ISSN: 2620-3758 (print); 2620-3766 (online) Vol. 6 No 2. September 2023. Page. 280 - 284

Prevention of Prenatal Stunting at Bhayangkara Hospital Nganjuk

Hari Prasetyo Umar*, Ratna Wardani, Byba Melda Suhita, Indasah, Yenny Puspitasari, Tri Retnoningsih

Institut Ilmu Kesehatan STRADA Indonesia
*Corresponding author: haryumar88@gmail.com

ABSTRACT

Efforts to prevent stunting are not only carried out at public health centers, but all agencies are expected to actively participate in preventing stunting, especially hospitals which are required to implement national programs regarding stunting. Stunting is a problem of chronic malnutrition caused by a lack of nutritional intake over a long period of time. This causes problems in the future, namely difficulties in achieving optimal physical and cognitive development. Stunted children have a lower Intelligence Quotient (IQ) than the average IQ of normal children (Ministry of Health of the Republic of Indonesia, 2018). Stunting is defined as a condition where the child's nutritional status according to TB/U results in a Z Score = <-2 SD, this indicates a short or very short body condition resulting from growth failure. Stunting in children is also a risk factor for death, problems with low motor development, low language skills, and functional imbalance (Anwar, Khomsan, and Mauludyani, 2014). Children who experience stunting as a result of someone not getting the right amount of nutritional intake over a long period of time (chronic). So that, stunting can actually be prevented with adequate nutritional intake, especially in the first 1000 days of life. This study aims to analyze efforts to prevent stunting during the prenatal period. The method used in this research is path analysis, by combining TRA and TPB theories to obtain 3 variables, namely environment, knowledge and behavior. Based on merger theory of behavior change TRA and TPB research can be concluded that the environment social pregnant women, knowledge about efforts to prevent stunting in pregnant women and the behavior of pregnant women regarding preventing stunting are all influential. This research concludes that stunting can be prevented from influencing factors starting from the prenatal period. Because adequate nutrition and the health of pregnant women greatly influence the growth of the fetus in the womb, which if there is a lack of intake can result in stunting.

Keywords: Prenatal, prevention, stunting

Received: June 8, 2023 Revised: July 11, 2023 Accepted: August 21, 2023



This is an open-acces article distributed under the terms of the Creative Commons Attribution-ShareAlike 4.0 International License

INTRODUCTION

Stunting is one of the targets of the Sustainable Development Goals (SDGs), which is included in the second sustainable development goal, namely eliminating hunger and all forms of

Journal of Community Engagement in Health

https://jceh.org/ https://doi.org/10.30994/jceh.v6i2.498

ISSN: 2620-3758 (print); 2620-3766 (online) Vol. 6 No 2. September 2023. Page. 280 - 284

malnutrition by 2030 and achieving food security. Targets set by the government through the 2020-2024 National Medium Term Development Plan (RPJMN).is to reduce the percentage of stunting by up to 14% (Indonesian Ministry of Health Data and Information Center, 2018).

Based on the 2021 SSGI results, the national stunting rate has decreased by 1.6 percent per year from 27.7 percent in 2019 to 24.4 percent in 2021. However, childbirth increases the global public health burden by contributing 45% of all under-five deaths. More than two million children under five die every year from malnutrition worldwide. Other impacts of stunting are disease, lack of intelligence and productivity which are of course very beneficial (Cruz et al., 2017).

Children who experience stunting as a result of someone not getting the right amount of nutritional intake over a long period of time (chronic). So that, stunting It can actually be prevented during the prenatal period with adequate nutritional intake for pregnant women, especially in the first 1000 days of life. Community-based interventions must be formulated and implemented to improve child health. At the individual level, interventions should focus on increasing pregnant women's knowledge of the basics of proper nutrition and the need to utilize itservice available healthcare. At the community level, health systems that facilitate public health interventions include maternal and child health programs that need to be made accessible to women in remote areas.

