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## Relationship Between Mother's Knowledge about Infant Massage with The Implementation of Independent Infant Massage

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### ABSTRACT

Knowledge of mothers about infant massage is needed because with a fairly good knowledge expected mother can give a good stimulation in accordance with the age and development of children. A good stimulation for older children can be given the maximum potential for development. Factors related to the growth and development of children adequate nutrition, supportive family style environment is the basis for growth and development for children. Other than that, in terms of common forms of stimulation that parents do to the baby is in the form tactile stimulation infant massage. This research is quantitative analytical research with approach cross sectional, samples taken is a technique sample random sampling using the formula slovin. The total sample of 71 respondents. The results of research that most respondents have good knowledge about infant massage, as many as 31 respondents (43,7%) who do self infant massage as many as 23 respondents (74,2%). From data analysis with chi square test obtained p-value >0,05 (0,026). Conclusion from the result of this research that there is a significant relationship between mother's knowledge with the implementation of self infant massage.

Keywords: Mother's Knowledge; Self Infant Massage

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#### *Article history :*

*Received: 1 Januari 2025*

*Received in revised form: 16 Maret 2025*

*Accepted: 27 April 2025*

*Available online: 15 Juni 2025*



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## INTRODUCTION

Growth and development in infants cannot be separated from the concept of growth and development. Growth is a physical change and increase in the size of body parts of an individual that are different, while development is the increasing perfection of abilities, skills, and more complex body functions in gross motor skills, fine motor skills, speech and language, as well as socialization and independence that individuals have to adapt to the environment. Good stimulation or stimulation for children can be given by parents for the development of their potential to the maximum. Factors related to child growth and development are adequate nutrition, a supportive family environment is the basis for child growth and development. In addition, in terms of personal children can be given stimulation, one form of stimulation that is commonly done by parents for babies is tactile stimulation in the form of baby massage 1.

According to the WHO (World Health Organization), more than 200 million children under the age of 5 in the world do not meet their development potential and most of them are children living in the continents of Asia and Africa. In recent years, there have been various problems with child development such as motor, language, behavioral, autism, and hyperactivity delays that have increased. The incidence of developmental delays in the United States ranges from 12-16%, Thailand 24%, and Argentina 22%, while in Indonesia it is between 13%-18% 2.

The oldest report of massage for treatment is recorded in the Ebers papyrus, an ancient Egyptian medical record. Ayur-Veda, the oldest medical book in the village (around 1800 BC), wrote about infant massage, diet, and exercise as the main healing methods of the time. Around 5000 years ago, doctors in China from the Tang Dynasty also believed that infant massage was one of the 4 important healing techniques 3. Based on the regulation of the Minister of Health of the Republic of Indonesia Number 28 of 2017 concerning the Permit and Implementation of Midwife Practices, it states that midwives are authorized to monitor infant growth and development through early detection and growth and development stimulation. Infant massage is one form of growth and development stimulation that can be performed by midwives 4.

Baby care in Indonesian has a definition, namely baby care. Babies are children aged zero to 12 months who must be given special care in order to maintain health during growth and development. Baby care in health sciences, especially obstetrics, has various types to maintain the health of babies from newborns to 12 months of age. One of the parts of baby care is baby massage 5.

Based on research conducted by Sinulingga, S., & Patriani, S in Jambi City in 2023, with the results of the study there is a relationship between knowledge and massage in infants aged 0-12 months with a p-value = 0.039. In addition, there is a relationship between maternal attitudes and infant massage

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in infants aged 0-12 months with a P-value = 0.012. The target data of Jambi city health program from real data obtained from Kenali Besar Urban Village Working Area as many as 240 babies aged 0-12 months. Based on this, the purpose of this study was to determine the relationship between maternal knowledge about baby massage and the implementation of independent baby massage in babies aged 0-12 months at Lavenda Integrated Health Post, Kenali Besar Urban Village Working Area, Jambi City 6.

### METHOD

This research method uses an analytical method that is correlational in nature with a cross-sectional approach where data concerning independent variables and dependent variables are collected at the same time 7. The dependent variable in this study was infant massage performed independently by mothers and the independent variable in this study was the mother's ability to answer questions about knowledge of infant massage theory. The population used in this study was a mother who had a baby aged 0-12 months at the Lavenda Posyandu as many as 240 babies. Sampling in this study used the simple random sampling technique using the Slovin formula, namely 71 people.

