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Parental Behavior Accompanies Children's Growth and Development in an Effort *to Catch Grow* Early Childhood Nutritional Status.

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ABSTRACT:

Background/purpose. The reduction in the prevalence of stunting is inseparable from the efforts of parents, schools, and the government and the community who carry out various stunting reduction programs based on the performance of each party. Parents have a big role to help improve the nutritional status of children through parental behavior in providing stimulus for growth and development in children. This study aims to analyze the behavior of parents in Bekasi City to accompany the growth and development of children in an effort to carry out *Catch Grow* or pursue growth in nutritional status. **Materials/methods**. This study uses a quantitative survey approach by analyzing parental behavior in accompanying growth and development in early childhood *Catch Grow* efforts. The target population of this study is parents of PAUD students in 12 Pondok Gede Districts, Bekasi City. Sampling was carried out randomly by distributing questionnaire instruments at FGD or discussion groups of parents of PAUD students. There were 54 respondents from this questionnaire. **Results**. Educational background is the main factor in providing an understanding of the importance of pursuing growth in nutritional status so that it can help the government in reducing the prevalence of stunting and continuing the growth and development of early childhood with minimal obstacles. 87% of parents show behavior in providing balanced nutritious food intake to their children, 91% of parents show behavior of playing with their children, 95% of the home environment is clean and 77.6% of parents routinely take their children to measure height and weight. Parental understanding encourages the occurrence of parental behavior in supporting children's growth and development by *catch and grow* early childhood nutritional status. **Conclusion.** Parental education and understanding encourage parental behavior in accompanying children's growth and development by *catching and growing* early childhood nutritional status

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1. Introduction

The nutritional status of children in the world is quite concerning. WHO data in 2021 states that currently children in the world are facing the problem of malnutrition. 149 million children under the age of 5 are stunted, i.e. height is not in accordance with age. 45 million children under the age of 5 experience wasting, which is too thin for height at their age. 39 million children under the age of 5 are obese, which is a condition of fat accumulation that exceeds the normal limit Various factors are the cause of malnutrition and obesity. Malnutrition is caused by a deficiency, excess or imbalance in a person's energy or nutrient intake. Obesity is caused by an imbalance between food intake and the body's caloric needs as well as other factors such as socio-economic, genetics, age, lifestyle, sanitation and access to clean water as well as lack of movement in daily activities.

Malnutrition is a huge concern today, one third of the nearly 700 million children in the world under the age of toddlers are malnourished or overweight (obesity) (UNICEF, 2020). This shows that 1 in 3 children in the world is obese and malnourished. Short-term problems, malnutrition and malnutrition are getting worse when faced with pandemic conditions. UNICEF estimates that there is a 15% increase in the number of stunting, malnutrition and undernutrition of children in the world during covid (UNICEF, 2020). The nutritional status of toddlers in

Indonesia shows an alarming proportion. National data on early childhood nutritional status shows that the proportion of nutritional status is very short and short at 30.8%. Likewise, the proportion of malnutrition status and malnutrition is 17.7%. Children under five years of age who are obese are around 8% (Riskesdas, 2018). The nutritional status data shows that nutrition problems in Indonesia include stunting, malnutrition and malnutrition and obesity problems. Data from the Indonesian Nutrition Status Survey shows that the prevalence of stunting decreased by 24.4% in 2021 and 21.6% in 2022. However, this figure is still far from the expected level of nutritional achievement of all Indonesian children.

Various factors are the causes of malnutrition and obesity. Malnutrition is caused by a deficiency, excess or imbalance in a person's energy or nutrient intake. Obesity is caused by an imbalance between food intake and the body's caloric needs as well as other factors such as genetics, age and lifestyle as well as lack of movement in daily activities. Malnutrition is a huge concern today, one third of the nearly 700 million children in the world under the age of toddlers are malnourished or overweight (obesity) (UNICEF, 2020). This shows that 1 in 3 children in the world is obese and malnourished. Short-term problems, malnutrition and malnutrition are getting worse when faced with pandemic conditions. UNICEF estimates that there is a 15% increase in the status of stunting, malnutrition and undernutrition of children in the world during the pandemic (UNICEF, 2020). This increase adds to the nutritional status of children in the world and nationally.

