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An Analysis Of Determinants Stunting Incidents In Toddlers At Mazo Puskesmas UPT, South Nias District

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ABSTRACT

The problem of stunting is a disturbance in the growth of a child's height or body length, where the height growth does not match with increasing age, which is also an abnormal condition of the body caused by more than one factor (multifactor). So this re-search discusses many things, including analyzing the influence of clean water access, latrine access, hand washing behavior with soap (CTPS), history of exclusive breastfeed-ing and MP-ASI on the growth and development of toddlers aged 24-59 months. This research used a cross sectional study design. The research was conducted in March-April 2020. Respondents were 118 children under five (aged 24-59 months) who lived in Og-an Ilir. The selection of respondents was taken using a simple random sampling tech-nique. Stunting, a condition characterized by impaired growth and development in chil-dren due to poor nutrition, recurrent infections, and inadequate psychosocial stimulation, is a significant public health problem. Statistical analysis was carried out to identify cor-relations and potential causal relationships between these variables and the incidence of stunting. The results show that low socioeconomic status and maternal education are significantly related to high stunting rates. Inadequate food intake and poor sanitation practices are also important factors. Frequent infections, especially gastrointestinal dis-eases, are known to worsen the risk of stunting in toddlers.The study concludes that a multifaceted approach is needed to address stunting, involving improved economic con-ditions, educational initiatives for mothers, improved nutrition programs, better access to health services, and improved sanitation facilities. These findings highlight the im-portance of integrated public health strategies to reduce stunting and improve the wel-fare of children in South Nias District. Further research is recommended to explore long-term interventions and their effectiveness in various settings.

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INTRODUCTION

Stunting is a growth disorder in a child's height or body length where the height growth does not match with increasing age. Stunting is an abnormal condition of the body that is caused by more than one factor (multifactor), which means that one main factor and other causal factors are needed for stunting to occur (Ariyanti, 2015). Reducing the number of

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stunting or short body posture is the first goal in The Global Nutrition Targets for 2025 and the second main indicator in the Sustainable Development Goals (SDGs) of Zero Hunger, which is a continuation program of the Millennium Development Goals (MDGs) (Ministry of Health of the Republic of Indonesia, 2015).

Currently there are still many parents who are not aware of the problem of stunting in children because a child who is stunted generally does not look like a problem child, and this is generally considered among ordinary people, if the parents are short then it is normal for their children to be too short. 1 in 3 children under five in Indonesia or 37.2% experience stunting, and this is a big challenge not only for the government but also all related sectors (Rikesdas 2020).

The problem of stunting is determined by the factors that influence it. These factors in each region can be different from each other. UNICEF suggests that growth is influenced by direct and indirect causes. Direct causes include food intake (consumption of macro and micro nutrients) and health conditions (infectious diseases), while indirect causes include household food security, child rearing patterns, environmental sanitation and use of health services. These factors are determined by human, economic and organizational resources through educational factors. The most basic causes of growth and development originate from political, ideological and socio-economic structural problems which are based on existing resource potential (Supariasa et al, 2019)

Research by Torlesse, et al (2019) in Indonesia found that the combination of inadequate sanitation and unsafe drinking water quality was a risk factor for stunting. Another study conducted in 137 developing countries identified environmental risk factors (namely, poor water quality, poor sanitation conditions, and use of solid fuels) as having the second largest influence on the incidence of stunting globally (Prendergast, AJ, & Humphrey, J. H, 2020).

Research in Sidoarjo explains that there is a relationship between the implementation of healthy latrines and the incidence of diarrhea considering that diarrhea is a risk and contributing factor in the event of stunting. Hygiene behavior is also a factor that can cause stunting, this is in accordance with the results of research conducted by Rahma which shows that the habit of mothers or child caregivers washing their hands with soap before feeding or after defecating is associated with a 15% reduction in the risk of stunting.

Furthermore, according to research by Muraro, et al (2018), smoking has a negative long-term impact on children's height. The results of research by Cord et al. (2019) and Quelhas et al. (2018) that pregnant women who are exposed to cigarette smoke have a relationship with fetal growth. Subsequent research by Goyal and Canning (2018) stated that the nicotine contained in cigarette smoke inhaled by mothers during pregnancy causes problems with embryo and bone growth, and enters the baby's body during the breastfeeding process. Twenty-two studies that measured biological levels of nicotine associated with exposure to cigarette smoke showed a positive relationship between exposure to secondhand smoke and nicotine concentrations and/or nicotine biomarkers in the body (Okoli, 2017).

