Analysis of the Causes of Stunting in Toddlers in the Work Area of Gandasuli Community Health Center South Halmahera Regency North Maluku (Qualitative Study)

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ABSTRACT

Stunting is a linear growth disorder that is not appropriate for age indicating a long-term event and is an accumulative impact of insufficient nutrient consumption, poor health conditions and inadequate care. This study aims to analyze or explore in depth the causes of stunting in toddler. The research was conducted in the working area of Puskesmas Gandasuli Kab. Halmahera Selatan, North Maluku. This research is a qualitative research with a sampling of researchers using non-probability sampling techniques, or rather researchers using purposive sampling technique. Subjects were determined based on inclusion criteria and obtained as many as 12 toddlers over 24 months. Data analysis in qualitative research is presented based on the data that has been collected and then conclusions are drawn. The results showed that the knowledge about stunting was still lacking, children were not exclusively breastfed causing malnutrition, errors in giving complementary foods which resulted in stunting, low family economic factors, inadequate use of posyandu, as well as poor environmental sanitation, food taboo culture for pregnant women, breastfeeding women and toddlers themselves so they can reduce their food intake which in turn reduces their nutritional status.

Keywords: Stunting, Culture, Public Health, Knowledge, Economic Status, Nutritional Status

INTRODUCTION

Stunting is a form of stunted growth process and is a nutritional problem that needs attention (Picauly & Toy, 2013). The problem of stunting will hamper children's development, this negative impact will continue in the afterlife. This happens because about 70% of brain cell formation occurs since the fetus is still in the womb until the child is 2 years old. If the brain experiences growth disorders, the number of brain cells, cell fibers and brain cell connectors will decrease. According to the Indonesian Ministry in (Maywita, 2018) Stunting in toddlers needs special attention because it can hinder children's physical and mental development. Stunting is associated with an increased risk of illness and death as well as stunted development of motor and mental abilities.

Stunting is one of the nutritional problems experienced by toddlers in the world today. In 2017, 22.2% or around 150.8 million children under five in the world were stunted. However, this figure has
decreased when compared to the stunting rate in 2000, which was 32.6%. In 2017, more than half of stunting children in the world came from Asia (55%) while more than a third (39%) lived in Africa. Of the 83.6 million stunted children under five in Asia, the highest proportion came from South Asia (58.7%) and the lowest proportion was in Central Asia (0.9%) (Joint child malnutrition, elimates, 2018). Stunting prevalence data for children under five collected by the World Health Organization (WHO), Indonesia is included in the third country with the highest prevalence in the Southeast Asia / South-East Asia Regional (SEAR) region. The average prevalence of stunting under five in Indonesia in 2005-2017 is 36.4% (Child stunting data visualizations dashboard, WHO, 2018).

According to Afifah et al in (Wulandari et al., 2019) Toddlers, pregnant women, and the elderly (elderly) are 3 vulnerable groups that are widely found in society. Toddlers are one of the vulnerable groups that must be paid the most attention. The success of controlling as a toddler will have an impact on the future. The fastest growing period for a child is the first 1000 days of life (1000 HPK). Linear growth disorders or stunting, occur mainly in the first 2 to 3 years of life and are a reflection of the interaction effect between lack of energy intake and nutritional intake, and infection (Ayuningtyas et al., 2018).

Puskesmas Gandasuli is one of the Puskesmas in the working area of the South Halmahera District Health Office, which oversees 10 villages in South Bacan District. The number of children under five with stunting in the working area of Puskesmas Gandasuli in 2018 reached 108 people out of 315 toddlers or 34.28% (Secondary data: Puskesmas Gandasuli, 2018) this number has increased from 2017 which reached 83 underfives who suffer from stunting of 276 toddlers or 30, 07%. (Secondary data from Puskesmas Gandasuli, 2017).

Based on the initial survey on June 19, 2019, there were 10 toddlers who suffered from stunting, it is even estimated that the cases will exceed the number of cases found. Based on the results of an initial interview with one of the health workers at Gandasuli Health Center, the main cause of nutrition problems in children under five is food intake. This can be seen from the low coverage of exclusive breastfeeding, namely 47% of the 80% target, irregular feeding practices, lack of active visits to Posyandu which only reached 46%. Meanwhile, based on the results of observations on several toddlers who experience nutritional problems, there are poor eating habits for mothers under five who are stunted during their pregnancy mass, as well as environmental sanitation. Apart from that, the work and income of the parents of children under five are low so that the fulfillment of the nutrition of children under five is not fulfilled properly.

From various studies on stunting and the existing literature, it is known that in addition to infection, stunting is also associated with nutritional deficiencies (micronutrients and macronutrients). There are several nutrients related to stunting such as protein, iron, zinc, calcium, and vitamins D, A and C. In addition, hormonal factors, genetics and low knowledge of parents in parenting, poverty, low environmental sanitation, low food accessibility at the family level, especially in poor families, there is low family access to basic health services (Hadi et al., 2019). Stunting is a sensitive indicator for poor socioeconomic conditions and a predictor for long-term morbidity and mortality. Stunting in early childhood is reversible. Parenting is also a factor in the incidence of stunting in children under five (Kusumawati et al., 2013).