UN statistics in 2020 recorded that more than 149 million (22%) children under five worldwide are stunted, of which 6.3 million are early childhood or stunted toddlers are Indonesian toddlers. According to UNICEF, stunting is caused by malnourished children within two years of age, mothers malnourished during pregnancy, and poor sanitation. Currently, the prevalence of stunting in Indonesia is 21.6%, while the target to be achieved is 14% by 2024. For this reason, a joint effort is needed to achieve the targets that have been set, one of which starts from the smallest unit in society, namely the family (UNICEF, 2021). The family plays an important role in improving family nutrition.

The determinants of stunting in Indonesia include poor maternal nutrition during preconception, pregnancy, and breastfeeding, short maternal stature, infections, teenage pregnancy, mental health, fetal growth stunts, premature birth, short birth intervals, and hypertension (Beal et al., 2018). Some factors that have a significant relationship with stunting in Indonesian children are household wealth and genetics (Beal et al., 2018). The household wealth in question is the socio-economic of the Indonesian people and government policies related to the economy and food insecurity. Genetics as a determining factor in stunting is related to the height of the father and the height of the mother and may not be given new insights or knowledge (Beal et al., 2018). In this case, parents need to be given knowledge about health and nutrition as well as stunting prevention.

Stunting occurs in the first 1000 days of life, which means that from the time it is still in the womb until the age of 2 years, the age of stunting occurs 24-35 months. Stunting occurs due to continuous recurrent infections and lack of stimulation from an early age. The socioeconomic circumstances of the family and the lack of parental knowledge can worsen the state of stunting. The state of child stunting that arises does not mean that the child cannot improve his nutritional status. The nutritional status of children can be improved by *Catch Grow* or pursue the growth of children's nutrition so that the shortcomings that occur can be met by pursuing the growth (Jalal Fasli, 2009). Kejar Grow is an effort to improve the nutritional status of children or stunted growth by providing adequate and balanced nutrition and providing the right stimulation according to the needs of children. Parents play an important role in children's growth and development efforts through proper parenting so that nutritional intake and stimulation can be done properly (Muhammad Asrar, 2009). Providing appropriate nutritional intake and early stimulation to children can develop aspects of cognitive, language, social-emotional, moral, religious and artistic development.

The Bekasi City Government continues to strive to reduce the rate of stunting or malnutrition in children with a number of innovations in regional apparatus programs. Regional officials involved in stunting prevention in Bekasi City include Bappelitbangda, Health Office, Population Control and Family

Planning Office, Women's Empowerment and Child Protection Office, Food Security, Agriculture and Fisheries Office, Disperkimtan, Education Office and Social Service. This effort from the Bekasi City Government shows positive results in reducing stunting. The stunting rate in Bekasi City was recorded to have decreased from 2019 to 2022. In 2022, the number of children experiencing stunting was 4,575 children or 3.4%, while the national target was 18.4% and compared to 2021 data of 7.9%. From the past year, there has been a decrease in stunting rates by 5.5%. For the Bekasi City RPJMD target in 2022, the prevalence of stunting is 9.8%. Data from the health office in August 2024, the prevalence of stunting in Bekasi City decreased to 3.67% with the highest prevalence in West Bekasi District.

The reduction in the prevalence of stunting is inseparable from the efforts of parents, schools, and the government and the community who carry out various stunting reduction programs based on the performance of each party. Parents have a big role to help improve the nutritional status of children through parental behavior in providing stimulus for growth and development in children. This study aims to analyze the behavior of parents in Bekasi City to accompany the growth and development of children in an effort to carry out *Catch Grow* or pursue growth in nutritional status.