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Exposure to cigarette smoke can cause Acute Respiratory Inspection (ARI). Research in Tanzania shows that IGF1 levels act as a protector against stunting in children (S. Syed et.al, 2018). In the conceptual framework prepared by WHO, a history of infectious disease is one of the etiologies of stunting in children (MK & OA Stewart CP et.al, 2013). ISPA contributes to a decrease in children's nutritional status, both from BB/U and TB/U. The association between ARI and stunting is caused by an increase in metabolic needs and disruption of food intake during a child's illness (MG Weisz, 2011). ARI as an infectious disease that is often experienced by children is the biggest factor influencing the incidence of stunting in children by 83% and the risk of experiencing stunting is 8.8 times higher (E. Kusumawati et. al, 2015).

Based on the decision letter from the Head of the South Nias District Health Service regarding the Designation of Villages as Locuses for the Acceleration of Stunting Reduction within the South Nias District Government in 2020, that in the areas of the Mazo Health Center, Gomo Health Center, Susa Health Center, Boronadu Health Center, Idanotae Health Center and Umbunasi Health Center.

Based on the annual recap of the nutritional status of toddlers in the August 2021 e-PPGBM, it was found that the prevalence of stunted toddlers in South Nias Regency was 22%. The condition or access to sanitation in the working area of the Mazo Community Health Center itself is still relatively low, for example, for communities with access to clean water of decent quality it is 21.18%, for communities with access to drinking water of decent quality it is 24.54% and likewise for communities with no access to toilets. reached 100% (Mazo Community Health Center, 2020). Based on the description above, the author is interested in writing about the analysis of the determinants of stunting among toddlers at the UPT Mazo Community Health Center, South Nias Regency.

Literature Review

Definition of Stunting

Stunting is a condition where height according to age is below -2 standard median of the child's growth curve (Fikawati et al., 2017). This standard is a world standard created by WHO in 2005. Stunting is a condition of chronic malnutrition which results in linear growth. This is caused by the accumulation of poor nutrition and health before and after birth (Fikawati et al., 2017). The nutritional status measurement used to determine whether stunting is used or not is anthropometric measurements.

Stunting not only has an impact on a person's physical condition in the future, but also has an impact on a person's health and productivity in the future. WHO (2013) states that there are several impacts of stunting. These impacts are divided into two, namely short-term impacts and long-term impacts. Short-term impacts include increasing mortality and morbidity. The long-term impacts are reduced physical growth, reduced reproductive health, increased risk of obesity and related diseases, reduced learning and work capacity and decreased productivity. Apart from that, if it is not treated, someone who suffers from stunting will also give birth to a stunted generation (Prendergast and Humphrey, 2014).

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Anthropometric Determination of Height/Body Length Nutritional Status

One of the linear growth parameters is body height/length (Par'i, 2017). Changes in height are a fairly long process, so height is usually used to measure chronic nutritional problems. The tool used must have an accuracy of 0.1 cm. According to Par'i (2017), there are two tools that can be used to measure it, namely the microtoise and the infantometer. Measurements using microtoise are usually used for children over the age of 2 years or less than 2 years old but can already stand (height). Meanwhile, the infantometer is used to measure children under 2 years of age or over 2 years of age but who cannot yet stand (body length). After measuring and recording the results, the next step is to compare the height measurement results with the standards published by the Indonesian Ministry of Health. The standard is published via Decree of the Minister of Health of the Republic of Indonesia Number: 1995/MENKES/SK/XII/2010 concerning Anthropometric Standards for Assessment of Children's Nutritional Status (Ministry of Health of the Republic of Indonesia, 2010).

Stunting is the most common form of malnutrition in the world. Of the total 254 million cases of malnutrition, more than 60% are cases of stunting or around 161 million children under five suffer from stunting. The remaining 93 million are cases of underweight and overweight toddlers (UNICEF, 2015). Many factors cause stunting. Not only is there not enough nutritious food, but also repeated infections, poor parenting patterns and lack of access to health and other social services can be factors causing stunting. According to (UNICEF, 2015), these factors are broadly classified into three, namely direct causes, fundamental causes and root causes. Direct cause is defined as a cause that therefore it will directly cause stunting without going through other factors.

