

Effectiveness of Tui Na Massage on Eating Frequency in Batita Children at The Working Area of Lubuk Alung Puskesmas, Padang Pariaman District, 2020

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Abstract

Background: Children's health needs attention, especially children who don't like to eat so they need direction to increase their appetite. Children who are stunted due to lack of food intake and recurrent diseases, especially infectious diseases that can increase metabolic needs and reduce appetite.

Objective: To know the effectiveness of tui na massage on eating frequency in children

Methodology: This type of research is Quasy Experiment with One-Group Pretest-Post-Test design, namely the grouping of experimental groups. This study examines the changes that occur in groups after the experiment (treatment).

Result: The research results showed that there was a relationship between nutritional status The results showed that the average frequency of eating toddlers before the Tui Na massage intervention was 1.33, the average frequency of eating toddlers after the Tui Na massage intervention was 2.33, there were differences in the frequency of toddler eating by Tui Na massage interventions and which is not done Tui Na massage intervention, less effective Tui Na massage is done to increase the frequency of feeding on toddlers.

Conclusion:

Tui Na Massage, Toddler

Introduction

Children's health needs attention, especially children who do not likes to eat so it requires direction to increase appetite. Children who experience stunting due to lack

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In Indonesia, out of 23 million toddlers, around 7.6 million children under five are classified as stunted or stunted (35.6%) consisting of 18.5% very short toddlers and 17.1% stunted toddlers. This prevalence rate is above the threshold that is universally agreed upon, the limit of non-public health problems tolerated by the World Health Organization (WHO) is only 20% or one fifth of the total number of children under five in a country. More than a third (36.1%) of Indonesian children are classified as short when they enter school age, the prevalence of stunted children increases with age, both in boys and girls.² Children with stunting are at risk of having an IQ 5-10 points lower than normal children. Stunting occurs due to malnutrition and recurring disease for a long time during the fetus to the first 2 years of a child's life.

Toddler is a general term for children aged 1-3 years (toddlers) and pre-school children 3-5 years. At toddler age, children are still fully dependent on their parents to carry out important activities such as bathing, defecating and eating. The development of speech and walking has improved. But other capabilities are still limited (Sutomo, 2010). Toddler age is the golden period of a child's growth. Therefore, their nutritional needs really must be met properly. Good nutrition is one of the important elements in creating quality human beings. Toddler age is a vulnerable age, because growth during this period determines further physical and mental development. Therefore, the intake of nutritious food is very important for the growth of brain cells and their physical development.³

Symptoms of eating difficulties are often experienced by children, especially the age range 1-3 years which is also called the food jag age, that is, children only eat foods they like and even have difficulty eating, often this is considered normal but prolonged eating difficulties will cause problems with growth and development. child development. Impaired spleen and digestive functions are the most dominant cause in children with eating difficulties. Chronic gastrointestinal dysfunction such as food allergies, food intolerance. These food-related reactions appear to be the main cause of these disorders. This can be seen by the emergence of difficulty eating problems.⁴

Difficulty in eating is a problem in providing food and fulfilling nutritional needs which is generally found in children and is a health problem throughout the world. Most eating difficulties are related to growth disorders, while eating difficulties in children are accompanied by developmental disorders.⁷

Efforts to overcome eating difficulties can be done by means of pharmacology and non-pharmacology. Efforts with pharmacology include administering multivitamins and other micronutrients. While non-pharmacological, among others through herbal drinks, massage, acupressure, and acupuncture. At present, most parents overcome their child's feeding difficulties by giving multivitamins without regard to the cause. This will have a negative impact if given in the long term.⁵

Acupressure has quite a lot of systems and therapeutic points, so if acupressure has to be done at all points then this method will be quite difficult to implement by midwives or the patient's family as routine care for toddlers, even though basically each point in the acupressure method has a specific function as needed the client's physique, so acupressure can be very easy to do if it is focused on related points that suit their needs, for example in this Tui Na massage which is limited to the meridian points of the hands, stomach, feet and back. The provisions for this massage are to be done 3 times a week, if necessary to repeat the therapy, give a break of 1-2 days and massage only one side of the hand, no need for both sides, do not force the child to eat because it will cause psychological trauma. Provide healthy, nutritious and varied food intake.⁶