2. Methodology

The survey research method was conducted in Bekasi City, West Java which began in April and ended in June 2025. This study uses a quantitative survey approach by analyzing parental behavior in accompanying growth and development in early childhood *Catch Grow efforts*. The target population of this study is parents of PAUD students in 12 Pondok Gede Districts, Bekasi City. Sampling was carried out randomly by distributing questionnaire instruments at FGD or discussion groups of parents of PAUD students. Respondents from this questionnaire were 54 respondents spread across 12 Pondok Gede sub-districts in Bekasi City. Non-test research instruments have gone through the validation of material and language experts. Data analysis uses descriptive statistics with tabulation and percentages first carried out.

3. Result/Findings

Catch *Grow* or Catch Grow Child Growth and Development is the process of improving children's nutritional status by providing the right nutrition and stimulation in early childhood. Nutritional status by providing complete nutritional intake, namely carbohydrates, proteins, fats, vitamins and minerals in the daily diet and children's school lunches. In this study, there are 4 indicators measured through a survey of parents about the balanced nutritional intake provided, the play activities carried out, the play equipment provided, a clean and comfortable home environment and routine activities to measure the height and weight of the child.

Table 1. Providing a Balanced Nutritional Intake

Aspects	Indicator	Choice	Respond
Complete nutritional intake		**Yes**	**Not**
	Feeding with complete nutrition	87%	
	Feeding has not met the nutritional requirements		13%

Table 1. showed that 87% of 57 parents had provided complete nutritional food intake. The food given contains carbohydrates, proteins, fats, vitamins, minerals and water. Thus, 46 parents have understood that the food given to children must contain adequate nutrients for children's growth and development. 13% or a total of 11 parents have not been able to provide food with complete nutrition with various causative factors. Some of the factors that cause the lack of nutritional fulfillment in the food menu are economic, social, cultural factors and parenting in the family (Fredi Daar et al., 2023). Providing balanced nutritional intake begins at 0-6 months of growth. Exclusive liquid breast milk and other supplements are the first food for the child(Sutarto, 2018). At the

age of 6 months, the baby's needs increase so that other food ingredients other than breast milk must be added. Until the age of 2 is the critical period of the child, the growth of brain cells grows rapidly. This critical period is prone for children to be recalled because the period that occurs cannot be repeated if the child misses it. At the age of 3, children tend to want to choose their own food and eat independently. Parents need to give their children the opportunity to do it themselves so that they form a habit of choosing food and eating the food on their own (Inten & Permatasari, 2019). However, parents need to help direct children to healthy and appropriate food to consume.

Table 2. Stimulation of Play Activities with Children

Aspects	Indicator	Choice	Respond
Play activities with children.		Yes	Not
	Parents play with their children.	91%	
	Parents have not done play activities with their children.		9%

Table 2. It shows that parents already understand the importance of stimulating play for children's growth and development. 91% of the 54 parents indicated that parents played with their children. 49 parents understand that play can develop aspects of children's development. Parents want children to have good cognitive intelligence, age-appropriate language skills, well-formed social emotions, interaction and adaptation to an easy environment and play as a means of developing children's behavior. 9% of 54 parents have not been able to play together. Various factors that cause obstacles in carrying out this activity include difficulty managing time between work and family. Inadequate health of parents and children, lack of interest in play activities and lack of parental knowledge about the importance of play activities (Baik et al., 2021). Play activities are one of the factors that support early childhood growth and development.

Table 3. Clean Home Environment

Aspects	Indicator	Choice	Respond
Clean Home Environment		**Yes**	**Not**
	The home environment is kept clean.	95%	
	The home environment has not been kept clean.		5%

A clean home environment is one of the indicators of children who are vulnerable to stunting, wasting and other diseases that arise. 95% of 54 parents have understood the importance of a clean environment for children's growth and development. A clean environment will prevent children from diseases, viruses and pests. A clean environment requires sanitation, clean water, fresh air, sufficient sunlight and a positive community environment (Ardyana, 2013). About 5% of parents have not been able to maintain good house cleanliness. Some of the factors that cause this include inadequate social and economic conditions, poorly organized houses, habits of moving houses or nomads.

