Analysis of Detection of Growth and Development
In Gross Motor Toddlers:
Case Study of Babies Aged 6 Months Cannot Pronning, Roll and Crooked

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Abstract
The analytical method of detecting growth and development carried out on children is not solely without reasons and benefits, apart from detecting whether there is a disturbance in their growth and development or not, as well as early prevention in children so that parents are able to minimize the occurrence of problems and obstacles to the growth and development of the baby. The number of respondents used is one, because this research is in the form of a field case study of toddlers aged 6 months who were conducted at AMC Metro Hospital with sources from the child development polyclinic doctor, and the baby's parents. Data obtained through direct observation, interviews and documentation. Data analysis was carried out to limit matters outside the subject matter of the study so that it focuses on the main topic. The results of the research showed that toddlers experienced gross motoric problems, namely not being able to lie on their stomach, rolling over (turning over and then lying on their backs), and tilting caused by several factors including the birth process by cesarean section, breastfeeding was replaced with formula milk, and lack of stimulus from other people. old. The solution that can be given is to carry out routine checks on child growth and development polyclinics and independent stimulation at home using the KIA, KPSP, DDTK/SDIDTK guide books, as a reference in an effort to overcome problems that occur in these babies.

Keywords: Growth; Development; Gross Moto; Toddlers

Introduction
Children are an important asset for the family as well as the country. Without a child, the potential successors to the next generation of the nation will run out. Therefore, in maintaining and caring for it must be very concerned especially at the age of toddlers. Because, at that age it is very susceptible to interference that can be fatal to the child in the future. Starting from the age in the womb or fetus, until birth and growing up, stimulation and early detection of its growth and development are urgently needed.

Detection of child growth and development is a method or method used to see the extent of growth and development, whether problems and disorders are found, where at the specified age the child should be able to carry out several activities, but due to detected problems causing the child to experience delay is also a hindrance to its downfall. If a problem is found in a child,
then as a parent, you must be sensitive to the child's collapse so that you can immediately be rushed to the child development polyclinic. With a note, if the problem is found to be serious enough to require special treatment by an expert or doctor at the child development polyclinic before it's too late. Related to this, as a parent is the one who understands and understands the growth and development of the baby the most. At the age of toddlers, parents must often always provide stimulation to children so that there are no disturbances from an early age. Early detection of child development is very important for parents to know and learn about. The above is supported by the opinion of (Faizah, 2022) who states that child development milestones must be achieved at a certain age. Like at the age of 6 months a child should be able to lie on his stomach and then turn around on his own, roll over, and so on.

As in 2007, the Indonesian Pediatrician Association (IDAI) and the Ministry of Health collaborated on guidelines for stimulation, detection and development interventions for children (SDIDTK) which were updated in 2015 with the aim of all toddlers and preschoolers getting SDIDTK services. This is in line with the regulation of the Minister of Health no. 66 of 2014 concerning monitoring growth, development and disorders of child growth and development (RI, 2016). In this case, growth and development in early childhood is a very urgent period, especially at the age of 0-6 years. At this time, the growth and development of a child must be properly optimized and in accordance with the age of his development. Because if not, they will experience delays in some or all aspects of their growth and development. In Indonesia, there are many problems related to child growth and development due to the lack of knowledge about early detection of growth and development (DDTK) in children or toddlers, so that many abnormalities are found in toddlers related to aspects of their growth and development, especially in motor development, which reaches 27.5% or equivalent to 3 million children who experience the disorder. Motoric development in toddlers or early childhood, including one important aspect which is the beginning of intelligence and social emotion in children. Apart from that, it is also the control of body movements through the activity of the central nervous system, the edges and muscles that arise from the development of children's reflexes which begin at birth, the impact is that children become helpless if these developments do not appear (Nurlaila et al., 2017).