METHOD

The method used in this research is Path analysis. There are several stages carried out in this analysis, the first is determining the problem variables, then conducting an assessment questionnaire on the variables of the social environment of pregnant women, knowledge of pregnant women regarding efforts to prevent stunting, behavior of pregnant women towards efforts to prevent stunting in pregnant women.

RESULT

Analysis of the influence of the environment on knowledge: From the analysis above, the environmental variable significance value is 0.000 <0.05. So it can be concluded directly that there is a significant influence of the environment on knowledge of 0.547.

Analysis of the influence of the environment on behavior: From the analysis, an environmental significance value of 0.018 < 0.05 was obtained. So it can be concluded that there is a direct significant influence of the environment on knowledge of 0.253.

Analysis of the influence of knowledge on behavior: From the analysis, a knowledge significance value of 0.015 <0.05 was obtained. So it can be concluded that there is a direct significant influence of knowledge on behavior of 0.260.

Analysis of the influence of the environment through knowledge on behavior: It is known that the direct influence of the environment on behavior is 0.253. Meanwhile, the indirect influence of the environment through knowledge on behavior is the multiplication of the beta value of the environment on knowledge and the beta value of knowledge on behavior, namely: $0.547 \times 0.260 = 0.142$. So the total influence that the environment has on knowledge is the direct influence plus the indirect influence, namely 0.253 + 0.142 = 0.395. Based on the calculation results above, it is known that the direct influence value is 0.253, which is greater than the indirect influence of 0.142. These results indicate that the environment directly through knowledge has a significant influence on behavior.

From the series of descriptions above, it can be concluded that the hypothesis that there is an influence of the environment and knowledge on behavior can be accepted.

Journal of Community Engagement in Health

https://jceh.org/ https://doi.org/10.30994/jceh.v6i2.498

ISSN: 2620-3758 (print); 2620-3766 (online) Vol. 6 No 2. September 2023. Page. 280 - 284

DISCUSSION

Knowledge regarding efforts to prevent stunting in prenatal or pregnant women is closely related to knowledge of nutrition and nutritional needs of the family, especially children, because mothers with low education, among other things, will find it difficult to absorb nutritional information so they may be at risk of experiencing stunting in their toddlers. Mothers who have good knowledge must be followed by attitudes, skills and willingness, as well as practices that bring improvements in toddler nutrition. In addition, it is easier for highly educated mothers to get access to information regarding nutrition and health (Rahmawati, Fajar, & Idris, 2020).

Prenatal socio-economic conditions and residential sanitation are also related to the occurrence of stunting. Economic conditions are closely related to the ability to meet nutritious food intake and health services for pregnant women and the health needs of toddlers. Meanwhile, sanitation and food safety can increase the risk of infectious diseases (Indonesian Ministry of Health Data and Information Center, 2018). In research by Asrianti et al (2019) it shows that families with lower middle income levels have four times the risk great for experience stunting compared to families with middle to upper income.

Stunting has an impact on children's health and growth and development. Stunting can cause problems with children's growth and development, especially in children under two years old. In general, stunted children experience obstacles in cognitive and motor development which can affect their productivity as adults. Stunted children also have the risk of suffering from non-communicable diseases such as diabetes mellitus, obesity and heart disease as adults. Economically, this could be a burden for the country, especially due to increasing health financing. The potential for economic losses caused by stunting is very large (Indonesian Ministry of Health Data and Information Center, 2018).

Three things that must be considered in preventing prenatal stunting are improving the diet of pregnant women, parenting patterns, and improving sanitation and access to clean water (Ministry of Health of the Republic of Indonesia, 2018). Apart from that, it is necessary to make efforts to change behavior from those who don't know to know, from those who haven't prevented it to become responsive to prevent it. Successful prevention of prenatal stunting is not only the task of pregnant women but everyone is obliged to support both their husbands, family and the support of the surrounding environment.

