



THE RELATIONSHIP BETWEEN I LOVE YOU MASSAGE AND DECREASED FREQUENCY OF COLIC IN BLOATED INFANTS

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ABSTRACT

Infantile colic or also known as colic in infants is when a healthy baby experiences bloating and crying loudly for no apparent reason. One way to get rid of the disorder in the form of flatulence and colic pain in infants is to provide massage techniques which are gentle stroking movements on the abdomen that resemble the letters "I" "L" and "U", helping digestive health and improving the digestive system. Objective: This study aims to see the relationship of I Love You massage with a decrease in the frequency of colic in bloated babies at the Siti Hajar midwife clinic in Medan Marelan. Methods: This type of research is Quantitative research with Correlation design research design. The population is all babies who experience bloating as many as 40 babies. The sampling method used Non Probability Sampling with Accidental Sampling type as many as 36 bloated babies, carried out using observation sheets and interviews. With data analysis using the Chi Square test. Results: The results of this study indicate that the p value = 0.000 < 0.005 so that the null hypothesis (H₀) is rejected. Conclusion: there is a relationship between I Love You massage with a decrease in frequency in baby bloating.

Keywords: colic frequency reduction; i love you massage; infantile colic

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INTRODUCTION

Infants are one of the most vulnerable groups to diseases and health problems, so it is important to maintain their optimal health (Wintoro & Wahyuningsih, 2022). When they are infants, the ability to digest food is still under development and not yet optimal. This situation makes babies very vulnerable to various digestive disorders (Mayangsari, 2021). One of the most common gastrointestinal symptoms and often reported by patients of all ages is bloating. This is because babies have many opportunities to swallow air, such as when they suckle through the mother's breast, bottle feed, and cry. Bloating conditions cause babies to be uncomfortable, fussy lose their appetite, and have difficulty sleeping. Babies in the 0-3 months and 6-12 months age ranges often experience flatulence because their digestive systems are not yet fully developed. However, at the age of 6-12 months, the baby's digestive tract has developed to absorb various types of complementary foods. Baby bloating can also accompany other digestive problems, such as abdominal pain, diarrhea, vomiting, and constipation. Bloated babies are also prone to vomiting (Ministry of Health Directorate General of Health Services, 2024).

Infantile colic also known as infantile colic, is when a healthy baby develops and cries vigorously for no apparent reason. The "Rule Of Three" criterion is commonly used to establish the diagnosis of infantile colic, which means that the baby cries for at least 3 hours every day, on 3 days a week and for at least 3 weeks without any apparent cause (Ong et al., 2019). Wessel's updated criteria state that the diagnosis can be made if the infant's crying is prolonged for at least 1 week. Infantile colic usually occurs between 2-4 months of age, so it

is often called 4-month syndrome (Wolke et al., 2017). In terms of infantile colic cases, rates range between 10 and 40% worldwide (Browne et al., 2018). Between 10 and 20% lead to infant doctor visits in the first 4 months of life (Indrio et al., 2017). When infants are 2-4 weeks old, colic symptoms usually appear and peak at 6 weeks of age. About 60% of infants with infantile colic recover by 12 weeks of age and 90% recover by 16 weeks of age (Banks et al., 2020). One way to eliminate disorders in the form of colic pain and flatulence in infants is to give baby massage. Infant massage is a movement that starts with the movement of the feet, abdomen, chest, face, hands, and back with smooth and slow movements throughout the baby's body. Baby massage can usually help reduce the risk of bloating and colic, increase bone density, make babies sleep better, increase baby weight, optimize the digestive process, and help brain growth (Anggraeni & Sari, 2021).