The results of Zhen Huan Liu and Li Ting Cen's research in Guangzhou (2009) stated that Tui Na massage has a positive effect on the development of the baby's nerves and blood circulation. A similar study was also conducted by Annif Munjidah (2015) entitled the effectiveness of Tui Na massage in overcoming eating difficulties in toddlers in RW 02 Wonokromo sub-district Surabaya in August 2015 which stated that Tui Na massage had a positive effect on eating difficulties in toddlers. Based on data obtained from the Padang Pariaman District Health Office, in 2019 the number of toddlers (1-3) at the Lubuk Alung Health Center was 2036 toddlers. With malnutrition status 1 person and malnutrition 132 people.

Method

1. Research design

This type of research is Quasy Experiment with the One-Group Pretest-Post-Test design, namely the grouping of experimental groups. This study examines the changes that occur in the group after the experiment.

2. Setting and samples

The research was carried out in the work area of the Lubuk Alung Health Center, Padang Pariaman Regency in December-April 2020. The samples were partly taken from the entire object under study which was considered to represent the entire population (Hidayat, 2014). The sample in this study were toddlers with a weight less than the height of 6 toddlers. How to take the sample This study used a purposive sampling technique.

3. *Intervention (applies to experimental studies)*

The intervention given to toddlers is tuina massage according to the existing checklist.

4. *Measurement and data collection*

Measurements were carried out 2 times, starting with a measurement asking the frequency of eating before the intervention was carried out, after 1 week the tuina massage was carried out, then after that the measurement of eating frequency was carried out again after the tuina massage was given.

Data collection tool that researchers use is the observation sheet. In filling it out, the author observes the frequency of eating in toddlers. data obtained indirectly or data collected from the Working Area of the Lubuk Alung Health Center regarding the number of toddlers in the Lubuk Alung Health Center.

5. *Data analysis*

Data analysis was processed by a computerized system, then analyzed using univariate analysis and bivariate analysis.

Univariate analysis, that is, all variables are processed based on the frequency distribution. The purpose of this analysis is to explain the characteristics of each variable studied (Notoatmodjo, 2012). The data analysis presented is descriptive statistical values including the mean (average) and standard deviation for the two measurements (before and after Tui Na massage on toddlers)

Bivariate Analysis data is processed computerized to determine the effect of the independent variables on the dependents studied. Before testing the hypothesis, the researcher conducted a normality test using the Kolmogorov-Smirnov test to determine the type of hypothesis used. If the significance interference ($p > 0.05$), the data is normally distributed and the hypothesis test

used is the parametric test, namely the dependent T-test, but if the significance interference value (p) is <0.05 , the data is not normally distributed and the hypothesis testing is The non-parametric test used is the Wilcoxon test which is processed using computerization.

It is possible that there is an influence seen from the p value. If $p \leq \alpha$ (0.05) it is concluded that there is an effect of Tui Na Massage Treatment on toddlers (H_a accepted). On the other hand, $p > \alpha$ (0.05) so it was concluded that there was no effect of the Tui Na Massage treatment on toddlers (H_o was rejected)

Results

Univariate analysis

1. Distribution of toddler eating frequency before (Pre Test) Tui Na intervention

Table 1.

Distribution of the frequency of eating toddlers before the Tui Na massage intervention (pretest) in the working area of the Lubuk Alung Health Center, Padang Pariaman Regency, 2020

<i>Variabel</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>Maximum</i>	<i>Minimum</i>
Pre test	6	1,17	0,408	2	1

Based on table 1, it was found that the average toddler eating frequency before the Tui Na massage intervention was 1.17 with a standard deviation of 0.408. The lowest average eating frequency is 1 and the highest average eating frequency is 2.