CONCLUSION

The conclusion of this research is that the results of the analysis show that pregnant women's knowledge about stunting and efforts to prevent it is still low. Factor environment social pregnant women's knowledge regarding efforts to prevent stunting is related to the incidence of stunting where mother's knowledge is closely related to knowledge of nutrition during pregnancy/prenatal period. Meanwhile, the behavior of pregnant women is influenced by environmental support social on prenatal and pregnant women's knowledge regarding efforts to prevent stunting. Every line is obliged to support efforts to prevent stunting, especially health facilities which are required to carry out national programs in efforts to reduce and prevent stunting.

REFERENCE

Akombi BJ, Agho KE, Hall JJ, Wali N, Renzaho AMN, Merom D. (2017). Stunting, Wasting and Underweight in Sub-Saharan Africa: A Systematic Review. *International Journal of Environmental Research and Public Health*, 14(8). doi: 10.3390/ijerph14-080863.

Arifin DZ, Irdasari SY & Sukandar H. (2012). Analisis sebaran dan faktor risiko stunting pada baduta di Kabupaten Purwakarta [manuscript on internet]. Bandung: Universitas

- Padjajaran; 2012 [cited 2015 Jan 4]. Available from: http://pustaka.unpad.ac.id/wp- content/uploads/2013/07/pustaka unpad analisis sebaran dan faktor risiko stu nting.pdf.
- Asrianti, T., Afiah, N., & Muliyana, D. (2019). Pengaruh Pemberian Asi Terhadap Kejadian Stunting di Wilayah Kerja Puskesmas Juanda Samarinda. Jurnal Kesehatan Ibnu Sina (*J-KIS*), 1(01), 29–34
- Chabibah N, Kristiyanti R, Khanifah M. (2021). Factor Analysis Of Intranatal And Postnatal Toward Stunting. Journal Research Midwifery Politeknik Tegal, Volume 10, Issue 01, January 2021.
- Cruz LMG, Azpeiti GG, Suarez DR, Rodriquez AS, Ferrer JFL, Serra ML. (2017). Factors Associated with Stunting among Children Aged 0 to 59 Months from the Central Region of Mozambique. Nutriens Journal. Hal: 1-16, doi:10.3390/nu9050491.
- Dunkel Schetter, C. (2011). Psychological science on pregnancy: stress processes, biopsychosocial models, and emerging research issues. Annual review of psychology, 62, 531-558.
- Hanum, F., Khomsan, A., & Heryatno, Y. (2014). Hubungan asupan gizi dan tinggi badan ibu dengan status gizi anak balita. Jurnal Gizi dan Pangan, 9(1).
- Indriani, D., Dewi, Y. L. R., Murti, B., & Qadrijati, I. (2018). Prenatal factors associated with the risk of stunting: a multilevel analysis evidence from Nganjuk, East Java. Journal of Maternal and Child Health, 3(04), 294-300.
- Kinyoki DK, Kandala NB, Manda SO, Krainski ET, Fugltad GA, Moloney GM, Berkley JA, Noor MA (2016). Assesing Morbidity and Correlates of Wasting and Stunting among Child-ren in Somalia using Cross-sectional Household Surveys 2007-2010. BMJ.6:1-9. doi: 10.1136/bmjopen-2015-00-9854.
- Kramer M, Kupka R, Subramanian SV, Vollmer (2016). Association Between Household Unavailability of Iodized Salt and Child Growth: Evidence from 89 Demographic and Health Surveys. The American Journal of Clinical Nutrition, 104: 1093-1099.
- Manary MJ, Trehan I. (2020). Protein-Energy Malnutrition. Twenty-Six. Elsevier Inc. doi:10.1016/B978-0-323-53266-2.00203-4.
- Murti, F. C., Suryati, S., & Oktavianto, E. (2020). Hubungan Berat Badan Lahir Rendah (Bblr) Dengan Kejadian Stunting Pada Balita Usia 2-5 Tahun Di Desa Umbulrejo Kecamatan Ponjong Kabupaten Gunung Kidul. Jurnal Ilmiah Kesehatan Keperawatan, 16(2), 52-
- Nugraha MA, & Keliat BA. (2020). Depresi Selama Kehamilan Sebagai Faktor Risiko Stunting. Jurnal Ilmu Keperawatan Jiwa Volume 3 No 3, Hal 249 – 262.
- Nugraheni, D., Nuryanto, N., Wijayanti, H. S., Panunggal, B., & Syauqy, A. (2020). Asi Eksklusif Dan Asupan Energi Berhubungan Dengan Kejadian Stunting Pada Usia 6–24 Bulan Di Jawa Tengah. Journal of Nutrition College, 9(2), 106-113.
- Permatasari AAI, Julia M, Batubara J, Pulungan A. (2019). Stunting is not a synonym of malnutrition. Eur J Clin Nutr. 2020 Mar;74(3):377-386. doi: 10.1038/s41430-019-0439-4. Epub 2019 May 29. Erratum in: Eur J Clin Nutr. 2019 Oct 21;: PMID: 31142828.
- Rahmawati, N. F., Fajar, N. A., & Idris, H. (2020). Faktor sosial, ekonomi, dan pemanfaatan posyandu dengan kejadian stunting balita keluarga miskin penerima PKH di Palembang. Jurnal Gizi Klinik Indonesia, 17(1), 23.
- Randolph, J. J. (2009). A giude to writing the dissertation literature review. peer- reviewed electronic journal, 14(13). Diakses pada 15 April 2019 dari http://doi.org/10.1306/ D426.

