PUBLISHER:
JURUSAN GIZI
POLTEKKES KEMENKES
BANJARMASIN
JL. H. MISTAR COKROKUSUMO NO.1A
BANJARBARU, KALIMANTAN SELATAN
70714

JR-PANGZI
JURNAL RISET
PANGAN DAN GIZI
OPEN JOURNAL SYSTEM (OJS) SINCE SEPTEMBER 2018
http://www.ejurnalpangan-gizipoltekkesbjm.com
jurnalgizi.poltekkesbjm@gmail.com

Hubungan Pemberian Makanan, Pemberian ASI Esklusif, Dan BBLR dengan Kejadian *Stunting* pada Balita

The Relationship Between Food, Exclucive Breastfeeding And LBW With Eventh Stunting In Toddlers

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Article Info
Article History
Received Date: 04 September 2023
Revised Date:10 Maret 2024
Accepted Date:15 Maret 2024

ABSTRAK.

Balita adalah kelompok yang rentan masalah gizi salah satunya adalah stunting karena pada usia tersebut mereka mulai mengenal dan mengikuti pola makan orang dewasa. Stunting disebabkan oleh faktor yang sangat komplek yaitu ketahanan pangan, pengetahuan ibu, pola asuh, pelayanan kesehatan, pengetahuan keluarga, berat badan lahir, penyakit infeksi, dan asi ekslusif. Penelitian ini bertujuan untuk mengetahui hubungan antara pemberian makanan, pemberian asi esklusif dan bblr dengan kejadian stunting pada balita di Wilayah Kerja Puskesmas Pugaan Kabupaten Tabalong. Metode penelitian ini menggunakan observasional analitik dengan rancangan kasus kontrol. Populasi adalah balita usia 24-59 bulan dengan sampel penelitian 82 orang yang diambil menggunakan dengan teknik purposive sampling. Variabel penelitian ini yaitu pemberian makanan, pemberian asi esklusif, bblr dan kejadian stunting. Pengambilan data dengan cara kuesioner dan wawancara serta analisis data menggunakan uji Chi-Square. Hasil penelitian ini menunjukan 95,2% pemberian makanan kurang tepat pada balita stunting dan 2,4% pada balita tidak stunting. Terdapat 41,5% ASI Ekslusif pada balita stunting dan 68,3% pada balita tidak stunting. Terdapat 24,4% balita yang mengalami BBLR pada balita stunting dan 14,6% pada balita tidak stunting. Ada hubungan pemberian makanan, dan pemberian ASI Ekslusif dengan kejadian stunting. Tidak ada hubungan berat badan lahir dengan kejadian stunting. Diharapkan kepada ibu balita sering mengikuti penyuluhan-penyuluhan di posyandu dan di puskesmas, ataupun mencari informasi tentang stunting di media sosial.

Kata kunci:
Pemberian Makanan, Pemberian ASI Ekslusif, BBLR, Kejadian Stunting

Keywords:
Feeding, Exclusive Breastfeeding, Low Birth Weight, and EventsStunting

Toddlers are a group that is vulnerable to nutritional problems, one of which is stunting because at that age they begin to recognize and follow adult diets. Stunting is caused by very complex factors, namely food security, maternal knowledge, parenting patterns, health services, family knowledge, birth weight, infectious diseases, and exclusive breastfeeding. This study aims to determine the relationship between feeding, exclusive breastfeeding and bblr with the incidence of stunting in toddlers in the Pugaan Community Health Center Working Area, Tabalong Regency. This research method uses analytical observational with a case control design. The population is toddlers aged 24-59 months with a research sample of 82 people taken using purposive sampling techniques. The variables in this study are feeding, exclusive breastfeeding, birth weight and stunting. Data were collected using questionnaires and interviews and data analysis using the Chi-Square test. The results of this study showed that 95.2% of the feeding was inappropriate for stunted toddlers and 2.4% for non-stunting toddlers. There is 41.5% exclusive breastfeeding in stunted toddlers and 68.3% in non-stunting toddlers. There are 24.4% of toddlers who experience LBW among stunted toddlers and 14.6% of non-stunting toddlers. There is a relationship between feeding and exclusive

breastfeeding with the incidence of stunting. There is no relationship between birth weight and the incidence of stunting. It is hoped that mothers of toddlers will often attend counseling at posyandu and at community health centers, or look for information about stunting on social media.

