

Original Research Article

Profile of child development in Kebon Pala, east Jakarta 2021

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ABSTRACT

Background: Development is the increase in functional abilities that are more complex in aspects of gross, fine motor, language, speech and social independence. According to UNICEF in 2012, the prevalence of children with growth retardation was as high as 3 million or 27.5% of Indonesian children. Objective of this study was to find out the description of the development of children aged 0-72 months in Kebon Pala village, Makasar district, east Jakarta through early detection of development using the developmental pre-screening questionnaire (KPSP) form.

Methods: This research belongs to the type of descriptive research design, which is a research method that serves to provide an overview of an object that is examined through samples collected without being analyzed and made general conclusions in September 2021-January 2022 located in the RW 011 Kebon village, Pala, Makassar district, east Jakarta.

Results: Of the 96 children involved in the examination, 77 children (80.2%) with appropriate results, 12 children (12.5%) were suspected delayed development and 7 children (7.3%) facing delayed development.

Conclusions: The development of children in RW 11, Kelurahan Kebon Pala, Makasar district, east Jakarta is dominated by the normal category, but still, the suspected and confirmed delayed development children were considerably high.

Keywords: Child development, Delayed development, Early detection

INTRODUCTION

As future generation, we need to ensure that our child gain their optimal potential development with proper stimulation.^{1,2} Development is a process of increased functional abilities which contains gross motor, fine motor, language and speech and social independence.³ This process is unique and need active physical activity, coordination of musculoskeletal and neuromuskular system nurture environment, and genetic inheritance.⁴⁻⁶ It happen in a limited time that called as golden period, as it cannot be repeated.⁷

UNICEF stated as many 27.5% of Indonesian children experienced developmental delays, and Balitbangkes report 16% of children experiencing brain development disorders which have implications for intelligence

disorders, motor disorders and hearing problems.⁷ Special attention needs to be given to their development, as delayed development may affect other organ function and may causes decreasing about 20% of their potential.^{4,8-10} Early detection of child development may be held by screening, and in Indonesia we use pre-screening of development questionnaire (Kuisiner Pra Skrining Perkembangan, KPSP).^{11,12} Objective of this study was to find out the description of the development of children aged 0-72 months in Kebon Pala Village, Makasar district, east Jakarta through early detection of development using the developmental pre-screening questionnaire (KPSP) form.

METHODS

This research obtained ethical approval from Fakultas Vokasi Universitas Kristen Indonesia with reference

number 553/UKI.F8.D/ PPM.1.6/2021. This research conducted as quantitative descriptive approach, which held on October 2021 in RW 011 Kelurahan Kebon Pala east Jakarta. Data was collected from 0-72 months children. The children used as subjects of this research were using non-probability, voluntary sample method through their parents' consent.

Exclusion criteria

Children who were found to have significant development problem, such as cerebral palsy, Down syndrome or foot deformities were excluded from this research.

The examination held with kuisioner pra skrining perkembangan anak (KPSP form, pre-screening of child development questionnaire). KPSP forms is a pre-screening questionnaire form that consist of 10 questions for each form. There are 3-months-interval forms for 0-30 months child, and 6-months-interval forms for 3-72 months child. Each forms consists tasks-based questionnaire for gross motor, fine motor, social-independence and language-speech abilities.³⁻⁵ Forms were distributed by social workers of Kebon Pala, in which the children's parents filled the KPSP form.

All data were categorized by age and analyzed by Microsoft Excel. If the children able to do 9-10 tasks, categorized as normal. If they were able to do 7-8 tasks, categorized as suspect of delayed development. If they were only able to do no more than 6 tasks, they were categorized as delayed development.³ The data was summarized to show the profile of children development in Kebon Pala.

RESULTS

The number of respondents was 96 children, consisting of 54 boys and 42 girls, as shown in Figure 1.

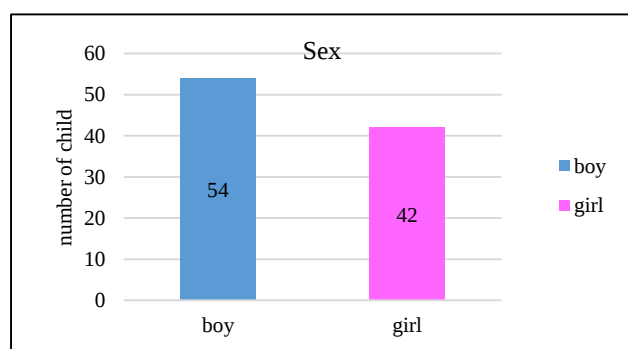


Figure 1: Sex of respondents.

