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THE EFFECTIVENESS OF OROMOTOR MASSAGE STIMULATION ON THE DEVELOPMENT OF LANGUAGE AND SPEECH SKILLS IN BABIES AGED 12-18 MONTHS

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ABSTRACT

Development is an increase in abilities or skills in more complex body structures and functions gradually and regularly. One component of child development is language. The development of language and speech abilities in children involves cognitive, sensori motor, psychological, emotional and environmental development. Talking is when someone makes a sound with the aim of conveying something to another person. Children need to learn several skills to be able to speak correctly. The aim of this research is to determine the effectiveness of oromotor massage stimulation on the development of language and speech abilities of babies aged 12-18 months at Lutuna Baby SPA. The method in this research is the approach used is one group pre test-post test design, the type of quantitative research with the research design is Praexperimental. The population in this study were all mothers who had babies aged 12-18 months and were willing to do oromotor massage, totaling 30 people. This research uses a measuring instrument, namely an observation sheet. The results of the study showed that the average difference in pretest-posttest babies' speech and language abilities was 0.933 and the p value was 0.000. This proves the influence of oromotor massage stimulation on improving the speech and language abilities of babies aged 12-18 months.

Keywords: language skills; oromotor massage stimulation; speaking

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INTRODUCTION

Development is an increase in abilities or skills in more complex body structures and functions gradually and regularly. Movement, intellectual, social and emotional abilities are also related to progress in development (Basic Education and Training Module, 2020). One component of child development is language. The development of language and speech abilities in children involves cognitive, sensorimotor, psychological, emotional and environmental development. (Suhadi, 2020). Talking is when someone makes a sound with the aim of conveying something to another person. Children need to learn several skills to be able to speak correctly. This includes the skill or ability to pronounce words correctly (phonology), understand the meaning of words (semantics), use words according to the context or purpose, and be able to arrange words with the correct structure or grammar (Agnes Indar, 2020). In research (Hutami & Samsidar, 2018) it is revealed that if a child is detected experiencing obstacles in his speech development, this incident must have a causal factor in the emergence of speech development obstacles.

The first factor that causes speech delays is a lack of fulfillment of important things that are essential in communicating. According to the World Health Organization (WHO), children's language development in the world has a fairly high incidence rate, namely in the United States the incidence rate is around 12-16%, in Thailand 24%, and Argentina 22%, while in Indonesia it is between 13%-18% (Wati, 2006 in Yuyun Rahayu, 2020). Stimulation of language development can be done in various ways. Sensory stimuli come from hearing (auditory expressive language development and auditory receptive language development) and vision (visual language development) (Rizkiyana, 2019). Oromotor massage stimulation is one way to stimulate children's language and speech skills. Oral Motor (oromotor) development is an eating skill that includes all activities that use the muscle movement system of the oral cavity, such as the jaw, teeth, tongue, palate, lips. , and cheeks, including the coordination of movements between these oral cavity organs. Oral motor is the coordination of movement of hard tissue, soft tissue, vascular system, and nerve control in the face and mouth area which forms oral motor function (Santi, 2016 in Erna etal, 2020). Coordination of these structures is very important for the functions of speaking, chewing, and swallowing a variety of food textures. The oral motor program includes activities to improve tongue lateralization, lip control and chewing strength (GANY, 202). To determine the effectiveness of oromotor massage stimulation on the development of language and speech abilities in babies aged 12-18 months at Lutuna Baby SPA Klinik Pratama Ika.

METHOD

This research uses a quantitative type of research with a praexperimental research design. The approach method used is one group pre test-post test design. The population in this study were all mothers who had babies aged 12-18 months and were willing to do oromotor massage, totaling 30 people. This research uses a measuring instrument, namely an observation sheet. data were analyzed using univariate and bivariate analysis

RESULTS

Table 1.
Distribution Characteristics of respondent mothers who have babies aged 12-18 months

Respondent Characteristics	f	%
Mother's Age		
20 - 24 years	12	40,0
25 - 29 years	13	43,3
30 - 35 years	5	16,7
Education		
JHS	6	20
SHS	9	30
PT	15	50
Working		
Working	19	63,3
Not Working	11	36,7

Table 1, the results obtained were that the average respondent was mothers aged 25-29 years or 43.3% (13 people), mothers aged 20-24 years or 40.0% (12 people), mothers aged 30-35 years or 16.7% (5 people). Mothers with a tertiary education were 50% (15 people), mothers with a high school education were 30% (9 people), and mothers with a junior high school education were 20% (6 people). And 63.3% of working mothers (19 people), and 36.7% of non-working mothers (11 people).

Table 2.
Characteristics of respondents of babies aged 12-18 months who received oromotor massage stimulation

Respondent Characteristics	f	%
Gender		
Woman	13	43,3
Man	17	56,7
Baby Age		
12 months	4	13,3
13 months	8	26,7
14 months	5	16,7
15 months	6	20,0
16 months	1	3,3
17 months	3	10,0
18 months	3	10,0
Exclusive breastfeeding		
Yes	20	66,7
No	10	33,3

Table 2, it is known that the majority of respondents were male, namely 17 people with a percentage of (56.7%) and 13 female respondents with a percentage of (43.3%). It can be seen in table 2, the dominant age group is 13 months old with 8 people with a percentage (26.7%) and the smallest is 16 months old with a percentage (3.3%). Judging from exclusive breastfeeding, there were 20 babies who were exclusively breastfed or 66.7% and 10 babies who were not exclusively breastfed or 33.3%.