Table 4. Routinely Measure Height, Weight, Head Circumference

Aspects	Indicator	Respondents' Choice	
Routinely measure height, weight.		Yes	Not
	Routinely measure height, weight.	77,6%	
	Have not routinely measured height and weight.		22,4%

Height, weight and head circumference measurements must be carried out regularly, both at Posyandu, health centers and clinics. 77.6% of 54 or 41 parents routinely measure height and weight. 12 people have not routinely measured their height and weight. The head circumference has not been routinely done and is still something that parents are not used to. Measurements of height, weight and head circumference should be done regularly to monitor the growth and development of the child (Nagari & Nindya, 2017). Parents have a record of growth charts of height, weight and head circumference.

Table 5. Respondent Education

Aspects	Indicator	Number of Respondents
Respondent Education		
	SD	1 Person
	JUNIOR	2 People
	SMA	18 people
	D3	1 Person
	S1	28 People
	S2	4 People

Table 5. Indicate the educational background of the respondent. Respondents with elementary education level were 1 person, junior high school 2 people, high school 18 people, D3 there was 1 person. There are 28 students with a S1 background and 4 masters. From the educational background, most of the S1 shows the level of knowledge and understanding of nutritional status and the importance of pursuing good growth in early childhood. Education is one of the indicators of success or not of pursuing growth in early childhood (Prasetiyati, 2015). Parents who have a good education can provide good education, care and parenting to children.

4. Discussion

Intake Balanced nutrition is needed by the body in the growth and development of children. Nutritious food is a health investment for children for the future. Lack of nutrients can cause various diseases and reduce the quality of developmental aspects. Children will be slow to face the phases of quality developmental stages. Balanced nutritional intake begins from the moment the fetus is in the womb, what the mother consumes, the child will consume. Therefore, you must maintain your intake of nutritious food (Baik et al., 2021). Children will be healthy if they have been given balanced healthy food from the beginning of their lives so that they achieve optimal growth and development. Balanced nutritional intake is also necessary for the development of the child's brain. From 0 to 4 years old, a child's brain experiences 80% growth and development. The nerves of the brain will be connected with nutritional support and motor physical movement (Primasoni, 2014). Nutritious food is fuel for the brain, so

children who are fulfilled with balanced nutritional food will grow up to be intelligent children. The brain organs need nutrients so that the cells in them can develop properly.

Every day, children need balanced nutrition consisting of carbohydrates, fats, proteins, vitamins and minerals. Children need healthy foods, vegetables, fruits and side dishes that are rich in protein. This food becomes a source of energy, energy reserves, and building substances and strengthens damaged cells (Ardyana, 2013). Early childhood needs an average of 1300 Kcal, this is influenced by gender, movement activities carried out and age. Carbohydrates are found in staple foods such as rice, wheat, cassava, sweet potatoes, bread, corn and others. Protein is found in tempeh, tofu, fish, meat and eggs. Meats and fish also contain fat. The rest of the body's nutritional needs are met by vitamins and minerals found in vegetables and fruits. The body also needs water to help with body temperature, help blood circulation to the brain and throughout the body, provide oxygen to the body, protect the brain, spinal cord and other sensitive tissues.

Food with various nutrients entering the body needs to be balanced with the fulfillment of children's movement activities. Children need to move so that food intake is not only stored but can be processed into body fuel. Thus the child's weight can grow in a balanced way, there is no accumulation of fat or obesity which can eventually lead the child to degenerative diseases. Children need to move to do physical activities. Children can exercise by paying attention to aspects of physical motor development according to their age and do not need to be forced. If the child is not able to do certain activities, there is no need to be forced to do it.