The age distribution was not equal, as shown at Figure 2.

As shown Figure 3, we may find that 77 children were normal, following 12 children were suspect of delayed development and 7 children facing delayed development.

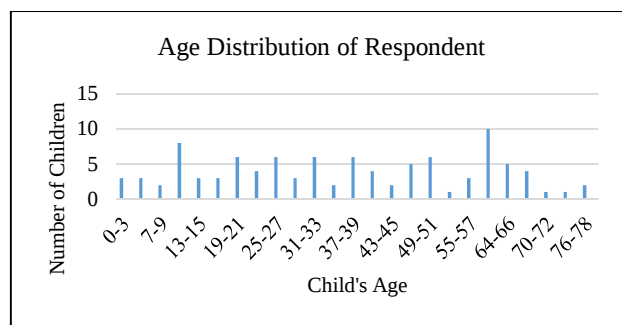


Figure 2: Age distribution of children.

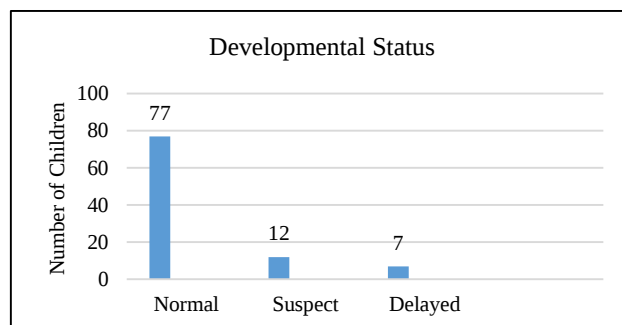


Figure 3: Profile of child development.

Table 1: Development profile distribution by age.

Age (months)	Development Profile					
	Normal		Suspect		Delayed	
	f	%	f	%	f	%
0-3	3	100	-	-	-	-
4-6	3	100	-	-	-	-
7-9	2	100	-	-	-	-
10-12	4	50	1	12.5	3	37.5
13-15	3	100	-	-	-	-
16-18	3	100	-	-	-	-
19-21	4	66	2	33	-	-
22-24	3	75	1	25	-	-
25-27	6	100	-	-	-	-
28-30	3	100	-	-	-	-
31-33	3	50	2	33.3	1	16.7
34-36	1	50	1	50	-	-
37-39	5	83.3	1	16.7	-	-
40-42	2	50	1	25	1	25
43-45	2	100	-	-	-	-
46-48	3	60	1	20	1	20
49-51	5	83.3	1	16.7	-	-
52-54	1	100	-	-	-	-
55-57	3	100	-	-	-	-
58-60	-	-	-	-	-	-
61-63	10	100	-	-	-	-
64-66	3	60	1	20	1	20
67-69	4	100	-	-	-	-
70-72	1	100	-	-	-	-
Total	77		12		7	

As shown in Table 1, distribution of children with suspicion delayed development are in 10-12 months old, 19-24 months old, 31-42 months old, 46-51 months old, and 64-66 months old. Whereas distribution of children with delayed development are in 10-12 months old, 31-33 months old, 40-42 months old, 46-48 months old, and 64-66 months old.

DISCUSSION

As we have found that boys involvement in examination were higher than girls. It may happen as reported from Badan Pusat Statistik that population of boys in Jakarta were higher than girls.¹³ As we may find from the result above, 80.2% children were normal, 12.5% children were suspect of delayed development and 7.3% children were facing delayed development. So, the prevalence of suspect and delayed development was 20.8%. This prevalence was same as previous study that held in East Jakarta, that there were 21.3% children who were facing suspect and delayed development.¹⁴ Yet, this number was higher than national report, that there were 11.7% children who were suspect of delayed development.¹⁵

Sex do not affect children development, but boys tend to be more intense in motoric activity, e.g. climbing, jumping, kicking and running. Parent's knowledge and education influence child development more than their sex, as parents' involvement and participation in their development may prevent delayed development.¹⁶⁻¹⁸

Another factor besides parents education was nutritional intake, which has been started since conception to their lifetime.^{19,20} Parents role and responsibilities to provide nutritional intake greatly affect the development of children.^{21,22} And last but not least, are stimulation. Parents should give the children an access to experience obstacles, interaction, and reinforcement to improve child development.²³ Lack of stimulation may cause permanent delayed development, so early stimulation for each child need to be given regularly and continuously by their parents and caregiver.²⁴

Limitation of this study is that we were using non-probability voluntary sampling method, so the number of respondents was not equal for age groups enlisted.