The prevalence of massage given to children in Canada, the United States, Australia and the United Kingdom is between 8-25%. Infant massage has become part of the health systems of some hospitals in the Philippines, China, the United States, and Hong Kong. Hospitals in Jakarta, Yogyakarta, Surabaya, Medan and Bandung are some of the hospitals in Indonesia that have provided infant massage as part of their services. The massage is performed by midwives (Fabiola, 2022). One of the massage techniques in infants is the I Love You massage method. The I Love You massage technique can help minimize signs of constipation in infants by doing massage for 15 minutes (Shivananda, S.P, & Ramesh, M, 2018). I Love You Massage or (ILU), which is a gentle stroking movement on the abdomen that resembles the letters "I" 'L' and "U", helps digestive health by increasing immunity, and improving digestive system function (Lestari & Nurwindasari, 2020 b).

Based on research conducted by Sylvia Maristika Rachman and Pradythara Helda Oktiani Putri (2020) on the relationship between massage therapy techniques in infants with complaints of colic at the Hanayan Mom and Baby Spa clinic, Sumedang Regency, the results are that there is a relationship between massage therapy in infants and colic complaints at Hanaya Mom and Baby Spa, Sumedang Regency as evidenced by the sig (r) score = 0.031 or <0.05 (Sylvia & Pradythara, 2020). Based on the initial survey, the researcher obtained information in 2023 at the Siti Hajar midwife clinic in Medan Marelan, 259 babies who experienced bloating and 78 babies who experienced colic, including babies aged 2-12 months. At the time of the initial survey, the initial researcher conducted an observation of bloated babies given an I Love You massage as many as 5 babies and conducted interviews with mothers who brought their babies with complaints of bloating to the clinic to be given a massage. From the results of interviews conducted by researchers, it was found that 2 people said they were worried that after being given a massage their baby did not recover and the bloating increased. In the explanation above, the researcher decided to carry out and explore research on the relationship between I Love You massage and a decrease in the frequency of colic in bloated babies.

METHOD

This type of research is Quantitative research because it will measure two variables with a research design using a Correlation design. The target population in this study were all babies who experienced bloating at the Siti Hajar Medan Marelan midwife clinic as many as 40 babies. The sampling method uses a Non Probability Sampling approach by Accidental Sampling, which is 36 babies who experience bloating who are given massage and who are not given I Love You massage to reduce the frequency of colic. This research was conducted in October-December 2024 at the Siti Hajar midwife clinic in Medan Marelan. This research has been declared ethically feasible according to WHO 2011 standards. This study uses measuring instruments, namely interviews and observation sheets on bloated babies who are

given massage and not given i love you massage to reduce the frequency of colic. Data analysis using univariate and bivariate analysis with chi square test.

RESULT

Table 1
Frequency distribution of respondent characteristics (n=36)

Respondent characteristics	f	%
Baby's age		
1-5 Months	13	36,1
6-10 Months	18	50,0
11-15 Months	3	8,3
16-20 Months	2	5,6
Baby's gender		
Male	19	52,8
Female	17	47,2
Mother's age		
21-25 years old	3	36,1
26-30 years old	18	50,0
31-35 years old	5	13,9

Based on data from table 1, it can be seen that the majority of infants in this study were babies aged 6-10 months as many as 18 babies (50.0%) while the minority were aged 16-20 months as many as 2 babies (5.6%). In gender data, the majority is male as many as 19 babies (52.8%) while the minority gender is female as many as 17 babies (47.2%). In maternal age data, it is known that the majority of maternal age is mothers aged 26-30 years as many as 18 mothers (50.0) while the minority is 31-35 years old as many as 5 mothers (13.9%).

Table 2
Frequency distribution of I Love You massage (n=36)

I Love You massage	f	%
Provided	25	69,4
Not given	11	30,6

Based on table 2, it is known that bloated babies who were given I Love You massage were 25 babies (69.4%), while those who were not given I Love You massage were 11 babies (30.6%). This shows that more than half (69.4%) of babies at the Siti Hajar Midwife Clinic were given I Love You massage.

Table 3
Frequency distribution of decreased frequency of colic in bloated infants (n=36)

Decreased frequency of colic in bloated babies	f	%
Decreased	28	77,8
Not decreased	8	22,2

Based on table 3, it can be seen that bloated babies who experienced a decrease in colic frequency were 28 babies (77.8%), while those who did not experience a decrease in colic frequency were 8 babies (22.2%). This proves that more than half of the bloated babies at the Siti Hajar Midwife Clinic experienced a decrease in the frequency of colic.