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INTRODUCTION

Background

Stunting is an underweight for age (<-2SD), characterized by a child's growth delay which results in failure to reach a normal height according to the child's age. The short-term impact is in the form of increased mortality and morbidity while the long-term impact is in the form of short stature, decreased reproductive health, decreased learning capacity, and increased non-communicable diseases. In the end, stunting has an impact on cross-generational shortness. Toddlers are more at risk of stunting because they are more susceptible to change.[1]

The World Healthy Organization for Children Malnutrition (WHO) in 2019 reported stunting incidence data of <20%, the prevalence of stunting in Indonesia is higher than several other countries in Southeast Asia, such as Vietnam at 23% and Thailand 16% (Millennium Challenge Account Indonesia) in 2015

Based on data from the Tabalong District Health Office, in 2021 the prevalence of stunting in Tabalong District was the second highest, namely 19.07%, while in 2022 from January to July it had a stunting prevalence of 27.68%.

Giving food to toddlers really needs to be considered because their food intake depends on the adults who care for them. Food intake in toddlers plays an important role in their growth and development.

Exclusive breastfeeding for toddlers can provide benefits as complete nutrition, increase endurance, increase mental and emotional intelligence that is stable and spiritual.

Babies with low birth weight need serious treatment, because in these conditions babies easily experience hypothermia and have not yet fully formed their organs so that they are prone to death. Low birth weight is associated with fetal and neonatal mortality and morbidity, growth disorders, cognitive development disorders and disease. chronic in the future.

The existence of the problems described above shows that the importance of the variables that affect stunting. Therefore, it is necessary to study more deeply the relationship between feeding, exclusive breastfeeding and low birth weight with the incidence of stunting in toddlers in the working area of the Pugaan Health Center.

Objective

The general objective of this study was to determine the relationship between feeding, exclusive breastfeeding, and low birth weight with the incidence of stunting in toddlers in the Work Area of the Pugaan Health Center, Tabalong Regency. The specific objectives of the study were to identify the characteristics of the respondents' age, gender, and to analyze the relationship between feeding, exclusive breastfeeding, and low birth weight with the incidence of stunting in toddlers in the working area of the Pugaan Health Center, Tabalong.

METHOD

Research type and design

This type of research is analytic observational with a case-control research design.

Population and sample

The population in this study were all mothers with toddlers who were in the working area of the Pugaan Health Center, totaling 419 people and the sample in this study was part of the population, totaling 82 people.

Data collection techniques

The sampling technique used purposive sampling. Primary data in the form of feeding, exclusive breastfeeding, and low birth weight with the incidence of stunting in toddlers obtained through interviews with questionnaires.

Analysis

Data analysis was carried out using the Chi-Square test ($x2$) with $\alpha = 0.05$ to assess the relationship between feeding, exclusive breastfeeding and low birth weight with the incidence of stunting in toddlers in the working area of the Pugaan Health Center.

RESEARCH RESULT

Characteristics of Toddlers

Toddler age

It is known that there are more toddlers aged 36-60 months (53.7%) compared to toddlers aged 24-35 months (46.3%) (Table. 1)

Table 1. Distribution of the frequency of children under five in the Work Area of the Pugaan Health Center

No	Age	n	%
1	24-35 months	38	46,3
2	36-60 months	44	53,7
	Amount	82	100

Gender

It is known that toddlers have male gender (52.4%) more than toddlers have female gender (47.6%) (Table. 2).

