variable and the infant massage behavior variable ( $p < 0.05$ ). The OR results are known to be 13,091. This means that mothers who have a negative attitude have 13 times the risk of not doing baby massage compared to mothers who have a positive attitude.

Attitudes formed from social interactions are influenced by personal experiences, culture, people who are considered important, mass media, educational or religious institutions, one's emotions. Then humans are accepting or rejecting what is happening. (16) In this case, the provision of touch in baby massage between parents and babies is able to flow an attitude of love which is a communication link to foster mutual love between the two. Able to reduce anxiety, improve physical abilities and increase self-confidence. (18)

According to the researcher, the results of this study show that many mothers have negative attitudes about infant massage. This indicates that the mother feels that if the baby is not sick or does not look lethargic, then the baby does not need to be massaged because the baby is considered healthy. Generally, mothers who have a negative attitude think that the baby does not need to be massaged if the baby is healthy, because they think that the baby is only fed enough so that the baby's growth will be good and they do not know that doing massage on the baby can increase the baby's weight.

### **The Relationship between Health Worker Support and Mother's Actions to Massage the Baby**

Based on the results of the study, it showed that there was a relationship between the support of health workers and the mother's actions to massage the baby at BPM Talitha 2021,  $p = 0.004$ . In line with research conducted by Aryati at Bhayangkara Kupang Hospital, East Nusa Tenggara, 53.3% of respondents said that the support provided by health workers was sufficient in the implementation of baby massage, as many as 46.7% of respondents said that the support of health workers was still lacking, less in the implementation of baby massage. From the results of the Spearman correlation test, it was found that the significance value of  $p = 0.00$  ( $p < 0.05$ ) which means that there is a relationship between the support of health workers and the

implementation of infant massage, while the value of the correlation coefficient  $r = 0.873$  indicates that there is a very strong relationship between the two variables. researched.

Support from health workers regarding the implementation of baby massage is a very important domain because it is a foothold in supporting mothers to do baby massage on their own babies. Health workers must provide information about the importance of baby massage for increasing the baby's weight. In addition to providing information, health workers must also tell the technique or ways to do the right baby massage so that the mother can do it herself at home. If the mother is taught by a health worker at a health service facility, then when the mother practices baby massage herself, she is accompanied by a waiting family and at the time of its implementation, the mother gets information that is contradictory to that given by the health worker.

According to the researcher, the results of this study indicate that some mothers say that support from health workers is still not good for mothers to do baby massage. Lack of support from health workers so that it does not support mothers' beliefs to properly massage their babies, which causes mothers not to know the benefits of baby massage. Health workers as parties who provide support (motivators) to maternity mothers play a very important role in motivating individuals to change one's behavior or actions. The higher the status of the party providing support, the more likely the individual is to change his behavior or actions. If the support provided is positive in accordance with what is provided by the support of health workers, then the implementation of baby massage by the mother will be maximized. Vice versa, if the support provided by health workers is lacking, the implementation of baby massage by the mother becomes less than optimal and causes the mother to not routinely massage the baby.

#### 4. CONCLUSION

1. Mother's knowledge about baby massage is mostly in the sufficient category as many as 15 (46.9%) respondents.
2. Mother's attitude about baby massage is mostly negative as many as 18 (62.5%) respondents.
3. The support of health workers according to the majority of mothers is not good as many as 20 (62.5%) respondents.
4. Most of the mothers did not do baby massage as many as 19 (59.4%) respondents.
5. There is a relationship between mother's knowledge and the act of doing massage on babies at BPM Talitha ( $p=0.005$ ).
6. There is a relationship between the mother's attitude and the act of doing massage on the baby at BPM Talitha 2021 ( $p=0.003$ ).
7. There is a relationship between the support of health workers and the act of doing massage on babies at BPM Talitha 2021, ( $p=0.004$ ).

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