Measurement of height, weight and head circumference needs to be done continuously. This is done to monitor the movement of children's growth and development whether they are in accordance with their age or not. IDAI stated that the easy way to tell the growth of a one-year-old baby is normal or not is to have three times birth weight, body length increases by 50 percent from birth length, and head circumference increases by about 10 cm. Even so, each child will grow at a different rate so it needs periodic measurements to make sure there are no abnormalities. The recommended measurement frequency is every month until the age of one year, every 3 months until the age of 3 years, every 6 months until the age of 6 years, and once every 1 year in subsequent years. IDAI further explained that the reference used for each age group can be different. Currently, Indonesia uses the growth curve of the World Health Organization (WHO) and the curve of the Center for Disease Control Prevention (CDC, 2000). The most commonly used indicator in Indonesia is weight by height (BB/TB), although there are also other indicators such as height by age (TB/U), and body weight by age (BB/U). The BB/TB indicator determines the nutritional status of children by comparing their weight with ideal weight according to their height, then it can be interpreted as obesity, overnutrition, good nutrition, undernutrition, and malnutrition. The TB/U indicator compares the height of a child with a child of the same sex. The interpretations are tall, normal, short stature, and very short stature. The BB/U indicator divides children into normal weight, underweight, and overweight. This indicator compares the weight of a child with a child his or her age. A measurement that is often missed by parents is head circumference. This measurement is every three months until the age of one year, and every 6 months until the age of 6 years. From the results, head circumference can be divided into normal, small (microcephaly), and large (macrocephaly). Small or large head circumference can be caused by impaired brain growth. Measurements of the correspondence between TB/U and BB/U showed the avoidance of early childhood from stunting and wasting.

Children who avoid stunting and wasting are healthy children and have a tendency to enjoy playing. Play activities are fun activities for children. Children carry out play activities to develop aspects of cognitive development, language, social emotions, physical, motor, moral, religious and artistic development (Siti Nur Hayati & Putro, 2021). Play activities are a means of early childhood exploration, developing children's curiosity and children's media to adapt to the environment. Play brings interaction situations for children by meeting and doing activities together. Play also controls children's emotions and gives children the experience to develop self-regulation. Play activities are a means of stimulation for early childhood. Children gain stimuli in sensorimotor, taste, karsa and work because play provides pleasure to the soul. By playing, the child's brain becomes more sensitive to stimuli and cells grow easily so that they can be used to think (Djuwita, 2018). The amygdala in the brain area becomes easily touched and the emotional side of the child can feel emotions easily, empathy grows and emotional adaptation appears well. Play activities awaken the social aspect of children. Children easily interact and adapt to

their environment. Empathy, problem solving and critical thinking of the surrounding environment arise. Children grow up with adequate character.

Children play in the home environment. The home environment should be the center of early childhood activities. A clean and comfortable house makes children happy to live in it. The house has windows and good air circulation, there is a playground and sunlight can enter the house. Houses that are prone to disasters such as landslides, floods, close to airports and polluted environments make children unable to grow properly. Children must make peace with disaster situations, noise and dirty air. A healthy home environment also has clean water and good sanitation. A clean and healthy environment allows for life without disease-transmitting animals such as rats. A clean and healthy environment will give birth to children who love cleanliness and get used to maintaining cleanliness both themselves and their environment. Pursue growth or *Catch Grow* to be a means for parents and early childhood teachers in supporting healthy, intelligent and cheerful children. The shortcomings experienced from slow development, and the occurrence of situations of failure to grow should be observed and addressed with joint movements. Parents, teachers, the community and the government focus on supporting early childhood development. This is one of the programs of the Governor of West Java which has made PAUD part of compulsory learning. Therefore, integrative holistic PAUD is expected to continue to be developed and its programs carried out comprehensively and consistently.

5. Conclusion

Catch grow nutritional status in early childhood in Bekasi City can be achieved, this can be seen from the analysis of data described by the researcher. Educational background is the main factor in providing an understanding of the importance of pursuing growth in nutritional status so that it can help the government in reducing the prevalence of stunting and continuing the growth and development of early childhood with minimal obstacles. 87% of parents show behavior in providing balanced nutritious food intake to their children, 91% of parents show behavior of playing with their children, 95% of the home environment is clean and 77.6% of parents routinely take their children to measure height and weight. Parental education and understanding encourage the occurrence of parental behavior in accompanying children's growth and development with *catch grow early* childhood nutritional status.

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