Weight Gain Toddler at Posyandu Kantil Sleman Yogyakarta

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Abstract. One of the indicators of success in a country is the fulfillment of nutrition. Therefore, the direction of nutrition development is in accordance with Law no. 36 of 2009 concerning Health, article 141 concerning efforts to improve nutrition. The nutritional improvement aims to increase individual nutrition through improving food consumption patterns. The government also issued a General Message for Balanced Nutrition (PUGS) and Nutrition Awareness Families (Kadarzi). The purpose of this study was to determine the differences in the nutritional status of children under five before and after the Covid-19 pandemic at Posyandu Kantil Yogyakarta. This research is a descriptive study and uses a cross sectional time approach. The population used in this study were children under five who did the weighing at the Posyandu and the sample was taken using purposive sampling. The results were 57.5% of children under five at the Kantil Posyandu gained weight. The importance of education and changes in parental behavior in providing care, especially providing nutrition and monitoring their child's weight gain.

Keywords: weight gain · toddler

1 Introduction

In 2002 WHO stated that nutrition is one of the causes of under- five mortality. The nutritional factor of this toddler is the first rank that affects under-five mortality as much as 54%. In 2010 based on the results of the Basic Health Research, the prevalence of under-fives with malnutrition was 4.9%. Another factor that affects nutrition is that 17.9% of children under five in Indonesia are malnourished. So that Indonesia needs to increase attention to toddler nutrition so that the quality of development in Indonesia will increase.

Currently, Indonesia is faced with the problem of stunting (short) which is quite high when compared to other countries, even compared to ASEAN countries, Indonesia's stunting rate is still the highest. Based on the results of the 2016 PSG research, it shows that the number of toddlers who are classified as very short is 8.5%, and those who are classified as short are 19.0% based on Thamaria in 2017.

Based on research conducted by Putri et al. in 2014 it was found that mother's education, mother's occupation, family income, parity, and parenting have an effect on the nutritional status of children under five. What greatly affects the nutritional status

of children under five is the type of work of the mother. Therefore, the dominant factor related to maternal care for children under five needs special attention.

In 2014 the government with the Regulation of the Minister of Health of the Republic of Indonesia No. 41 of 2014 concerning Guidelines for Balanced Nutrition. With this regulation, it replaces the slogan "4 healthy 5 perfect" into a balanced nutrition guideline. The principle of Balanced Nutrition has four pillars, namely: Consuming a variety of food, getting used to a clean and healthy lifestyle, doing physical activity, and monitoring body weight regularly.

The current problem is that the prevalence of nutritional status of children under five has not increased according to the criteria for weight gain of children under five. Attention, especially mothers, to diet and breastfeeding are the main problems. Many mothers view that formula feeding can increase their toddler's weight. However, according to the guidelines for balanced nutrition, the provision of nutrition for children under five is not based on milk. Balanced nutrition guidelines say that by providing a balanced diet will affect the weight gain of toddlers. Mother's understanding of breastfeeding also affects the nutritional status of children under five. Breastfeeding is basically given to infants aged 0–6 months and then breastfeeding is no longer essential due to the increased activity of toddlers so that complementary foods with balanced nutrition are needed. It is also necessary to regulate the pattern of breastfeeding and balanced nutrition. Breastfeeding after 6 months needs to be regulated so that toddlers will receive complementary foods given by the mother. Some observed mothers who are still breastfeeding giving breast milk every time the child starts to cry, fuss, which is not necessarily the only cause of thirst. When a child cries and is fussy, it is necessary to observe whether at these hours it is at the time of eating so that the sign of crying in the toddler is because he is hungry.

The success of mothers in providing complementary foods to breast milk will have an impact on the weight gain of toddlers which increases according to the graph of the increase in toddler nutrition. This increase needs to be checked regularly with a weighing program at the posyandu. In the posyandu program, weight gain, age, and height of children under five will be recorded. This recording will be reported to relevant agencies such as Puskesmas and kelurahan. The Puskesmas and Kelurahan will monitor the nutritional status of toddlers in their working areas.

