



ISSN. 2338-7475
E-ISSN. 2620-7869

Hearty

Jurnal Kesehatan Masyarakat

Volume 12 No 3, Agustus 2024

Penerbit:

Fakultas Ilmu Kesehatan, Universitas Ibn Khaldun
Gedung H.E.M Kahfi Lantai 4 Jl. KH. Sholeh Iskandar Km. 02 Bogor
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Kutipan dari Keputusan Direktorat Jenderal Pendidikan Tinggi, Riset dan Teknologi
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Nomor 105/E/KPT/2022

Peringkat Akreditasi Jurnal Ilmiah Periode 1 Tahun 2022

Nama Jurnal Ilmiah

Hearty : Jurnal Kesehatan Masyarakat

E-ISSN: 26207869

Penerbit: Fakultas Ilmu Kesehatan Universitas Ibn Khaldun Bogor

Ditetapkan Sebagai Jurnal Ilmiah

TERAKREDITASI PERINGKAT 4

Akreditasi Berlaku selama 5 (lima) Tahun, yaitu
Volume 9 Nomor 2 Tahun 2021 Sampai Volume 14 Nomor 1 Tahun 2026

Jakarta, 07 April 2022

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
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
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
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
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
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The Relationship between Exclusive Breastfeeding and Speech Development in Children 6-12 Months

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Abstract

Exclusive breastfeeding without additional foods is related to the distribution of nerves in speech development. When breastfeeding process is repeated, it can train child's voice-forming muscles and mouth structure. An interesting problem is that previous research shows that there is no relationship between exclusive breastfeeding and children's speech development. The assessment used is Denver II. The aim of this study was to assess the speech development of normal or suspected children. The sample was carried out by purposive sampling. The number of respondents in this study was 141 people, 75 male (55.3%) and 66 female (45%). Exclusive breastfeeding data was obtained for 105 respondents, of whom 89 respondents had normal speech development, 16 respondents (11.3%) were suspect. Meanwhile, 36 respondents (25.5%) were not given exclusive breast milk, 30 respondents (21.3%) had normal speech development and 6 respondents (4.3%) were suspect. A statistically insignificant relationship between exclusive breastfeeding and the speech development of children aged 6-12 months at the Grogol Petamburan Community Health Center, West Jakarta with a p-value of 0.838 ($p > 0.005$). This research involves various factors that can influence speech development apart from exclusive breastfeeding, so further research is needed to identify factors that can influence children's speech development.

Kata kunci : Exclusive Breastfeeding 1; Speech Develoepment 2; Children 3

Introduction

The main food for children is breast milk, it's consists of fatty acids, amino acid lactose and water in quantities that are ideal for children's brain development. It also contains high levels of docosahexaenoic acid (DHA; 22:6 n-3) and the main form of long-chain n-3 polyunsaturated fatty acids (LC-PUFAs). DHA accumulates actively in the brain during early development where it plays an important role in neurotransmission and neurodevelopment.¹ According to research by Hye Jeong Choi et al., (2018) it's stated that the importance of exclusive breastfeeding in children less than 4 months old has a very significant effect on

improving risk of delayed development in terms of the child's adaptability and speaking ability later in life.² According to neuroimaging studies in children who were fed formula milk, there was a decrease in the volume of the subcortical white area and gray area compared to children who were breastfed. This is related to the distribution of nerves related to language development.³ Almost the entire contents of a child's mouth is occupied by the tongue, which means that the entire sucking and swallowing process depends on the tongue.⁴ Therefore, Early Breastfeeding Initiation can directly train the movement of the child's tongue, lips, cheeks and jaw. If the breastfeeding process is

repeated, it trains the development of the child's voice-forming muscles and mouth structure.⁵ This is an interesting problem to discuss. Remember, the initial stage of speaking greatly influences the progress of subsequent speaking. Where exclusive breastfeeding plays a very important role in a child's speech development.