Motoric disorders can be characterized by problems that are visible and clearly visible in children, as is the case in a case found in a toddler aged 6 months who experienced motor disturbances, namely gross motor skills with problems the child could not lie on his stomach, roll over (turn over), and oblique. As well as their fine motor skills are also affected, namely the child cannot reach objects/toys that are still within reach, because the child has problems with his body and it is not possible to be able to reach these toys. On the other hand, this movement should be done in toddlers aged 4 months (Rokhmiati, 2022) and at the age of 0-2 months the child can lie on his stomach even at the age of 3 months the child should be able to roll over (Wicaksana, 2022). However, based on interviews with child development doctors, it is still relatively normal if a baby is still in the age range of 3-6 months and has not been able to perform gross or fine motor movements, but it does experience a slight delay compared to other children of the same age who can already do it. the movement. The disorder experienced is not a fatal or serious problem, so it can still be detected and treated by giving stimulation to children.
Detection and stimulation of growth and development that can be done in children, for example, such as monitoring their growth and development on a regular basis, providing adequate nutritious food and meeting nutritional needs and sufficient breast milk for the baby. Breastfeeding can actually affect child development, as in previous research, that breastfeeding for toddlers aged 0-6 months can optimize their normal motor development, especially if the milk is exclusive and not formula milk (Riana Trinovita Sari, Juniastuti, Dominicus Husada, 2017). Apart from that, the nutritional content in breast milk also has an effect, because breast milk contains various proteins, vitamins, minerals, fats, water and enzymes that are needed by the body so that breast milk will reduce the risk of various types of malnutrition. Also, breast milk contains all the essential fatty acids needed for the healthy development of eyes, brain and blood vessels. Apart from that, the efficacy of breast milk is proven by research which states that there is a significant relationship to infants aged 0-6 years in terms of their growth aspects (Ramadhani, 2022).

Problems with child growth and development often occur, especially at the age of 0-6 years. Apart from being a golden age for children, this age can also be a difficult period in optimizing children's growth and development so that problems do not occur. Because the problem of falling children also cannot be considered trivial by parents, therefore, they must recognize how their little ones grow and develop. The growth and development of children is not only influenced by parenting from the wrong parents, but also includes other factors, namely internal (from within) and external (from outside). Examples of internal factors can be from parents' genetics, gender, overweight and underweight, or caused by premature birth and so on. While external factors can be from parenting or providing food intake that lacks iron (which strengthens the bones and muscles of the child's body) so that children have difficulty doing these gross motor movements, and others.

Based on this, a gap is obtained which becomes a problem that must be resolved. Therefore, this study focuses on the analysis of growth and development detection in toddlers with gross motor disorders, namely not being able to lie on their stomach (stomach), rolling over (turning over and then lying on their backs) and tilting, with the aim of being able to find out what is the right solution in dealing with DDTK on this problem, as well as knowing what factors influence this, as well as whether there are other impacts that will be obtained by the toddler. Apart from that, so that parents as well as prospective parents can take precautions with an in-depth understanding of SDIDTK which is very important to know.

**Literature Review**

SDIDTK (stimulation, detection and early intervention on growth and development) for children is a guidebook in which there is a coaching process for stimulation, detection, early intervention, growth and development of deviations in children aged the first 5 years in a comprehensive and quality manner that includes the role of parents, family, social environment, and also educators (Maritalia, 2009). Early childhood is known as the golden age because it has abilities that adults don't have, with all its uniqueness which is in the age range of 0-6 years, also with extraordinary curious, critical, active, character and traits. At this age, of course,
stimulation is needed for growth and development so that it runs optimally and there are no obstacles. In this case, aspects of child development are very closely related. Both of these aspects are heavily influenced by genetics as well as the environment (Loka & Diana, 2022).

Growth is defined as something that can be seen and measured, such as weight, height, head circumference, and so on. Growth is the maturity of physical functions such as cells, organs, and others that lasts from conception to birth. Growth is also related to nutrition such as malnutrition and so on. Growth in the form of physical changes occurs from time to time both in terms of dimensions, proportions, and composition. Meanwhile, development is an ability or skill in children that increases related to the structure of body functions that can be predicted and has a regular pattern. Development occurs simultaneously with growth due to the maturity of the central nervous system which is influenced by the organs. Development includes gross and fine motor, psychosocial, psychosexual, language, cognitive, and emotional. Development also has a fixed and sequential pattern, has different speed levels, and is always in line with growth. If growth is fast, then development will follow, such as increasing the child’s reasoning, mental, memory and so on (Ramadhani, 2022).