Table 3.
Average speech and language skills of babies aged 12-18 months prior to oromotor massage stimulation intervention

Variabel	f	SD	Min	Max	Mean
Pre test	30	0,504	1	2	1,43

Table 3, it can be seen that the average ability of respondents before the oromotor massage stimulation intervention was carried out was 1.43 with a standard deviation of 0.504. The lowest speech and language ability scale is 1.

Table 4.
Average speech and language abilities of babies aged 12-18 months after an oromotor massage stimulation intervention

Variabel	N	SD	Min	Max	Mean
Posttest	30	0,765	1	3	2,37

Table 4, the average ability of respondents after the oromotor massage stimulation intervention was 2.37 and with a standard deviation of 0.765. The speech and language ability scale is 1 and the highest is 3.

Variabel	Mean	Mean Different	SD	t	Df	p value	N
Pretest	1,43	0,933	0,765	5,887	29	0,000	30
Posttest	2,37		0,504				30

Table 5, the average result of the baby's speech and language abilities 12-18 months before the intervention was 1.43 and after the intervention was 2.37. It can be seen that there is a difference in the average language and speech abilities of babies 12-18 months after oromotor massage stimulation with an average difference of 0.933 and p value = 0.000, which means that there is an influence of oromotor stimulation on increasing speech and language abilities

where there is an increase in the scale speech and language abilities of respondents before and after being given oromotor stimulation.

DISCUSSION

In table 3, the results of research conducted on babies aged 12-18 months at Lutuna Baby SPA Pratama Ika show that the average scale of babies' speech and language abilities is 1.43 and the standard deviation is 0.504. Before being given oromotor massage stimulation, it is known that the lowest ability scale is 1, which indicates a delay in the development of speech and language skills, which results in babies not showing the same development as children their age (Sulistyawati & Amelia, 2021). Delays in speech and language development in babies can be seen from various factors. One indicator of speech delay is a lack of active stimulation from parents. Oromotor massage stimulation is one way to stimulate and improve children's speech and language skills. Where this stimulation is a massage skill in the oral area to stimulate the oral muscles including the coordination of movements between the organs of the oral cavity. In table 4, the results of research that carried out oromotor massage stimulation on babies aged 12-18 months at Lutuna Baby SPA Pratama Ika Clinic showed that the average scale of speech and language abilities was 2.37 with a standard deviation of 0.765. The lowest ability scale is 1 and the highest is 3. Delays or disorders in speech and language skills can be minimized early by providing stimuli to children, one of which is oromotor massage therapy.

Oromotor massage stimulus is useful for minimizing the incidence of speech delays in children. This activity involves coordination and movement of soft tissue, the vascular system, and nerve control in the face and mouth area for oral motor function. (Erna et al, 2022). The results of the study showed that there was an increase in speech and language abilities after oromotor massage stimulation. This is supported by research by Erna et al, 2022. The Effect of Using Oral Motor for Children Aged 2-4 Years, which states that oromotor massage stimulation can improve muscle function in the oral or mouth area. Good oral skills will also show good speech processing in children. Based on examinations carried out before giving oromotor massage stimulation to babies using DDST sheets, KPSP and CLAMS sheets, it was found that the average baby's language and speech abilities were not in accordance with general development. Where found in babies aged 12-15 months, 9 out of 23 babies could not master 1-3 words. Or not being able to pronounce repeated words clearly such as "ma-ma", "pa-pa". This indicates language and speech delays. Meanwhile, at the age of 16-18 months, it was found that 3 out of 7 babies experienced language and speech delays where word mastery was still lacking. Where at the age of 16-18 months, babies can already master 3-7 syllables. Results Research shows that the majority of babies received breast milk, namely 20 people with a percentage of 66.7% and 10 people who did not receive breast milk with a percentage of 33.3%.

After gradual observation and assessment, it was discovered that breast milk does not affect the development of speech and language skills in babies aged 12-18 months. This is in line with Mutiara Qori Akbar's research, a descriptive study of speech and language development in a group of babies aged 0-12 months who were given exclusive and non-exclusive breast milk at Syarfi Hidayatullah Hospital, Ciputat, South Tanggerang, which stated that exclusive and non-exclusive breastfeeding did not show any significant difference in the baby's speech and language development. . This is in contrast to research by Rahayu Soamole et al, 2018. The relationship between exclusive breastfeeding and language development in children aged 12-36 months at the Tamamaung Makassar Community Health Center shows that there is a relationship between exclusive breastfeeding and children's language development.