Research conducted by Risani Rambu Podu Loya and Nuryanto (Loya & Nuryanto, 2017) in Katiku Tanah Selatan Subdistrict, Central Sumba Regency, NTT. Stating that the wrong pattern of parenting for toddlers aged 6-12 months has the potential for stunting. Because there is no special treatment in the pattern of care for feeding babies who are indicated as stunting. The patterns of breastfeeding and complementary feeding for toddlers in Central Sumba District do not pay attention to the nutritional needs of children under five, the frequency of correct feeding, types of food that are good for toddler growth and development due to the low knowledge of the subject's mother regarding balanced nutrition, and the availability of foodstuffs in the home ladder has an impact on the variety and type of food provided both in quality and quantity.
MATERIALS AND METHODS

This research had previously conducted an ethical test and passed the number 1637 / KEPK / XI / 2019. The research was conducted in the working area of Puskesmas Gandasuli, North Bacan District, South Halmahera Regency, North Maluku Province from December to January 2020. This research is included in the scope of Public Health Nutrition. This research is a qualitative research with a case study design. This method was chosen in order to obtain in-depth information about stunting in toddlers, and it is hoped that in the data collection process it can also find new findings related to the incidence of stunting in toddlers. Because the research method can develop questions that are presented to research informants.

The affordable population in this study were babies aged 24-59 months who were stunted in the working area of Puskesmas Gandasuli. The informants in this study were mothers of toddlers, fathers of toddlers and holders of the Nutrition program at the Gandasuli Health Center. Retrieval of research informants using purposive sampling in accordance with the inclusion and exclusion criteria set by the researcher. Subjects were collected using secondary and primary data, namely the results of measurements of the toddler's height and weight. The inclusion criteria made by the researcher were:

1. toddlers aged 24 to 59 months
2. toddlers who were stunted
3. toddlers who were not sick
4. mothers under five who were willing to be informants in this study.

As for the exclusion criteria in this study were:

1. toddlers under the age of 24 months
2. toddlers who were not stunted
3. toddlers who were sick
4. mothers under five who were unwilling to become research informants.

In accordance with the sampling technique above, the researchers obtained 12 mothers of stunting toddlers who were willing to become informants in this study. Data collection was carried out by in-depth interviews (in-depth interviews). In-depth interviews of researchers asked about the informants' knowledge, nutritional status, economic status, public health and socio-cultural status. In addition to conducting in-depth interviews, researchers also made observations on the environment where stunting toddlers lived.

The main data in this study are primary data equipped with secondary data. where the primary data of the researchers were obtained from anthropometric measurements, namely the measurement of height (TB) and body weight of children under five (BB). Secondary data were obtained from, the profile of the South Halmahera district health office, the profile of the Gandasuli Health Center, and nutrition reports. Meanwhile, the informants in this study who acted as crosschecks were families of children under five with stunting and nutrition officers at Puskesmas Gandasuli.

The instrument in this study the researcher used interview guidelines which were arranged based on the focus of the study, which contained knowledge, nutritional status, economic status, public health and the socio-cultural status of children under five. Mobile, stationery as a medium in collecting data and documentation. As well as measuring tools for height and weight of toddlers.

The validity of the research by using triangulation of sources and observations. Then the data analysis carried out in this qualitative research is data that has been collected, grouped according to the problem or what is called reducing data and selecting the data obtained in accordance with the problem under study and related to the issues discussed. The data that has been selected are processed and presented in a systematic manner and sorted in narrative form, with the aim of making it more understandable and understood. After these steps are carried out, the fourth step is for the researcher to test the truth according to the data and then conclude the research results.

RESULTS

1. Characteristics of stunting mothers under five

| No | Informant (code) | Age (Years) | Education | Work | Keterangan |
|----|-----------------|-------------|-----------|------|------------|
| 1  | 01              | 40          | SD        | Farmer | Key Information |
| 2  | 02              | 33          | SD        | Housewife | Key Information |
| 3  | 03              | 34          | SMP       | Housewife | Key Information |
| 4  | 04              | 30          | SD        | Farmer  | Key Information |
The identity of stunting mothers consists of various backgrounds, namely as a housewife (IRT), farmers and washing workers. While the educational background itself also varies from elementary school (SD) to Bachelor (S1) levels. The mother of the toddler is the informant of this study, thus enriching the information obtained by the researcher.

**Toddler Mother Knowledge About Stunting**

One of the causes of the high incidence of stunting is the lack of knowledge of mothers under five about stunting. From the results of the researchers' interviews with mother's informants, it was found that on average, your informants heard the word stunting after other people said it, but they did not know what stunting was like. Although there were some informants who said that stunting was a short child, and some did not even know what stunting was. With this limited informant knowledge that causes stunting in toddlers. The following are the results of interviews with several of my informants:

"Saya pernah dengar dong bilang stunting itu kapodo, tapi saya tr tau stunting itu macam bagaimana"

"I've heard people say that stunting is short, but I don't know what stunting looks like"

"Anak kapodo"
"Short child"

"Stunting itu kita tr tau"
"I don't know stunting"

In addition to the notion of stunting, researchers also find out the knowledge of the parents of toddlers, in this case, the mother's informant about the symptoms caused by stunting. From the results of the interviews, there were only a few informants who could accurately describe the symptoms even though they were not yet complete. Indirectly, the mother informants did know that it was a symptom of stunting, but they did not know that the toddler was stunted.