2   Methodology

The design in research is structured to be able to guide researchers so that they can help researchers obtain answers to research questions [1]. This research is a descriptive study and uses a cross sectional time approach.

The population is the whole of the characteristics or units of measurement results that are the object of research (Ridwan and Akdan, 2006). The population of this study was 40 people in the Posyandu Kantil Yogyakarta under five.

According to Notoatmodjo (2005), the sample is part of the population studied [2]. The samples in this study were all of the population, namely mothers who have toddlers at the Kantil Posyandu with a total of 40 people with the following criteria:

a) The complete Posyandu data contains Weight From January to July 2021

b) Willing to be a respondent

In connection with the population is not so much and for the accuracy of the study, the sample used in this study is purposive sampling, namely sampling based on a consideration made by the researcher based on the citi or the characteristics of the population that have been previously known.

The data collection tool used in this research is a questionnaire. The method used in data collection is to use a questionnaire which is then collected and analyzed. The data collection tool used in this research is data from the Posyandu. The method used in data collection is to use secondary data, namely data obtained from other parties, usually in the form of documentation or report data. Data collection in this study used data from Posyandu.

The process of collecting secondary data that has been collected for further analysis, recording, and documentation. Data processing uses an approach in accordance with the research design. The data analysis was carried out to see the factors that influence a problem, namely the weight gain of toddlers [1].

Univariate analysis was carried out to analyze the existing variables descriptively by calculating the frequency distribution and their proportions to determine the characteristics of the research subject. The research variables were analyzed descriptively using a frequency distribution table and the percentage of each data obtained. The data obtained is displayed in the form of tables and narratives.

3   Result

Descriptive analysis is intended to determine the results of weight gain under five at the Kantil Posyandu. This analysis is used to determine the tendency of respondents to each research variable, then a classification is made based on norms.

Posyandu Kantil is one of the Posyandu located in Yogyakarta. The Kantil Posyandu is located in Soka Binangun, Merdikorejo, Tempel, Sleman, Yogyakarta. In Soka Hamlet there are 2 posyandu activities that are carried out regularly every month. This Posyandu has 4 health cadres for the Toddler Posyandu and 4 health cadres for the elderly Posyandu. The Posyandu is fostered by the Tempel I Health Center which is also frequently visited by health workers from the Tempel I Health Center. In one kelurahan there is also a midwife who is responsible for public health conditions who work closely with the community in coordinating public health.

Children under five are children who have reached the age of one year or more, which is popular with the understanding of the age of children under five years. This period can also be grouped into 2 major groups, namely children aged 1−3 years (toddlers) and preschoolers (3−5 years). At the age of 1−3 years (toddlers) we often call it a passive group where children are still fully dependent on their parents or other people who take care of them to carry out important activities, such as bathing, urinating and eating. After entering the age of 4, this group has begun to be included in the active consumer group where dependence on parents or caregivers begins to decrease and shifts to their desire to do many things such as bathing and eating alone even though they are still in limitations.

Toddlers don't grow as fast as infancy, but their nutritional needs remain a top priority. In this toddlerhood, nutrition plays an important role in child development.

Table 1. Distribution of the frequency of. weight gain of toddlers

Category	Frequency	Percentage
Increase	23	57.5%
Decrease	17	42.5%
Total	40	100%

Source: Primary data, 2022.

Toddler period is a transition period, especially at the age of 1–2 years where children will begin to eat solid food and accept new food tastes and textures.

The nutritional needs of toddlers are actually also influenced by age, body size, and level of activity. Energy: usually toddlers need about 1,000 to 1,400 cal per day. Calcium: needed approximately 500 mg per day. Iron: toddlers need 7 mg per day. Vitamins C and D.

The results of the research on weight gain for toddlers are:

Based on Table 1, it can be seen that most of the children's weight included in the rising category as many as 23 respondents (57.5%) and the non-rising category as many as 17 respondents (42.5%).

