# OPTIMIZATION OF THE IMPLEMENTATION OF EARLY INTERVENTION DETECTION STIMULATION FOR GROWTH AND DEVELOPMENT (SDIDTK) IN TODDLERS WITH THE DEVELOPMENTAL PRE-SCREENING QUESTIONNAIRE (KPSP) TOWARDS VILLAGE MIDWIVES

### Rusli A, Katili<sup>1</sup>, Irwan<sup>2</sup>

<sup>1</sup>Fakultas Kedokteran dan Ilmu Keperawatan, Universitas Muhammadiyah Gorontalo, Indonesia <sup>2</sup>Jurusan Kesehatan Masyarakat, Fakultas Olahraga dan Kesehatan, Universitas Negeri Gorontalo, Indonesia

email: rusliakatili1@gmail.com

#### Abstract

The Indonesian government has made maximum efforts to optimize toddler development and prevent deviations through the Early Growth and Development Stimulation, detection, and Intervention (SDIDTK) program. However, the implementation of SDIDTK still needs to be improved, and only 53% of the work area implements it. Health Center Estuary Enim. SDIDTK training intervention has never been conducted in the midwife village of Estuary Enim. The novelty of this research is that the researcher analyzed the optimization of the implementation of (SDIDTK) in toddlers, with Questionnaire Pre Screening Development (KPSP) Towards Village Midwives. The purpose of this study was to determine the optimization of the implementation of early intervention detection stimulation for growth and development (SDIDTK) in toddlers with a questionnaire for prescreening development (KPSP) on village midwives. The method used in the quasi-experimental research and the research design used one group pretest and posttest design. The sample in this study was 36 Village Midwives. The results of this study showed that the implementation of SDIDTK and KPSP was mostly carried out (69.4 %), while the rest was not carried out (30.6%). The implementation of SDIDTK and KPSP before the study was 69.08  $\pm$  9.90; then, knowledge increased after the study, namely 96.89  $\pm$  4.05. An increase in knowledge was obtained by 27.80  $\pm$  10.36. The conclusion is that there is an effect of optimizing the implementation of SDIDTK in toddlers with KPSP on village midwives

**Keywords:** Optimization; Knowledge; Implementation of SDIDTK.

#### INTRODUCTION

The age of children (0-5 years) is a critical phase in toddler development, where the brain is very responsive to stimuli and experiences. If stimulation is given well during this period, the child's development will naturally go well according to the plan. However, if stimulation is inadequate, this can interfere with toddler development and have long-term impacts (1).

In Indonesia, the number of toddlers has reached a significant level, covering around 10% or as many as 18 million individuals in the total population. Therefore, to ensure that the next generation can develop well, various intervention efforts, such as providing adequate nutrition, adequate stimulation, and ensuring access to quality health services, including early detection and action in addressing possible growth problems (2), are important.

According to the World Organization (WHO), it is estimated that around 5-25% of toddlers worldwide experience mild brain disorders, which include problems in gross and fine motor development. Meanwhile, according to the Ministry of Health of the Republic of Indonesia (Depkes RI), around 16% or around 0.4 million toddlers in Indonesia have been diagnosed with developmental problems such as gross and fine motor disorders, hearing disorders, lack of thinking skills, and delays in speaking (3). The results of the 2018 Basic Health Research revealed that the prevalence of stunting (growth delay) in toddlers in South Sumatra Province reached 22.8% (4). Although there has been a decrease from the figure in

2010, which reached 40%, this percentage is still a fairly serious problem. (3).

As the number of toddlers reaches 10% of the total population, the issue of growth and development is something that needs serious attention and has become a very important program. Points to be given priority cover intake of adequate nutrition, adequate stimulation, and affordable access to quality health services, including early detection and early intervention for growth problems. Early detection of growth and development disorders is very important because the first three years of a child's life are very crucial. (5).

The Indonesian government has taken steps by launching a program for stimulation, detection, and early intervention of growth and development (SDIDTK), which is an improvement on the program for early detection of growth and development (DDTK) that has been running since 1988 and is an important part of the Puskesmas program. Children have special characteristics that are different from adults, namely that they are undergoing a process of growth and development. To improve the quality of child development to reach an optimal level, several things must be met, including (1) meeting the child's basic needs, (2) detecting early developmental delays, early intervention. and providing Conducting routine developmental monitoring can help detect developmental delays in children early on. IDAI (Indonesian Pediatrician Association), together with DEPKES (Ministry of Health), have developed the use of KPSP ( Questionnaire Pre-Screening Development ) as a tool to assess child development up to the age of 6 years.