According to Hurlock’s theory, motor development is related to the body, muscles, and nerves that are coordinated with each other. If the development process has not occurred, then the child is helpless. Meanwhile, Sher explained that to train his motoric development, it was done by means of simple sports for children, such as jumping, tiptoeing, and so on. He also added that motor development can provide good health, emotional catharsis, independence, socialization, self-entertainment, and can shape self-concept (Fitriani, 2018). Related to this, what happens to children is related to the physical aspects of the motor or more precisely the gross motor skills of children which also have an impact on fine motor skills.

Gross motor is related to physical activities such as sitting, rolling over, lying on your stomach, standing, walking, and others. Meanwhile, fine motor is related to small muscles, namely the coordination of the eyes, ears, hands and feet. Such as the ability of children to hold objects, draw, and so on. Factors that can affect growth and development include nutrition, breastfeeding, genes, environment, maternal psychology, disorders, economics, drugs, stimulation and many others (Ramadhani, 2022). Based on the theory of experts, grouping gross motor movements into 3 namely locomotor movements (moving places), non-locomotor (staying in place / not requiring movement), and manipulative or projecting something (throwing, catching). At the age of 6 months, rolling and lying on the stomach are included in locomotor movements (Sumiyati, 2018).

Gasell and Amess, Illingsworth and Slamet Suyanto explained that children’s motor development refers to 8 patterns, namely: continuous, having the same stages, maturity, general to specific, starting from innate reflexes to coordinated movements, cephalo caudal direction, proximo distally, and bilaterally to crosslaterally. There are also elements in the gross motor development of children, including: strength, speed, endurance, flexibility, coordination, agility, accuracy and balance. Factors that influence motor development include gender, health, family heredity, economy, environment and so on (Saripudin, 2019).
The growth and development of children can be stimulated from an early age, in stimulating children there are of course certain principles, as follows: 1) must be based on love and affection, 2) be a good role model for children, 3) the stimulus given according to the age of development, 4) stimulation is carried out by playing, 5) continuous and gradual, 6) using safe game aids, 7) regardless of gender (male or female), 8) giving rewards or praise to children (Utomo & Ismail, 2021).

Method

This writing was carried out based on the results of in-depth research related to cases in toddlers aged 6 months who had problems with their motor skills. This research is natural based on facts and actual data that appear in the field. This research is a qualitative type. The approach used is a case study through a field study. The data were obtained through direct field observations and interviews with respondents to find out the problems from the cases that occurred, as well as documentation as research reinforcement.

The research was conducted at Ahmad Yani Hospital, Metro City, Lampung Province. The sample in the study amounted to 1, therefore an in-depth analysis was carried out. The research informants were parents (PA and GM), and Doctors at the Child Growth and Development Polyclinic (DI). The stages that the researchers used were pre-survey, survey (field), data processing and analysis, then writing reports and drawing conclusions. Data analysis techniques are processed through data collection, then the reduction stage is only choosing to focus on important things, then the data presented is the result of reduced data, and the last is verification or conclusions. The study was conducted 3 times in a period of approximately 1 week. During the research, the authors were involved in the practice of the examination process carried out by growth and development poly doctors on patients (children) who were also accompanied by their parents. With a test or examination of the detection of child growth and development, cases were found in these toddlers that there were obstacles or delays experienced, namely in their gross motor skills.

Therefore, the researcher took an Indicator that was in accordance with the research and focused on the development of children related to their motor skills, that is, at the age of 6 months, babies are able to turn from their stomach to their backs and vice versa, lifting their heads as high as 90° and maintaining that position. upright, holding other people's fingers, reaching for objects within reach, tilting and looking all sides (RI, 2016).