4 Discussion

Based on the results of Table 1 distribution of the frequency of weight gain under five. Most of the toddler's weight is categorized as good. The weight gain is in accordance with the standards that have been determined on the weight gain chart. Weight gain was obtained by comparing last month's weight with this month's weight. Then the results are entered into a graph. After being entered into the graph, it will be seen whether the weight gain is categorized as increasing or not increasing if the weight does not match the increase in the graph.

Body weight describes the amount of protein, fat, water and minerals in the body. There are several reasons why body weight is used as an anthropometric parameter. These reasons include changes in body weight that are easily visible in a short time, weight can describe the current nutritional status. In order to measure body weight, a tool with accurate measurement results is needed. To get an accurate weight measurement, there are several requirements including the weight measuring instrument must be easy to use and carry, easy to obtain and relatively inexpensive, the accuracy of the measuring instrument is 0.1 kg (100 g), the scale is easy to read, quite safe to use. And the instrument has been calibrated.

Nutritional status is an expression of a state of balance in the form of certain variables or the manifestation of nutrition in the form of certain variables. Example: Malnutrition is a state of unbalanced food consumption in a person's body [5] (I Dewa Nyoman, 2001).

Nutritional status is the state of health of individuals or groups determined by the degree of physical need for energy and other nutrients obtained from food and food whose physical impact is measured anthropometrically [4] (Suhardjo, 2003).

The nutritional status of children is basically determined by two things, namely: the food eaten and the state of health. The quality and quantity of a child's food depends on the nutritional content of the food, the presence or absence of additional food in the family, the purchasing power of the family and the mother's characteristics regarding food and health. The health condition of the child is also related to the mother's characteristics of food and health, the purchasing power of the family, the presence or absence of infectious diseases and the reach of health services [5] (I Dewa Nyoman, 2001).

According to research conducted by Indriastuti in 2007, maternal factors that affect infant weight gain are maternal education, nutrition and breast care. Education can affect a person's health, especially in child care patterns, the allocation of nutritional sources and the utilization of other information. The low level of education of mothers causes various limitations in dealing with nutritional problems and their families and children under five. Mother's education is the main capital in supporting the family economy and also plays a role in the preparation of family meals, as well as child care and care. For families with a high level of education it will be easier to receive health information, especially in the field of nutrition, so that they can increase their knowledge and be able to apply it in daily life.

In accordance with research conducted by Indrianti in 2019, one of the factors that influence the weight gain of toddlers is Low Birth Weight (LBW). In this study, it was found that 3 respondents or 7.5% of children under five experienced LBW, which is a body weight of less than 2500 g. Birth weight is a very strong factor that can affect growth, especially the weight of the next toddler [3]. In accordance with Wahdah's research in 2012 LBW greatly affects growth disorders in toddlers [6]. The results of this study indicate that the likelihood of stunting in children aged 24–59 months is more found in children with a history of LBW compared to children with a history of being born with normal weight. History of LBW plays a role 6.152 times compared to children with normal birth weight.

Metabolic disorders followed by hypothermia can occur because LBW babies have very little fat in their bodies. In addition, the regulation of his body temperature system is also immature. What is often a problem in LBW babies is hypoglycemia. Babies with less intake can have an impact on cell damage in the brain which causes brain cells to die. In the event of death of brain cells, resulting in disturbances in the intelligence of the child. To get more glucose must be assisted with more breast milk. Most LBW babies lack breast milk because the baby's size is small, the stomach is small and the energy when sucking is very weak.

In addition to a history of low birth weight in infants, breastfeeding is also an important factor in weight gain.

5   Conclusion

Based on the results of the analysis, it can be concluded that 57.5% of children under five in the Kantil Posyandu gained weight.

