
Implementation of Screening for Child Growth and Development

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ABSTRACT

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 neuromuscular system, speech, emotions and socialization. The implementation of this activity was carried out at the Permata Playhouse in Kediri City. Activities are carried out in a day. Activities are carried out using weight scales, microstructure, and child development questionnaires. From the results, some children experience delays in growth and development. The importance of the role of parents and health workers in monitoring and preventing growth and development problems.

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INTRODUCTION

Child growth and development is the result of interactions between genetic factors, hereditary, constitution with environmental factors both prenatal and post natal environment. These environmental factors that will provide all kinds of needs which are the basic needs needed by children to grow and develop. The initial basic needs for growth are foster care, compassion and sharpening. Stimulation is part of the child's basic needs, namely sharpening. In child development there is a critical period, where stimulation / stimulation is needed so that potential develops. Children who get directed stimulation will develop faster than children who get less stimulus. By honing children's abilities continuously, children's abilities are increasing (Soetjningsih, 2013).

The coverage of early detection of growth and development of children under five and pre-school is the coverage of children aged 1-6 years who detected health and growth according to standards by health workers (doctors, midwives and nurses). Early detection services for growth and development in children under five and pre-school children early will stimulate children's development in the future and can detect children if there are irregularities. Indicators of success in 2010 are expected that 90% of toddlers and pre-school children are affordable by stimulation activities and early developmental deviation interventions. So that the mothers are expected to provide developmental stimulus for their children and come to the nearest health worker to detect their child's early growth (Fazrin, I., Saputro, H., Chusnatayaini, A., & Ningrum, N. A., 2017).

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 neuromuscular system, speech, emotions and socialization. All of these functions play an important role in human life as a whole.

Early detection of child growth is an activity / examination to find early on the developmental deviations in toddlers and pre-school children with early found deviations / child development problems, then the intervention will be easier to do, health workers also have "time" in making appropriate plan of action / intervention, especially when it comes to involving the mother / family. If the deviation is overdue, then the intervention will be more difficult, and this will affect the growth and development of the child (Hidajaturrokhmah, N., & Saputro, H., 2016)

The purpose of this activity is to detect and stimulate community participation in early detection of growth in children under five and pre-school children and to optimize the growth of children under five and pre-school children.

METHODS

The implementation of this activity was carried out at the Permata Playhouse in Kediri City. Activities are carried out in a day. The activity begins with introductions to children, then measures the height of the child, weighs the body, examines the child's vision and hearing, assesses gross motor skills, fine motor skills, language and personal social using the Pre-Development Screening Questionnaire (KPSP), mentally assesses emotional children with the Emotional Mental Problems Questionnaire (KMME), assessing the risk of autism in children with M-CHAT (Modified Checklist For Autism In Toddlers) and assessing the risk of children with hyperactivity problems.

The tools used are weight scales, measuring tape (microtois), and developmental questionnaires. The activity begins with measurements and ends with education to parents about the importance of appropriate growth and development and an explanation of the stages of growth and development according to the age of the child.

RESULT AND DISCUSSION

Table 1. Results of examination of child growth and development

Respon den	Age (month)	Gender	BB	LK	TB	KPSP	TDL	TDD	KMME	CHAT	GPPH
1	19	Male	9,5 Kg	46 cm	77 cm	(S)	Normal	Normal	No problem	Normal	0
2	8	Female	6,7 Kg	45 cm	64 cm	(S)	Normal	Normal	No problem	-	0
3	6	Female	9,5 Kg	45 cm	74 cm	(S)	Normal	Normal	No problem	-	0
4	18	Male	15 Kg	46 cm	82 cm	(S)	Normal	Normal	Possibility of experiencing mental emotional problems	-	0
5	48	Female	10 Kg	47 cm	94 cm	(P)	Normal	Normal	Possibility of experiencing mental emotional problems	-	0
6	12	Male	8,3 Kg	44 cm	71 cm	(P)	Normal	Normal	Possibility of experiencing mental emotional problems	-	0
7	36	Female	14 Kg	47 cm	84 cm	(S)	Normal	Normal	No problem	-	0
8	30	Female	13 Kg	48 cm	93 cm	(S)	Normal	Normal	No problem	-	0

9	13	Female	7,8 Kg	44 cm	72 cm	(M)	Normal	Normal	No problem	-	0
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Children have a characteristic that is always growing and developing from conception until the end of adolescence, this is what distinguishes children from adults. Children are not small adults. Children show characteristics of growth and development that are appropriate for their age (Saputro, 2018).

Growth is the increase in size and number of cells and intercellular tissue, meaning that the physical size and structure of the body are partially or wholly, so it can be measured in units of length and weight. Development is a more complex increase in body structure and function in the ability to coarse motion, smooth motion, speech and language and socialization and independence. 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 neuromuscular system, speech, emotions and socialization. All of these functions play an important role in human life as a whole (Saputro, 2017).

Early detection of child growth is an activity / examination to find early on the developmental deviations in toddlers and pre-school children with early found deviations / child development problems, then the intervention will be easier to do, health workers also have "time" in making appropriate plan of action / intervention, especially when it comes to involving the mother / family. If the deviation is overdue, then the intervention will be more difficult, and this will affect the growth and development of the child

From the table above, it can be seen that there are some children experiencing growth and development problems, especially in the metal and emotional areas of children. Mental emotional disorders are never caused by a single cause, the cause is a biology-psychology-and environment-related connection. Biologically, the interference lies in the brain chemicals of the neurotransmitter. The neurotransmitter functions to connect each nerve cell so that communication in the brain and nervous system runs normally. The neurotransmitters often referred to are serotonin and dopamine, various types of human neurotransmitters. When compared to electricity, the interference with the neurotransmitter is like a short circuit in the brain.

In addition to neurotransmitters, susceptibility factors to mental disorders are inherited or genetic factors. They are seen as easily experiencing sleep disorders, or born with low birth weight, or born to teenage mothers. Psychological factors such as lack of confidence, children who tend to be vulnerable to criticism, children who are easily discouraged are supporters of mental emotional disorders. Childhood life pressure also influences, such as confusion of care when separate fathers, frequent change of caregivers, children who are entrusted in many places.



(a)



(b)

Figure 1. Implementation of measurement and assessment of child growth and development.

Many factors affect the process of growth and development of infants into children, adolescents and adults. These factors can be positive and negative. Factors that have positive influences such as good and balanced nutritional intake, good health care, good parenting patterns, and clean and healthy environmental conditions, etc. While the factors that have a negative influence on children's growth and development such as poverty, neglect, social security, poor health services and others. Therefore, it must be endeavored so that children and adolescents can grow and develop optimally,

so that later in the day they will become individuals who are healthy adults, both physically, spiritually and socially, so that they can become strong future generations.

CONCLUSION

The importance of early detection of child growth and development to support the child's future. Delay in growth or development can lead to problems in children, family problems and problems in the country. From the results of the activity it was found that there were several children who had problems with growth or development. In this case it is very important to monitor the parents as closest to the child, as well as health workers as family health consultants so that the future of the child becomes better with optimal growth and development.

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