"Kalau kita lihat dari dia lahir itu su BBLR, jadi sampe sekarang juga pertumbuhan me tara sama deng depe Tamang-tamang yang lain agak terlambat, cuman saya bersyukur depe nafsu makan biarpun tara lancar me apa saja dia makan"

"What I see from birth is that my child is LBW, that's why until now her growth is not the same as other friends, it's a bit late, but I am grateful that even though her appetite is not smooth, but whatever food she eats"

"Depe pertumbuhan terlambat"
"Growth is late"

**Stunting Toddler Nutritional Status**
The results of research conducted on mothers under five, all stunting mothers under five did not provide exclusive breastfeeding. Even though we know that breast milk is the best food that should be given to children. This is because breast milk contains optimal nutrients so that the process of growth and development of toddlers is not owned by formula milk or complementary foods (MP-ASI). Exclusive breastfeeding is a baby who is breastfed without any other food or drink including plain water, except for drugs, vitamins, minerals and expressed breast milk. Age under 24 months is a very important period in a child's life because at that time there is rapid growth and development of the brain, which then becomes the basis for the development of knowledge, physically, mentally, spiritually and socially for the preparation of quality human resources (HR).

Research informants did not give exclusive breastfeeding to toddlers because they had to farm, breasts did not produce breast milk, and were prohibited by officers because they were sick. Providing optimal breastfeeding for toddlers in addition to providing complete nutrition also provides protection from disease. The following are some of the reasons conveyed by the informants for not providing exclusive breastfeeding:

“Bagaimana mau kasih toto pe dia, saya Jam 1 malam kadang su keluar pigi kobong ambel sayur deng apa-apa pigi jual dipasar kadang pulang maghrib jadi su tr kase toto sudah. Maghrib masuk rumah dia su tidur! Jadi saya hanya kasih minum dia susu kaleng itu; pun seling deng Teh.

"How can you be given ASI! Every 1 o'clock at night, sometimes I go to the garden to collect vegetables and sell them back to the market, my maghrib comes home, the child is asleep! So only sweetened condensed milk that I give, and sometimes alternating with tea "

“Kalau saya tra kasih karena memang saya pe kuah susu trada, dari melahirkan memang kuah susu tra kaluar”

"I did not give ASI because the milk did not come out, since I gave birth there was no breast milk"

“Saya dapa larang dari petugas kasih toto saya pe anak karena sakit, saya pe anak 2 ini semua tr toto. Saya juga bingung kiapa kong larang”

"I was prohibited by the officers from giving breast milk because I was sick, so both of my children were not breastfed. I am also confused why it is prohibited "

The quality of intake is also influenced by the type of food. Type of food is a variety of food ingredients given to toddlers. Eating a variety of foods is also one of the principles of balanced nutrition to support the fulfillment of nutrients in achieving optimal growth and development of toddlers. The types of complementary foods provided are mashed fruits, soft and mushy foods, and baby food packaged in cans, cartons or sachets.

In giving MP-ASI that is wrong will affect the nutritional status of toddlers, from the results of the study found that some toddlers were given family food, which had a dense texture, and others. The following are the results of the interview:

“Makan sabaranh siih! Tergantung apa yang ada. Mo kasbi, nasi, sayur, ikan, pisang tapi pisang mantah yang rebus”.

"Just eat what it is! Depending on what is available, you want cassava, rice, fish vegetables with steamed raw bananas "

“Paling makan makanan kebun macam kasbi deng pisang, tambah deng nasi. Ikan juga makan tapi tra terus. Dari Puskesmas juga kalau Posyandu kadang kasih biscuit jadi saya kasih makan itu saja tapi kadang minta jajan saya kasih karena dia naflu makan tr bae sekali”

"He ate food from garden products such as bananas, cassava, with rice. Fish is edible but rarely. From the Puskesmas every time I have a Posyandu I often give biscuits, sometimes when I ask for snacks I give them because I have a bad appetite "

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**Economic status of stunting children**

Sometimes work is always used as an excuse for not properly caring for children because Mom always leaves home for a long time. From the results of the research, it was found that there were 6 informants who worked as housewives, 5 farmers and 1 washing labor. The occurrence of stunting in this group of mothers are all housewives. Although there are some mothers who have stunting children under five are also workers.

The following are the results of the interview:

*Kalau saya cuman IRT sedangkan suami cuman Petani*
"For me as a housekeeper, while my husband is a farmer"

*Tong 2 semua Tani*
"We are both farmers"

*Saya denga paitua petani, cuman kadang paitua jaga pigi mangael lagi*
"I am with a farmer husband, but my husband is a fisherman"

At the time of this study, researchers also asked about the income of the parents of toddlers. From the results of the interview, it turns out that the lowest income for parents of children under five is Rp. 750,000 and the highest income was Rp. 3,000,000, after the researcher wanted to ask whether or not this amount of money was sufficient to pay for daily needs, it turned out that all the informants' answers said it was not enough. This is as expressed by one of the informants who has the highest income and is a housewife. With an income of Rp. 3000,000 in a month is not enough to meet daily needs because apart from eating, children's needs also need attention. The level of food consumption is influenced by income and the price of food products. High income will determine good purchasing power. Conversely, low income will reduce purchasing power.