References

1. Arikunto S. 2006. "Prosedur Penelitian Suatu Pendekatan Praktek", Rineka Cipta, Jakarta.
2. Notoatmodjo. 2005. "Promosi Kesehatan Dan Ilmu Perilaku", Rineka Cipta, Jakarta.
3. Indrianti dan Adhila Fayasari(2019). Berat Badan Lahir dan Pemebrian ASI Berhubungan dengan Stunting Balita di Jakarta. Binawan Student Journal Vol 1 No 2 ISSN 2715–1824
4. Chomitz et al (2007). "The Role of Lifestyle in Preventing Low Birth Weight," The Future of Children, Vol. 5 No. 1, 1995, pp. 121–138; Richard E. Behrman, Adrienne Stith Butler, eds., Preterm Birth: Causes, Consequences and Prevention, Institute of Medicine, Committee on Understanding Premature Birth and Assuring Healthy Outcomes, Washington, D.C.: National Academies Press, 2007.
5. Danerek, M., Dykes, A. (2006). A Theoretical Model of Parent's Experiences of Threat of Preterm Birth in Sweden. International Journal of Nursing Practice. Volume 24. 416-424.
6. Depkes RI. (2008). Perawatan Bayi Berat Lahir Rendah(BBLR) Dengan MetodeKangguru. Jakarta:Depkes.
7. Dinas Kesehatan Kota Yogyakarta. 2013. Profil Kesehatan Daerah Istimewa Yogyakarta Tahun 2013. Yogyakarta: Dinas kesehatan Provinsi Yogyakarta
8. Dinkes Lumajang. (2013). Epidemiologi BBLR. Diakses tanggal 27 Desember 2014 dari http://dinkeslumajang.or.id/epi demiologi-bblr/
9. HTA Indonesia. (2008). Perawatan BBLR dengan Metode Kangguru. Departemen Kesehatan Republik Indonesia.
10. Ikatan Dokter Anak Indonesia(IDAI). (2004). Bayi Berat Lahir Rendah .Dalam : standar Pelayanan Medis Kesehatan Anak Edisi I. Jakarta.
11. Hidayah, F.2013. ASI Eklusif sebagai Faktor Risiko kejadian Stuntingpada anak usia 6-24 Bulan di Kota Yogyakarta. Universitas Gadjah Mada.Yogyakarta.
12. Indrasari, Nelly. 2012. Faktor Resiko Pada Kejadian BBLR. Jurnal Keperawatan Volume VIII No.2 Oktober 2012 ISSN 1907–0357
13. Judarwanto W. (2009). Perawatan Bayi Berat Lahir Rendah dan Prematur. The Children Indonesia.
14. Levene, M.L., Tuhedope, D.I., Thearle, M.J. (2000). Essential of Neonatal Medicine Third Edition. United Kindom: Blackwell Science.
15. Lindberg, B., Ohrling, K. (2008). Experiences of Having A Prematurely Born Infant from The Perspective of Mothers in NorthernSweden. International Journal of Circumpolar Health. Volume 67:5. 461-471
16. Marlisman, Desty Pratiwi. 2017. Gambaran Mutu Pelayanan Antenatal Care (ANC) di Puskesmas Ciputat Timur. Repository.uinjkt.ac.id.
17. Mew, A.M. et al. (2003). Correlates of Depressive symptoms in mothers of preterm infants. Neonatal Netw, 22(5).
18. Nirmala,P., Rekhab, S., And Washington, M., (2006). Kanggoro Mother Care:Effect and Perception of mothers and Health Personel. Journal of Neonatal Nursing, 12(5):177-184
19. Notoatmodjo. (2002). "Metode Penelitian Kesehatan", Rineka Cipta, Jakarta.
20. Notoatmodjo. (2003). "Pendidikan dan Perilaku Kesehatan", Jakarta, Rineka Cipta.
21. Pantiawati, I. (2010). Bayi Dengan BBLR. Yogyakarta: Nuha Medika.
22. Rahmadi, Antun (2016). Hubungan Berat Badan dan Panjang Bayi dengan Kejadian Stunting Anak 12–59 bulan di Provinsi Lampung. Jurnal Keperawatan Volume XII. ISSN 1907–0357.
23. Rimon, et al (2015). Early enteral feeding and nosocomial sepsis in very lowbirthweightin-fants. http://journals.bmj.com/cgi/re printform
24. Victor, et al (1997). Beberapa masalah perawatan intensif neonatus. Jakarta: Fakultas Kedokteran UI.