The design of this research is an analytical survey with a cross sectional study approach. Where using purposive sampling with a sample size of 40 respondents. Where the test is 0.05 with a p value of 0.021. In this study, researchers assume that the development of children's speech and language skills must be stimulated from an early age with parents. In this case, researchers found that respondents who lacked knowledge and had no time together resulted in children experiencing delays in speech and language development. By stimulating oromotor massage, it is one way to stimulate and improve speech and language development in babies aged 12-18 months. The maturation of the orofacial muscles results in children being better at speaking, chewing and swallowing. It can be seen in the research results that the average difference in pretest-posttest babies' speech and language abilities is 0.933 and the p value is 0.000. This proves the influence of oromotor massage stimulation on improving the speech and language abilities of babies aged 12-18 months.

CONCLUSION

Based on the results of research that has been conducted regarding the effectiveness of oromotor massage stimulation on language and speech development in babies aged 12-18 months at Lutuna Baby SPA Pratama Ikamaka, there are significant or significant differences before and after oromotor massage on the development of baby's language and speech which shows differences in average abilities. pretest-posttest baby speech and language 0.933 with p value 0.000. which means that there is an influence of oromotor massage stimulation on the development of language and speech in babies aged 12-18 months.

REFERENCES

Barbara – Jurnal Asuhan Ibu dan Anak– 2022

Budiarti, E., Rahmani, E., Yusnita, E., Sumiati, C., & Yunaini, Y. (2022). Pengaruh Penerapan Oral Motor Untuk Anak Speech Delay Usia 2-4 Tahun. Jurnal Pendidikan Indonesia, 3(10), 953–960. https://doi.org/10.36418/japendi.v3i10.1417

Duwandani, F. O., Himawati, L. N., Tresnasari, C., & Iskandar, W. (2022). Scoping Review: Hubungan Prematuritas dengan Keterlambatan Bicara pada Anak Usia Dua sampai Lima Tahun. Bandung Conference Series: Medical Science, 2(1), 15–20. https://doi.org/10.29313/bcsms.v2i1.743

Eka Putri et al. - JUKEJ :Jurnal Kesehatan Jompa– 2022

Eka Putri, T., Ganis Indriati, & Riri Novayelinda. (2022). Gambaran Perkembangan Bahasa Anak Usia 12-24 Bulan. JUKEJ : Jurnal Kesehatan Jompa, 1(1), 10–19. https://doi.org/10.55784/jkj.vol1.iss1.125

Expressive language, receptive language and numeracy development as reported by parents and teachers, by gender-2020

F.I. Gama – Jurnal Pendidikan dan Pembelajaran Bahasa Indonesia – 2023

Failashofa & NurFitria - PAUDIA :Jurnal Penelitian dalam Bidang Pendidikan Anak Usia Dini– 2022

Gany, A. (2021). Stimulasi Oral Motor Meningkatkan Fungsi Otot Orofasial Anak Tumbuh Kembang.Universitas Hasanuddin.

Husna, A., & Eliza, D. (2021). Strategi Perkembangan dan Indikator Pencapaian Bahasa Reseptif dan Bahasa Ekspresif pada Anak Usia Dini. Jurnal Family Education, 1(4), 38–

46. https://doi.org/10.24036/jfe.v1i4.21

Indah, R. N. (2017). Gangguan Berbahasa Kajian Pengantar. In Wardah (Vol. 15, Issue 1).

Kurniati, E. (2017). Perkembangan Bahasa Pada Anak dalam Psikologi Serta Implikasinya dalam Pembelajaran. Jurnal Ilmiah Universitas Batanghari Jambi, September. https://doi.org/10.33087/JIUBJ.V17I3.401

Linda wati - Jurnal_Kebidanan– 2020

Luh, N., Puspadi, N., Ayu, G., & Sukraningsih, G. (n.d.). Perkembangan Bahasa Anak Umur 0-3 Tahun dalam Lingkungan Keluarga.

Neviyarni – Inovasi Pendidikan – 2020

Sari, puspita eka kurnia. (2014). Efektifitas Pijat Bayi Terhadap Pertumbuhan.

Sasmal, S. (2021). Oromotor stimulation and its application in the care of preterm neonates Effect of OMS View project Fetal therapy View project. Article in Asian Journal of Nursing Education and Research, 11(02), 169–172. https://doi.org/10.5958/2349-2996.2021.00042.2

Siregar & Subiyantoro - Edukids: Jurnal Pertumbuhan, Perkembangan, Dan Pendidikan AnakUsia Dini – 2021

Soamole et al. - Journal of Islamic Nursing – 2018

Tenry, A. A., Dewi, I., & Anisa, N. R. (2023). Pengaruh Pemberian Asi Eksklusif Terhadap Capaian Perkembangan Bayi Usia 7-12 Bulan Dengan Ddst Ii. 3, 46–53.

Winarsih et al. - JIIP – Jurnal Ilmiah Ilmu Pendidikan– 2023

Windiani, I. G. A. T., & Soetjiningsih, S. (2016). Penilaian CAT (cognitive adaptive test)/CLAMS (clinical linguistic & auditory milestone scale) pada Anak di Tempat Penitipan Anak Werdhi Kumara I Denpasar. Sari Pediatri, 12(4), 228. https://doi.org/10.14238/sp12.4.2010.228-32