And the following are the results of interviews with informants of mothers under five years of age:

*"Tara tau ee! Uang kamari saya tra hitung-hitung. Yang penting bisa makan saja saya su bersyukur. Mungkin Rp 750.000, ""

"Do not know! Every time there is income, I never count it. If I can eat that I am very grateful. Maybe Rp. 750,000 "

*"Tergantung dari hasil panen. Kalau panen banyak berarti pemasukan juga banyak! Tapi kalau sedikit ya berarti sedikit. Rp. 2000.000 sampai Rp 3000.000, Alhamdulillah untuk torang makan masih cukup dalam 1 bulan, tapi tambah yang berarti uang tra cukup"

"All from the harvest. If you harvest a lot, it means you have a lot of income! But if a little, it means a little result. Rp. 2000,000 to Rp 3,000,000, Alhamdulillah there is still enough to eat in a month, if you add other needs it is not enough "

"Rp.3000.000 itu tara cukup. Baru saya pe anak ini dia pe kebutuhan banyak sekali, belum lagi makan, deng bayar apa-apa saja uang habis”"

"Rp. 3000,000 is not enough. My child's needs are very much, not even for food and other payments that have run out of money "

**Public Health Aspects**

Apart from external factors, there are also internal factors that can affect the nutritional status of children under five, for example the use of posyandu. The use of posyandu is very important to monitor the development and condition of children under five. This has a huge influence on the nutritional status of children under five. So that visits must be carried out regularly and regularly. From the results of the interview, their informant said that they did not carry their child because of the distance, they worked, their child was sick and so on, the following is the interview:
Analysis of the Causes of Stunting in Toddlers.....

"Jaga kerja, jadi kita tara bawah. Kalau dia sakit itu kadang saya cuman beli obat di kios kong kasih minum.""

"Often work, so I do not carry it. If my child is sick, I only buy medicine at the shop to drink."

"Kalau dari Puskesmas dong datang itu saya bawah, tapi kalau suruh datang di Puskesmas itu saya masih baflkir. Kebutuhan yang lain saja tara cukup kong mau bawah dia kasana lagi di Puskesmas"

"When officers from the Puskesmas come, I often take them out, but when asked to come directly to the Puskesmas I still think. The other needs are not enough. How do I keep my child going to the Puskesmas?"

"Sering bawah, cuman tadi ini dia sakit jadi saya tara bawah Posyandu"

"Often takes him under him, only because he was sick before so he didn't go to Posyandu"

Not only the problem of using the posyandu, the use of water and the possession of a family toilet or toilet is one of the problems that can cause stunting. Based on the results of the interview, it was found that stunting toddlers live in homes that do not have access to clean water such as tap water, there is a latrine facility but it is not feasible, the results of the interview are as follows:

"Tong cuman pake air dari kali saja, jadi setiap hari itu mesti bajalan kadar ada di kali ambil air. Tarada jamban deng WC"

"We consume river water, for our daily needs. So every day you have to walk to the river to get water. There is no latrine with toilet here"

"Disini dari dulu semua pake jamban, jadi tong pe jamban semua ada diatas kayu soki. Air itu tong ambil di kali sana"

"All of us here have used latrines for a long time, the latrine is above the mangrove roots. For water, we often use river water for all our daily needs"

"Saya cuman pake air kali deng air hujan, jamban diatas air masing"

"River water and rainwater that I use, and the toilet is above sea water"

Socio-Cultural Aspects

Based on the results of interviews with my informant, it turns out that there are several foods that are considered taboo, such as red snapper, cendro fish. The following are the results of interviews with several informants:

"Selama saya hamil sampe menyusui apa saja makan, kecuali makanan yang memang dapa larang, macam pisang ya ng baku dempet, terus ikan-ikan yang warna merah,"

"From pregnancy to breastfeeding I eat all food, except for prohibited foods such as attached bananas and red fish."

"Mau makan bagaimana, kalau setiap makan itu habis muntah. Cuman memang memang saya paksakan makan, tapi kalau makanan yang dapa larang macam ikan dasar merah itu tara bisa"

"Every time you eat, you must be nauseous, so wanting to eat is also a bit difficult, but you are forced to eat even a little. If food like red snapper is prohibited"

"Io ada berapa makanan yang dong larang saya makan, pokoknya dong larang sampe saya pe anak ini batoto habis baru bisa makan. Tapi untung saya pe anak ini dia tra toto lancar to jadi sa bisa makan, tapi itupun babadiam"

"Yes, there are some foods that are not allowed to eat, as long as I am pregnant to breastfeeding. Incidentally, my child is also not exclusively breastfed so I eat it secretly"
Apart from mothers, it turns out that from the research results the researchers also found that there is a food taboo for toddlers. Following are the results of interviews with several mothers of toddlers:

Sebenarnya beda-beda kalau makanan yang deng larang, kebetulan saya pe anak laki-laki! Di dalam tong pe keluarga itu anak laki-laki dilarang makan sayur ganemo

“It's actually different for foods that are forbidden for boys and girls! Incidentally my son is a boy, and boys are usually prohibited from eating ganemo (vegetables from melinjo leaves)"

“Ada, yang kita inga itu ikan sako. Ikan sako itu kalu saya makan nanti di ape badan Bangka-bangka”

“There is! But as far as I can remember it was only cendro fish. If you eat cendro fish, my child's body will swell"

Ikan sako deng sayur ganemo
“Cendro fish with sayur ganemo (melinjo leaf vegetable)"

Researchers also want to find out whether there are habits in the family that oblige parents, or elders in the family to eat first. Following are the results of interviews with several informants:

“Justru anak-anak yang torang suruh makan kamuka”
“To eat, children we put first”

Tarada, sapapun yang ada dalam rumah kalau mau makan silahkan”
“No, whoever is in this house if you want to eat please”

“Anak-anak yang kamuka”
“Kids first”

**DISCUSSION**

**Knowledge of Mother Toddlers about stunting**

From the results of interviews with the mother's informant, it was found that on average, your informants heard the word stunting after other people said it, but they did not know what stunting was like. Although there were some informants who said that stunting was a short child, and some did not even know what stunting was. With this limited informant knowledge that causes stunting in toddlers.

