

EFFECTIVENESS OF TUI NA MASSAGE IN OVERCOMING EATING DIFFICULTIES IN STUNTING TODDLERS AGED 3-4 YEARS

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ABSTRAK : EFEKTIFITAS PIJAT TUI NA DALAM MENGATASI KESULITAN MAKAN PADA BALITA STUNTING USIA 3-4 TAHUN

Latar Belakang Imunisasi dasar merupakan vaksin yang diberikan kepada berusia 0-11 bulan 29 hari. Tujuan meningkatkan kekebalan secara aktif pada bayi terhadap suatu penyakit, sehingga apabila suatu saat terpapar dengan penyakit tersebut tidak akan sakit atau hanya mengalami sakit ringan. Menurut data WHO 2021, sebanyak 4,9 juta anak didunia tidak mendapatkan imunisasi lengkap. Penyebab ketidak lengkapan imunisasi yaitu pandemik covid tahun 2019, membuat cakupan imunisasi ditingkat global mengalami penurunan yaitu dari 86% menjadi 81% pada tahun 2021. Dampak dari ketidak lengkapan imunisasi yaitu resiko kesakitan, kecacatan, bahkan kematian. Penelitian ini secara umum bertujuan untuk mengetahui adanya hubungan pengetahuan ibu dengan pemberian imunisasi dasar lengkap pada bayi di Puskesmas Ganjar Agung Kota Metro.

Metode Penelitian ini merupakan penelitian kuantitatif dengan *pendekatan cross sectional*. Teknik pengambilan sampel menggunakan *non-probability sampling* dengan metode *total sampling*. Sampel dalam penelitian adalah ibu yang memiliki bayi berusia 11 bulan yang berkunjung ke Puskesmas atau Posyandu di Wilayah Kerja Puskesmas Ganjar Agung, Kota Metro pada bulan Januari sampai dengan Mei 2024 sejumlah 51 responden. Pengambilan data menggunakan kuesioner dan analisis data menggunakan uji *chi square*.

Hasil penelitian didapatkan ibu dengan pengetahuan pada kategori cukup sebesar 78,4% dan kelengkapan imunisasi dasar pada bayi 82.4%. Hasil uji statistik *p value* = 0,667.

Kesimpulan penelitian bahwa tidak ada hubungan yang signifikan antara pengetahuan ibu dengan kelengkapan imunisasi dasar pada bayi. Hasil penelitian diharapkan dapat menjadi pertimbangan bagi instansi kesehatan agar dapat meningkatkan promosi tentang imunisasi dasar lengkap pada bayi.

Kata Kunci : Imunisasi dasar, pengetahuan ibu.

ABSTRACT

Background Basic immunization is a vaccine given to children aged 0-11 months 29 days. The aim is to actively increase immunity in infants against a disease, so that if one day they are exposed to the disease they will not get sick or only experience mild illness. According to WHO data in 2021, as many as 4.9 million children in the world did not receive complete immunization. The cause of incomplete immunization, namely the 2019 Covid pandemic, caused global immunization coverage to decline from 86% to 81% in 2021. The impact of incomplete immunization is the risk of illness, disability, and even death. This study generally aims to determine the relationship between maternal knowledge and the provision of complete basic immunization to infants at the Ganjar Agung Health Center, Metro City. This research method is a quantitative study with a cross-sectional approach. The sampling technique uses non-probability sampling with the total sampling method. The sample in the study were mothers who had 11-month-old babies who visited the Health Center or Posyandu in the Ganjar Agung Health Center Working Area, Metro City from January to May 2024, totaling 51 respondents. Data collection using a questionnaire and data analysis using the chi square test.

The results of the study found that mothers with knowledge in the sufficient category were 78.4% and completeness of basic immunization in infants was 82.4%. The results of the statistical test *p value* = 0.667.

The conclusion of the study is that there is no significant relationship between maternal knowledge and completeness of basic immunization in infants. The results of the study are expected to be a consideration for health agencies in order to increase promotion of complete basic immunization in infants.

Keywords: Basic immunization, maternal knowledge.

INTRODUCTION

Stunting is a condition of malnutrition related to past nutritional inadequacy, so it is included in chronic nutritional problems. Stunting is measured as nutritional status by considering the height or length, age, and gender of the toddler. The habit of not measuring the height or length of toddlers in the community makes it difficult to recognize the incidence of stunting. This makes stunting one of the focuses of the target for improving nutrition in the world until 2025.

The impact of stunting disrupts children's academic or educational abilities. The impact of stunting will also affect the quality of Indonesia's human resources which has the potential to cause economic losses. Stunting causes a decrease in adult height which is related to a decrease in economic productivity of 1.4%. Stunting also causes a decrease in productivity of 2-3% each year (Achadi et al., 2020).