### RESULTS

#### 1. Univariate Analysis

##### a. Knowledge Level

Table 1. Frequency Distribution of Mothers' Knowledge Level at Lavenda Integrated Health Post, Kenali Besar Subdistrict, Jambi City in 2025

No	Knowledge	Frequency (n)	Percentage (%)
1	Not enough	10	14,1
2	Enough	30	42,3
3	Good	31	43,7
	Total	71	100

Based on table 1 above, it can be concluded that the frequency of mothers' knowledge levels consists of 71, 10 respondents (14.1%) have insufficient knowledge, 30 respondents (42.3%) have sufficient knowledge, and 31 respondents (43.7%) have good knowledge.

**b. Implementation of Independent Baby Massage**

Table 2. Frequency Distribution of Implementation of Independent Baby Massage by Mothers at Lavenda Integrated Health Post, Kenali Besar Village, Jambi City in 2025

No	Implementation of Independent Baby Massage	Frequency (n)	Percentage (%)
1	Are not done	30	42,3
2	Done	41	57,7
	Total	71	100

Based on table 2 above, it can be concluded that the frequency of independent baby massage implementation consisting of 71 respondents, namely 30 respondents (42.3%) did not perform independent baby massage and 41 respondents (57.7%) performed independent baby massage.

**2. Bivariate Analysis**

Table 3. The Relationship Between Mother's Knowledge About Infant Massage and the Implementation of Independent Infant Massage at Lavenda Integrated Health Post, Kenali Besar Village, Jambi City in 2025

No.	Independent Variable Knowledge	Dependent Variable		Total		<i>p-value</i>		
		Are not done	Done	n	%			
1	Not enough	f 7	% 70	F 3	% 30	10	100	0,026
2	Enough	15	50	15	50	30	100	
3	Good	8	25,8	23	74,2	31	100	
	Total	30		41		71		

Based on Table 3 above, it can be concluded that the frequency of the relationship between maternal knowledge about infant massage and the implementation of independent infant massage consists of 71 respondents, namely mothers who have less knowledge as many as 7 respondents (70%) who do not perform independent infant massage and 3 respondents (30%) who do independent infant massage, mothers who have sufficient knowledge as many as 15 respondents (50%) who do not perform independent infant massage and 15 respondents (50%) who do independent infant massage, and mothers who have good knowledge as many as 8 respondents (25.8%) who do not perform independent infant massage and 23 respondents (74.2%) who do independent infant massage. From the results of the statistical test, a p-value

of  $<0.05$  was obtained, which means that there is a relationship between maternal knowledge about infant massage and the implementation of independent infant massage.

## DISCUSSION

### 1. Knowledge Level

Based on the results of the study from 71 respondents, 10 respondents (14.1%) had insufficient knowledge, 30 respondents (42.3%) had sufficient knowledge, and 31 respondents (43.7%) had good knowledge. This shows that mothers who have babies aged 0-12 months at the Lavenda Posyandu, Kenali Besar Village, Jambi City, have good knowledge about baby massage.

According to Notoatmodjo, factors that influence a person's knowledge are information, culture, education, experience, socio-economic and age<sup>8</sup>. A person with more sources of information will have broader knowledge. Culture greatly influences a person's level of knowledge because new information will be filtered to see whether it is in accordance with the existing culture and religion. The higher the education, the easier it will be to accept and adapt to new things. Related to the age and education of the individual, that higher education means broader experience, while the older a person is, the more experience a person will have. The social environment will support a person's high knowledge, while the economy is associated with good economic education, the level of education will be high so that knowledge will also be high. Two traditional attitudes regarding the course of development during life are that the older one gets, the wiser one becomes, the more information one encounters and the more things one does, thereby increasing one's knowledge.

The results of this study are in line with the theory, it is proven that education and age have an influence on a person's level of knowledge. With increasing age, experience also increases so that knowledge also increases. Sufficient education can also support a person's level of knowledge. Although the majority of respondents' education is high school, this education is also sufficient to influence the respondents' insight coupled with the sources of information that respondents get from local health workers.