RESULTS/FINDINGS

Growth and development is a very important aspect for a child’s life which also greatly determines how the child collapses in the future. With good growth, the development process will be aligned and run well. Because in fact, aspects of growth and development are interrelated with one another. Based on the results of the research conducted by the researchers, data on cases in children (toddlers) were found, namely:
Table 1. Biodata and Information

<table>
<thead>
<tr>
<th>Biodata</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Name</td>
<td>AAG</td>
</tr>
<tr>
<td>Age</td>
<td>6 month</td>
</tr>
<tr>
<td>Weight</td>
<td>8,6 Kg</td>
</tr>
<tr>
<td>Head Circumference</td>
<td>43 cm</td>
</tr>
<tr>
<td>Body Length</td>
<td>71 cm</td>
</tr>
<tr>
<td>Birth History</td>
<td>Premature Fault at RSIA AMC Metro</td>
</tr>
<tr>
<td>Problem</td>
<td>Motoric (can’t lie on his stomach, rolling over/turning on his back and on his side)</td>
</tr>
<tr>
<td>Father’s Name</td>
<td>PA</td>
</tr>
<tr>
<td>Age</td>
<td>29 y.o</td>
</tr>
<tr>
<td>Profession</td>
<td>Fonder</td>
</tr>
<tr>
<td>Mother’s Name</td>
<td>GM</td>
</tr>
<tr>
<td>Age</td>
<td>29 y.o</td>
</tr>
<tr>
<td>Profession</td>
<td>Midwife</td>
</tr>
</tbody>
</table>

The results of the data obtained show that there is a delay or problem with the motor, that is, the child cannot lie on his stomach (stomach), so that when he is on his stomach the child cannot roll over or turn on his back on his own, the child cannot even turn on his side. This can be known by an examination using the KPSP (Pre Development Screening Questionnaire):

TheKPSP showed that the toddler experienced disturbances in his gross and fine motor skills. Disorders of fine motor skills are caused by problems with gross motor skills, so that it also has an impact on children's fine motor skills. It is known that the impact on children's fine motor skills is not being able to reach objects that are around them because children cannot tilt so that stimulation to practice reaching for objects by themselves that are near children cannot be done, besides that the finger muscles in toddlers when holding objects are still fairly weak and stiff, because children are not used to practicing to reach and then hold it. Even though on the test results the child could hold objects in his hands but only lasted a matter of seconds.
In the existing data, it also shows that the child during the birth process experienced a cesarean delivery. So that from the cesarean process, usually it can also have an impact on the growth and development of children. However, the common thing that often happens is that parents feel that it’s fine when the baby is born by cesarean section, as long as the baby doesn’t drink amniotic fluid or there are serious problems in the womb during the delivery process. Then, as time goes by, because the parents feel fine, there arises a lack of attention or providing a stimulus to their child who feels safe. Where supposed to be, parents are sensitive and routine checks are carried out immediately at the child development polyclinic or manual detection with the guidance of the MCH book which is always given to parents since the time of pregnancy, to ensure that the baby is in good condition and healthy. Most parents carry out examinations when these symptoms or problems appear. That is the minimum negligence that parents must avoid and watch out for. In order to minimize and prevent the occurrence of disturbances and problems in children as early as possible, as they should, if you look at the guidebook, at the age of 6 months the child can already make these motor movements.

If examined from the parents’ data, the mother’s work history is a midwife. Where it is impossible for a midwife to pay less attention to and maintain the health condition and collapse of her own child. But in fact, many similar cases were found in other children, even in children from the fallen poly doctor who had autism/abk disorders (children with special needs). Based on the results of the interview with the DI doctor, it was stated that:

"the status title (title) at work does not guarantee that 100% of children will be perfect, good, and healthy. Parents' sensitivity and awareness are very important in providing stimulation and also genes or other factors can also trigger disturbances in children or health related to their growth and development."

On the other hand, GM's mother said that:

"the work of doctors or midwives and the like is not trivial, we pay very close attention to patients, to the point that we can forget and neglect children, even to the point where they are placed or cared for by other people."

This shows that the work of parents does not guarantee their children, but it is sensitivity and awareness that make parents understand the importance of all aspects of their children. In addition to this, according to the DI doctor, the cause of AAG not being able to lie on its stomach, rolling over (turning on its back) and on its side is

"because it was born by cesarean section, it is also caused by insufficient breastfeeding, and replaced with formula milk which does not pay attention to dosage and nutritional intake, child. Thus causing the strength of the bone muscles in the child to weaken. Even though at the age of 6 months they are still very vulnerable and need breast milk, because the nutritional content in breast milk is very good for the growth and development of babies.