The prevalence of stunting in infants under five years of age (toddlers) in Indonesia in 2015 was 36.4%. This means that more than a third or around 8.8 million toddlers experience nutritional problems where their height is below the standard for their age. The stunting is above the threshold set by WHO at 20%. The prevalence of stunting in Indonesian toddlers is the second largest in Southeast Asia after Laos which reached 43.8%. However, based on the 2017 Nutritional Status Monitoring (PSG), toddlers who experience stunting were recorded at 26.6%. This figure consists of 9.8% in the very short category and 19.8% in the short category. Children who experience stunting are mostly caused by lack of food intake, repeated infectious diseases that cause increased metabolism and reduced appetite (Yenni Puspita, 2015), reduced appetite will cause irregular eating patterns and children only want to eat the food they like or food jog, this condition if it lasts for a long time will cause developmental and growth disorders in toddlers (Afian L. et al. 2003). The results of the 2023 health profile research, nationally the prevalence of underweight and underweight in toddlers in Lampung Province is 4.0% (Ministry of Home Affairs, 2023). based on nutritional monitoring data from the Metro City Health Service, the Purwosari Health Center work area has a stunting incidence of 5.7% of toddlers experiencing stunting (Andrianti et al., 2022). The results of the pre-survey conducted by the researcher obtained 32 toddlers who experienced stunting in the work area of the Purwosari Metro Utara Health Center"

RESEARCH METHODS

This type of research is quantitative research with a quasi-experimental research design with a pretest-posttest with control group design. Pretest-posttest with control group design, namely the researcher divided two groups into an experimental group and a control group. In the experimental group, treatment was given in the form of Tui Na massage on stunted toddlers. In the control group, Tui Na massage was not given to stunted toddlers. This study began with a pretest before Tui Na massage was given to the experimental group using an observation sheet. Then the researcher performed Tui Na massage and then the researcher gave a posttest. In the control group, the researcher only conducted a pretest and posttest without any intervention. This research design was used to determine the effect of Tui Na Massage on stunted toddlers aged 3-4 years by giving direct massage Tui Na Massage. The population in the study were all stunted toddlers aged 3-4 years in the Purwosari Metro City Health Center Work Area, totaling 32 people. the number of samples required in this study was 30 samples and added (10%) for the drop out proportion so the total number of respondents was 32 respondents. With a ratio of 1:1, the experimental group had 16 samples and the control group had 16 samples. The sampling technique for this study was total sampling, which is a sampling method based on certain considerations made by the researcher himself based on previously known population characteristics or properties (Notoatmodjo, 2018). Inclusion criteria: Toddlers aged 3-4 years. Toddlers diagnosed with stunting (TB and BB minus 2 from the WHO Multicenter Growth Reference standard, Z-score value less than 2 SD, body shorter than the Reference standard, BB does not increase or tends to decrease). Stunting toddlers who do not experience complications. Toddlers who have parental consent

Exclusion criteria: Toddlers with serious health problems. Toddlers with a history of injury. Toddlers with oil allergies. Toddlers who undergo intensive treatment

Univariate analysis to see the frequency distribution of research variables and bivariate analysis with the Shapiro Wilk test.

RESEARCH RESULT

Univariate Analysis

This analysis aims to describe the frequency distribution of each research variable using proportion measures.

Table 1
Distribution by Gender of Toddlers

Sex	N	%
Male	22	73,33
Female	10	26,67

Based on table 1 above, we can conclude that the majority of toddlers are male, namely 73.33% (22 toddlers).

Table 2
Distribution based on mother's age of toddlers

Mother's Age	N	%
< 25 tahun	6	18,75
25 -35 tahun	19	59,38
35 tahun	7	21,87

Based on table 2 above, we can conclude that the majority of mothers of toddlers are aged 25-35 years, namely 59.38% (19 mothers).

Bivariate Analysis

Before conducting bivariate analysis, the data obtained was tested for normality using the Shapiro Wilk test, which can be seen in the following table:

Table 3
Data Normalization Test (Shapiro Wilk) in the Tuina massage group before and after the intervention.

Group	Df	P Value
Before		
Pijat Tuina	16	0,021
Tanpa pijat Tuina	16	0,077
After		
Pijat Tui'na	16	0,027
Tanpa pijat Tui'na	16	0,453

Based on table 3 above, the results of the research variable normality test show that all variables have a significance value greater than 0.05 (pvalue> 0.05), so it can be concluded that the data is normally distributed.

