

The Use of Lavender Aromatherapy as A Stimulant To Increase Pre-School Children's Appetite

Sitti Khadijah¹, Vitrianingsih²

^{1,2}Faculty of Health Sciences, Respati University of Yogyakarta

*Corresponding author: cha_midwife19@yahoo.com

ABSTRACT

Backgrounds: Pre-school age is a period in which children experience very rapid growth and development. Therefore, adequate nutrition is needed both in terms of quality and quantity. One of the problems that often arise to meet the nutritional needs is children's eating difficulty. One of the treatments as an action to handle that problem is by using aromatherapy.

Objectives: To find out the effect of lavender aromatherapy on increasing pre-school children's appetite.

Methods: The type of this study was quasi-experimental research using a pretest-posttest design group approach to find out the effectiveness of the use of aromatherapy to increase pre-school children's appetite. This study was conducted at PGTK Jogja Kids Park with 21 respondents as samples taken using total sampling technique. The data were analyzed with univariate and bivariate statistics using the paired t-test.

Results: The percentage of pre-school children's appetite, before being given lavender aromatherapy, was 81% which was in the high category, then, after being given lavender aromatherapy, it increased to 95,2%. The result of paired t-test showed that giving lavender aromatherapy had an effect to increase pre-school children's appetite with the p-value of $0.009 < 0.05$.

Conclusion: Giving lavender aromatherapy can increase pre-school children's appetite effectively.

Keywords: *Lavender Aromatherapy, Appetite, Pre-School Children*

INTRODUCTION

The growth and development of children is a topic which needs to get major attention (1). Children aged 1–5 years are a group which easily gets affected by nutritional problems. In the present days, children are experiencing rapid growth and development so that they require sufficient nutritional intake. Pre-school children aged 3–6 years are in a period for playing and a golden period for receiving various stimuli. At this time, children can easily be given various stimulations following the stages of growth and development. One of the efforts which parents need to do to optimize children's growth is to meet their children's nutritional needs in which the pre-school children need the nutritional intake of 1,800 calories per day (2).

The fulfillment of nutrition for children does not always go according to plan. During the pre-school age, children often experience a lack of nutritional fulfillment due to children being more active for outdoor activities so that they often forget the time to eat (3).. Inadequate nutritional intake is caused by the lack of appetite for children. Appetite is a condition which drives someone to satisfy his/her desire to eat instead of being hungry. Appetite disorder on children can cause children to not get proper nutrition. This condition may cause children more susceptible to diseases, especially infectious diseases, and worm infections. Moreover, for a long time, it may cause nutritional deficiency which leads to malnutrition condition for children (3).

Every child must have experienced the decreased appetite condition, especially when the child's age is over 1 year. The decreased appetite condition for children is generally a natural condition because children's appetite will tend to decrease when they have aged 1–6 years old, especially when they stop suckling and start walking. Along with their ability to be able to move, such as walking, the condition will increase the children's activity. This will cause the interest of children on food to decrease (4).

Handling children's appetite problem is needed to be completed early by parents to avoid the adverse effects caused by the lack of nutrition. One of the treatments which can be done by parents is by using aromatherapy. In the last few decades, aromatherapy with essential oils has been popular again because many people consider that synthetic medicine therapy has a bad impact on the human body due to the accumulation of synthetic substances in human main organs such as kidney and liver.

The use of aromatherapy is also currently being developed in complementary midwifery services (5). Aromatherapy with essential oils which give a fresh and fragrant sensation does not only provides extensive benefits to the body but also can stimulate the brain which then stimulates clients' appetite who is in ill or weak condition (6).

Based on several studies, plants around us which contain lots of essential oils which can be used as aromatherapy to increase the appetite are lemongrass leaves, temulawak, ginger, temuireng, lemon, jasmine, rosemary, and lavender (5). Currently, the lavender essential oil is available in the market, but its usage has not been optimally utilized. Therefore, this study aimed to find out whether the use of lavender aromatherapy can increase pre-school children's appetite so that the food intake and nutritional needs could be met properly.

MATERIALS AND METHODS

The type of this research was the quasi-experimental method using the pretest-posttest group design. This study had been approved by the Ethics Committee of Respati University of Yogyakarta. The population in this study was 21 pre-school children aged 3–6 years at PGTK Jogja Kids Park. Aromatherapy which was used in this study was lavender aromatherapy which could be easily found on the marketplace (having BPOM permission). This aromatherapy was given to the subject by inhalation using a diffuser for 1 month.

The data were analyzed quantitatively using univariate analysis to descriptively analyze research variables by presenting data in the form of frequency distribution tables and explanation to elaborate the data on the tables. In addition, the data were also analyzed using bivariate analysis to find out the differences of appetite before and after aromatherapy was given by utilizing paired t-test analysis.

RESULTS AND DISCUSSION

The result of the data analysis was presented in the following table.

Table 1. Respondents' characteristics

Variable	Frequency (N=21)	Percentage (%)
Age 3 years	7	33.3

	4 years	4	19.1
	5 years	8	38.1
	6 years	2	9.5
Sex	Male	12	57.2
	Female	9	42.8

Primary data, 2019

Table 1 showed that respondents were mostly children aged 5 years, namely 8 children (38.1%), and were male, namely 12 children (57.2%).

Table 2. Frequency distribution of Respondents' Appetite in Pre-test and Post-test

Variable	Pre-test		Post-test	
	N	%	N	%
Appetite				
High	17	81.0	20	95.2
Low	4	19.0	1	4.8

Primary data, 2019

Table 2 showed that there were 4 children (19%) in the pre-test group who experienced low appetite, meanwhile, in the post-test group after being given lavender aromatherapy, respondents who experienced low appetite dropped to 1 child (4.8%).