In addition to the notion of stunting, researchers also find out the knowledge of the parents of toddlers, in this case, the mother's informant about the symptoms caused by stunting. From the results of the interviews, there were only a few informants who could accurately describe the symptoms even though they were not yet complete. For example, what was conveyed by informant 11 who said that since birth his child was LBW. And informant 12 who said the child's growth is late. Indirectly, the mother informants did know it was a symptom of stunting, but they did not know that the toddler was stunted.

The results of interviews with mother's informants about the definition of stunting, the symptoms of stunting, and the impact and prevention of stunting itself, it turns out that the knowledge of Mother Informants about the incidence of stunting in toddlers is still very limited. From the research results, the answers given by the mother's informants were correct but not complete. Apart from that, there were some mother informants who could not answer. Questions asked about the impact and prevention of stunting. As stated by informant 8 and informant 10, who both said they did not know the impact and prevention of stunting.

The lack of knowledge of these mothers' informants, according to the author, is reasonable because when the author asked the triangulation informants about their opinions about people's knowledge of stunting, the triangulation informant said that the community's knowledge about stunting was still far from what they expected! Most of the people here have their education up to elementary school (SD), so it is rather difficult for them to understand the symptoms, the effects and even the prevention of stunting itself. Well, we from the Puskesmas are now trying to carry out a stunting campaign. The stunting campaign itself has several things that they try to make, both by spreading stunting banners but using local languages, with the hope that in the future the community
will find it easier to understand what stunting is. Besides that, we also do the government program of giving MP ASI every time the Posyandu is running.

Judging from the characteristics of the informants, the average stunting mother informants interviewed had low education or only reached the elementary school level (SD). Informants who have knowledge about stunting will affect behavior which is indicated by changes in good lifestyle so that the stunting problem will be low.

Knowledge itself is influenced by factors of formal education. Knowledge is closely related to education, where it is hoped that with a high education, the person will have broader knowledge. However, it needs to be emphasized, it does not mean that someone with low education is absolutely low-knowlegable. This is because increased knowledge is not absolutely obtained from formal education, but can be obtained through non-formal education (Di & Jatibarang, 2016). Knowledge is the result of "knowing" and this occurs after people perceive an object through the five human senses, namely sight, hearing, smell, taste and touch by themselves. At the time of sensing to produce knowledge, it is strongly influenced by the intensity of perceptual attention to the object. Most of human knowledge is obtained through the eyes and ears according to nurut (Retnaningsih, 2016).

This research is also in line with the research conducted by Ismanto et al. (Larsen & Huskey, 2015) in Manado, which stated that 5 children with stunting had parents with knowledge of poor nutrition. Another study was also conducted by Lastantoni 2015 (Novela & Kartika, 2019) with the title analysis of factors related to the incidence of malnutrition in children under five at Cebongan Community Health Center. From the analysis using the Chi-square test obtained P value 0.029 <0.05, which means that there is a significant relationship between knowledge and the incidence of malnutrition in children under five.

**Toddler Nutritional Status**

Exclusive breastfeeding for the first 6 months of life can result in optimal height growth. This study revealed that some children under five received breast milk but not exclusively, which on average was only given for 2 days to 5 months. In addition, it was also found that there were mother informants who did not breastfeed since their child was born. The low level of exclusive breastfeeding in this research area is also in line with what the holder of the Gandasuli Health Center Nutrition program said that the behavior of exclusive breastfeeding in the working area of Puskesmas Gandasuli is still very low, this can be seen from the program achievements in December which still reached 47% of 80% target.

It turns out that in exclusive breastfeeding, the informant mother had problems. In the results of the interview, there were several obstacles faced by mothers under five, one of which was expressed by the Mother Informant who said that she was forced not to breastfeed because she had to do gardening. However, there was another informant who said that since birth his child was not given ASI because there was a prohibition by the Health Officer. The same thing was also expressed by health workers or triangulation informants that exclusive breastfeeding in the working area of Puskesmas Gandasuli is low because there are several factors affecting, for example, economic factors that force them to meet family needs, in addition to maternal health factors that do not allow toddlers to breastfeed.

The results of this study found that the wrong behavior of the mother informant's complementary feeding (MP-ASI), which causes malnutrition under five. Informant 1, when interviewed by researchers, said that the food he gave to his child was rice mixed with salt water or royco. The same thing was said by informant 4 who said that whatever food the informant ate, it was also what his child ate. However, Kasuami is often given, and sometimes also rice.

The behavior of stunting mothers of toddlers who provide the type of food consumed by toddlers. From the results of the interview, 7 informants gave mothers a variety of foods, but because of the child's lack of appetite, it affected nutritional status. In addition, there are also those who
provide the same types of food every day and also because of the child's lack of appetite, which causes stunting.

Nutritional status is a state of status in the human body related to food consumption, and is influenced by internal and external factors such as age, gender, physical activity, disease and socio-economic conditions (Wolley et al., 2016). The results of this study are also in line with what was done by (Putri et al., 2015) who said that a good nutritional status of toddlers is where the physical and mental development of toddlers is balanced. Poor nutritional status can put toddlers at a hindrance in their growth and development processes.

**Economic Status**

Sometimes work is always used as an excuse for not properly caring for children because Mom always leaves home for a long time. From the results of the research, it was found that there were 6 informants who worked as housewives, 5 farmers and 1 washing worker. From that, there was a group of mothers under five who should be able to care for their children properly so that nutrition could be fulfilled and not the occurrence of stunting in this group of mothers are all housewives. Although there are some mothers who have stunting children under five are also workers.