Based on the RISKESDAS report in 2022, DKI Jakarta has the second lowest percentage of breastfeeding on the island of Java. The percentage of exclusive breastfeeding in the capital city reached 59.58%. This is a decrease of 19.52% compared to the previous year.⁶ Where in 2021, exclusive breastfeeding coverage in DKI Jakarta will be 79.1%.⁷ According to the Indonesian Ministry of Health, it is reported that there are 0.4 million (16%) toddlers experiencing speech delays. RISKESDAS 2013, it is said that children who experience speech delays are increasing day by day, namely around 2.3% -24.6% of children. In Indonesia, people experience speech delays. The prevalence of speech delays in school children is between 5%-10% (Suparmiati, Ismail, & Sitaresmi, 2019).⁸ With the decreasing percentage of exclusive breastfeeding, this has a big impact on the speaking fluency of preschool children. According to research by Kyoung Min Kim., et al (2020), it was found that in children who were given exclusive breast milk there was an increase in the child's cognitive function and speaking.⁹ From the research journal Ebtissam et al, 2019, it was stated that there were problems with the development of speech in children who were introduced to food. Complementary breast milk (MPASI) and use of bottles before 6 months.¹⁰ This is also supported by research by Eales et al., (2020) that giving direct breast milk, colostrum and exclusive breast milk improves children's speech and cognitive development.¹¹ However, in Hamida et al's research, (2023) said there is no influence between exclusive breastfeeding and non-exclusive breastfeeding on the speech development of children aged 6-24 months.¹² The RISKESDAS data above shows a decrease

in exclusive breastfeeding in DKI Jakarta and a higher level of children's speech delays. This interesting to research regarding several factors that can influence exclusive breastfeeding. Is there a relationship between exclusive breastfeeding and children's speech development at the Grogol Community Health Center, West Jakarta? The research will be carried out on mothers and children aged 6-12 months, because there are many factors that can influence the assessment of speech development and intervention can be carried out as early as possible if there is a delay in speaking in children.

Method

The reaserch was carried out from January to February 2024 with 141 respondents in Puskesmas Grogol Petamburan, Jakarta Barat. Approached with cross sectional and sample collection using purposive sampling from mother and children aged 6-12 months who meet the predetermined inclusion and exclusion criteria. The inclusion criteria for this study is mother and children aged 6-12 months, exclusive breast feeding, and history of good health since birth and not suffering from chronic diseases. If mothers were willing to be respondents, they must signed a written informed consent.

Exclusive breastfeeding history is access with interview questionnaire including how they give their breast milk and whether they breastfeed exclusively or not. Children whose at first 6 months got breast milk only without complementary food were classified as exclusive breastfeeding.¹³ Regarding the method of breastfeeding was given, it classified into sucked directly into breast, pure breast milk given with a bottle pacifier or a mixture of both.

The speech development is measured using Denver II which specific to age scale and results as normal or suspect. It will be interpreted based on the answer to the total score of 'Suspect' on the questionnaire listed in Denver II. It's called suspect if 'Warning' is ≥ 2 / ≥ 1

‘Late’. Meanwhile, it is categorized to be normal if there are no delays/ maximum 1 ‘Warning’.¹⁴ The correlation between exclusive breastfeeding and speech development in children aged 6-12 months was analyzed with Chi-Square test. The approval of ethical clearance has been obtained from Tarumanagara University No. 223/ KEPK/ FK UNTAR/ XI/ 2023.

Results

In this reaserch the sample of mother and children aged 6-12 months were a total 141 samples who are willing to be respondents. The majority characteristics of mothers who worked were 20 respondents (14.2%), while 121 respondents (85.8%) didn’t work. Meanwhile, based on children’s gender it was 75 boys (55.3%) and 66 girls (45%).

It was also obtained gestational age, which 121 respondents (85.8%) had a normal gestational age (37-40 weeks), while for premature births were 20 respondents (14.2%). Meanwhile, data based on birth weight shows 129 (91.5%) respondents had normal weight, 10 (7.1%) respondents had low birth weight (LBW) and the remaining 2 (1.4%) had high birth weight. It’s said that the birth weight is sufficient or normal, range between 2500-4000 grams. If it is lower, it’s called low birth weight, and vice versa.

The data obtained shows that mothers who exclusively breastfeed directly to their breast were 87 respondents (61.7%) whereas mothers who gave it via a pacifier bottle were 4 respondents (2.8%). The rest 17 respondents (12.1%) gave exclusive breastfeeding trough of breast and pacifier bottle.

The results of correlation between effect of exclusive breastfeeding on speech development of children aged 6-12 months was assesed from each aspect. Respondents who were given exclusive breast milk, 105 respondents (74.5%) 89 respondents (63%) had normal speech development, the other 16 respondents (11.3%) were suspected delay speech development. Apart from that with a total 36 respondents

(25.5%), 30 respondents (21.3%) had normal speech development, and 6 respondents (4.3%) were suspected delay speech development. The results of this reaserch are presented in (Table1).

