

Mothers Toddler Knowledge About Giving And Method Of Making 4 (Four) Star Complementary Feeding In Stunting Prevention Efforts

Neti Sulami¹, Yati Purnama², Dian mariza³

^{1,3}Akademi Kebidanan Surya Mandiri Bima ²Akademi Kebidanan Harapan Bunda Bima

ARTICLE INFO

Keywords:

Complementary food of breast milk (MPASI), prevention, stunting, toddler

Email :

neti.sulami@gmail.com

yatipurnama984@yahoo.com

dianurindo@gmail.com

ABSTRACT

Complementary food must meet the nutritional needs of 4 stars which must contain micro and macronutrients consisting of carbohydrates, protein, fat, vitamins and minerals. If complementary foods are not introduced around the age of 6 months, or if they are given inappropriately, they can be a risk factor for stunting. In giving MPASI, the things that need to be considered are the sufficient amount, time, texture, variety, method of administration, and principles of cleanliness. This research is a quantitative descriptive study to find out the knowledge of mothers of toddlers aged 6-12 about giving and how to make MPASI by calculating the frequency distribution. The results showed that the knowledge of mothers of toddlers aged 6-12 months about the purpose and benefits of giving a healthy menu of MPASI 4 stars was in the less category, namely 92% and 72%, the knowledge of mothers of toddlers aged 6-12 months about the nutritional needs of MPASI in the less category was equal to 92%, knowledge of mothers of toddlers aged 6 – 12 months about the Impact of Providing MPASI Healthy Menu is in the less category, namely 84%, types of MPASI given to toddlers aged 6 – 12 months are mostly processed factories, namely 90%, and accuracy of mothers of toddlers age 6 – 12 months about the accuracy of the method of cooking/texture in the inappropriate category, which is 71%.

Copyright © 2023 Eduhealth Journal. All rights reserved is Licensed under a [Creative Commons Attribution- NonCommercial 4.0 International License \(CC BY-NC 4.0\)](https://creativecommons.org/licenses/by-nc/4.0/)

1. INTRODUCTION

Stunting is another form of growth failure caused by chronic malnutrition. Stunting reflects poor linear growth and accumulates during the pre- and postpartum periods, due to inadequate nutritional intake and chronic or recurrent infections. Stunting nutritional status is indicated by the Z-Score value of length or height for age less than -2 standard deviations (SD) based on World Health Organization (WHO) standards (NLIS, 2012).

Stunting in toddlers needs special attention because it can hamper the physical and mental development of children. Stunting is associated with an increased risk of morbidity and mortality as well as retarded growth of motor and mental abilities. Toddlers who are stunted have a risk of decreased intellectual abilities, productivity, and an increased risk of degenerative diseases in the future. Stunting also increases the risk of obesity, because people with short bodies will have a low ideal body weight. A few kilograms of weight gain can make the person's Body Mass Index (BMI) increase beyond normal limits. Overweight and obesity conditions that continue for a long time will increase the risk of degenerative diseases (Risksedas, 2018)

Nutrition obtained from birth greatly influences its growth, including the risk of stunting. At the age of 6 months, the baby's need for energy and nutrition begins to increase and cannot be fulfilled only with breast milk, so complementary food is needed. If complementary foods are not introduced around 6 months of age, or if they are given inappropriately, they can be a risk factor for stunting. In giving complementary foods, the things that need to be considered are sufficient amount, time, texture, variety, method of administration, and hygiene principles (Prihutama, N.Y, dkk, 2018).

Mothers Toddler Knowledge About Giving And Method Of Making 4 (Four) Star Complementary Feeding In Stunting Prevention Efforts. Neti Sulami, et.al

Complementary food for ASI (MP ASI) is food that is easy for babies to consume and digest. MP ASI given must provide additional nutrition to meet the nutritional needs of a growing baby. Complementary food for ASI can be prepared specifically for babies or the food is the same as family food, but the texture is adjusted to the age of the baby and the baby's ability to accept food. MPASI must meet the nutritional needs of 4 stars which must contain micro and macronutrients consisting of carbohydrates, proteins, fats, vitamins and minerals (Pérez, 2011 dan Rakhmahayu, 2019).

2. METHOD

This research is a descriptive research with cross sectional design. A sample of 100 respondents, namely mothers of toddlers aged 6-24 months in the District of Lambu, Kab.Bima. Data analysis was performed by univariate analysis.