Table 4
Difference in average appetite before and after Tui'na massage and without Tui'na massage in stunted toddlers with eating difficulties

Kelompok	N	Mean	Selisih mean	SD	P Value
Pijat Tui'na before	16	48,88	21,1	16,046	0,000
after	16	70,00		12,366	
Tanpa Pijat Tui'na before	16	51,66	5	14,562	0,046
after	16	56,66		14,142	

Based on table 4 above, it shows that the average value (mean) of the appetite level of stunted toddlers in the Tuina Massage intervention group was 70.00, better than before Tuina Massage with an average value of 48.88. The average

appetite level of toddlers in the control group without Tuina massage before was 51.66 compared to after 56.66. There was a very significant difference in the average in stunted toddlers who received Tui'na massage with a P_value (0.000)

Tabel 5
Corelasi dan signifikansi pre dan post pijat Tuina dan Tanpa pijat Tui.na

Group	N	Correlation	Sign ^a
Pre Pijat Tui'na Post Pijat Tui'na	16	0,503	0,033 *
Pre Tanpa pijat Tui'na Post Tanpa pijat Tui'na	16	0,765	0,000*

Based on table 5 above, it shows a correlation of $0.503 > 0.033$ in the Tui'na massage intervention group. The correlation value is greater than the sig. value.

DISCUSSION

Difficulty eating in children is a problem that is often faced during growth and development, various causal factors such as boredom with the menu, disliked texture, preferred taste, these conditions require mothers to learn a lot about food variations for toddlers, variations in shape and taste. According to Judarwanto (2004), difficulty eating is characterized by the behavior of vomiting food in the child's mouth, eating for a long time, not wanting to put food in the mouth, throwing away food and pushing away the mouthful and some parents state that the child does not want to be given food. Preschool children can realize that they are not completely dependent on their surroundings, children demand autonomy for themselves such as refusing when given food. Toddlers have a high curiosity and they are interested in fulfilling many things with their curiosity, so they are busy exploring the environment around them. According to Wardlaw and Hampl (2007), because the busyness of exploring their environment sometimes distracts children from their food. In addition, children are also The most common cause of difficulty eating in toddlers is due to impaired spleen and digestive function. So that the food that enters the stomach is not immediately digested, which results in food stagnation in the digestive tract, complaints conveyed by parents on this problem are that children often vomit, feel nauseous when fed, and the stomach feels full so that it reduces appetite or even no appetite at all. Tui'na massage is one of the non-pharmacological therapies that can be used to overcome difficulty eating in children and toddlers, this massage will smooth blood circulation to the spleen and digestive system, this is supported by research supported by research conducted by Zhen Huan Liu and Li ting Cen in Guangzhou in 2009 stated that Tui na massage has a positive effect on the development of nerves and blood circulation in infants. Similar research was also conducted by Joko Widodo et al (2012) found that acupressure at certain meridian points can smooth blood flow to the digestive tract. This Tui Na massage is done with a gliding massage technique (Effleurage or Tui), massaging (Petrissage or Nie), tapping (tapotement or Da), friction, pulling, rotating, shaking, and vibrating certain points so that it will affect the body's energy flow by holding and pressing the

body on certain body parts. This Tui Na massage is a more specific massage technique to overcome eating difficulties in toddlers by facilitating blood circulation in the spleen and digestion, through a modification of needle-free acupuncture, this technique uses a pressure technique on the body's meridian points or energy flow lines so that it is relatively easier to do than acupuncture (Sukanta, 2010)

In this study, it showed the average value (mean) of the appetite level of stunted toddlers in the Tuina Massage intervention group of 70.00 better than before Tuina Massage with an average value of 48.88 The average appetite level of toddlers in the control group without Tuina massage before 51.66 compared to after 56.66. There is a very significant average difference in stunted toddlers who receive Tui'na massage with a P_ value (0.000). This is in line with Beautris's research (2007) which states that there are 24% of respondents in New Zealand who said their children had difficulty eating at the age of 2 years and 18% of them continued until the age of 4 years. This is also in accordance with the theory that difficulty eating is often experienced by children, especially in the age range of 1-3 years which is also called the food jag age, namely children only eat foods they like or even have difficulty eating (Afiani L. Ika et al., 2003). It is categorized as difficulty eating/decreased appetite if the mother answers the questionnaire with more than 2 signs/indicators of difficulty eating. Some indicators of eating difficulties in toddlers are: difficulty chewing, sucking, swallowing, vomiting or spitting out food that has entered the mouth, playing with food or eating for a long time, not wanting to put food in the mouth at all or closing the mouth tightly, spitting out or spilling food, pushing away the mouthful, not liking many variations of food, and unusual eating habits. (Widodo, 2012).

CONCLUSION

From the results of the study, it can be concluded that Tuina massage is effective in overcoming eating difficulties in stunted toddlers as seen from the average value (mean) of the appetite level of stunted toddlers in the Tuina Massage intervention group of 70.00, better than before Tuina Massage with an average value of 48.88. The average level of appetite of toddlers in the control group without Tuina massage before was 51.66 compared to after 56.66. There was a very significant difference in the average in stunted

toddlers who received Tui'na massage with a P_ value (0.000)

SUGGESTIONS

Tuina massage can be applied as one of the therapies to overcome eating difficulties in stunted toddlers.

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