Exposure to Cigarette Smoke

According to Priyoto (2015: 126) smoking behavior is an activity or activities carried out by individuals in the form of burning cigarettes and smoking them and can produce smoke which can be inhaled by people around them. Impact health from smoking behavior for many smokers and people around them. Some of them are mouth, throat and lung cancer, coronary heart disease, respiratory problems, pregnancy problems and other health problems. In addition, smoking habits can increase the risk of poor nutritional status in toddlers. This situation has the potential to increase the risk of death for infants and toddlers. As many as 14% in urban slum areas and 24% in rural areas of infant deaths are caused by smoking behavior (Priyoto, 2015: 126).

Cigarettes are cylinders of paper measuring between 70 and 120 in length mm and a diameter of around 10 mm (depending on each country) containing chopped dry tobacco. The cigarette is burned at one end and left to smolder and smoked at the other end. When a cigarette is smoked, its composition will break down into other components. Components that evaporate will become smoke and condense with other components. The components of cigarette smoke inhaled by smokers consist mostly of gas (85%) and particles (15%). There are around 4000 types of chemicals, of which 40 types are carcinogenic or can cause cancer. Some of the common and main poisons found in cigarettes are tar, nicotine, and carbon monoxide (CO) (Priyoto, 2015: 129).

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Approximately 0.5-3 ng of nicotine is contained in cigarette smoke. Everything that is inhaled will be absorbed so that there is around 40-500 ng/ml of blood. Nicotine is an alkaloid and is simultaneously and at high doses toxic. Nicotine is only found in tobacco. This substance very actively affects the brain and central nervous system. This substance is also addictive and psychoactive. The more nicotine consumed, the higher the level of nicotine needed by smokers to achieve satisfaction. This is proven by the small number of people who have succeeded in quitting smoking.

Relationship between exposure to cigarette smoke and incidence of stunting in toddlers

Exposure to cigarette smoke is a risk factor for stunting in toddlers in three ways, namely exposure to cigarette smoke can be a risk factor for ARI which is a risk factor for stunting in toddlers, nicotine in exposure to cigarette smoke can interfere with the absorption of minerals and vitamins, and family cigarette consumption will reduce family spending, especially food spending. Huttunen et al. (2010) stated that there are several studies which state that exposure to cigarette smoke for children can have an effect on children's health in the early stages of life. There is evidence that exposure to cigarette smoke will increase morbidity due to infection. Smoking at home has been shown to cause several infections, including pneumococcal or meningococcal disease, otitis media, bronchitis and pneumonia.

Several studies state that there is a relationship between parental smoking and the incidence of lower respiratory tract infections. This incident is a serious incident that requires hospital services. Children whose parents smoke are twice as likely to develop lower respiratory tract infections and require hospital services (Arcavi et al., 2015). Apart from the incidence of lower respiratory tract infections, exposure to cigarette smoke can be associated with upper respiratory tract infections in toddlers. According to research by Indahsari, Noor, and Arsyad (2018), the habit of parents who smoke at home is related to the incidence of ISPA in toddlers. Parents who smoke at home with their toddlers are 2 times more likely to suffer from ISPA than toddlers whose parents do not smoke at home (Indahsari, Noor, and Arsyad, 2018). This is confirmed by research by Tazinya et al. (2018) and Sofia (2017) which states that there is a relationship between exposure to cigarette smoke and incidentsm ARI in toddlers. Toddlers who are exposed to cigarette smoke are 4.7 times more at risk than toddlers who are not exposed to cigarettes (Tazinya et al., 2018).

Astuti, Handayani, and Astuti (2020) prove a significant relationship between exposure to cigarette smoke and the incidence of stunting in toddlers. The OR of cigarette smoke exposure for exposure for ≥3 days per week was 13.49 (reference exposure <3 days per week). According to Astuti, Handayani, and Astuti (2020), their research only describes the estimated number of days toddlers are exposed to cigarette smoke in a week. In fact, exposure to cigarette smoke occurs continuously for a long time. If there is ≥3 days of exposure to cigarette smoke in a week, then there may be around 156 days of exposure to cigarette smoke each year. This will result in a high accumulation of nicotine in the toddler's body. Research by Shah et al. (2019) stated that children who live with smokers have higher nicotine levels in the body compared to toddlers who do not live with smokers. This

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will affect the health of toddlers, one of which is their growth. Nicotine in the body can reduce oxygen supply by 30-40% and can interfere with the absorption of several nutrients such as calcium, minerals and vitamin C, which are very important in the height growth of children, especially toddlers (Astuti, Handayani, and Astuti 2020:5) .