Table 3. The Effect of Lavender Aromatherapy on Pre-School Children's Appetite

		N	C	p-value
Appetite	Pre & post test	21	.519	.009

Primary data, 2019

Table 3 showed the result of the paired t-test in which the p-value was $0.009 < 0.05$ so that H_0 is rejected. It meant that giving lavender aromatherapy had an effect to increase pre-school children's appetite with the closeness of 0.519 (sufficient).

This result showed that, before being given lavender aromatherapy, there were 4 children (19%) with low appetite, and, after being given aromatherapy for one month routinely, there was an increase in the children's appetite in which children with low appetite dropped to 1 child (4.8%). This result was in line with research conducted by Ekawati who stated that children nutritional intake was getting better after being given aromas jar game therapy (7)..

Aromatherapy is an alternative treatment from the volatile plant material and is better known

in the form of essential oils in which the essential oils which are evaporated as the main component in aromatherapy can give effects such as anti-inflammatory, antiseptic, stimulation for blood circulation, and appetite booster.

According to Soedjiningsih, some children with the lack of appetite tended to reject food in various ways such as stalling for meals, picking out the food menu, and closing their mouths when being fed. Based on the analysis of questionnaire items from children with low appetite, almost all of them refused food by closing their mouths and dismissing the food given (4). This appetite disorder was an important clinical disorder but was often ignored by parents. Therefore, parents were expected to overcome this children's eating disorders as early as possible because children who have an appetite disorder were more likely to fail to meet the food and drink intake so that nutritional needs were not fulfilled properly (3).

Aromatherapy as an additional therapy is a therapeutic action because it has benefits to improve physical and psychological conditions (8). The use of aromatherapy provides many benefits to the body. Giving lavender aromatherapy regularly will encourage children's interest in food through sensory stimulation.

Koensomardiyah said that the aromatherapy which was inhaled will enter the nose and touch cilia or the fine hairs in the nose. Inside the cilia, there were receptors associated with olfactory bulges which located at the tip of the olfactory duct and were connected to the brain. The smell of aromatherapy would be converted by cilia into electrical impulses that were transmitted to the brain through the olfactory system. These impulses would reach the limbic system and then converted into electrochemical compounds that secreted the serotonin so that the body would feel relaxed and refreshed and could reduce the intensity of nausea and vomiting (9).

Based on the results of the paired t-test analysis, it indicated that giving lavender aromatherapy had an effect to increase pre-school children's appetite with sufficient closeness. This was in line with the research conducted by Fatmawati which stated that there was an effect of giving aromatherapy to a child's appetite (5). The result of a research conducted by Santi indicated that aromatherapy could give effects of calming, refreshing, and reducing nausea and vomiting in which the effect of refreshing and

reducing nausea would have an impact on increasing appetite (10).

CONCLUSION AND RECOMMENDATION

1. The pre-school children's appetite before being given aromatherapy lavender was 81% which was in the high category.
2. The pre-school children's appetite after being given aromatherapy increased to 95.2% which was in the high category.
3. The result of paired t-test showed that there was an effect of giving lavender aromatherapy to the increase the children's appetite in which the p-value was $0.009 < 0.05$.

ACKNOWLEDGMENT

Thank you the KEMENRISTEKDIKTI and Universitas Respati for facilitating and supporting the implementation of this research.

REFERENCES

1. Kumala, V. (2005). *Menyiasati Kesulitan Makan Pada Anak*.
2. Afni. (2011). *Sistem Pencernaan Makanan dan Mekanisme Rasa Lapar dan Haus*. Diakses 12 September 2019 <http://www.crayonpedia.org/mw/>
3. Setiowati, W. (2019). *Pengaruh Pemberian Buah Pepaya Bangkok (Carica Papaya L) Terhadap Nafsu Makan Pada Anak Usia 3-6 Tahun*. Jurnal Darul Azhar Vol 8, No.1 Agustus 2019.
4. Soetjningsih, (2012). *Kebutuhan Gizi Balita*. Diakses 12 September 2019 dari http://www.balitaanda.com/fatherhood/659kebutuhan_gizi_balita.html
5. Fatmawati, E. (2016). *Penggunaan Aromaterapi Sebagai Stimulasi Meningkatkan Asupan Makan pada Balita*. Jurnal Kesehatan "Samodra Ilmu" Vol. 07 No. 02 Juli 2016.
6. Kusumaningrum, D. (2009). *Efektivitas Aromaterapi Terhadap Peningkatan Nafsu Makan Klien*. Seminar Keperawatan dan Temu Ilmiah Nasional "Berbagi Jurus Jitu menjadi Perawat Bintang Lima", 3-4 Oktober 2009, LPMP Spondol Semarang.
7. Ekawati, I. (2018). *Pengaruh Terapi Bermain Aroma Jars Terhadap Asupan Nutrisi Anak Prsekolah Saat Hospitalisasi*. Universitas Muhammadiyah Surakarta. Skripsi.
8. Agustini, S. (2014). *Pengaruh Pemberian Aromaterapi Terhadap Konsentrasi Siswa Kelas V Sekolah Dasar Dalam Mengerjakan Soal Ulangan Umum*. Jurnal Psikologi Udayana Vol. 1. No. 2. 271-278.
9. Koensoemardyah. (2009). *A-Z Aromaterapi untuk Kesehatan, Kebugaran, dan Kecantikan*. Yogyakarta; Lily Publisher.
10. Santi, D. R. (2013). *Pengaruh Aromaterapi Blended Peppermint dan Ginger Oil terhadap Rasa Mual pada Ibu Hamil Trimester Satu di Puskesmas Rengel Kabupaten Tuban*. Jurnal Sain Med, Vol. 5. No. 2 Desember 2013: 52-55.