Table. 2 Gender distribution of toddlers in the Work Area of the Pugaan Public Health Center, Tabalong Regency

No	Gender	n	%
1	Man	43	52,4
2	Woman	39	47,6
	Amount	82	100

The variables studied

Stunting Incident

It is known that 50% (case) of toddlers are stunted and 50% are not stunted (Table 3).

Table.3 Frequency Distribution of Stunting Incidents in the Work Area of the Pugaan Health Center, Tabalong Regency

No	Stunting Classification	n	%
1	Stunting	41	50
2	Not Stunting	41	50
	Amount	82	100

Feeding

It is known that there are fewer stunted toddlers who are given proper food (4.8%) compared to those who are not properly fed (95.2%) (Table. 4).

Table.4 Distribution of the Frequency of Feeding Stunted Toddlers in the Work Area of the Pugaan Community Health Center, Tabalong Regency

No	Feeding	n	%
1	Appropriate	2	4,8
2	Less precise	39	95,2
	Amount	41	100

Exlusive breastfeeding

It is known that there are fewer stunting toddlers who are given exclusive breastfeeding (41.5%) than those who are not exclusively breastfed (58.5%) (Table 5).

Table.5 Distribution of the Frequency of Exclusive Breastfeeding for Stunted Toddlers in the Work Area of the Pugaan Health Center

No	Exclusive breastfeeding	n	%
1	Exclusive breastfeeding	17	41,5
2	Not Exclusive breastfeeding	24	58,5
	Amount	41	100

It is known that there are more non-stunted toddlers who are given only exclusive breastfeeding (68.3%) compared to those who are not given exclusive breastfeeding (31.7%) (Table 6).

Table. 6 Frequency Distribution of Exclusive Breastfeeding for Non-Stunted Toddlers in the Pugaan Health Center Work Area

No	Exclusive breastfeeding	n	%
1	Exclusive breastfeeding	28	68,3
2	Not Exclusive breastfeeding	13	31,7
	Amount	41	100

LBW

It is known that there are fewer stunting toddlers with LBW (24.4%) than those who are not LBW (75.6%) (Table. 7).

Table.7 Frequency Distribution of LBW among stunting toddlers in the Working Area of the Pugaan Public Health Center

No	LBW	n	%
1	LBW	10	24,4
2	Not LBW	31	75,6
	Amount	41	100

It is known that the LBW infants who are not stunted (14.6%) are less than those who are not LBW (85.4%) (Table 8).

Table. 8 Frequency Distribution of LBW among toddlers who are not stunted in the Working Area of the Pugaan Public Health Center

No	LBW	n	%
1	LBW	6	14,6
2	Not LBW	35	85,4
	Amount	41	100

The relationship between the independent variables and the dependent variable

The relationship between feeding and the incidence of stunting in toddlers

The feeding of toddlers who suffer from stunting is more inaccurate, namely 39 people (95.2%) compared to toddlers who are not stunted, namely 1 person (2.4%) and the feeding of toddlers who are not stunted is more correct, namely 40 people. (97.6%) compared to stunted toddlers, namely 2 people (4.8%) (Table. 9)

Table. 9 Distribution of the Relationship between Feeding and Stunting in toddlers in the Work Area of the Pugaan Community Health Center, Tabalong Regency.

Feeding	*Stunting*		Tidak *Stunting*	
	n	%	n	%
Less precise	39	95,2	1	2,4
Appropriate	2	4,8	40	97,6
Amount	41	100	41	100
p = 0,00	*a=0,05*		*OR = 0,004*	

The Chi Square statistical test obtained a value of p = 0.000 (p <α) with an OR = 0.004, which means that there is a significant relationship between feeding and the incidence of stunting in children under five in the Work Area of the Pugaan Health Center, Tabalong Regency. Obtained with an OR value < 1 means that children who are not properly fed have a 0.004 times the risk of becoming stunted compared to those who are given proper feeding.