It is estimated that in the research of Astuti, Handayani, and Astuti (2020), exposure to cigarette smoke occurred not only during the research, but also occurred before pregnancy, making it possible for exposure to cigarette smoke to occur in the first 1000 days of life. This period is a golden period for a child's growth, and if exposed to cigarette smoke, the toddler's growth cannot be optimal. Ramadani et al. (2019) stated that exposure to cigarette smoke during pregnancy can reduce fetal development and weight at birth. Other research also proves that there is a significant difference between birth weight and birth length of babies born to mothers who are secondhand smokers and mothers who are not secondhand smokers (Abdullah et al., 2017). Abdullah et al.'s research. (2017) also proved that there was a significant negative correlation between cotinine levels in umbilical cord blood and weight. birth weight and birth length. These two things are risk factors for stunting when you are a toddler.

Conceptual Framework

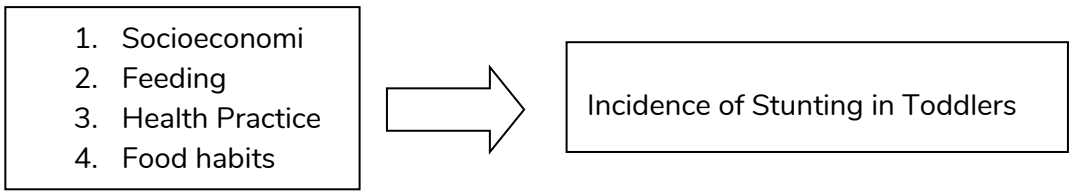

Figure 1. Conceptual Framework

a. There is a socio-economic influence on the incidence of stunting among toddlers in the working area of the UPT Mazo Health Center, South Nias Regency.
b. There is an influence of feeding on the incidence of stunting among toddlers in the working area of the UPT Mazo Health Center, South Nias Regency.
c. There is an influence of health practices on the incidence of stunting among toddlers in the working area of the UPT Mazo Health Center, South Nias Regency.
d. There is an influence of food habits on the incidence of stunting among toddlers in the working area of the UPT Mazo Health Center, South Nias Regency.

METHODS

This research is an observational analytical research. Analytical research is research which aims to analyze the correlation between risk factors and effect factors (Notoatmodjo, 2012:37). The term observational means that researchers only make observations on a research subject without treating the research subject (Sugiyono, 2011: 60). This research approach uses a cross sectional design, looking at the influence of the independent variable on the dependent variable.

Research location UPT Mazo Community Health Center, South Nias Regency, Research Time October-December 2023. Population is a group where researchers will

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obtain research results that can be generalized (generalized) (Sumanto, 2014:200). A population has at least one characteristic that differentiates that population from other groups. The population in this study were toddlers aged 24-59 months who took height measurements at every posyandu in the Mazo Community Health Center, South Nias Regency. The total number of toddlers aged 24-59 months who took height measurements was 250 toddlers. The population of toddlers in the case group are toddlers with very short stunting status (<-3 SD), while the population of toddlers in the control group are toddlers with normal status (>-2).

The sample is part of the number and characteristics of the population which is used to draw conclusions (Sugiyono, 2015:81). Because it is used to draw conclusions, the sample size and criteria must be able to represent the population. Meanwhile, according to Sastroasmoro and Ismael (2014: 17), a sample is a subject obtained in a certain way and is considered to represent an accessible population. Sample used in research as many as 250 toddlers.

According to (Sumanto, 2014:201) Sampling is the process of selecting a number of individuals (research objects) for a study in such a way that the individuals (research objects). The sampling technique for this research is total sampling. Data analysis is a very important part of the scientific method, because data analysis can provide meaning and meaning that is useful in solving research problems. Data analysis aims to obtain an overview of the research results that have been formulated in the research objectives (Notoatmodjo, 2012: 180).

