



The effectiveness of tui na massage on increasing appetite in toddlers who experience difficulty in eating

Nur Azizah Lubis¹, Juliana Sion Sihombing²

^{1,2}Bachelor Degree, Program Studi Kebidanan, Sekolah Tinggi Ilmu Kesehatan Indah Medan, 20226, Indonesia

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ABSTRACT

Difficulty eating in children that is not treated immediately can cause malnutrition, dehydration, underweight, and can interfere with the child's cognitive development. The aim of this research is to see the effectiveness of Tui Na massage in increasing appetite in toddlers at the Elfita Clinic, Medan City. The method used in this research was a quasi experiment with a one group pretest-post test design. Using simple random sampling. Data analysis through the Chi Square test with an alpha significance value of 0.05. The research results show a p value of 0.0000 < α 0.05. Tui Na massage is effective in increasing appetite in toddlers at the Elfita Clinic, Medan City. The conclusion from this research is that the more regularly you do Tui Na massage, the more your toddler's appetite will increase. And it is hoped that mothers of toddlers will be able and regularly apply this massage.

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Corresponding Author:

Nur Azizah Lubis,
Program Studi D3 Kebidanan,
Sekolah Tinggi Ilmu Kesehatan Indah Medan,
Jl. Saudara Ujung No. 110, Sudirejo II, Kec. Medan Kota, Kota Medan, Sumatera Utara, 20226, Indonesia.
Email: nurazizahlubis39@gmail.com

1. Introduction

Children are every parent's dream, therefore parents will give the best for their children so that they achieve normal growth and development without any interference. The toddler period is a (golden period) that is very sensitive to the environment; this period is very short, (Rudy et al., 2018). Growth disorders can increase the risk of malnutrition. According to the World Health Organization (WHO) report, the prevalence of malnutrition in the world increased from 17.6% in 2015 to 25.0% in 2020. Children suffering from malnutrition with the assumption that their growth will be disrupted is estimated to increase from 113.4 million in 2015 to 218 million in 2020.

This condition is an illustration of the magnitude of the nutritional problem in children in the world today, which directly impacts the disruption of children's growth in the future, (Pratami et al., 2020). The 2018 Basic Health Research (Riskesdas) conducted by the Ministry of Health stated that the percentage of malnutrition among children under five in Indonesia was 3.8%, while the percentage of malnutrition was 11.4%. This is not much different from the results of the Nutritional Status Monitoring (PSG) held by the Ministry of Health in 2017, namely the percentage of malnutrition among children under five was 3.5% and the percentage of malnutrition was 11.3%. The province with the highest percentage of malnutrition and malnutrition among children under five in 2018 was East Nusa Tenggara, while the province with the lowest percentage was West Java Province (Indonesian Ministry of Health, 2020). Children's growth and

development is very dependent on adequate nutrition. Some of the problems that often occur in fulfilling nutrition are difficulty eating in toddlers which can cause growth and development disorders or stunting, (Wijayanti & Sulistiani, 2019).

Difficulty eating in children that is not treated immediately can cause malnutrition, dehydration, underweight, electrolyte imbalance, impaired cognitive development, anxiety disorders, and in more severe circumstances can become a life-threatening condition, (Asih & Mugiati, 2018). Some indicators of difficulty eating in toddlers are: difficulty chewing, sucking, swallowing, spitting out 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, vomiting or spilling. food, refusing to eat, not liking a wide variety of foods, and unusual eating habits, (Munjidah & Anggraini, 2019).

Efforts to overcome eating difficulties can be done using pharmacological or non-pharmacological methods. Pharmacological efforts include administering multivitamins and other micronutrients. Meanwhile, non-pharmacology includes herbal drinks or herbal medicine, acupuncture, acupressure and massage, (Kursani et al., 2020). In this modern era, most parents prefer to give multivitamins to increase appetite to overcome the problem of children who have difficulty eating, unfortunately this can have negative impacts if given over a long period of time. An example of a negative impact or side effect that can arise as a result of long-term administration of multivitamins is an imbalance in the body, for example too much zinc can cause anemia and neutropenia, (Liang et al., 2020). Massage and acupressure are methods that have been around for a long time, but are very rarely used in providing care for toddlers, in society children only get massage when they are born until they are 40 days old or if they have other muscle problems, (Munjidah, 2018). Nowadays, a baby massage technique has been developed, namely Tui Na massage. Tui Na massage is an alternative for increasing appetite in children. Tui Na massage is a more specific massage to overcome feeding difficulties in toddlers by improving blood circulation in the spleen and digestion, through a modification of acupuncture without needles, this technique uses pressure on the body's meridian points or energy flow lines so it is relatively easier to do than acupuncture, (Limananti & Triratnawati, 2003).