The relationship between exclusive breastfeeding and the incidence of stunting in toddlers

Exclusive breastfeeding for stunted toddlers is more common in the non-exclusive breastfeeding category with 24 percentages (58.5%) compared to non-stunted toddlers with 13 percentages (31.7%). Meanwhile, there were more children under five who were not stunted in the Exclusive Breastfeeding category with 28 percentages (68.3%) compared to stunted toddlers with 17 percentages (41.5%) (Table. 10)

Table.10 Relationship Distribution of Exclusive Breastfeeding with the Incidence of Stunting in Toddlers in the Work Area of the Pugaan Public Health Center, Tabalong Regency

Exclusive breastfeeding	*Stunting*		Not *Stunting*	
	n	%	n	%
Not Exclusive breastfeeding	24	41,5	28	68,3
Exclusive breastfeeding	17	58,5	13	31,7
Amount	41	100	41	100
p= 0,01	*a= 0,05*	*OR= 0,331*		

The Chi Square test statistic showed p=0.01(p<α) with OR=1.742 so there is a relationship between exclusive breastfeeding and the incidence of stunting in the Work Area of the Pugaan Health Center, Tabalong Regency. Obtained with an OR <1, meaning that children who are not given exclusive breastfeeding have a 0.331 times the risk of becoming stunted compared to those who are given exclusive breastfeeding.

The relationship between LBW and the incidence of stunting in toddlers

It is known that 31 children with stunting did not experience LBW with a percentage of 75.6%. Meanwhile, there were 35 children under five who were not stunted in the non-LBWW category with a percentage of 86.4% (Table 11).

Table.11 Distribution of the Relationship between LBW and Stunting in Toddlers in the Work Area of the Pugaan Public Health Center, Tabalong Regency

LBW	*Stunting*		Not *Stunting*	
	n	%	N	%
LBW	10	24,4	6	14,6
Not LBW	31	75,6	35	86,4
Amount	41	100	41	100
p=0,33	*a= 0,05*		*OR=1.742*	

The Chi Square test showed a value of p = 0.33 (p <α) so there was no relationship between birth weight and the incidence of stunting in the Working Area of the Pugaan Health Center, Tabalong Regency.

DISCUSSION

Characterisrics of Toddlers

According to the results of the study, it was found that the age of toddlers 24-35 months (46.3%) was less than that of 36-60 months (53.7%). According to TNP2K (2018), a fetus that does not receive proper nutrition before birth and during the early period after birth will result in stunting, but stunting begins to appear after the child is 2 years old. Children who grow and develop disproportionately will generally have below average intellectual abilities compared to children who grow well [2]. This is related to changes in the type of food, namely from breast milk to MP-ASI. In addition, it is also affected by exposure to diseases related to hygiene in the food supply and environmental sanitation. Toddlers aged 2-5 years have a greater potential for exposure to infectious diseases because they play a lot at home or outside school and do lots of activities [3].

According to the results of the study, it was found that there were more males (52.4%) than females (47.6%). That the majority are male. Differences in the shape of muscle bones in boys and girls have an effect on differences in weight and height, especially men are more at risk for experiencing malnutrition due to more protein energy needs in men [4]. Gender is a strong determinant of stunting in Mozambique [5].

Feeding

Inappropriate feeding of toddlers who were stunted was 39 people (95.2%) more than the right 2 people (4.8%). The results of interviews and collecting in-depth questionnaires with mothers of toddlers found that many mothers of toddlers were less regular in providing food to their children and also usually mothers of toddlers did not accompany their children to eat so that toddlers did not finish their food and also often ate outside food such as snacks after eating snacks. the kids don't want to eat anymore. The habits of parents by giving food to their children can affect the nutritional status of children. Parental behavior will develop if there is a stimulus, both from within (internal) and from outside (external) [6].

Adequacy of children's nutrition which is an important thing in the growth and development of children and inadequate nutrition can result in an impact on the health status of children [7]. The results of the chi square stated that there was a close relationship between the feeding of stunted toddlers (p≤0.05) and was influenced by the characteristics of toddlers stating that the percentage where toddlers with stunting was more dominant in the male sex (58.5%) was higher when compared to with stunting toddlers who are female (41.5%).