Based on the results of the study by Dewi, entitled "The Relationship Between Knowledge and Mother's Attitudes About Baby Massage in Wadung Getas Village, Wonosari District, Klaten"<sup>9</sup> that the knowledge of mothers about baby massage in Wadung Getas Village, Wonosari District, Klaten is mostly sufficient, as many as 18 respondents (54.5%). The attitude of mothers about baby massage in Wadung Getas Village, Wonosari District, Klaten is mostly quite good, as many as 22

respondents (66.7%). There is a relationship between knowledge and the attitude of mothers about baby massage in Wadung Getas Village, Wonosari District, Klaten.

Based on the results of the study, the researcher's conclusion regarding the mother's knowledge of infant massage is quite good because the mothers already understand how to massage babies, and the implementation of infant massage has also been carried out by mothers independently at home without the help of health workers. In addition, the average education of mothers is high school whose level of knowledge is sufficient in receiving information and is also influenced by age, education, sources of information, experience and the active role of health workers to be able to improve the knowledge and abilities of mothers regarding infant massage, namely to perform infant massage independently at home.

## **2. Implementation of Independent Baby Massage**

Based on the research results from 71 respondents, 30 respondents (42.3%) did not perform independent baby massage, and 41 respondents (57.7%) performed independent baby massage at the Lavenda Posyandu, Kenali Besar Village, Jambi City. According to Adriana<sup>1</sup>, good stimulation or stimulation for children can be given by parents for the development of their potential to the maximum. Factors related to child growth and development are adequate nutrition, a supportive family environment is the basis for child growth and development. In addition, in terms of personal children can be given stimulation, one form of stimulation that is commonly done by parents for babies is tactile stimulation in the form of baby massage. Based on the research results, the researcher's conclusion regarding the implementation of independent baby massage is that providing stimulation in the form of massage to babies can have a positive impact on babies and parents to foster a bond of affection, and can increase parental participation to directly carry out baby massage independently at home, namely equipped with good parental knowledge, it will increase the role of parents in baby care through massage.

## **3. The Relationship between Mother's Knowledge about Infant Massage and Independent Implementation of Infant Massage**

From the results of the chi-square statistical test, a p-value of 0.026 was obtained. This shows a p-value <0.05, which means that there is a relationship between maternal knowledge about infant massage and the implementation of independent infant massage at the Lavenda Posyandu, Kenali Besar Village, Jambi City. Based on the results of a study conducted by researchers from 71 mothers who had babies aged 0-12 months in April 2025 at the Lavenda Posyandu, Kenali Besar Village, Jambi City, 31 mothers with good knowledge performed baby massage as many as 23 respondents (74.2%), 30 mothers with sufficient knowledge performed baby massage as many as

15 respondents (50%), 10 mothers with less knowledge performed baby massage as many as 3 respondents (30%).

According to Notoatmodjo<sup>8</sup>, factors that influence a person's knowledge are education, age and experience. The higher the education, the easier it will be to accept and adapt to new things. Two traditional attitudes regarding the course of development during life are the older the wiser, the more information is encountered, and the more things are done so as to increase knowledge. Related to the age and education of individuals, that higher education means broader experience, while the older a person is, the more experience a person will have.

Based on the results of the study, the researcher's conclusion regarding the mother's knowledge about baby massage with the implementation of independent baby massage at home is quite good. This can happen because most of the mother's knowledge is quite good which is obtained from the mother's experience, because the mother's age is still very productive, and more mothers do not work, so they can have more free time to do baby massage. This study aligns to several studies, Higher maternal knowledge leads to greater *independence and confidence* in performing baby massage correctly and safely. Mothers who are well-informed are more likely to initiate and continue baby massage independently, which can contribute to better health outcomes for their babies<sup>11-13</sup>. However, a study in Padang City found that there was no relationship between mothers' knowledge and attitudes and infant massage behavior at the Andalas Community Health Center in 2024<sup>14</sup>.

## CONCLUSION

Most respondents in both the treatment group and the control group had a severe anxiety level before being given prenatal yoga, with 8 people (53%) in the treatment group and 7 people (47%) in the control group. The majority of respondents in the treatment group had a mild anxiety level category with 9 people (60%) after being given prenatal yoga. All respondents totaling 15 people in the treatment group experienced a decrease in anxiety levels after being given prenatal yoga, with an average decrease value (Mean Rank) of 8.00 and a total negative rank (Sum of Ranks) of 120.00. The Asymp. Sig. (2-tailed) value is 0.000 ( $p < 0.05$ ), thus it can be concluded that there is an influence of prenatal yoga provided in reducing the anxiety levels of mothers in labor in facing the childbirth process.

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