# Detection of Toddler Growth and Development Monitoring for Parents at Posyandu Merpati

# Rini Sartika<sup>a)</sup>, Nuryanti<sup>b)</sup>, Lauhil Mahfuzoh<sup>c)</sup>, Sarmila<sup>d)</sup>

Midwifery Study Program, Faculty Of Health Sciences, Yatsi Madani University, Tangerang, Indonesia

<sup>a)</sup>Corresponding author: rinisyaffa@gmail.com <sup>b)</sup>yanoer1008@gmail.com <sup>c)</sup>lauhiilmf@gmail.com, <sup>d)</sup>milaputri13123@gmail.com

#### ABSTRACT

The Covid-19 pandemic outbreak is very detrimental to the community in the health sector, they are limited in visiting health services, there is fear and anxiety of the community to contract the Covid-19 virus. This can lead to disrupted monitoring of the growth and development of children under five in health facilities. Child development is an important thing to pay attention to because child development in the early phase will affect child development in the next phase, around 7.6 million children worldwide die before reaching the age of 5 years and more than 190 million children who live cannot reach their potential development age. The Stimulation Detection and Early Intervention of Growth and Development (SDIDTK) program is one of the main programs of the Puskesmas. The purpose of this counseling is to increase the knowledge and understanding of parents, especially mothers, regarding early detection of growth and development problems in toddlers aged 2-6 years. Health education is carried out by face-to-face method by providing counseling using leaflets, with parents who have toddlers as participants. Measurement of knowladge can be done by giving a questionnaire measuring instrument in the form of pretest and posttest. The results of health counseling activities obtained by 30 respondents showed that at the time of the pretest as many as 13 respondents (43.33%) were in the good category and as many as 17 respondents (56.67%) were in the poor category. The conclusion in the implementation of health education regarding early detection of child growth and development monitoring has an impact on increasing knowledge and understanding in parents.

## ARTICLE INFO

#### Article History :

Submitted/Received 31 Aug 2023 First Revised 12 Jun 2024 Accepted 13 Jun 2024 First Available online 31 Jul 2024 Publication Date 31 Jul 2024

#### Keyword :

*Early Detection Toddler Growth and Development Parents* 

### **INTRODUCTION**

Growth is a qualitative change, an increase in the size and number of cells such as height, weight and head circumference which can be seen in real terms from the physical and structure of the body in part or in whole so that it can be measured. Growth is physical change and increase in size (Lubis, 2023).

Development is a compound maturation process that is related to increasing abilities (skills) in body structures and functions that are more complex and follow regular patterns. Development is the increasing ability in more complex body structures and functions as a result of the maturation process (Kiftiyah et al., 2022).

Growth and development are two different but inseparable events. Every family expects their children to have optimal growth and development, including physical, mental or cognitive, and social health. Often parents do not realize when their children experience delays in growth and development (Lie, 2021). For this reason, parents need to recognize the red flags of children's growth and development. During this period, there is a connection between nerve cells, the quantity and quality of this connection determines the child's intelligence (Hidayat, 2020). This period is the period that becomes the basis, foundation, and foundation of various aspects of age development in the early days of his life in the world (Setiowati, 2020).

Growth and development actually includes two events that are different in nature, but are interrelated and difficult to separate, namely development and growth (Islamiyati et al., 2021). Growth occurs simultaneously with development. In contrast to growth, development is the result of the interaction of the maturity of the central nervous system with the organs it influences, for example the development of the neomuscular system, the ability to talk, emotions and socialization (Tambunan & Ratnaningsih, 2021).

Child development is an important thing to pay attention to because the development of children in the early phase will affect the development of children in the next phase (Siregar et al., 2022). Many countries experience various child development problems such as motor delays, language, behavior, autism, and hyperactivity. Incidence rates in the United States range from 12-16%, Thailand 24% and Indonesia 13-18%. This problem is still an issue that must be addressed seriously until now (WHO, 2020).

One of the factors that influence children's growth and development is parents in providing information about monitoring growth and development to family members so that children's growth and development are monitored properly (Suryana, 2021). Parents are one of the most important things in the process of early detection of child growth and development. Parents' knowledge is needed so that parents can screen for early (Nurpratama et al., 2023).