Journal of Community Engagement in Health

https://jceh.org/ https://doi.org/10.30994/jceh.v6i2.498

ISSN: 2620-3758 (print); 2620-3766 (online) Vol. 6 No 2. September 2023. Page. 280 - 284

- Ruaida, N. (2013). *Hubungan anemia ibu hamil dengan kejadian stunting pada anak usia 6-24 bulan di Kota Yogyakarta* (Doctoral dissertation, Universitas Gadjah Mada).
- Rufaida, F. D. (2020). Hubungan faktor keluarga dan rumah tangga dengan kejadian stunting pada balita di tiga Desa Wilayah Kerja Puskesmas Sumberbaru Jember. *Journal of Agromedicine and Medical Sciences*, Vol. 6 No. 1.
- Sartika AN, Khoirunnisa M, Meiyetriani E, Ermayani E, Pramesthi IL, Nur Ananda AJ. (2021). Prenatal and postnatal determinants of stunting at age 0-11 months: A cross-sectional study in Indonesia. PLoS One. 2021 Jul 14;16(7):e0254662. doi: 10.1371/journal.pone.0254662. PMID: 34260622; PMCID: PMC8279365.
- Sutarto, S. T. T., Mayasari, D., & Indriyani, R. (2018). Stunting, Faktor ResikodanPencegahannya. *Agromedicine Unila*, *5*(1), 540-545.
- Syabania, R., Yuniar, P. A., & Fahmi, I. (2022). Faktor-faktor Prenatal Yang Mempengaruhi Stunting Pada Anak Usia 0-2 Tahun Di Wilayah Asia Tenggara: Literature Review. *Journal of Nutrition College*, 11(3), 188-196.
- Wemakor, A., & Mensah, K. A. (2016). Association between maternal depression and child stunting in Northern Ghana: a cross-sectional study. *BMC public health*, 16(1), 869.
- Widanti, Y. A. (2017). Prevalensi, Faktor Risiko, dan Dampak Stunting pada Anak Usia Sekolah. *Jurnal Teknologi Dan Industri Pangan*, 1(1), 23–28.
- Yisak, H., Gobena, T., & Mesfin, F. (2015). Prevalence and risk factors for under nutrition among children under five at Haramaya district, Eastern Ethiopia. *BMC pediatrics*, *15*, 1-7.