According to the results of the study, it was found that proper feeding for toddlers was not stunting, showing as many as 40 people (97.6%) more than 1 person (2.4%) who were not right. From the results of interviews with toddler mothers in serving interesting food for children, for example vegetable egg rolls, and also providing regular meals for children. The type of food given must be in accordance with the needs of the body and the digestive power of toddlers, types of food that are more varied and have sufficient nutritional value are very important to prevent toddlers from experiencing malnutrition [8].

Exclusive breastfeeding

Exclusive breastfeeding for stunting toddlers showed as many as 17 people (41.5%) less than not exclusive breastfeeding as many as 24 people (58.5%). The results of in-depth interviews with mothers of toddlers, it is known that many mothers of toddlers give breast milk combined with formula milk. The most common reason given by mothers of toddlers is that breast milk is not smooth, besides that it is easy to get formula milk so that mothers are less trying to increase their milk production. This is in line with other studies which show that the percentage of stunting in toddlers aged 12-35 months is greater in toddlers who are not exclusively breastfed (51.4%) compared to toddlers who are exclusively breastfed (19%) [9].

The results of the study found that 28 people (68.3%) had more exclusive breastfeeding for toddlers who were not stunted compared to 13 people (31.7%) who were not exclusively breastfed. The results of interviews with mothers under five obtained information that they could provide exclusive breastfeeding because, for example, the mother's milk came out immediately after giving birth and was given to the baby, and the mother already knew that exclusive breastfeeding was given when the toddler was 0-6 months old. As well as the support from the husband and family around to provide ASI. Husband's support plays a major role in the mother's success in giving exclusive breastfeeding. The greater the support given by the husband, the greater the chance for the mother to breastfeed her baby. This will affect the smoothness of the milk ejection reflex, because experiencing anxiety will cause the work function of the hormones prolactin and oxytocin to decrease. produce milk [10].

LBW

The results of the study found that 10 people (24.4%) had fewer stunting LBW babies than 31 people (75.6%) who were not LBW. The results of the LBW study regarding toddlers were not stunting as many as 6 people (14.6%) less than those who were not LBW as many as 35 people (85.4%). Factors that are likely to cause low LBW in the Work Area of the Pugaan Health Center, Tabalong Regency, are the nutritional status of the mother before pregnancy and the age of the mother during pregnancy.

Based on the results of interviews with nutrition officers at the Pugaan Health Center, there were several mothers whose pre-pregnancy baby nutritional status was below <18.5. The adequacy of nutritional status before pregnancy was assessed using the body mass index (BMI). One study showed women who were thin or BMI <18.5 had twice the chance of giving birth to low birth weight babies than women who had normal BMI [11].

Interviews at the Pugaan Health Center were more pregnant women with an age range of 26-35 years, this shows that they are at a healthy age so that they can prevent the incidence of LBW. Pregnancy under the age of 20 is a high-risk pregnancy. The reproductive period of women is basically divided into 3 periods, namely the reproductive period of young age (15-19 years), healthy reproductive age (20-35 years), and old reproduction (36-45 years) [12]. Other research shows that there is a relationship between LBW and the incidence of stunting in children aged 6-24 months, namely 5.6 times more at risk of experiencing stunting in children with a history of LBW compared to children born with normal weight [13].