The covid-19 pandemic outbreak is very detrimental to the community in the health sector, they are limited in visiting health care facilities, there is fear and anxiety of the community to contract the covid-19 virus (Islamiyati et al., 2021). The implementation of health protocols with PHBS is very strict and is strictly applied when people visit health care facilities, so it is strongly recommended that people limit visits to hospitals, health centers or other health places, and if they are not forced to do so, they are expected to make appointments with health workers only through social media such as telephone, sms, and others to consult about their health (Tambunan & Ratnaningsih, 2021).

According to UNICEF in 2021, data on the high incidence of growth and development disorders in children under five years of age was obtained (27.5%) or 3 million children experienced growth and development disorders. The incidence of developmental delays generally occurs around 10% in children worldwide. Regarding world progress for child development, it is noted that Indonesia ranks as the fifth country in the world with the largest number of children with developmental delays (UNICEF, 2021).

National data according to the Indonesian Ministry of Health that in 2020 13-18% of children under five in Indonesia have growth and development disorders. Child growth and development in Indonesia still

needs serious attention. The rate of growth and developmental delays is still quite high, which is around 5-10% experiencing general developmental delays. The child population in Indonesia shows that around 33% of children experience growth and development disorders from the total population of around 83 million and every year the number of child populations will increase (Kemenkes, 2020).

Developmental assessment in children is very important so that if suspicions of deviations are found, early stimulation and intervention can be carried out before abnormalities occur. Early prevention efforts need to be made to reduce developmental problems by conducting early detection. Early detection can be done every three months in children aged 0-12 months and every six months in children aged 12-72 months and can be done at all levels of health services. One of the early detection efforts can be carried out starting from the basic health level, namely posyandu (Melia et al., 2021).

Non-optimal growth and mental emotional development in children will have a negative impact in the form of cognitive and mental emotional development problems which can be in the form of high-risk behavioral disorders. Based on these problems, the authors are interested in conducting community service regarding "Health Counseling on Early Detection of Monitoring Toddler Growth and Development in Parents" so that the community, especially parents, have the awareness to check their toddlers regularly at the Posyandu or Puskesmas, know and realize that the importance of early detection of child growth and development disorders can be resolved early.

### METHOD

This community service has three stages: preparation, implementation, and evaluation. Details of the stages of community service activities are as follows:

- a. Preparation, the team involving students prepared educational materials, pretest and posttest instruments, SDIDTK instruments, identification of tools and materials needed and submission of permission letters. The letter was addressed to the Rajeg Health Center, Tangerang Regency. At this stage, coordination was also carried out with Posyandu Merpati 8 Mekarsari Village, Rajeg District, Tangerang Regency.
- b. Implementation, this activity was carried out for 1 day. The first day began with an opening ceremony. After the opening ceremony, the pretest questionnaire on stimulation, detection and early intervention of growth and development was continued with the assessment or screening of growth and development of toddlers. Screening is done by weighing weight, measuring TB. After the pretest, the parents' knowledge was measured through the administration of the posttest questionnaire.
- c. Evaluation, based on the results of growth and development screening, cooperation between parents and cadres is carried out in the implementation of stimulation and prevention of deviations in growth and development of toddlers. At this stage, the process of documentation and reporting of the results of activities is carried out.

### RESULTS

Educational activities on how to Stimulate Early Intervention Detection of Growth and Development (SDIDTK) are given to 30 parents who have children under five in the Merpati Posyandu Area, with the aim of increasing parents knowledge of how to stimulate children's growth and development, how to detect deviations early so that they can be anticipated quickly and appropriately to avoid complications and the impact they cause, parents are able to carry out early intervention both independently and collaboratively with the right to a deviation in growth and development that occurs in toddlers.

The results of the distribution of respondents knowledge regarding early detection of child growth and development in 30 respondents showed that at the time of the pretest as many as 13 respondents (43.33%) were in the good category and as many as 17 respondents (56.67%) were in the poor category. Respondents knowledge increased to 30 respondents (100%) in the good category after being given health counseling on child growth and development stimulation. This shows that there is a significant increase in respondents knowledge about early detection of child growth and development.