RESEARCH RESULTS

General description of the Mazo Public Health Center UPT, South Nias Regency

UPTD Puskesmas Mazo is in Mazo District which is located in a mountainous area or high hill area with an area of 189 km2 covering 1 (one) District and 10 (Ten) villages, consisting of 10 (Ten) Posyandu and has 2 (two) units Poskesdes located in Tetegawa'ai Ehomo Village, and Orahuahili Village and 2 (two) Pustu units located in Ulumazo Village and Luahanndroito Village

The Mazo Community Health Center UPTD has the following working area boundaries:

1. An area. Geographically, the UPTD location of the Mazo Community Health Center is as follows:
   East : Borders with Gomo District
   West : Borders with Ulususua District
   South side : Borders with Susua District
2. Number of Villages/Subdistricts
   The working area of the UPTD Puskesmas Mazo consists of 10 assisted villages, most of which are in hilly areas and a small number are in mainland areas. The average distance traveled by residents of each village to the Mazo Health Center UPTD is mostly on foot and a small percentage use 2 (two) wheeled and 4 (four) wheeled transportation facilities.

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UPTD Puskesmas Mazo always strives to develop officers into friendly and polite individuals in service so that clients will always be served in an optimal way. Friendly and polite service is the soul of UPTD Puskesmas, so this service will make UPTD Puskesmas Mazo equivalent to services provided by private parties which have become a necessity in making clients satisfied. Therefore, it is necessary to have more focused health planning so that it is hoped that all health program activities can be right on target, on time with sufficient funds so that they are more successful and effective. In accordance with the Health strategy, the Mazo Community Health Center UPTD has 6 (six). The main mandatory program in health services through efforts, namely:

1. Health Promotion (Promkes);
2. Environmental Health (Kesling);
3. Maternal and Child Health (KIA) and family planning;
4. Improving Community Nutrition;
5. Prevention and Eradication of Infectious Diseases;
6. Treatment ;

Apart from the 6 (six) mandatory programs above, the UPTD Puskesmas Mazo is also carrying out program developments which have now started with health services for the elderly, the Desa Siaga program. Development of innovative programs in the form of Posyandu for Pregnant Women, Posyandu for the Elderly, Posyandu for Babies/Toddlers with a target population data collection system, Child Friendly Space, Breastfeeding Corner. Currently, we will continue to strive and innovate to achieve the Vision and Mission of the Mazo Community Health Center UPTD which is carried out through compassionate service to improve the status of the people of Mazo District in particular, supporting the South Nias Regency Government program in the field of Health and supporting the achievement of a Healthy Indonesia and the Millennium Development Goals (MDGs).) in general. UPTD Puskesmas Mazo always strives for quality and affordable health for all levels of society by using the resources and facilities available at UPTD Puskesmas Mazo and carrying out efforts to improve health through Health Promotion, disease prevention efforts, basic medical services and referrals.

Quantitative Research Data Analysis

This study used case control by taking a sample of 250 cases (stunted toddlers). The research results showed that stunting children under five were aged between 12-24 months, namely 67 people (73.6%) and 25-36 months namely 24 people (26.4%) and 52 women (57.1%), the remaining 39 people (42.9%). The characteristics of stunted toddlers were matched with the age and gender of non-stunting toddlers.

Research variables consist of independent variables and dependent variables. Independent variables include age, age at marriage, ethnicity, education, employment, income, knowledge, attitudes, feeding, eating habits and health practices. The dependent variable is stunting.

Mothers who have toddlers aged 12-36 months are known to have a higher reproductive age of less risk, between 20-35 years, 139 people and the remaining reproductive age at risk, between <20 or >35 years, 113 people.

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Table 1. Frequency Distribution of Mother's Married Age in UPTD Work Areas

No.	Mazo Health Center Married Age	n	%
1.	Reproductive risk < 20 or>35 years	113	44.8
2.	Reproduction is less risky 20-35 years old	139	55.2
	Total	252	100.0

Mothers have completed higher education, namely high school or college, and those with lower levels have completed elementary and junior high school with no different proportions. 97 mothers had completed higher education and the remaining 155 had lower education. Mothers generally do not work or are housewives, namely 116 people and the rest work to help their husbands meet the needs of the family, 136 people.

Table2. 3. Frequency Distribution Work Mother in the Mazo Health Center UPTD Work Area

No.	Work	n	%
1.	Work	136	54.0
2.	Doesn't work	116	46.0
	Total	252	100.0

Socioeconomic Influence on Stunting in the Mazo Community Health Center UPTD Work Area

The research results show that family income is generally classified as below the UMK, namely Rp. 2.5 million (75.8%). This illustrates that the family has an inadequate income, but if it is assumed that a family with a large number of children will not necessarily be able to finance their needs well.