The relationship between feeding and the incidence of stunting in toddler

Statistical testing between feeding and the incidence of stunting in toddlers shows that there is a relationship between feeding and the incidence of stunting in the Working Area of the Pugaan Health Center, Tabalong Regency. The results of this study are in line with Yati's research 2018 in the working area of the Wonosari I Health Center with p=0.001. Yati in the study stated that there was a relationship between feeding and the incidence of stunting in toddlers aged 36-59 months. Other studies have found that toddlers who have a history of poor feeding have a less chance of experiencing stunting when compared to toddlers who have a history of good feeding patterns with a p-value = 0.000 [14]. The type of food consumption greatly determines the nutritional status of a child, good quality food if the daily menu provides a nutritious, balanced and varied menu composition according to their needs [15]. Children under the age of five, especially at the age of 1-36 months, are a period of rapid physical growth. Thus, it requires the most nutritional needs compared to the next period. Appropriate feeding is feeding according to the type of food, the amount of food and the child's meal schedule. The key to

success in fulfilling child nutrition lies in the mother. Good eating habits are very dependent on the mother's knowledge and skills on how to prepare food that meets nutritional requirements.

The relationship between exclusive breastfeeding and the incidence of stunting in toddlers

Statistical testing between exclusive breastfeeding and the incidence of stunting in toddlers shows that there is a relationship between exclusive breastfeeding and stunting in the Work Area of the Pugaan Health Center, Tabalong Regency. The OR value < 1 means that children who are not given exclusive breastfeeding have a 0.331 times the risk of becoming stunted compared to those who are given exclusive breastfeeding. This study is also in line with other studies which found that the number of children under five who were exclusively breastfed and stunted was 21 (40.4%), while the number of children under five who were not exclusively breastfed and was stunted was 31 (59.6%) [16]. The same thing was also shown in other studies where most toddlers did not get exclusive breastfeeding (43.5%) [17].

The benefits of exclusive breastfeeding itself are numerous, starting from increasing immunity, meeting nutritional needs, cheap, easy, clean, hygienic and can increase the bond or bond between mother and child. Breast milk is a nutritional intake in accordance with the needs that will help the growth and development of children. It is known that many mothers of toddlers give breast milk combined with formula milk. The most common reason given by mothers of toddlers is that breast milk is not smooth, besides that it is easy to get formula milk so that mothers are less trying to increase their milk production.

The relationship between LBW and the incidence of stunting in toddlers

Statistical testing between exclusive breastfeeding and the incidence of stunting in toddlers showed that there was no relationship between birth weight and the incidence of stunting in the Work Area of the Pugaan Health Center, Tabalong Regency. History of birth weight has no relationship with the incidence of stunting [18]. Even though children under five who are born do not experience LBW, if food intake is not balanced during the growth process it can result in children becoming stunted.

One of the determining factors is the nutritional care pattern for children with low birth weight babies. The pattern of nutritional care provided by parents has a very significant relationship to the growth and development of children, the better the pattern of nutritional care provided by the mother, the better the nutritional status of the child [19].

To be able to increase the weight of children born with LBW conditions, mothers can provide adequate food. Children with LBW accompanied by inadequate food consumption, mother's nutritional knowledge in choosing food ingredients and processing food is very decisive because it can determine the importance of food diversity and prevent loss of nutrients in food preparation and processing all of that to prevent dependence on certain types of food to control the nutrients in a product [20].

CONCLUSION

From the results of the study it can be concluded that the characteristics of toddlers are more dominated by males at the age of 30-60 months with stunting in the Work Area of the Pugaan Health Center in Tabalong Regency being 50% and not stunting 50%. The results showed that the factors influencing the incidence of stunting were exclusive feeding and breastfeeding, while a history of weight at birth was not a contributing factor to the incidence of stunting.

There are many factors that can cause stunting. It is hoped that research can be carried out by including variables that are not included in this study, such as infectious diseases, socio-economic, and health services.

THANK YOU

The author would like to thank all parties who have provided technical and financial support for this research.