The Tui Na massage technique is using the hands and applying pressure to massage points to relieve symptoms, treat disease, or help restore the patient's health, (Wijayanti & Sulistiani, 2019). This massage is carried out using gliding massage techniques (Effleurage or Tui), massaging (Petrissage or Nie), tapping (tapotement or Da), friction, pulling, rotating, shaking and vibrating certain points so that it will influence the body's energy flow by holding and pressing the body. on certain body parts, (Munjidah & Anggraini, 2019). The conditions for this massage are 1 set of therapy equal to 1 x therapy protocol per day, for 6 consecutive days, if necessary, repeat the therapy, give a break of 1-2 days and massage only one side of the hand, no need for both sides, don't force the child to eat because it will cause psychological trauma. Provide healthy, nutritious and varied food intake, (Munjidah, 2018). Tui Na massage is useful as a way to support the child's growth and development process mentally, physically and socially. The aim of massage is to provide positive stimulation, smooth the nerves so that the body becomes fresher and more relaxed, (Noflidaputri et al., 2020). Another benefit of massage is that it makes you sleep more soundly so that it can increase concentration and increase intelligence. With massage, stress can be reduced. Massage will improve growth, development and memory, (Asih & Mugiati, 2018).

2. Methods

This study used an observational analytical design with a cross-sectional approach by examining the effectiveness of Tui Na massage in overcoming children's eating difficulties. The population used was all mothers and toddlers who consulted at the Elvita Clinic during the March-August 2023 period, amounting to 30 people and the sample used was the entire population because the population was smaller than 100. Data analysis used Chi Square with an alpha significance value of 0,05.

Direct data collection used a questionnaire instrument regarding signs of eating difficulties in toddlers. Meanwhile, the Tui Na massage variable is the child's massage treatment for 7 days by the parents. This research was carried out at the Elfita Clinic. Meanwhile, the implementation time will be

March-August 2023. The test will be carried out using the Chi Square Correlation Test using computer assistance through the SPSS 22 program.

3. Results and Discussion

Data collection on the Tui Na massage variable was carried out directly, through distributing questionnaires to parents. Provided that massage is carried out regularly if the parents provide 1x massage protocol, namely 1x/day which includes 8 movements. Meanwhile, for the variable of difficulty eating in children, data collection was carried out directly, namely the researcher distributed a questionnaire in the form of 8 indicators of difficulty eating in toddlers.

3.1 Distribution of respondents based on age Characteristics of Respondents According to Age of Toddlers

Table 1.
Characteristics of Toddlers Who Experience Eating Difficulty at the Elfitia Clinic

| Age (Month) | Appetite Condition | | | |
|-------------|--------------------|-----|--------|---|
| | Difficulty Eating | | Normal | |
| | N | % | N | % |
| 12 | 4 | 20 | 0 | 0 |
| 13 | 3 | 15 | 0 | 0 |
| 14 | 5 | 25 | 0 | 0 |
| 15 | 2 | 10 | 0 | 0 |
| 16 | 3 | 15 | 0 | 0 |
| 17 | 1 | 5 | 0 | 0 |
| 18 | 2 | 10 | 0 | 0 |
| Total | 20 | 100 | 0 | 0 |

Based on table 1, it is known that the respondents were 20 babies and all of them had difficulty eating.