In addition to the work of the informants at the time of the research, the researcher also asked about the income of the parents of toddlers. From the results of the interview, it turns out that the lowest income for parents of children under five is Rp. 750,000 and the highest income was Rp. 3,000,000, after the researcher wanted to ask whether or not this amount of money was sufficient to pay for daily needs, it turned out that all the informants' answers said it was not enough. This is as expressed by one of the informants who has the highest income and is a housewife. With an income of Rp. 3000,000 in a month is not enough to meet daily needs because apart from eating, children's needs also need attention. The level of food consumption is influenced by income and the price of food products. High income will determine good purchasing power. Conversely, low income will reduce purchasing power.

Another cause is due to uncomfortable living. One of the standards set by the government, in this case the Ministry of Public Works and Public Housing (Kemen PUPR RI, 2020) in preventing stunting, is to determine the criteria for a livable house, namely the construction structure of roofs, floors and walls that meet safety and are sturdy and not cracked. Like the reality in the field, most of the stunting children live in uncomfortable houses, due to having a house whose roof uses thatch leaves, the floor is still from the ground and the number of houses that were cracked as a result of the earthquake that occurred a few months earlier in South Halmahera Regency.

In addition to triangulating sources, the researcher also triangulated observations to have a deeper look at the feasibility of houses inhabited by stunting children. From the observations, it was found that 3 houses were inhabited by stunting toddlers, the structure of the building met safety and was sturdy and did not crack. And most of the children under five still live in unfit for habitation

The economic factor according to the author is one of the factors that causes the incidence of stunting to be very high in the working area of Puskesmas Gandasuli. Low economic status is considered to have a significant impact on the likelihood of children being thin and stunted (Masyarakat, 2018). The low economic status of the family will affect the choice of food they consume so that it usually becomes less varied and less in number, especially in foods that function for children's growth such as sources of protein, vitamins and minerals, thereby increasing the risk of malnutrition (Sebataraja et al., 2014).

The results of this study are in line with research conducted by Nasikah and Margawati in Semarang, that low family economic status is a significant risk factor for the incidence of stunting in children aged 2-3 years. Children with lower family economic status are at risk of stunting (Nasikah & Margawati, 2012).
Public Health

The research, which was conducted on December 21, 2019, researchers conducted interviews with mother informants. The use of posyandu is one that researchers want to explore public health factors in the incidence of stunting in children under five.

Apart from external factors, there are also internal factors that can affect the nutritional status of children under five, for example the use of posyandu. The use of posyandu is very important to monitor the development and condition of children under five. This has a huge influence on the nutritional status of children under five. So that visits must be carried out regularly and regularly.

Based on the results of this study, it can be seen that another cause of the high incidence of stunting in the work area of Puskesmas Gandasuli is a lack of active visits to posyandu which only reaches 46%, this was said by triangulation informants. The triangulation informant also revealed that the problem was actually a common dilemma between medical personnel and people living in the archipelago. Uncertain weather causes health services to be disrupted, the distance traveled is too far, the transportation used by health workers and the community is very limited, economic problems and finally family support in the use of posyandu.

In addition to those disclosed by the triangulation informant, previous researchers have also conducted interviews with toddler mother informants who on average had the same reasons why they did not make good use of the posyandu, namely because of the distance traveled, weather, husband's support and economic problems.

Apart from the problem of using the posyandu, water use and the possession of a family toilet or toilet are among the problems that can cause stunting. Based on the results of the interview, it was found that stunted children live in homes that do not have access to clean water such as tap water, there are latrine facilities but are not feasible.

In line with the results of the interview, the researcher also interviewed the triangulation informant. According to the opinion of this health worker informant that for the environment as a whole it is far from proper and clean, it is continued again that latrines that are above sea water have indirectly polluted the environment. Human excrement under the sea is then eaten by fish, and the fish is consumed by us. It is clear that the fish we eat give rise to bacteria which will ultimately affect a person's nutritional status. Treatment of drinking water that is wrong without going through a process of deposition, filtering. because the average water used by the informant is river water.

Owning a pet that is left free will greatly affect environmental sanitation. Based on the results of interviews, most informants have pets that are not caged. Toddlers who are stunted are the result of chronic nutritional problems as a result of insufficient food intake, coupled with infectious diseases and environmental problems. The condition of the physical environment greatly affects the health of the occupants of the house, including the nutritional status of children under five. (Boucot & Poinar Jr., 2010)

Several studies have also proven that environmental sanitation is also very influential on the nutritional status of children under five. Toilets that do not meet the standards such as slung toilets have a greater potential to cause stunting in children than toilets that meet the standard of sitting toilets. The existence of latrines that do not meet the theoretical standards has the potential to lead to infectious diseases due to poor hygiene and sanitation which can interfere with the absorption of nutrients in the digestive process. (Alfadhila Khairil Sinatrya & Lailatul Muniroh, 2019)

The waste disposal facility factor is very important because it indicates the sanitation of a particular place. Also associated with diarrhea. Clean water facilities are one of the dominant factors that affect the incidence of diarrhea among children under five. To prevent diarrhea, clean water must be taken from a good source. As stated by Ardiyanti (Zairinayati & Purnama, 2019) children who come from families with unprotected water sources and types of latrines that do not meet standards are more at risk of stunting. Which means this research is in line with previous research
**Socio-Cultural Aspects**

From the results of the study, it can be seen that all interviewed mother informants had abstinence from food during pregnancy, there was even 1 informant who had abstinence from food and breastfeeding. This was revealed by informant 4, she did not eat red snapper during pregnancy and breastfeeding because she was afraid that when her child was born, her skin was scaly like a fish, and red and red. However, unlike informant 4, informant 8, who also has abstinence from eating, prefers to keep eating because it is for the baby's nutritional needs. Some of the foods considered taboo by the informants included stingrays, red snapper, squid, attached bananas and banana blossoms. Abstinence from eating stingrays has the reason that the form of stingrays is not common so it is feared that it will affect the physical form of the child being conceived. Squid and stingrays are animal side dishes, a source of protein for pregnant women who believe in taboo that squid and stingrays are at risk of experiencing protein deficiency.