This examination is carried out every three months for children under 2 and every 6 months until the child reaches the age of 6. The aim is to assess whether the child's development is in accordance with his/her age or whether there are deviations in four aspects of development, namely gross motor skills, fine motor skills, language, and socialization/independence (6).

Village midwives are a profession that is close to toddlers and implementing SDIDTK programs. Village midwives carry out their duties as midwives do procedure screening in a way routinely carried out at Posyandu And screening on toddlers in the work area. (7) . Based on this, midwives' knowledge in carrying out SDIDTK is very important. The results of previous research explain that not all midwives routinely carry it out because of changes in the SDIDTK book, which are different from before, causing midwives not to carry it out routinely (8). The attitude shown by a midwife can also be influenced by her knowledge about the implementation of SDIDTK. The midwife's attitude reflects her agreement or disagreement with a program. This has a direct impact on the success the **SDIDTK** program implementation. In this case, if the midwife's attitude supports the SDIDTK program, then the program has the potential to run well. However, if the midwife's attitude does not support the SDIDTK program, then the implementation of this program may experience obstacles (7).

Based on the above, it shows that the

importance of midwife knowledge in carrying out Early Detection of Child Growth and Development activities makes it a priority for screening programs. This can be done with the right target. This is expected to be a process of finding toddler development problems more quickly so that they can be handled earlier. Early handling can allow for the treatment of toddler development problems to be more easily diagnosed (9).

The Indonesian Ministry of Health has stated that one of the factors that influences the success of the SDIDTK program for toddlers and preschoolers is the performance of the officers who implement it. Implementing officers, such as midwives, health cadres, or PAUD/TK teachers, have a very important role in determining the success of the SDIDTK program. Therefore, this study aims to evaluate how the performance of implementing officers can be optimized in the implementation of the Early Growth and Development Intervention Detection Stimulation (SDIDTK) program for toddlers. This research focuses on the application of SDIDTK using Questionnaire Pre Screening Development (KPSP) by village midwives in the region Health Center Estuary Enim in 2022.

#### **METHOD**

Study This uses a *quasi-experiment*, And the design study uses *Pre and post-test group Design*. The subjects in the study were Village Midwives in the Muara Enim Health Center Area who met the inclusion criteria and were willing to be respondents by signing the consent form after being given *informed consent*. The

sample was taken using a *total sampling technique*, namely, all Village Midwives in the Muara Enim Health Center Area. Estuary Enim totaling 36 people who met the inclusion criteria. The inclusion criteria were village midwives who were willing to be respondents. Exclusion criteria were midwives who were not present at the time of the research.

The instruments used in this study were checklists and questionnaires. This study was conducted in the Puskesmas area. Estuary Enim South Sumatra in September 2022. The data was processed using computation using the Paired T-test with an alpha of 0.05 and a confidence level of 95%.

#### RESULTS AND DISCUSSION

Table 1 Respondent Characteristics

Variables	n	%
Midwife Education		
D3	32	88.9
D4	4	11.1
Employment Status		
Regional Honorarium	4	11.1
TKS	10	27.8
civil servant	22	61.1
Implementation of SDIDTK		
Are not done	11	30.6
Done	25	69.4
Implementation of KPSP		
Are not done	11	30.6
Done	25	69.4
Total	36	100.0

Source: Primary data, 2022

In Table 1, it is found that most midwives are D3 graduates (88.9 %). The employment status of most midwives is civil servants (61.1 %), SDIDTK implementation is

mostly carried out (69.4%), while the rest are not carried out (30.6%). KPSP implementation is mostly carried out (69.4 %), while the rest are not carried out (30.4%)

Table 2 Knowledge Before And After Optimization Implementation of SDIDTK on Toddler with KPSP Against Midwife Village

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Knowledge	Mean±SD	Median	Range		
Pre-Test	69.08±9.90	69.50	50 – 86		
Post-Test	96.89±4.05	97.15	89-100		

Information: Descriptive Statistic Test

In Table 2, it was found that midwives' knowledge about the implementation of SDIDTK and KPSP before the research was

 $69.08 \pm 9.90$ , then knowledge increased after the research, namely  $96.89 \pm 4.05$ .