The results of the implementation of community service show that the knowledge of parents before being given health counseling regarding early detection of monitoring child growth and development of 30 respondents, namely there were 13 respondents (43.33%) and as many as 17 respondents (56.67%) were not good. Similarly, research according to Prastiwi (2020) shows that of the 45 respondents, there were 4 respondents (3%) in the good category, 16 respondents (38%) in the sufficient category, and 25 respondents (59%) in the poor category.

Early detection of child growth monitoring is said to be good if it can answer 8-10 questions correctly while it is said to have less knowledge if it answers 1-7 questions correctly. Most parents still do not know about the importance of early detection and monitoring of growth and development in their children (Esme et al., 2022).

Meanwhile, after being given health counseling regarding early detection of child growth and development monitoring, 30 respondents (100%) had good knowledge. This is in line with the results of research conducted by Setiowati (2020) showing the level of knowledge after being given counseling as many as 38 respondents (100%) in the good category.

Based on these data, it shows that the importance of health education regarding stimulation as well as early detection of growth and development, this is done as an effort to prevent growth and development disorders in toddlers, especially the incidence of stunting. In connection with this, a program is needed that supports the level of knowledge of mothers of toddlers, especially those aged 9-60 months, in conducting early detection of growth and development of toddlers so that delays in growth and development of toddlers can be overcome as early as possible (Izah, 2022).

Based on Susilawati's research (2020), in monitoring children's growth and development the role of parents is very important. Early detection by parents can identify 1 to 6% of children who experience growth and development disorders. Parents who do not monitor children's growth and development are 34.3%. This leads to a high number of children who have not been monitored for growth and development. The incidence of developmental disorders in children is known to be around 33.5%. The results of Susilawati's research show that the characteristics of mothers of toddlers are mostly at the age of 20-35 years as many as 30 mothers (56.6%), high school education as many as 29 mothers (54.8%), family income in the high category as many as 27 mothers (50.9%), having children  $\ge 2$  as many as 37 mothers (69.8%), and not working as many as 44 mothers (83%) (Susilawati, 2020).

This is also stated by Pratiwi's research, (2022). Growth and developmental disorders are often subtle and difficult to recognize, usually detected when problems occur. Early screening processes make it possible to find children at risk of developmental problems. Parents have an important role in monitoring the growth, development and stimulation of toddlers during the covid-19 pandemic (Pratiwi, 2022).

The role of parents in monitoring children's growth and development is also influenced by educational status. The higher a person's education, the better it is in doing and deciding on an action. The higher the level of education of parents, the better the achievement of child development (Novianti & Utami, 2022). Most parents who have children under five do not hesitate to check the growth and development of their toddlers because they want their toddlers to grow and develop according to their age and be in good health so they come to health services to monitor and check their children's health (Lie, 2021). The role of parents is very important for the success of realizing a healthy society even during the Covid-19

pandemic. By complying with health protocols, parents can carry out various activities that cannot be done online, such as monitoring the health growth and development of toddlers to the posyandu or to other health services, so as to achieve optimal public health (Harwijayanti, 2023).

# CONCLUSIONS AND RECOMMENDATIONS

The conclusions related to community service activities that have been carried out are: it is important for teachers to be able to master related concepts and contexts of applying differentiated learning, especially in mathematics. The importance of teacher efforts in mastering learning technology and its use in mathematics learning activities. Good practices need to be applied in every learning activity that the teacher does in class to provide motivation to learn in students. The implementation of health education on early detection of child growth monitoring has an impact on increasing knowledge and understanding of parents in Mekarsari Village, Rajeg District, Tangerang Regency. This can be seen in the increase in knowledge of parents before being given health counseling regarding early detection of child growth monitoring at a level of knowledge that is not good at 17 respondents (56.67%) to have good knowledge in 30 respondents (100) after health counseling.

It is hoped that by holding health counseling on early detection of child growth and development monitoring in parents, parents will know and understand how important it is to monitor children's growth and development.

# ACKNOWLEDGMENTS

Appreciation and gratitude to the rector and LPPM of Yatsi Madani University for allowing the author to carry out community service regarding is Detection Of Toddler Growth And Development Monitoring For Parents At Posyandu Merpati. Thank you also to lecturer and all staff of Yatsi Madani University who the author could not mention one by one.

# AUTHORS' NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. Authors confirmed that the paper was free of plagiarism.

