

Description of Nutritional Status in Students of Mts Al-Amin Pakis

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Abstract

Adolescents are an age group that is vulnerable to experiencing malnutrition or excess nutrition problems. Teenagers generally carry out higher physical activity compared to other ages, so they require more nutritional fulfillment. However, the incidence of overnutrition in adolescents can also occur due to poor eating habits so that the amount of energy input is greater than the energy expended. The purpose of this study was to describe the nutritional status of students. This type of research is quantitative with an analytical descriptive design on 85 students of MTs Al-Amin Pakis. Data on nutritional status were obtained by measuring the height using a microtoise and the respondent's weight using a mechanical scale. Nutritional status is classified based on the value of the BMI/age z-score table for children aged 5-18 years from the 2011 Indonesian Ministry of Health guidelines. The results of the data analysis obtained the nutritional status category of junior high school students who were involved as the majority of respondents who were in the normal nutritional status category, namely 77 people (90.58%). However, there were still 8 students (9.41%) who were obese.

Keywords: Nutritional Status, MTs Al Amin Pakis

INTRODUCTION

Adolescents are an age group that is vulnerable to experiencing problems with under or over nutrition. Data from the Global School Health Survey (2015) reports that there are poor adolescent eating patterns that can affect the nutritional status of adolescents, including: not always eating breakfast (65.2%), most adolescents consuming less vegetable and fruit fiber (93.6%), and often consume flavored foods (75.7%). Apart from that, teenagers also tend to do less physical activity (42.5%). These things can increase the risk of teenagers becoming fat, overweight, and even obese (Ministry of Health of the Republic of Indonesia, 2018). Adolescents who do not consume a balanced nutritious diet are also at risk of experiencing Chronic Energy Deficiency or CED, which can cause various infectious diseases and other hormonal disorders (Ministry of Health of the Republic of Indonesia, 2018). A teenager's nutritional status will determine the growth and development process of a teenager. In accordance with the findings of Asakura & Satoshi (2017) which states that good nutrition will support the growth and development of a child or teenager. It was also stated that nutrition provided regularly will increase children's concentration in the learning process, thereby

indirectly supporting their cognitive development and academic grades at school. Teenagers whose nutritional intake and meal portions are regular will also experience better growth than teenagers whose nutritional intake and meal portions are irregular. Adolescent children have crucial nutritional needs to support their secondary growth. Lijuan, et al (2016) stated that adolescent girls who have sufficient iron intake will predominantly remain in a stable hemoglobin condition during menstruation compared to adolescent girls who lack iron who will tend to experience anemia during their menstruation. The same thing will also happen to teenage boys who will experience rapid fatigue which will affect their activities which should be high. The long-term impact if this is not treated is iron anemia in expectant mothers who are about to give birth, and chronic fatigue in men. After knowing some of the impacts of lack of nutrition, and remembering that teenagers are the future successors of the nation, nutritional status is an important topic for parents, schools and the government to focus on. This is the potential and basis for conducting research to determine the nutritional status of MTs Al-Amin Pakis students.

RESEARCH METHOD

This type of research is quantitative with a descriptive analytical design on 85 MTs Al-Amin Pakis students. Nutritional status data was obtained by measuring the respondent's height using a microtoise and the respondent's weight using a mechanical body scale. Nutritional status was classified based on the BMI/age z-score table value for children aged 5-18 years from the 2011 Indonesian Ministry of Health guidelines.

RESEARCH RESULTS AND DISCUSSION

1.1. Research result

The distribution of respondents' nutritional status is presented in table 1. Meanwhile, the nutritional status diagram of respondents is in Figure 1.