Table 3. Optimization of the Implementation of Early Detection and Intervention Stimulation for Growth and Development (SDIDTK) in Toddlers with Questionnaire Pre Screening Development (KPSP) in Village Midwives

Mean±SD	P - value	t	CI 95%
27.80±10.36	0,000	16,101	24,300 – 31,311

Information: Paired T Test

Based on Table 3, there was an increase in knowledge of  $27.80 \pm 10.36$ . The results of the statistical test obtained a p-value <0.001, which means that there is an effect of optimizing the implementation of SDIDTK in toddlers with KPSP on midwives in the Health Center Area. Estuary Enim Year 2022

#### **Discussion**

### **Respondent Characteristics**

In this study, most midwives were D3 graduates (88.9 % ). A village midwife should have at least a diploma III-level education and already hold a Midwife Practice License (SIPB), in accordance with the regulations stipulated in the Ministerial Regulation. Health Number 900/ Menkes /SK/III/2002 concerning Registration and Midwife Practice. Having an SIPB is proof that a midwife is permitted to practice throughout Indonesia in accordance with standards. applicable profession.

Midwife villages own responsibility to implement the SDIDTK program for toddlers in their work area, in accordance with the Decree of the Minister of Health Number 28 of 2017 concerning the registration and practice of midwives, which states that one of the duties of midwives is to monitor child growth and development. The employment status of midwives is mostly as Civil Servants (PNS), with a percentage of 61.1 %. The midwife profession is a profession, so in practice,

midwives must comply with the service standards set by laws and regulations and must also follow the code of ethics imposed by the midwife professional organization. In carrying out her duties as a health worker, a midwife must fulfill her responsibilities not only to the community in accordance with statutory regulations but also to the professional organization of midwives based on the code of ethics midwife.

The implementation of the SDIDTK program and the use of KPSP were mostly carried out by midwives, with a percentage of around 69.4 %, while a small portion did not implement it (30.6%). The services provided by midwives include aspects of prevention and promotion with a focus on partnerships and community empowerment together with other health workers, in accordance with the Midwifery Care Standards regulated in the Decree of the Minister of Health of the Republic of Indonesia Number 938/MENKES/SK/VIII/2007.

In accordance with a study conducted by Setyatama & Laela (2018), the results showed that most midwives at the Community Health Center Java have implemented the SDIDTK program by 53.3%. Respondents who have good knowledge and attitudes tend to be higher in implementing SDIDTK (53.3 %) compared to respondents who have sufficient

knowledge and implementing SDIDTK (23.3%). On the other hand, respondents who have good knowledge tend to be lower in matter non-implementation of SDIDTK (23.3%).

In a study conducted by Wahyuni et al. (2018), the implementation of SDIDTK requires adequate resources, including the involvement of midwives. The results of the SDIDTK program implemented in accordance with the guidelines showed a higher percentage of human resources, around 70.2%, compared to those that were not in accordance, which was around 33.3%. Human resources (HR) are a very important component because apart from being policy implementers, they are also subjects of public policy.

In a study, Syofiah (2018) showed that the reluctance of midwives to conduct SDIDTK examinations was caused by several factors, such as the complexity of the SDIDTK examination format, the need for time and special skills to examine in accordance with established procedures, the lack of strong crosssector cooperation so that midwives feel responsible for the low coverage of SDIDTK, limited funds, facilities, and supporting infrastructure in the implementation SDIDTK, not all related parties have received SDIDTK training so that the implementation of the examination is not appropriate, and low awareness about benefit implementation of SDIDTK.

In the study, Antriana (2018) found a relationship between midwife knowledge and the implementation of SDIDTK. This relationship can be understood because

knowledge is the basis of action, so good knowledge will produce good action. Therefore, it is important for midwives to take training to improve their skills and knowledge in implementing SDIDTK.

According to assumption researchers, the existence of this relationship means that knowledge is an important factor in implementing SDIDTK properly. Therefore, midwives must undergo training to improve their skills and increase their knowledge.

Knowledge implementation before and after research

In this study, midwives' knowledge about the implementation of SDIDTK and KPSP before the study was  $69.08 \pm 9.90$ ; then knowledge increased after the study, namely  $96.89 \pm 4.05$ .