2. Distribution of toddler eating frequency after (post test) Tui Na massage intervention.

Table 2.

Distribution of toddler eating frequency after the Tui Na massage intervention (post test) in the work area of the Lubuk Alung Health Center, Padang Pariaman Regency, 2020

<i>Variabel</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>Maximum</i>	<i>Minimum</i>
Post test	6	2,35	0,249	3	2

Based on table 2, it was found that the average toddler eating frequency after the Tui Na massage intervention was 2.35 with a standard deviation of 0.249. The

lowest average eating frequency is 2 and the highest average eating frequency is 3.

3. Normality Test

Carrying out the data normality test using the Shapiro Wilk parameter, it is said to be normally distributed if the significance value (p) > 0.05 and if the significance value (p) < 0.05 it is not normally distributed. Following are the results of the normality test for the average toddler eating frequency before and after the Tui Na massage intervention.⁸

Table 3.

Normality Test of Eating Frequency for Toddlers Tui Na massage intervention in the work area of the Lubuk Alung Health Center, Padang Pariaman Regency, 2020

<i>Variabel</i>	<i>Mean</i>	<i>SD</i>	<i>Minimum – Maximum</i>	<i>P value</i>
Pre test	1,17	0,408	1 – 2	0,212
Post test	2,40	0,249	2 – 3	0,221

From table 3 it can be seen, the average frequency of eating toddlers before being given Tui Na massage is 1.17 while the average frequency of eating toddlers after being given Tui Na massage is 2.40. The results of statistical processing show p value > 0.05 . This shows that the data is normally distributed, so the statistical test used is the Paired Sample T Test.

Bivariate analysis

The effectiveness of Tui Na massage in increasing the frequency of toddler feeding in the working area of the Lubuk Alung Health Center, Padang Pariaman Regency in 2020, is as follows:

Table 4.

The effectiveness of Tui Na massage in increasing the frequency of feeding toddlers at the Lubuk Alung Health Center, Padang Pariaman Regency, in 2020.

<i>Variabel</i>	<i>Mean</i>	<i>t</i>	<i>P Value</i>
Pre Test	1,17	-7,852	0,001
Post Test	2,40		

Based on table 4, there was a change in the frequency of toddler feeding before and after Tui Na massage, namely 1.17 to 2.40. The results of the analysis using the paired sample t test obtained a value of t (-7.852) with a value of $p = 0.001 < 0.05$, which means that H_0 is rejected and H_a is accepted. So it can be concluded that Massage Tui Na is effective in increasing the frequency of eating toddlers.

Discussion

According to the researcher's assumption that 6 respondents after the intervention experienced an increase in the frequency of appetite, this occurred due to the influence of Tui Na massage which is one of the solutions to overcome the problem of malnutrition but also must be given counseling on the benefits of Tui Na massage to toddler parents. This occurs due to the release of beta endorphins which will increase the formation of growth hormone due to the increased amount and activity of tissue ODS (Ornithine decarboxylase). Vagus activity affects food absorption and production of serotonin which can increase endurance. With researchers doing Tui Na massage, it can help increase the frequency of eating for toddler mothers and also researchers provide education about nutrition for toddlers and good eating patterns for toddlers.^{9,10,}

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Conclusion

Based on the results of the study entitled Effectiveness of Tui Na massage on toddler feeding frequency in the working area of the Lubuk Alung Health Center, Padang Pariaman Regency in 2020 with a total sample of 6 people, it can be concluded that:

1. The distribution of toddler eating frequency before the Tui Na massage intervention was 1.17
2. It was found that the distribution of toddler eating frequency after the Tui Na massage intervention was 2.40
3. The effectiveness of Tui Na massage is done to increase the frequency of eating in toddlers.

Author Contribution

Contributions in writing this article were carried out by the main author and member writers, we work together in making this article according to the template provided.

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