Table 1 Distribution of Respondents' Nutritional Status (n=85)

Nutritional Status Category	f	%
Very thin	0	0
Thin	0	0
Normal	77	90.58
Fat	8	9.41
Obesity	0	0

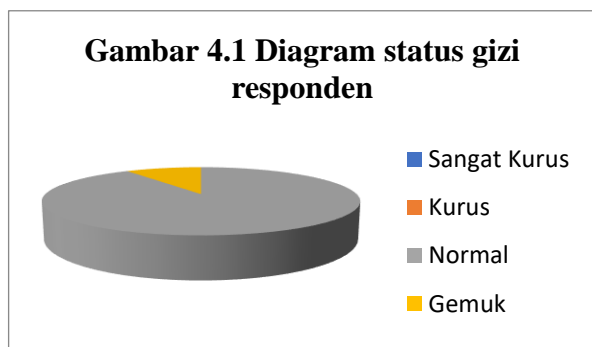


Figure 1. Categories of nutritional status of students

3.2 Discussion

Table 1 and Figure 1 show the nutritional status category of MTs Al-Amin

Pakis students who were involved as respondents, the majority of whom were in the normal nutritional status category, namely 77 people (90.58%). However, there are still 6 students (9.41%) who are obese.

The research results showed that the majority of respondents were in the normal nutritional status category. The results of this research support the research of Dya and Adiningsih (2019) which also found that the majority of high school students involved as research participants had normal nutritional status. Nuryani and Rahmawati (2018) stated that of the 134 students involved as respondents, 67.9% had normal nutritional status. Normal nutritional status describes a person's nutritional adequacy or the balance between the amount of energy entering the body and the energy released by the body. In general, food consumption is closely related to nutritional status. If the food consumed has good nutritional value, then nutritional status will also be good, conversely if the food consumed lacks nutritional value, it will cause nutritional deficiencies. Sholeha (2014) found that there was a relationship between eating behavior and BMI in adolescents. Snacking habits are an eating behavior that influences diet quality and BMI. Consuming snacks in large portions and frequently can increase the risk of obesity, whereas consuming snacks before feeling hungry will improve the quality of children's diet (Nuru & Mamang, 2015). Patcheep (2011) also explains several factors that influence eating behavior and food choices in adolescents, one of which is peers.

This illustrates the importance of controlling environmental factors around adolescents in fulfilling balanced nutritional status to prevent malnutrition and obesity in adolescents. Meeting nutritional intake needs varies between individuals. This depends on age, gender, activity, body weight and height (Thamaria, 2017). The

results of this research found that the majority of junior high school students involved as respondents were 13 years old and male. 13 years of age is school age with the characteristics of appetite which tends to increase naturally (Muhilal, 2006). Sari (2011) states that school-aged children need to receive more attention to their daily eating patterns from their parents and the surrounding environment because it will shape the child's future eating patterns. The results of this research also found that there were still students who were obese. In line with research by Dya and Adiningsih (2019) which also found that 28.6% of teenagers involved in their research were obese. Research by Noer, Kustanti, & Fitiriyanti (2018) found that obesity begins when a person reaches puberty due to irregular eating habits, weak parental control, followed by an increase in school activities which causes an increase in appetite and the influence of peers. Fraser et al (2012) stated that someone who consumes fast food at the age of 13 years increases the risk 1.23 times of becoming obese at the age of 15 years or can increase their BMI by 0.08 kg/m². Adolescents who have excessive macronutrient intake, frequent consumption of fast food, lack of physical activity, have mothers and fathers with obesity status, and do not eat breakfast are at greater risk of obesity (Kurdanti et al., 2015). Wulandari, Muniroh, and Susila (2015) found that children who were overweight had greater energy intake than children with normal nutritional status. Adolescents who experience nutritional imbalances can cause various diseases. Dya and Adiningsih (2019) found that nutritional status is one of the causes of menstrual cycle disorders in adolescent girls. Research by Weiss et al. (2004) stated that of 112 teenagers with obesity problems in the United States, 23 teenagers (21%) experienced glucose intolerance. Not only physiological problems, but excessive or insufficient