BIBLIOGRAPHY

1. Anggraini, Y. Rusdi, P.H.N. 2019. Factors related to stunting in toddlers in the working area of the Air Bangis Health Center, West Pasaman Regency. Indonesian Midwifery Research Journal, 3(2), pp. 69–73. doi: http://dx. doi.org/10.32536/jrki.v3i2.56.
2. Dasman H. (2019). Four impacts of stunting for children and the Indonesian state. The Conversation (Scientific Discipline, Journalistic Style), 22–24.
3. Achadi et al., 2020. Effects of Biliary Atresia on the Development of Cognitive and Motor Functions in Children: A Systematic Review. Journal Of The Indonesian Medical Association, 73(1), 25-34.
4. Samio, 2018. Factors Associated with Stunting Incidents in Toddlers in the Working Area of the Tatah Makmur Health Center, Banjar Regency. Journal of Midwifery and Reproduction, 4(1), 13-20.
5. García Cruz et al., 2019. Factors associated with stunting amongchildren aged 0 to 59 months from the central region of Mozambique. Nutrients, 9(5),
6. Krisnana, I., Azizah, R., Kusumaningrum, T., & Has, E. M. M. (2019). Feeding patterns of children with stunting based on WHO (world health organization) determinant factors of behaviours approach. Indian Journal of Public Health Research and Development, 10(8), 2756–2761. https://doi.org/10.5958/0976-5506.2019.02288.5
7. Imelda (2018). Risk factors for stunting in children aged 2-5 years at the Biromaru Health Center. Ghidza: Journal of Nutrition and Health, 2(1), 39-43.
8. Marantika, M., & Sarwinanti. (2021). The Feeding Pattern Related to Stunting in Toddlers Age 24–59 Months. 34(Ahms, 2020), 242–245. https://doi.org/10.2991/ahsr.k.210127.056
9. Anjana (2018). Relationship between Knowledge and Attitudes of Infant Mothers (Age 7-11 Months) About Exclusive Breastfeeding with the Implementation of Exclusive Breastfeeding at the Baloi Permai Health Center Batam. Midwifery Zone: Batam University Midwifery Study Program, 8(2).
10. Septianingrum et al., 2020. Printing Smart Toddlers and Parenting Styles. Yogyakarta: Nuha Medika
11. Karinta (2023). Relationship between Body Mass Index in Pregnant Women and Birth Weight with the Prevalence of Stunting in Toddlers. Diss. Kusuma Husada University Surakarta, 2023
12. Damic (2019). The influence of feeding practice on the risk of stunting in infant and young children in developing countries: a literature review Indonesian Nutrition Science, 2019, 3.1: 13-22.
13. Detty Nurdiatin (2018). Effect of vitamin A and zinc supplementation during pregnancy on the incidence of low birth weight and premature babies. 2005. PhD Thesis. Gadjah Mada University
14. Fauziah, Afroh, and Giyawati YO. 2020. The phenomenon of the history of giving complementary food to ASI (mpasi) and the diet of children in overcoming malnutrition to prevent stunting in the city of Yogyakarta."Jarlit Journal 16
15. Compassion and Wirjatmadi. 2019. Vegetable-Animal Protein Consumption of Stunting and Underweight Children Under Five Years Old in Indonesia." Nutrition and Food Research 39.2 (2016): 95- 102
16. Sartina, Dewi (2019) "Factors Associated with Stunting Incidents in Toddlers in Kuala Pesisir District, Nagan Raya Regency." Journal of Biology Education 10.1 (2022): 20-32.
17. Rusmini Yanti, Dinda Noor Ali Julian. 2018. Maternal Age During Pregnancy and Exclusive Breastfeeding with Stunting Incidents in Toddlers https://doi.org/10.31964/jr-panzi.v1i1.31
18. Trisiswati (2021). Relationship between LBW history (low birth weight) and stunting in Pandeglang district. Sainstekes Magazine 8(2): 061-070
19. Zulaika (2021). The Relationship between LBW and Nutritional Parenting with Stunting Incidents in Tabemela Village, Tilango District, Gorontalo Regency. Honey: Journal of Health, 10(2), 1-8.

20. Sari and Ratnawati (2018). Relationship between Mother's Knowledge about Feeding Patterns and Toddler Nutritional Status in the Work Area of the Gapura Health Center, Sumenep Regency. DOI : 10.2473/amnt.v2i2.2018.