Based on all of the findings above, it can be underlined that children experience problems with their motor skills due to several factors such as cesarean delivery, inadequate or
inappropriate intake of breast milk and nutrition, lack of stimulation provided by parents, which has an impact on the motor strength of children who experience lateness.

Discussion

Based on research findings, DDTK for children through KPSP is very useful for detecting and stimulating overturned toddlers. At the age of 6 months when the baby has not been able to carry out his motor movements properly, then this method or method is considered appropriate to use. DDTK is an effort made to find out early if abnormalities and deviations are found in the development of children, so that they can be handled immediately if there are cases that reach a serious level in children. In addition, DDTK is useful in efforts to prevent, stimulate and intervene according to the age of child development so that they can grow optimally. Because DDTK also covers all aspects of development. How to do detection using the screening method through routine checks at posyandu, puskesmas, clinics or even hospitals or doctors' practice in the growth and development poly division. The tools used are usually MCH books, SDIDTK, scales, measuring instruments and so on (Utomo & Ismail, 2021).

Meanwhile, KPSP itself aims to find out whether the child's development is normal or whether there are deviations. The KPSP assessment examination itself is divided into 4 development sectors, namely: gross motor, fine motor, speech/language and socialization/independence. The use of KPSP is carried out until the child is 6 years old, in the order of every 3 months for children under 2 years, and 6 months until the age of 6 years (Maddeppungeng, 2018). In addition, to measure children's development, you can also use the DDST (Denver Development Screening Test), which is a test used to determine the development of children aged 1 month to 6 years. It is not only motor skills that can be measured using the DDST, but also language, social and other aspects (Sukmawati et al., 2017).

Factors that cause children not to be able to lie on their stomach, roll over (turn over on their backs), and tilt are internal factors such as gender, age, genetics, chromosomes and race. external factors such as psychological and socio-economic (Nahriyah, 2018). As well as inadequate breastfeeding, even though the balance of nutrients in breast milk is at the best level and breast milk has the best form for a young baby's body. Breast milk is very rich in food extracts that accelerate the growth of brain cells and the development of the nervous system. Breast milk contains carbohydrates, taurine, DHA and AA. (Riana Trinovita Sari, Juniastuti, Dominicus Husada, 2017).

This is in line with research which states that breast milk has a major role as a source of nutrition in growth and development as well as child antibodies which have benefits of up to 100% and even benefit the mother because it is one of the prevention and reduction of various diseases such as cancer, osteoporosis, and so on. According to the Department of Health, mothers giving formula to babies increases every year compared to mothers who breastfeed their children exclusively (non-sufor) until they reach the specified age. That is why many children in Indonesia have motor disorders (Fitriani et al., 2021). It is not easy to breastfeed for 6 months without the help of formula, however, breast milk is the best food for babies 0-6
months, apart from being a nutritional intake, it is also a support for the baby's intelligence, and this 6-month period is what is called exclusive breastfeeding (Anggraini et al., 2017).

Other causes were also found, namely when the birth process was by caesarean or premature and babies with low or overweight weight can also trigger disturbances in the baby's motor skills. In addition, maternal health factors also affect the toddler's fall (Ruslan et al., 2020). Reporting from another opinion, namely, the provision of stimulus and environmental factors is also decisive, such as giving a stimulus by doing massage or spa for babies, of course by special professionals who handle babies, this can affect their motor skills (Nurlaila et al., 2017).

Based on several theories, it is stated that at around 3-6 months of age, children should be able to make movements on their stomach supporting their bodies with both hands, rolling and back and forth from a prone position and then lying on their backs, and usually children have started to learn to sit and at first with the help of other people, parents as a support for children (Sumiyati, 2018). Strengthened by another statement that at that age, the child will be able to raise his head steadily at first around 45° while lying on his back and if he is used to it firmly, then the child will be easy to sit and crawl and this ability is one of the stimulus processes for children to be able to swallow solid food (Rihlah, 2019).