The results of the bivariate analysis explain that the calculation results obtained an Odd Ratio (OR) value = 1.132 (95% CI: 0.644-2.512), meaning that mothers who have a low income, namely below the UMK (<Rp. 2.5 million) are 1.132 times more likely to have a stunted toddler than have a high income, namely above the UMK. However, according to chi square statistical calculations, the income factor is not related to stunting in toddlers with a p value of 0.603>0.05.

Socioeconomics acts as an effect modifier and confounding factor between the relationship between dietary diversity and stunting (21). Likewise, in multivariate analysis there was no effect of family income on stunting in toddlers. The statistical test results obtained a p value = 0.603. where the incidence of stunting in toddlers is not caused by family income above or below the minimum wage.

The increase in people's standard of living (welfare), the influence of advertising promotions, and the ease of information, can cause changes in lifestyle and the emergence of new psychogenic needs among middle and upper economic communities. High income that is not balanced with sufficient nutritional knowledge will cause a person to become very consumptive in their daily eating patterns, so that the choice of food ingredients is based more on considerations of taste rather than nutritional aspects (12).

In general, parents of stunted toddlers work as casual laborers on oil palm plantations whose job is to clean areas and harvest produce with an income below the minimum wage.

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Assuming the family consists of 2 people, of course we cannot prioritize care and nutritional needs properly and other expenses are greater waiting to be addressed. This is in accordance with the informant's statement that toddlers rarely consume milk or fruit because the family income is not enough or purchasing power is low. In addition, children's habits of having difficulty eating so that the portion of food served is not finished puts toddlers at risk of stunting.

There is no link between income and stunting. Based on data analysis, it can be seen that almost the same proportion of toddlers who are stunted and those who are not stunted come from low and high income families. The proportion of stunted children under five who come from low-income families is 51.4%, while the proportion of stunted children under five from high-income families is 45.5%.

The Effect of Feeding on Stunting in Toddlers in the Mazo Community Health Center UPTD Working Area

The results showed that feeding children under five was not good (61.4%). This illustrates that mothers in implementing daily feeding according to age are not good, which can cause stunting in toddlers. According to Irianto, a variety of foods is very beneficial for health. Diverse foods are foods that contain the nutritional elements the body needs, both in quality and quantity. Nutrition is usually called tripurpose food, namely, food that contains energy, building and regulating substances. This food contains various vitamins and minerals, which play a role in facilitating the functioning of the body's organs to optimize growth (10).

The results of the bivariate analysis explain that poor feeding tends to lead to stunting in toddlers. Proven by the results of statistical tests showing that there is a significant relationship, and is a risk factor because the OR value is 1.715 which is greater than 1. In line with Lubis' opinion that toddlers who are experiencing a rapid growth process, require relatively more food intake with better quality. good and nutritious. In accordance with findings in the field based on interview results that provision food by preparing the daily family meal menu is not in accordance with good nutritional care, especially consuming additional foods such as milk and fruit (10).

Likewise, the results of the multivariate analysis showed that there was an influence of feeding on stunting in toddlers. The statistical test results obtained a value of p=0.005, where the incidence of stunting in toddlers was caused by poor feeding. The results of the analysis showed that the Exp (B) value was 2.644, meaning that mothers who fed poorly were 2.644 times more likely to have stunted toddlers than those who fed well. In line with research by Hutasoit (2012), that there is an influence between parenting patterns on eating and the occurrence of stunting in elementary school children in North Tapanuli Regency ($p<0.05$ (86). Similar research by Debora (2011), states that parenting patterns have significant relationship to the incidence of stunting in North Biboki District, North Central Timor Regency, East Nusa Tenggara Province ($p<0.05$) (10).

To increase toddler nutrition, families prefer to buy snacks at food stalls to fulfill toddlers' appetites. Mother also rarely cooks pudding to meet the nutritional needs of family members because of her husband's limited money. According to Lubis' opinion, children still

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need a mother's guidance in choosing food so that growth is not disrupted. The mother's form of attention/support towards the child includes attention when the child eats and the parent's attitude in feeding (15).