A study by Utami et al. (2016) showed that midwives who had never received training in implementing SDIDTK 178 (80.2%) had early detection skills of 45.9% sufficient and 14.0%. This shows that midwives who have not received intervention generally have limitations in implementing SDIDTK, including infanttoddler growth deviations, infant-toddler development, implementation of TDD, TDL, detection of MME, autism, and GPPH. Therefore. midwives need training optimization of SDIDTK implementation.

In line with the study by Cahyaningrum & Mawarni (2015), the results showed that around 53.3% of midwives had good knowledge about SDIDTK. This fact should be considered because midwives, as health service providers who have a central role in the early

detection of child growth and development, should have very good knowledge, even reaching 100%, in assessing children to detect delays. Growth in toddlers.

The study showed an increase after training. Supported by Yanuarini's research (2019) shows that after training, 95% of respondents increased SDIDTK training. In accordance with the contents of the training curriculum regarding stimulation, detection, and early intervention in growth and development, after completing the training, participants are expected to have the ability to run the SDIDTK (Stimulation, Detection, Early Intervention for Growth and Development) program at their respective places of duty. During the training process, participants are given the opportunity to develop their skills gradually so that they can achieve the expected level of competency at the end of the training (15).

Supported by a study by Nuraini et al. (2017), the results of the study showed that the role of midwives as a whole has challenges, with only some of them having the ability and willingness to implement SDIDTK in integrated health posts and health centers. Midwives need help understanding how to implement and assess aspects of SDIDTK, especially those documented. In KPSP guidelines or KIA books, the implementation of SDIDTK has yet to reach the expected level. In order to overcome this obstacle, training is important in improving facilities and infrastructure, evaluating the effectiveness of the strategies used, and

providing knowledge to other parties who also play a role, such as training related to SDIDTK.

According to assumption, Researchers, before and after the study, showed an increase in midwives. The existence of SDIDTK optimization training for midwives can improve knowledge SDIDTK SDIDTK SO that implementation can be optimal in their work areas. Optimization Implementation Stimulation Early Intervention Detection of Growth and Development (SDIDTK ) in Toddlers With Questionnaire **Pre-Screening** Development (KPSP) in Village Midwives

In this study, the increase in knowledge was  $27.80 \pm 10.36$ . The statistical results showed a significant effect of optimizing the application of SDIDTK in toddlers with KPSP on midwives.

In line with the study by Rahayu & Purnamasari (2019), the results of the training that combines lecture and demonstration methods in the SDIDTK application show an increase in effective knowledge. Knowledge assessment can be done by measuring a person's ability to explain what they know in the form of a response or answer, either verbally or in writing. The response or answer appears as a reaction to a stimulus, which can be a statement in oral or written form.

Supported by the study, Marwasariaty et al. (2019) explained that respondents who were given education using booklet media and applications could increase independence in implementing SDIDTK (p-value 0.005). Health education activities with the use of applications have a more significant influence than

providing health education using only booklets or applications because providing health education using applications is the same as providing learning through discussion and direct application of the knowledge given.

Improvement knowledge A good midwife's early detection skills will affect the motivation and implementation of midwives in carrying out SDIDTK in their work area. Knowledge is a factor that influences a person's actions. Midwives who have a good understanding of SDIDTK will try to carry it out effectively because they realize the importance of implementation of SDIDTK (12).

The knowledge possessed by midwives has a significant impact on the implementation of SDIDTK, and this knowledge is the result of information obtained after individuals observe or learn about a particular subject. The learning process can occur through the use of the senses, experience, hearing, and reflection. knowledge or cognitive aspect plays an important role in shaping a person's actions. Therefore, it is recommended that SDIDTK training, seminars, or workshops be held that emphasize understanding the importance of monitoring child growth and development. This is expected to increase midwives' knowledge regarding SDIDTK (19).

In view of researchers, optimizing the implementation of Early Detection Intervention Stimulation for Growth and Development (SDIDTK) by using Questionnaire Pre Screening The development (KPSP) in midwives can be implemented effectively. Through the implementation of SDIDTK, the

implementation of training related to SDIDTK, and an understanding of the importance of monitoring child growth and development, midwives' knowledge of SDIDTK can be increased evenly.

### CONCLUSION

This study concluded that optimizing the implementation of SDIDTK in toddlers with KPSP for midwives in the Health Center Area Estuary Enim is effective and influences the knowledge of village midwives.

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