CONCLUSION

By following the objectives of the study, based on the result and discussion above, we may conclude that prevalence of suspected delayed development and delayed development in Kebon Pala, east Jakarta were considerably high. With this information, it is obliged to us to increase parent's involvement to optimize their child development stimulation.

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Conflict of interest: None declared

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REFERENCES

1. Cahyaningsih DS. Growth Development of Children and Adolescents. Jakarta: TEAM; 2011.
2. Dian A. Development and play therapy in children. Jakarta: Salemba Medika; 2017.
3. Balitbangkes RI. Guidelines for Implementation of Early Detection and Intervention Stimulation of Child Development. Jakarta: RI Ministry of Health; 2016.
4. RI Minister of Health. Monitoring Growth, Development and Growth and Development Disorders of Children. Regulation of the Minister of Health of the Republic of Indonesia Number 66. Jakarta, Indonesia: Ministry of Health of the Republic of Indonesia; 2014.
5. Soetjningsih, Ranuh ING. Child Development. 2nd edn. Jakarta: EGC; 2012.
6. ansur AR. Growth and Development of Pre-School Age Children. North Sumatra: Andalas University Press; 2019.
7. United Nations Children's Education Fund. Situation of children in indonesia- trends, opportunities and challenges in fulfilling children's rights. Jakarta: UNICEF Indonesia; 2020.
8. Lisnaini. Neuromuscular and genetic pediatric physiotherapy. Jakarta: UKI Press; 2021.
9. Hidayat AAA. Introduction to Pediatrics for Midwifery Education. Jakarta: Salemba Medika; 2011.
10. Trisnowiyanto B. Physiotherapy Examination Instruments. Yogyakarta: Nuha Medika; 2012.
11. Balitbangkes RI Ministry of Health. Developmental Stages of Toddlers and Health Profiles Jakarta: Ministry of Health of the Republic of Indonesia; 2006.
12. Soetjningsih, Ranuh IN. Child Growth and Development. 2nd edn. Jakarta: EGC Medical Book Publishers; 2014.
13. Population Registration by Gender, Gender Ratio and Administrative Districts/Cities in DKI Jakarta Province (Jiwa), 2019-2021. Available at: <https://jakarta.bps.go.id/indicator/12/414/1/registrasi-penduduk-menurut-jenis-kelamin-rasio-jenis-kelamin-dan-kabupaten-kota-administrasi-di-provinsi-dki-jakarta.html>. Accessed on 5 June 2023.

14. Napitupulu RM. Early detection of toddler development in Rw 06, Cawang Subdistrict, 2015. *Pro-Life J*. 2017;4(1):250-60.
15. Health Research and Development Agency. Basic Health Research. Jakarta: Publishing Agency and Health Research and Development; 2019.
16. Chamidah. Child Growth and Development. Jakarta: Rineka Cipta; 2013
17. Shams B, Golshiri P, Najimi A. The evaluation of Mothers' participation project in children's growth and development process: Using the CIPP evaluation model. *J Educ Health Promot*. 2013;2:21.
18. Juneja M, Mohanty M, Jain RRS. Ages and stages questionnaire as a screening tool for developmental delay in Indian children. *Indian Pediatr*. 2012;49:457-461.
19. Diana FM. Toddler development monitoring. *J Public Health*. 2010;4 (2):117-20.
20. Santrock JW. Life span development. Jakarta: Erlangga; 2011.
21. Purwandari H. Early Detection and stimulation of growth and development of toddlers. Yogyakarta: Student Library; 2014
22. Proverawati A, Rahmawati E. Asi and Breastfeeding. Yogyakarta: Nuha Medika; 2013
23. Yuniarti S. Neonatal growth and development care for infants-toddlers and preschool children, Bandung: Refika Aditama; 2015.
24. Sulistyawati A. Detection of Child Development. Jakarta: Salemba Medika; 2014.

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