In general, feeding by mothers to toddlers is at risk of causing stunting. Mothers do not carry toddlers while eating, other than because their parents have made it a habit since childhood to eat alone with other family members, so that mothers can complete their daily work. The mother also did not try to persuade the toddler to consume the portion provided because her husband did not encourage the mother to try to get the child to eat with gusto. According to Ayuningtias (2016), adequate parenting practices are very important not only for the child's immune system but also optimizing the child's physical and mental development and improving the child's health condition. On the other hand, if child care is inadequate, especially food security and children's health can be one of the factors that lead children to suffer from nutritional disorders (10).

Mothers also rarely monitor their toddler's weight regularly while carrying them to Posyandu. This is reinforced by the informant's statement that toddlers are rarely taken to the Posyandu to be weighed and their weight monitored because the distance from the Posyandu to home is quite far and the husband's limitations are limited to work. In line with Wasaraka's opinion, toddlers who are rarely taken to Posyandu to have their weight monitored are prone to disease because they do not receive immunizations that can increase their immune system (15).

Feeding is an important factor to avoid stunting in toddlers so that in the future families can be provided with counseling and education about eating patterns containing good nutrition on a regular basis by empowering officers and cadres through home visits. Families who have stunting and are poor families can become participants in the Supplementary Food Program. Apart from that, there is a need to strengthen breastfeeding support groups and Mother-to-Five Classes.

The Influence of Eating Habits on Stunting in Toddlers in the UPTD Working Area of the Mazo Health Center

The research results showed that toddlers' eating habits were not good (64.0%). This illustrates that the mother is getting used to the toddler's daily food which is not good, such as fruit and temperature, not preparing breakfast, coaxing the toddler by carrying the child, and the food menu is not varied. In Santoso's opinion, vegetables and fruit are also a source of dietary fiber which is easily found in foodstuffs and is almost always found in everyday dishes, either raw (healthy vegetables) or after being processed into various forms of cooking (10).

In Febriana's opinion, eating habits are the mother's efforts or actions to provide food to toddlers with the indicators of breakfast, drinking milk, fruit, snacks, snacks, parenting patterns, a variety of foods, and personal hygiene. Fruit vegetables have low calories and are a source of fiber and micronutrients such as vitamins and minerals (13).

The results of the bivariate analysis explain that bad eating habits tend to lead to stunting in toddlers. This is proven by the results of statistical tests showing that there is a significant relationship, and is a risk factor because the OR value is 1.641, which is greater

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than 1. In line with research by Sari (2016) that the prevalence of stunting in the low protein intake group is 1.87 times greater than the adequate protein intake group. Likewise, regarding calcium and phosphorus intake, the prevalence of stunting in the low calcium intake group was 3.625 times greater than in the adequate calcium intake group (8).

Likewise, the results of the multivariate analysis showed that there was an influence of eating habits on stunting in toddlers. The statistical test results obtained a value of p=0.004, where the incidence of stunting in toddlers was caused by bad habits. The results of the analysis showed that the Exp (B) value was 2.915, meaning that mothers who had bad eating habits were 2.915 times more likely to have stunted toddlers than good eating habits and was the dominant factor influencing stunting. The results of this research are in line with Novita's (2018) research which showed that 41% of toddlers aged 24-59 months experienced stunting. The chi square test shows that there is a relationship between birth length, parenting patterns and food diversity with stunting ($p \leq 0.05$). The results of multivariate analysis show that there is a relationship between food diversity and stunting (p= 0.029, OR=3.213, 95% CI: 1.123-9.189) (89).

Food diversity is a reflection of the quality of food consumed by toddlers. Research conducted in Gresik shows that intake of green vegetables such as spinach can reduce the risk of stunting, because green vegetables contain a lot of iron which functions to prevent stunting. If the amount of iron obtained from food is excessive, it will be stored in the muscles and spinal cord. If iron intake is inadequate, the iron stored in the spine is used to produce hemoglobin.

CONCLUSIONS

Based on the results of research and discussion, it can be concluded that: Family socio-economics has no effect on stunting in toddlers with a p value of 0.603. Mother feeding has an effect on stunting in toddlers with a p value of 0.005. The mother's eating habits influence *stunting*in toddlers and is the dominant variable that influences it with a p value of 0.004. Health practices implemented by families influence stunting in toddlers with a p value of 0.000. The factor that has the most influence on stunting among toddlers in the Mazo Health Center UPTD Working Area is the mother's eating habits with a p value of 0.004.

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