This is in line with research conducted by (Ernawati et al., 2013) showing that maternal protein intake during pregnancy has a significant effect on stunting nutritional status. As with the food taboo in pregnant women, the same thing happens to toddlers. The results of interviews with 12 informants showed that some children under five had no food, such as salted fish, shark, cendro fish, ganemo (vegetables made of melinjo leaves) chilies, and quail eggs. Salted fish, if eaten, will cause coughing in the child, this was said by the informant 4. Then the cendro fish will cause the child's body to become swollen, said the informant 12. However, some mother informants also said that their child did not have abstinence from eating as stated by informant 1 there is no taboo, all food can be eaten.

The many types of food sources of animal protein that are tabbed for children under five cause the choice of animal source foods to decrease, this greatly affects the nutritional status of children under five such as KEP (lack of protein energy), besides that animal protein also plays a major role in children's growth and intelligence, so that with the many types of protein sources that are tabbed will cause the growth and development of children's intelligence to be not optimal. Even though fish is a side dish of protein that is cheap and has an affordable price for people in South Halmahera district. It is feared that the limitation on eating marine fish will cause an increase in the number of stunting children under five.

Then the researcher wanted to ask more about eating habits in the family, for example, there are rules that require parents or elders in the family to eat first. The results of interviews with the informants of mothers of stunting that all of them did not have such rules which in turn would affect the nutritional status of the children.

Indonesia consists of hundreds of tribes and various cultures. Because each area consists of different tribes and ethnicities. Each tribe has a diverse culture, including the people in the working area of the Gandasuli Health Center. The same thing was said by Harjoyo that values in culture are relative or between one society is different from another society.

Culture is a factor that relates to the values and views of society that are born from existing habits, and in turn encourages people to behave in accordance with cultural demands. For example, the food that is currently developing is a view that does not consume foods that are prohibited by culture, because it can have an impact on the nutritional status of children and toddlers.

Culture, traditions, or habits that exist in society such as dietary restrictions and wrong diet can cause nutritional problems, especially for toddlers. This will have an impact on the growth and development of toddlers Adriani and Wirjatmadji 2013 in (Illahi & Muniroh, 2018).
CONCLUSION
1. Lack of parental knowledge about stunting.
2. Non-exclusive breastfeeding and unsuitable complementary foods that affect the nutritional status of children under five.
3. The low economic status of the family will affect the choice of food they consume so that it is usually less varied and less in number, especially in foods that function for children's growth, such as sources of protein, vitamins and minerals, thereby increasing the risk of malnutrition.
4. Apart from external factors, there are also internal factors that can affect the nutritional status of children under five, the use of posyanu. The use of posyandu is very important to monitor the development and condition of children under five. This has a huge influence on the nutritional status of children under five. Apart from Posyandu, the use of clean water and latrines can also trigger infectious diseases due to hygiene and poor sanitation which can interfere with the absorption of nutrients in the digestive process.
5. There is still plenty of food that should be consumed but still taboo for pregnant women, nursing mothers, and toddlers. As a result of this taboo, pregnant women, breastfeeding mothers, and toddlers do not dare to eat certain foods, thus reducing their nutritional intake which in turn affects their nutritional status.

SUGGESTION
1. The District Government of South Halmahera should make efforts to increase your knowledge regarding the impact and prevention of stunting.
2. There is a need for nutritional counseling regarding exclusive breastfeeding and complementary breastfeeding for toddlers organized by the government of South Halmahera Regency, as well as ongoing monitoring and evaluation of work programs focused on solving nutritional status problems in an effort to improve health status.
3. There needs to be an integrated and multisectoral program to increase family income, to tackle the incidence of stunting in children under five.
4. Improve health services for puskesmas through early detection activities by measuring the height and weight of children under five routinely every month through the posyandu. In addition to early detection, the puskesmas should also provide education on clean and healthy living habits.
5. It is suggested to the related parties that there is an effort to decrease the belief in abstinence from food for pregnant women, breastfeeding mothers and toddlers. itself through routine outreach to mothers of toddlers in collaboration with families and community leaders who are key persons in health communication.
6. It is hoped that further research on stunting is expected. The researcher hopes that the next researcher can triangulate the method so that new phenomena can emerge.