3.2 Effectiveness of Tui Na massage in overcoming feeding difficulties in toddlers

Based on the statistical test results in table 2, because the Chi Square test requirements were not met, the researcher used Fisher's Exact test, obtained a significant value of $p = 0.000 < \alpha = 0.05$. So H_0 is rejected. This means that Tui Na massage is effective in overcoming feeding difficulties in toddlers

Table 2.
Toddler's Appetite Condition Before and After Being Given Tui Na Massage

| Appetite Condition | Pre Test | | Post Test | | p-value |
|--------------------|----------|-----|-----------|----|---------|
| | N | % | N | % | |
| Difficulty Eating | 20 | 100 | 2 | 10 | 0,000 |
| Normal | 0 | 0 | 18 | 90 | |

Discussion

Difficulty eating in toddlers

Based on table 2, it is known that all respondents (100%) have difficulty eating. If we look at the majority of respondents, namely in table 1, the age of most respondents is between 7 months and < 36 months. This is in accordance with the theory that children often experience difficulty eating, especially in the 1-3 year age range, which is also called the food hog age, that is, children only eat foods they like or even have difficulty eating, (Limananti & Triratnawati, 2003). It is categorized as having difficulty eating if the mother answers the questionnaire with more than 2 signs/indicators of difficulty eating. Based on research conducted by many people in Sidosari, who still use herbal drinks, multivitamins, and abdominal

massage to overcome toddlers' appetite problems, therefore respondents who experience an appetite disorder should be able to give lemongrass oil aromatherapy regularly before going to bed at night to increase appetite, (Sánchez-Vidaña et al., 2017).

Some indicators of difficulty eating in toddlers are: difficulty chewing, sucking, swallowing, spitting out 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, regurgitating or spilling. food, refusing to eat, not liking a wide variety of foods, and unusual eating habits, (Munjidah, 2018).

Through massage Tuina, some organs related to metabolism can be touched, such as fingers, palms, stomach, and back. The techniques in massage are Tuinasliding (known as Effleurage or Tui), massaging (Petrissage or Nie), tapping (tapotement or Da), friction, pulling, twisting, shaking, and shaking points, inducing blood circulation, intestine, stomach and especially the spleen to become more reliable, (Wei et al., 2017).

The effectiveness of Tui Na massage in overcoming feeding difficulties in toddlers

The results of statistical tests via the Chi Square test did not meet the requirements, so the researchers used Fisher's exact test, obtaining a significant value of $p\ 0.000 < \alpha\ 0.05$. So H_0 is rejected. This means that Tui Na massage is effective in overcoming feeding difficulties in toddlers.

Tui Na massage is done using gliding massage techniques (Effleurage or Tui), massaging (Petrissage or Nie), tapping (tapotement or Da), friction, pulling, rotating, shaking and vibrating certain points so that it will influence the body's energy flow by holding and pressing the body on certain parts of the body. Through the delivery of responses made by the hypothalamus, all elements in the essential oil will be delivered by the circulation system and chemical agents to the organs of the body in need, (Blaine et al., 2017). Tui Na massage is a more specific massage technique for overcoming feeding difficulties in toddlers by improving blood circulation in the spleen and digestion, through a modification of acupuncture without needles, this technique uses pressure techniques on the body's meridian points or energy flow lines so it is relatively easier performed compared to acupuncture, (Sukanta, 2003).

The most common cause of difficulty eating in toddlers is due to impaired spleen and digestive function. So that food that enters the stomach is not immediately digested, which results in stagnation of food in the digestive tract. The complaints expressed by parents regarding this problem are that children often vomit, feel nauseous when fed, and the stomach feels full, resulting in reduced appetite or even no appetite at all. very. According to researchers, caused by one physiological factor the touch stimulation through massage can affect the mechanism of brain waves, especially the hypothalamus, which is the key and the centre of the response to hunger and appetite, (Zhang et al., 2019).

Therefore, respondents should be able to apply various methods of increasing appetite. In this case, Tuina massage is proven effective in growing toddlers' appetite. Also, this method is easy to do so that it can be done for all toddlers who experience appetite disorders, (Al-Bedah et al., 2017).

3. Conclusion

In conclusion, the presented review underscores the prevalence of feeding difficulties among toddlers, particularly in the 1-3 year age range, and introduces Tui Na massage as an effective solution to address these challenges. The study emphasizes the impact of Tui Na massage on blood circulation, especially in the spleen and digestion, attributing its efficacy to touch stimulation and its influence on brain waves related to hunger and appetite. While the statistical tests support the effectiveness of Tui Na massage, future research could further explore the long-term effects, potential variations in response based on individual differences, and the comparison of Tui Na massage with other interventions. Additionally,

investigating the feasibility of integrating Tui Na massage into existing therapeutic approaches for pediatric feeding difficulties would contribute valuable insights for healthcare professionals and caregivers seeking effective strategies to improve toddlers' eating habits.

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