nutritional status in adolescents can cause psychological disorders such as negative body image (Sahputri, 2015). Apart from that, teenagers who are obese also feel bullying or teasing from their friends, which disturbs their psychology (Noer, Kustanti, & Fitiriyanti, 2018). Various problems, both physical and psychological, that can be experienced by teenagers as a result of inadequate nutritional requirements require comprehensive management. Nurcahyani, Suaib, and Istejo (2020) found that there was an influence of nutritional education on energy and protein intake in junior high school girls in Makasar. Providing education through counseling using leaflet media succeeded in increasing knowledge about nutrition and was able to increase energy and protein intake for junior high school students (Pakhri, Sukmawati, & Nurhasanah, 2018). The research results of Asrar, Hadi, and Boediman (2009) found that there was a relationship between parenting patterns and eating patterns with nutritional status in children. The parenting style in question is the behavior practiced by parents or other caregivers in providing food and emotional support that children need during the growth and development stages.

CONCLUSION

Based on data analysis, the results showed that the majority of junior high school students involved as respondents were in the normal nutritional status category. However, there are still students who are obese.

BIBLIOGRAPHY

- Asakura, K. & Satoshi, S. (2017). School lunches in Japan: their contribution to healthier nutrient intake among elementary-school and junior highschool children. *Public Health Nutrition*; Cambridge. 20(9): 1523-1533. DOI: 10.1017/S1368980017000374

- Asrar, M., Hadi, H., & Boediman, D. (2009). Pola asuh, pola makan, asupan zat gizi dan hubungannya dengan status gizi anak balita masyarakat Suku Nualu di Kecamatan Amahai Kabupaten Maluku Tengah Provinsi Maluku. *Jurnal Gizi Klinik Indonesia*, 6(2): 84-94. <https://jurnal.ugm.ac.id/jgki/article/view/17716/11497>
- Dya, N. M. & Adiningsih, S. (2019). Hubungan antara status gizi dengan siklus menstruasi pada siswi MAN 1 Lamongan. *Amerta Nutr*, 310-314. DOI: 10.2473/amnt.v3i4.2019. 310-314
- Fraser, L.K., Clarke, G.P., Cade, J.E., & Edwards, K.L. (2012). Fast food and obesity: A spatial analysis in a large United Kingdom population of children aged 13-15. *Am J Prev Med*, 42(5):e77-85.
- Kementerian Kesehatan RI. (2011). Keputusan Menteri Kesehatan Republik Indonesia. (Direktorat Bina Gizi).
- Kementerian Kesehatan RI. (2018). Kenali Masalah Gizi yang Ancam Remaja Indonesia. Diunduh dari <https://www.kemkes.go.id/article/view/18051600005/kenali-masalahgizi-yang-ancam-remajaindonesia.html>
- Kurdanti, W., Suryani, I., Syamsiatun, N. H., Siwi, L. P., Adityanti, M. M., Mustikaningsih, D., & Sholihah, K. I. (2015). Faktor-faktor yang mempengaruhi kejadian obesitas pada remaja. *Jurnal Gizi Klinik Indonesia*, 11(4): 179-190. <https://jurnal.ugm.ac.id/jgki/article/view/22900/15594>
- Lijuan, W., Jing, S., Jian, H., Hong, L., Jin, L. (2016). Iron status of first-year junior high school students in rural boarding school among nine provinces in China. *Journal of hygiene research*, 45(6) 911-937.
- Muhilal, D. D. (2006). Gizi seimbang untuk anak usia sekolah dasar. Jakarta: PT. Primamedia Pustaka.
- Noer, E. R., Kustanti, E. R., & Fitriyanti, A. R. (2018). Perilaku gizi dan faktor psikososial remaha obes. *Jurnal Gizi Indonesia (The Indonesian Journal of Nutrition)*, 6(2): 109-113. <https://ejournal.undip.ac.id/index.php/jgi/article/view/19130/13588>
- Nurchayani, I., Suaib, F., & Istejo, I. (2020). Pengaruh Edukasi Gizi terhadap Peningkatan Asupan Energi dan Protein pada Remaja Putri SMP Al-Ishlah Maros. *Ghidza: Jurnal Gizi Community of Publishing In Nursing (COPING)*, p-ISSN 2303-1298, e-ISSN 2715-1980 138 Volume 8, Nomor 2, Agustus 2020 Dan Kesehatan, 4(1), 100-106. <https://doi.org/10.22487/ghidza.v4i1.35>
- Nuru, H. & Mamang, F. (2015). Association between snacking and obesity in children: a review. *International Journal of Community Medicine and Public Health*, 2(3): 196-200. DOI: <http://dx.doi.org/10.18203/2394-6040.ijcmph20150472>
- Nuryani & Rahmawati (2018). Kebiasaan jajan berhubungan dengan status gizi siswa anak sekolah di Kabupaten Gorontalo. *Jurnal Gizi Indonesia (The Indonesian Journal of Nutrition)*, 6(2): 114-122. <https://ejournal.undip.ac.id/index.php/jgi/article/view/16774/13590>
- Pakhri, A., Sukmawati, & Nurhasanah. (2018). Pengaruh Edukasi Gizi Terhadap Pengetahuan Gizi Dan Asupan Energi, Protein, Dan Besi Remaja. *Media Kesehatan Politeknik Kesehatan Makassar*, 13(1), 39-43. <https://doi.org/10.32382/medkes.v13i1.97>
- Patcheep, K. (2011). Factors Influencing Thai Adolescents' Eating Behaviour. Thesis, School of Nursing Science, Faculty of