Solutions or stimulation that can be given to children aged 6 months with gross and fine motor problems are: 1.) Training the strength of the muscles of the neck, arms, legs and stomach so that the baby can lie on his stomach easily, how to: lay the baby face down on both thighs or above the body parents while parents lie down slowly. Help the baby to turn his body and let him be in a face down position. If the baby cannot lift his head on his own, help the baby by providing support in the form of a pillow to support his chin. 2.) Stimulus for babies can grip or hold objects firmly, namely: teach them to hold other people's fingers (mother, father, older siblings, and those around them). 3.) Then teach the baby to reach for objects that are within his reach, for example Put a small toy that sounds or is brightly colored in the baby's hand. After the baby grips the toy, gently pull it to train the baby to hold the object firmly. 4.) Then holding his own hand or holding an object with both hands. Place an object or toy in the baby's hand and see if he transfers it to the other hand. Try to keep the baby's hands, left and right, each holding an object at the same time. First the baby is assisted, put the toy in one hand and then try to get the baby to take the other hand with the hand that is used most often. 5.) to train the baby to be able to tilt, the first stimulus is to be able to look right and left, pick up small objects that are placed like pieces of biscuits in front of the baby. Teach the baby to pick up these objects. If the baby is able to do this, keep pills/medicines and other small objects out of reach of the baby. 6.) Do this stimulation regularly every day with the duration increasing slowly from 1 minute, then increasing to 2 minutes, 3 minutes and so on so that the baby is able to lie on his stomach independently. But if the baby shows fatigue, you should rest first, then repeat a few moments later. 7.) Meet the nutritional needs of the baby by providing sufficient breast milk. 8.) If more than 9 months the baby still has difficulty turning his body, then have the baby checked directly by a pediatrician in the development and development sub-division.
for further examination. Because it is feared that this developmental delay occurs due to organic problems, for example cerebral palsy, mental retardation, muscle injury, or others (RI, 2016).

Another opinion states that baby stimulation can also be done with massage or baby spa because by doing this, the baby's development will develop more quickly and be directed. Baby spa is a tactile stimulus that provides sensory stimulation to babies so it's good for their motor skills. However, when doing a baby spa, it must follow rules and directions and not just anything, and parents must ensure that the spa clinic for babies is safe and secure. If necessary, mom and dad don't need to worry if baby spa is done routinely for children (Sukmawati et al., 2017). This opinion is reinforced by other research that effleurage massage or spa performed on infants has an effect on gross motor skills in the ability to lift the head and roll over. Especially when coupled with stimulation of swimming movements for babies (Wahyuni & Rofiana, 2020).

**Conclusion**

Based on the overall results of research conducted on infants aged 6 months with gross motor problems, namely not being able to lie on their stomach, roll over (turn over on their back), and tilt, it can be interpreted that it is important for parents to make early detection starting from the time of pregnancy until postpartum and of course it doesn't stop there. Because, the growth and development of children is a determinant of how the future. Every parent certainly hopes and wants the best for their baby, therefore, they must continue to learn and understand about child development and the methods used to deal with various existing problems.

Like the case experienced by AAG in terms of gross motor skills, it is known that the causal factors are not far from everyday life, namely breastfeeding replaced with formula milk, when the mother gave birth by cesarean section, and the lack of stimulus given to the child. This is certainly very impactful and cannot be considered trivial or ordinary. So what should parents do, namely by carrying out routine checks at the child development polyclinic, or health center, or hospital that provides these growth and development experts. Apart from that, personal stimulus is also carried out at home which involves children to continue to practice independently, which can be done by parents or families who help. Of course, with guidance from doctors and MCH books, KPSP, DDTK/SDIDTK, and other sources as references.

Children are a valuable treasure for a family as well as a nation, because they are the next generation of reformers. Love children by paying attention to all aspects including their growth and development. Mom and Dad don't be afraid to study or do examinations on their children, because that is knowledge, you have to be literate in knowledge so that you become a smart generation and can advance a nation/country.

**References**