Table 4.

Relationship between I Love You massage and decreased colic frequency in bloated infants

<i>I Love You massage</i>	Decreased frequency of colic in bloated babies				Total	
	Decreased		Not decreased		f	%
	f	%	f	%		
Provided	24	66,7	1	2,8	25	69,4
Not given	4	11,1	7	19,4	11	30,6
<i>p value</i>	0,000					

Table 4 explains that bloated babies who were given I Love You massage and experienced a decrease in colic frequency were 24 babies (66.7%) and did not experience a decrease in colic frequency as many as 1 baby (2.8%). While bloated babies who were not given I Love You massage and experienced a decrease of 4 babies (11.1%) and did not experience a decrease in colic frequency as many as 7 babies (19.4%). From the results of bivariate analysis using Chi-Square to see the relationship between I Love You massage with a decrease in the frequency of colic in bloated babies, the results showed that the p value = 0.000 <0.005 so that the null hypothesis (H0) was rejected. The conclusion is that there is a relationship between I Love You massage and a decrease in the frequency of colic in bloated babies.

DISCUSSION

Based on the results of research that has been carried out at the Siti Hajar Medan Marelan midwife clinic, it is known that 36 babies experience bloating, babies who are given I Love You massage are 25 babies (69.4%) and who experience a decrease in colic frequency as many as 24 babies (66.7%) and there are 1 baby (2.8%) who do not experience a decrease in colic frequency. While those who were not given I Love You massage were 11 babies (30.6%) and those who experienced a decrease in colic frequency were 4 babies (11.1%) and those who did not experience a decrease in colic frequency were 7 babies (19.4%). Based on the results of observations made by researchers, 1 bloated baby was given an I Love You massage but did not experience a decrease in the frequency of colic and the researcher conducted an interview with the mother where the baby's mother said that the baby had diarrhea. Researchers also obtained observations of babies who were not given I Love You massage there were 4 babies who experienced a decrease in the frequency of colic then researchers conducted interviews with the baby's mother, where the baby's mother gave castor leaves with eucalyptus oil given to the baby's stomach.

Based on observations made by researchers, it was found that bloated babies who were not given I Love You massage then did not experience a decrease in colic frequency were 7 babies. This shows that the majority of bloated babies who are not given I Love You massage do not experience a decrease in colic frequency. Based on the results of this study, it shows that there is a relationship between I Love You massage and a decrease in the frequency of colic in bloated babies at the Siti Hajar Midwife Clinic, Medan Marelan, which is evident from the p value = 0.000 <0.005. There is a significant relationship because I Love You massage can help reduce baby discomfort due to bloating. This study is in line with research (Andriani & Nilamsari, 2020) conducted a longitudinal study to activate the I Love You massage intervention on infant indigestion, involving 45 infants aged 2-8 months. Through massage techniques performed twice per week for 10-15 minutes, this study succeeded in reducing the incidence of colic by 65% with statistical significance p < 0.05. The findings demonstrate the effectiveness of massage in reducing indigestion and optimizing infant sleep quality.

Based on this research and supporting research according to the researcher's assumption, there is a relationship between I Love You massage and a decrease in the frequency of colic in bloated babies at the Bidan Siti Hajar Medan Marelan clinic, so the clinic needs to make SOP

related to the management of baby massage in bloated babies to reduce the frequency of colic, so that the baby feels comfortable, and provide guidance to the baby's mother on how to carry out massage in infants to overcome colic disorders but still under the supervision of health workers. And mothers should need to increase their knowledge of this and consult with health workers.

CONCLUSION

Based on the results of research conducted on the relationship between I Love You massage and a decrease in the frequency of colic in bloated babies using the Chi- Square test, it was found that the p value = 0.000 < 0.005 so that the null hypothesis (H_0) was rejected, which means that there is a relationship between I Love You massage and a decrease in the frequency of colic in bloated babies.

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