# REFERENCES

Esme, Yunike, Mariani, & Wibowo. (2022). *Tumbuh Kembang Anak* (1st ed.). PT Global Eksekutif Teknologi.

Harwijayanti, bekti putri. (2023). Tumbuh Kembang Anak. Get Press Indonesia.

Hidayat, A. A. (2020). Pengantar Ilmu Kesehatan Anak Untuk Pendidikan Kebidanan. Salemba Medika.

Islamiyati, Sadiman, & Triwijayanti, Y. (2021). Empowerment of Family in Early Detection of Total Growth at Puskesmas Karangrejo Metro. *ABDIMAS UMTAS: Jurnal Pengabdian Masyarakat, 4*(2).

Izah. (2022). Stimulasi Dan Deteksi Dini Tumbuh Kembang Balita Usia 9-12 Bulan Menggunakan Aplikasi Tumbuh Kembang Balita Di Wilayah Kelurahan Margadana. *Jurnal Abdimas PHB*, *2*(2).

Kemenkes. (2020). Profil kesehatan Indonesia. Kementerian Kesehatan Republik Indonesia.

Kiftiyah, Riska, & Sabrina. (2022). Pengantar Asuhan Kebidanan. Yayasan Penerbit Muhammad Zaini.

Lie, J. S. (2021). Insreasing Paud Teacher Knowledge About Childrens Growth Detection With KPSP. *ABDIMAS UMTAS: Jurnal Pengabdian Masyarakat*, *4*, 2.

Lubis, H. (2023). *Penyuluhan Kesehatan Masyarakat Pertanian* (1st ed.). Dotplus Publisher.

- Melia, D., Rinjani, M., & Susanti, R. (2021). Deteksi Dini Tumbuh Kembang Anak Usia 0-6 Tahun Berbasis Aplikasi Android. *Wellness And Healthy Magazine*, *1*(1).
- Novianti, & Utami. (2022). Penilaian Status Gizi dan Pengetahuan Gizi Seimbang Anak Usia Sekolah Sebagai Bentuk Aktivasi Kegiatan UKS. *ABDIMAS Jurnal Kesehatan Masyarakat*, *4*(1), 399–404.
- Nurpratama, Lestari, W., Puspasari, K., & Rahmadanti1, A. (2023). PENYULUHAN PENTINGNYA PENIMBANGAN PADA BALITA DI POSYANDU MERPATI 3 DESA KARANG ASIH KECAMATAN CIKARANG UTARA. *Jurnal Pengabdian Masyarakat Berkemajuan, 7*(1).
- Prastiwi. (2020). Pertumbuhan dan Perkembangan Anak Usia 3-6 Tahun. *Jurnal Ilmiah Kesehatan Sandi Husada*, *10*(2), 242–249.
- Pratiwi. (2022). Optimalisasi Peran Orang Tua Dalam Pemantauan Pertumbuhan, Perkembangan dan Stimulasi Balita Pada Masa Pandemi Covid-19. *Jurnal Widya Laksana, 11*(2).
- Setiowati. (2020). *Golden Age Parenting Periode Emas Tumbuh Kembang Anak* (1st ed.). Media Nusa Creative.
- Siregar, N., Syukur, N. A., & Suryani, H. (2022). Prevention of Stunting Through Cadre Empowerment in the Mangkupalas Health Center Work Area in 2021. *ABDIMAS UMTAS: Jurnal Pengabdian Masyarakat*, *5*(1).

Suryana, D. (2021). Stimulasi dan Aspek Perkembangan Anak. Kencana.

- Susilawati. (2020). Karakteristik Ibu dan Balita Dalam Pemantauan Pertumbuhan dan Perkembangan Balita. *Jurnal Kebidanan, 9*(2), 143–152.
- Tambunan, E., & Ratnaningsih, T. (2021). *Tumbuh Kembang Optimal Anak Stimulasi dan Antisipasi.* Wineka Media.

UNICEF. (2021). Laporan Tahunan 2021. United Nations International Children's Emergency Fund.

WHO. (2020). Improving Early Childhood Development. World Health Organization.



# APPENDIX

FIGURE 1. Documentation of the Opening of Counseling



FIGURE 2. Documentation of the Anthopometric Examination



FIGURE 3. Documentation of the Material Counseling



FIGURE 4. Documentation of the Closing of Counseling