3. RESULTS AND DISCUSSION

Based on the results of the univariate analysis that has been carried out, the following results are obtained:

a. Respondents' knowledge of the benefits of a 4-star mpasi healthy menu to prevent stunting

Table 1. Frequency Distribution Of Respondents' knowledge of benefits 4-star mpasi healthy menu

Category	Frequency	Percentage
Well	28	28
Not Enough	72	72
Amount	100	100

Based on the table above, it shows that the knowledge of mothers of toddlers aged 6-12 months about the benefits of a healthy 4-star complementary food menu is mostly in the less category are 72%.

b. Respondent's Knowledge Of MPASI Nutritions

Table 2. Frequency Distribution Of Respondent's Knowledge Of MPASI Nutritions

Category	Frequency	Percentage
Well	8	8
Not Enough	92	92
Amount	100	100

Based on the table above, it shows that the knowledge of mothers of toddlers aged 6-12 months about MPASI Nutrition Needs is mostly in the less category are 92%.

c. Respondents' Knowledge About the Purpose of Giving MPASI 4 Stars

Table 3. Frequency Distribution Of Respondents' Knowledge About the Purpose of Giving MPASI 4 Stars

Category	Frequency	Percentage
Well	8	8
Not enough	92	92
Amount	100	100

Based on the table above, it shows that the knowledge of mothers of toddlers aged 6-12 months about the purpose of giving 4-star complementary foods is mostly in the less category are 92%.

d. Respondents' Knowledge of the Impact of Giving Solids Before 6 Months old

Table 4. Frequency Distribution Of Respondents' Knowledge of the Impact of Giving Solids Before 6 Months old

Category	Frequency	Percentage
Well	16	16

Mothers Toddler Knowledge About Giving And Method Of Making 4 (Four) Star Complementary Feeding In Stunting Prevention Efforts. Netti Sulami, et.al

Not enough	84	84
Amount	100	100

Based on the data above, it shows that the knowledge of mothers of toddlers aged 6-12 months about the impact of giving complementary foods before the age of 6 months is mostly in the less category, namely 84%.

e. Type Of MPASI

Table 5. Frequency Distribution Type Of MPASI

Category	Frequency	Percentage
Home made	10	10
Factory Processed	90	90
Amount	100	100

Based on the data above, it shows that the type of MPASI given by mothers to toddlers aged 6-12 months is mostly factory processed MPASI are 90%.

f. Accuracy of Cooking Methods/Textures of Healthy MPASI Menus

Table 6. Frequency Distribution Of Cooking Accuracy Methods/Textures of Healthy MPASI Menu's

Age	Category				TOTAL	
	Exactly	Percentage	Not Exactly	Percentage	Amount	Percentage
6-9 months old	11	11	71	71	82	82
10-12 months old	1	1	17	17	18	18
Amount	12	12	88	88	100	100

Based on the table above, it shows that most of the mothers under five have not cooked the healthy complementary food menu, namely 71%.

A. DISCUSSION

1. Type of Complementary Feeding (MPASI)

In general, there are 2 types of MP-ASI, namely factory MP-ASI modified in the form of packages, cans or bottles such as milna, nayz organic, cerelac, sun, pronima etc. And also MP-ASI from local ingredients that are made by yourself. MP-ASI made from local food ingredients such as aged 6-7 months, the main food MP-ASI is milk porridge, biscuits melted with breast milk. Entering the 7th month, filtered porridge is given as a source of carbohydrates and animal protein. Fruit snacks such as bananas, oranges, pumpkin, and papaya. Age 12-23 months, the main food is family food that is lightly seasoned and not spicy, while the snack food is fruit and cake, biscuits, compote pudding, green bean porridge. In this study, the majority of mothers under five used processed MPASI from factories, which was 90%.

2. Purpose and benefits of complementary feeding (MPASI)

In this study, the results of research on the knowledge of mothers of toddlers aged 6-12 months about the purpose and benefits of giving a healthy menu of complementary foods are mostly in the unfavorable category, namely 92% and 72%, which means that many mothers of toddlers still do not know the purpose and benefits of giving a healthy menu. MPASI especially in preventing stunting. Infants and children are at risk of experiencing stunting from the age of six months onwards, that is, when breast milk alone is not sufficient to meet the needs of all nutrients and it is necessary to start giving complementary foods for breast milk (MPASI). Complementary feeding is often given in insufficient quantities and is often of lower quality than breast milk. The quality of MPASI is influenced by the variety of ingredients used, while the quantity of MPASI is related to the frequency of giving it in a day. The quality and quantity of complementary foods can positively affect linear

Mothers Toddler Knowledge About Giving And Method Of Making 4 (Four) Star Complementary Feeding In Stunting Prevention Efforts. Netti Sulami, et.al

growth, but simply increasing the quantity of food will not be effective if the quality of the food is poor (Dewey, 2016)

3. Impact of elementary feeding for breast milk (MPASI)

Age of toddler which complementary foods are given has an effect on the incidence of stunting, because children only need breast milk until they are 6 months old, but >6 months breast milk alone is not enough to help optimal growth and development. Global recommendations for proper feeding of infants and children are initiation of early breastfeeding (IMD) within one hour after giving birth, exclusive breastfeeding for six months, and providing complementary foods according to needs from six months of age with continued breastfeeding for up to two years. or more. In this study, the results of research on the knowledge of mothers of toddlers aged 6-12 months regarding the impact of giving a healthy complementary food menu in the less category was 84%.