- Medicine and Health Science, University of East Anglia.
- Sahputri, D. L. (2015). Hubungan antara status gizi dan gambaran tubuh remaja putri di SMA Negeri 3 Cimahi. Skripsi tidak dipublikasikan. Program Studi Ilmu Keperawatan, Fakultas Kedokteran dan Ilmu Kesehatan Universitas Islam Negeri Syarif Hidayatullah. <http://www.repository.uinjkt.ac.id/dspace/bitstream/123456789/28934/1/Diza%20Liane%20Sahputrifkik.pdf>.
- Sari, F. (2011). Faktor-faktor yang berhubungan dengan terjadinya obesitas pada anak di TK YPI Ibnu Syam, Cempaka Putih dan Waladun Shaleh Kecamatan Banuhampu Kabupaten Agam Tahun 2011. Fakultas Keperawatan, Universitas Andalas, Padang. <http://repo.unand.ac.id/id/eprint/165>
- Sholeha, L. (2014). Hubungan perilaku makan terhadap indeks massa tubuh pada remaja di SMP YMJ Ciputat. Skripsi tidak dipublikasikan. Program Studi Ilmu Keperawatan, Fakultas Kedokteran dan Ilmu Kesehatan Universitas Islam Negeri Syarif Hidayatullah. <http://repository.uinjkt.ac.id/dspace/bitstream/123456789/25583/1/LIA%20SHOLEHA-FKIK.pdf>
- Thamaria, N. (2017). Bahan ajar: Penilaian status gizi. Pusat Pendidikan Sumber Daya Manusia Kesehatan: Badan Pengembangan dan Pemberdayaan Sumber Daya Manusia Kesehatan, Kementerian Kesehatan RI.
- Weiss, R., Dziura, J., Burgert, T. S., Tamborlane, W. V, Taksali, S. E., Yeckel, C. W., ... Caprio, S. (2004). Obesity and the Metabolic Syndrome in Children and Adolescents. *New England Journal of Medicine*, 350(23), 2362–2374. <https://doi.org/10.1056/NEJMoa031049>
- Wulandari, NWM, Muniroh, L., Susila, T. Asupan energi dan aktivitas fisik berhubungan dengan z-score IMT/U anak sekolah dasar di daerah pedesaan. *Media Gizi Indonesia*, 10(1):51-56