REFERENCES
Alfadhila Khairil Sinatrya, & Lailatul Muniroh. (2019). Hubungan Faktor Water, Sanitation, and Hygiene (WASH) dengan Stunting di Wilayah Kerja Puskesmas Kotakulon, Kabupaten Bondowoso. Amerta Nutrition, 3(3), 164–170. https://doi.org/10.2473/amnt.v3i3.2019.164-170
Ayuningtyas, A., Simbolon, D., & Rizal, A. (2018). Asupan Zat Gizi Makro dan Mikro terhadap Kejadian Stunting pada Balita. Jurnal Kesehatan, 9(3), 445. https://doi.org/10.26630/jk.v9i3.960
Boucot, A., & Poinar Jr., G. (2010). Stunting. Fossil Behavior Compendium, 5, 243–243. https://doi.org/10.1201/9781439810590-c34
Di, S., & Jatibarang, T. P. A. (2016). Pengaruh Pengetahuan Terhadap Sikap Ibu Rumah Tangga Dalam Upaya Mengatasi pencemaran Lingkungan Akibat Sampah Di Tpa Jatibarang. Journal of Edugeography, 4(1), 24–32. http://journal.unnes.ac.id/sju/index.php/edugeo
Ernawati, F., Rosmalina, Y., & Permanasari, Y. (2013). Pengaruh Asupan Protein ibu hamil dan panjang bayi lahir terhadap kejadian stunting pada anak usia 12 bulan di kabupaten bogor. *Penelitian Gizi Dan Makanan*, 36(1), 1–11. http://ejournal.litbang.kemkes.go.id/index.php/pgm/article/view/3388

Estimates, 2018). Joint child malnutrition. https://www.who.int/nutgrowthdb/estimates2017/en/

Hadi, M. I., Kumalasari, M. L. F., & Kusumawati, E. (2019). Faktor Risiko yang Berhubungan dengan Kejadian Stunting di Indonesia: Studi Literatur. *Journal of Health Science and Prevention*, 3(2), 86–93. https://doi.org/10.29080/jhsp.v3i2.238

Illahi, R. K., & Muniroh, L. (2018). Gambaran Sosio Budaya Gizi Etnik Madura Dan Kejadian Stunting Balita Usia 24–59 Bulan Di Bangkalan. *Media Gizi Indonesia*, 11(2), 135. https://doi.org/10.20473/mgi.v11i2.135-143

Kemen PUPR RI. (2020). Permen PUPR No. 8 Tahun 2020. Diakses dari https://pu.go.id/assets/announcements/Permen-PUPR-No-8-Tahun-2020.pdf

Kusumawati, E., Rahardjo, S., & Sari, H. P. (2013). Model Pengendalian Faktor Risiko Stunting pada Anak Usia di Bawah Tiga Tahun. *Jurnal Kesehatan Masyarakat*, 9(3), 249–256. http://journal.fkm.ui.ac.id/kesmas/article/view/572

Maywita, E. (2018). Faktor Risi ko Penyebab Terjadinya Stunting Pada Balita Umur 12-59 Bulan Di Kelurahan Kampung Baru Kec. Lubuk Begalung Tahun 2015. *Jurnal Riset Hesti Medan Akper Kesdam I/BB Medan*, 3(1), 56. https://doi.org/10.34008/jurhesti.v3i1.24

Nasikhah, R., & Margawati, A. (2012). Faktor Risiko Kejadian Stunting Pada Balita Usia 24 – 36 Bulan Di Kecamatan Semarang Timur. *Journal of Nutrition College*, 1(1), 176–184. https://doi.org/10.14710/jnc.v1i1.738

Novela, V., & Kartika, L. (2019). Faktor-Faktor Status Gizi Kurang Pada Anak Usia Prasekolah di Wilayah Kerja Puskesmas Guguk Panjang Kota Bukittinggi. *Jurnal Endurance*, 4(2), 359. https://doi.org/10.22216/jen.v4i2.4021

Retnaningsih, R. (2016). Hubungan Pengetahuan Dan Sikap Tentang Alat Pelindung Telinga Dengan Penggunannya Pada Pekerja Di Pt. X. *Journal of Industrial Hygiene and Occupational Health*, 1(1), 67. https://doi.org/10.21111/jihoh.v1i1.607

Sebataraja, L. R., Oenzil, F., & Asterina, A. (2014). Hubungan Status Gizi dengan Status Sosial
Analysis of the Causes of Stunting in Toddlers......

Ekonomi Keluarga Murid Sekolah Dasar di Daerah Pusat dan Pinggiran Kota Padang Lisbet Rimelfhi Sebataraja., *Jurnal Kesehatan Andalas*, 3(2), 182–187. https://doi.org/10.25077/jka.v3i2.81

WHO, 2018. Child Stunting data Visualizations Dashboard. https://apps.who.int/gho/data/node.sdg.2-2-viz-1?lang=en

Wolley, N. G. A., Gunawan, S. , & Warouw, S. M. (2016). Perubahan status gizi pada anak dengan leukemia limfoblastik akut selama pengobatan. *E-CliniC*, 4(1). https://doi.org/10.35790/ecl.4.1.2016.11693

Wulandari, C., Setiyarini, D. W., Bariroh, K., Laraswati, L., Azhari, M. F., & Ibnu Aziz, R. A. (2019). Upaya Peningkatan Status Kesehatan Kelompok Rentan dengan Pendekatan Pembelajaran dan Pemberdayaan Masyarakat. *Jurnal Pengabdian Kepada Masyarakat (Indonesian Journal of Community Engagement)*, 5(2), 167. https://doi.org/10.22146/jpkm.29999

Zairinayati, & Purnama, R. (2019). Hubungan Hygiene Sanitasi dan Lingkungan dengan Kejadian Stunting Pada Balita. *Jurnal Ilmiah Multi Science Kesehatan*, 10(1), 78–91. http://jurnal.stikes-aisyiyah-palembang.ac.id/index.php/Kep/article/view/186