Table 1 The Relationship between Exclusive Breastfeeding and Speech Development in Children Aged 6-12 Months

Exclusive breastfeeding	Speech Development Results		Total n (%)	p-Value
	Normal	Suspect		
	n (%)	n (%)	n (%)	
Ya	89 (63%)	16 (11,3%)	105 (74,5%)	0,838
Tidak	30 (21,3%)	6 (4,3%)	36 (25,5%)	
Total	119 (84,4%)	22 (15%)	141 (100%)	

Discusion

Based on the results analysis, it was found that exclusive breastfeeding was not statistically corellated to speech development in children aged 6-12 months at Puskesmas Grogol Petamburan, West Jakarta with a p-value of 0.838 (p-value > 0.005). This is similar to a study from Hamida et al, (2023), who stated that there was no relationship between exclusive breastfeeding and speech development in children aged 6-12 months at Puskesmas Grogol Petamburan, West Jakarta.¹² In this study, were found reasons why children who were exclusively breastfed could experience suspected speech delays. This is related to external factors such as low family income, which can influence parents' emotional pressure which influences the focus of parenting on children's speech development. Lack of knowledge and attention that can be attributed to working mothers on child development. Apart from that, it was also found that those who were not given exclusive breast milk still had normal speech development. Factors that can influence one of them are good parenting patterns and a focus on children's

cognitive development which can improve children's speaking abilities.

However, on the other hand, this research is not in line with Kyoung Min Kim et al, (2020) which states that there is a significant relationship between exclusive breastfeeding and speech development. Where it is said that direct exclusive breastfeeding is a protective factor for the development of good speech as well as supporting external factors.⁹

Conclusion

This can be concluded that in this study there are many factors that can influence speech development apart from exclusive breastfeeding, so further research is needed to identify factors that influence children's speech development. This research can be used as a guide for health workers and parents to always monitor children's speech development. So it's hoped that the risk of delays in children's speech can be minimized and intervention can be carried out as early as possible.

References

1. Juber BA, Jackson KH, Johnson KB, Harris WS, Baack ML. Breast milk DHA levels may increase after informing women: A community-based cohort study from South Dakota USA. *Int Breastfeed J*. 2017 Jan 28;12(1).
2. Choi HJ, Kang SK, Chung MR. The relationship between exclusive breastfeeding and infant development: A 6- and 12-month follow-up study. *Early Hum Dev*. 2018 Dec 1;127:42–7.
3. Deniz Can D, Richards T, Kuhl PK. Early gray-matter and white-matter concentration in infancy predict later language skills: A whole brain voxel-based morphometry study. *Brain Lang*. 2013 Jan;124(1):34–44.
4. Iskander A. Morphological Comparison Between Neonatal And Adult Human Tounge [Internet]. *Ann Otol Rhinol*. 2003. Available from: www.nlm.nih.gov/research.
5. Broad FE. The effects of infant feeding on speech quality. *N Z Med J* [Internet]. 1972 Jul;76(482):28—31. Available from: <http://europepmc.org/abstract/MED/4508379>
6. Laporan Kinerja Direktorat Jenderal Kesehatan Masyarakat Tahun 2022. 2022.
7. Riset Kesehatan Dasar (RISKESDAS). Laporan Kinerja Kementerian Kesehatan Republik Indonesia 2021. 2021.
8. Suparmiati A, Ismail I, Sitaresmi MN. Hubungan Ibu Bekerja dengan Keterlambatan Bicara pada Anak. *Sari Pediatri*. 2013;14(5).
9. Kim KM, Choi JW. Associations between breastfeeding and cognitive function in children from early childhood to school age: A prospective birth cohort study. *Int Breastfeed J*. 2020 Sep 29;15(1).
10. El-Din EMS, Elabd MA, Nassar MS, Metwally AM, Abdellatif GA, Rabah TM, et al. The interaction of social, physical and nutritive factors in triggering early developmental language delay in a sample of egyptian children. *Open Access Maced J Med Sci*. 2019 Sep 15;7(17):2767–74.
11. Eales B, Krüger E, Graham M, Van Der Linde J. Feeding and developmental outcomes of infants in a South African community. *Prim Health Care Res Dev*. 2020;21:1–8.
12. An-Nisa H, Souvriyanti E, Arifandi F. Pengaruh Pemberian ASI Eksklusif Dan ASI Non Eksklusif Terhadap Perkembangan Bayi 0-12 Bulan Di Rumah Sakit YARSI Jakarta Dan Tinjuannya Menurut Pandangan Islam. 2023;
13. Departemen Kesehatan RI J. Inisiasi Menyusu Dini (IMD) dan ASI Eksklusif 6 Bulan. 2008;1.
14. 524 I Appendix C DENVER II Developmental Screening Test (Reprinted with permission of DDM). Thomson Delmar Learning; 2007.