4. Nutrition Of Complementary Feeding

Good and correct complementary feeding includes variations and frequency of minimal complementary feeding. The frequency of complementary feeding is the proportion of children who receive the minimum recommended complementary food. Without the frequency of eating and various complementary foods, infants and children are at risk of experiencing nutritional deficiencies, causing stunting which in turn increases morbidity and mortality . A good type of complementary food for breastfeeding is made from fresh ingredients, such as tempeh, peanuts nuts, chicken eggs, chicken liver, fish, vegetables and fruits. The types of complementary foods that are appropriate and given according to the age of the child are mashed foods, soft foods, and solid foods. In this study, the results were obtained that the knowledge of mothers of toddlers aged 6-12 months about the nutritional needs of MPASI was mostly in the unfavorable category, namely 92%. This can be seen from the types of complementary foods used by toddler mothers, namely factory preparations where factory preparations do not meet the macro and micronutrient needs needed by toddlers, known as a 4-star complementary food healthy menu consisting of carbohydrates, protein, fat, vitamins and minerals.

5. Making Healthy Complementary feeding

How to cook/make a healthy MPASI menu also really needs to be considered in the accuracy of giving MPASI. Toddler age affects the texture of solids that will be given to toddlers. At the beginning of administration, at the age of 6 months, toddlers get complementary foods with a smooth texture, ages 9 months and over with a rough texture, and ages 12 and over following the structure of adults while still paying attention to the composition of the healthy complementary food menu.



Figure 1. Complementary Feeding For Toddler

4. CONCLUSION

Knowledge of mothers of toddlers aged 6-12 months about the benefits of giving a healthy menu of 4-star MPASI in the less category are 72%. Knowledge of mothers of toddlers aged 6 – 12 months about MPASI Nutrition Needs in the less category are 92%. Knowledge of mothers of toddlers aged 6 – 12 months about the Purpose of Providing MPASI Healthy Menu in the less category are 92%. Knowledge of mothers of toddlers aged 6 – 12 months about the Impact of Providing MPASI Healthy Menu in the less category are 84%. Most of the types of MPASI given to toddlers aged 6 – 112 months are factory processed are 90%. The accuracy of toddler mothers aged 6-12 months regarding the accuracy of cooking methods/textures in the inappropriate category are 71%

REFERENCES

- [1] Nutrition Landscape Information System (NLIS) Country Profile Indicators. 2012 In: Interpretation Guide [Internet]. Geneva, Switzerland: Department of Nutrition for Health and Development World Health Organization;
- [2] Departemen Kesehatan RI. 2018. *RISKESDAS* .Jakarta
- [3] Prihutama,N.Y,dkk. 2018.Pemberian Makanan Pendamping *ASI Dini Sebagai Faktor Risiko Kejadian Stunting Pada Anak Usia 2-3 Tahun*; 2018 JURNAL KEDOKTERAN DIPONEGORO Volume 7, Nomor 2, Mei 2018 <http://ejournal3.undip.ac.id/index.php/medico>
- [4] Pérez Lizaur AB. 2011 Complementary Feeding: *Report of the Global Consultation, Summary of Guiding Principles*. Gac Med Mex [Internet]. 2011;147 Suppl(December):39–45.
- [5] Rakhmahayu A, Dewi YLR, and Murti B. 2019. *Logistic regression analysis on the determinants of stunting among children aged 6-24 months in Purworejo Regency, Central Java*. *J Matern Child Health*. 4(3):158–169. doi: 10.26911/thejmch.2019. 04.03.03.
- [6] Direktorat Promosi Kesehatan dan Pemberdayaan Masyarakat Kementerian Kesehatan Republik Indonesia. 2018. *Apa itu MPASI? Apa Pengaruhnya untuk Perkembangan Bayi?* <https://promkes.kemkes.go.id/?p=8929>
- [7] Siswati,T. *Stunting*. 2018. Husada Mandiri Poltekkes Kemenkes Yogyakarta.
- [8] Tim Nasional Percepatan Penanggulangan Kemiskinan. 2017. 100 Kabupaten/Kota Prioritas Untuk Intervensi Anak Kerdil (*Stunting*) (Ringkasan). Sekretariat Wakil Presiden Republik Indonesia. Jakarta.
- [9] Nurkomala S. 2017. *praktik pemberian makanan pendamping ASI Pada Anak Stunting dan tidak stunting usia 6-24 bulan*. Skripsi Universitas Diponegoro. Semarang.
- [10] Dewey KG, Adu-Afarwuah S. Systematic review of the efficacy and effectiveness of complementary feeding interventions in developing countries. *Matern Child Nutr* [Internet]. 2008;4(s1):24–852016; 7(2):139–149, doi: 10.26553/jikm. 2016. 7.2.139-149.
- [11] World Health Organization.2007. Indicators for assessing infant and young child feeding practices Part 1 Definitions. In: Dept. of Child and Adolescent Health and Development. Washington DC [USA]: World Health Organization;
- [12] Nutrition Landscape Information System (NLIS) Country Profile Indicators. 2012 In: Interpretation Guide [Internet]. Geneva, Switzerland: Department of Nutrition for Health and Development World Health Organization;