



THE RELATIONSHIP BETWEEN FAMILY CHARACTERISTICS AND STUNTING AMONG CHILDREN AGED 24–59 MONTHS IN NAGARI SINURUIK, THE WORKING AREA OF TALU COMMUNITY HEALTH CENTER

HUBUNGAN ANTARA KARAKTERISTIK KELUARGA DAN STUNTING PADA ANAK USIA 24–59 BULAN DI NAGARI SINURUIK, WILAYAH KERJA PUSKESMAS TALU

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Abstract

Stunting is a chronic nutritional problem influenced by various direct and indirect factors, including maternal knowledge of nutrition, maternal education, and family income. This study aimed to determine the relationship between family characteristics and the incidence of stunting among children aged 24–59 months in Nagari Sinuruik, within the working area of Talu Public Health Center. This study used a quantitative descriptive-analytic method with a cross-sectional design. The study was conducted from February to August 2024, with data collection carried out from June 26 to 30, 2024. The study population consisted of 85 children aged 24–59 months, with a sample of 46 respondents selected using random sampling. Data were collected using questionnaires and analyzed using the Chi-Square test. The results showed that 26 toddlers (56.5%) experienced stunting, 28 respondents (60.9%) had poor nutritional knowledge, 28 respondents (60.9%) had a lower educational level, and 24 respondents (52.2%) had low family income. There were significant relationships between maternal knowledge and the incidence of stunting ($p=0.007$), maternal education and the incidence of stunting ($p=0.012$), and family income and the incidence of stunting ($p=0.009$). The study concluded that maternal knowledge, maternal education, and family income were associated with the incidence of stunting among children aged 24–59 months. Public health center staff are expected to continue monitoring the nutritional status of toddlers and improve nutrition education for mothers, adolescents, and prospective brides and grooms.

Keywords : Stunting, Children Under Five, Maternal Nutritional Knowledge, Maternal Educational Level, Family Income.



Abstrak

Stunting merupakan masalah gizi kronis yang dipengaruhi oleh berbagai faktor langsung maupun tidak langsung, termasuk pengetahuan ibu mengenai gizi, pendidikan ibu, dan pendapatan keluarga. Penelitian ini bertujuan untuk mengetahui hubungan antara karakteristik keluarga dengan kejadian stunting pada anak usia 24–59 bulan di Nagari Sinuruik, wilayah kerja Puskesmas Talu. Penelitian ini menggunakan metode deskriptif-analitik kuantitatif dengan desain cross-sectional. Penelitian dilaksanakan pada bulan Februari hingga Agustus 2024, dengan pengumpulan data dilakukan pada tanggal 26 hingga 30 Juni 2024. Populasi penelitian terdiri dari 85 anak usia 24–59 bulan, dengan sampel sebanyak 46 responden yang dipilih menggunakan teknik random sampling. Data dikumpulkan melalui kuesioner dan dianalisis menggunakan uji Chi-Square. Hasil penelitian menunjukkan bahwa 26 balita (56,5%) mengalami stunting, 28 responden (60,9%) memiliki pengetahuan gizi yang kurang, 28 responden (60,9%) memiliki tingkat pendidikan rendah, dan 24 responden (52,2%) memiliki pendapatan keluarga rendah. Terdapat hubungan yang signifikan antara pengetahuan ibu dengan kejadian stunting ($p=0,007$), pendidikan ibu dengan kejadian stunting ($p=0,012$), serta pendapatan keluarga dengan kejadian stunting ($p=0,009$). Penelitian menyimpulkan bahwa pengetahuan ibu, pendidikan ibu, dan pendapatan keluarga berhubungan dengan kejadian stunting pada anak usia 24–59 bulan. Petugas puskesmas diharapkan untuk terus memantau status gizi balita serta meningkatkan edukasi gizi bagi ibu, remaja, dan calon pengantin.

Kata Kunci : Stunting, Balita, Pengetahuan Gizi Ibu, Tingkat Pendidikan Ibu, Pendapatan Keluarga.

1. INTRODUCTION

Children under five are children under five years of age who are in a period of rapid growth and development. Long-term nutritional deficiencies, particularly during the first 1,000 days of life, can cause growth failure, resulting in children being shorter than their peers. This condition is known as stunting (Sukanto et al., 2023).

Stunting is a condition in which children under five fail to achieve their expected height for their age due to chronic undernutrition. Stunting can begin during pregnancy and continue into early life after birth and is generally clearly visible by two years of age (Qolbiyah et al., 2021). Stunting among children under five remains a major nutritional problem. Its causes include direct factors, such as nutritional intake and infectious diseases, as well as indirect factors, such as low birth weight, food availability, socioeconomic status, education, and caregiving practices (Siregar & Siagian, 2021).

According to WHO data in 2022, approximately 148.1 million, or 22.3%, of children under five worldwide experienced stunting. In Indonesia, the prevalence of stunting based on 2021 data was 24.4%, while in West Sumatra it was 27.47% (WHO, 2022; Kemenkes RI, 2022). In West Pasaman Regency, the prevalence of stunting reached 35.5%, and Talu Community Health Center was among the areas with a high number of stunting cases, at 15.53% (West Sumatra Health Office, 2022).

Family characteristics are one of the indirect factors that may influence the risk of stunting. Good maternal knowledge can support appropriate caregiving practices and feeding according to children's needs. Maternal education is related to the ease of receiving information, while family income affects the ability to meet nutritional food needs (Utami et al., 2022).

An initial survey conducted on March 4, 2024, among 10 mothers with toddlers aged 24–59 months showed that all mothers had inadequate nutritional knowledge, 8 mothers (80%) had a lower educational level, and 6 mothers (60%) had low family income. Based on these conditions, this study was conducted to determine the relationship between family characteristics and the incidence of stunting among toddlers aged 24–59 months in Nagari Sinuruik, within the working area of Talu Community Health Center, in 2024.



2. RESEARCH METHOD

This quantitative study used a descriptive-analytic method with a cross-sectional design to determine the relationship between family characteristics as independent variables and the incidence of stunting as the dependent variable.

The study population consisted of 85 children aged 24–59 months in Nagari Sinuruik, within the working area of Talu Community Health Center. The sample consisted of 46 respondents, calculated using the Slovin formula with a 10% margin of error and selected using random sampling.

The study was conducted in Nagari Sinuruik, within the working area of Talu Community Health Center. The research process took place from January to August 2024, while data collection was conducted from June 26 to 30, 2024. Primary data were obtained through height-for-age measurements and questionnaires administered to mothers of toddlers. Secondary data were obtained from relevant documentation sources.

The independent variables included maternal knowledge of nutrition, maternal education, and family income. The dependent variable was the incidence of stunting based on the height-for-age (HAZ/TB-U) indicator, with stunting categorized as <-2 SD and non-stunting as ≥ -2 SD.

Data were processed through editing, coding, processing, and cleaning using SPSS version 26. Univariate analysis was used to describe the frequency distribution of each variable. Bivariate analysis used the Chi-Square test with a significance level of $\alpha=0.05$. The study followed ethical principles, including informed consent, anonymity, and confidentiality.

3. RESULT AND DISCUSSION

a. Frequency Distribution of Stunting among children under five Aged 24–59 Months in Nagari Sinuruik, Talu Community Health Center Working Area

Based on the research findings, among 46 respondents, 26 toddlers (56.5%) experienced stunting and 20 toddlers (43.5%) did not experience stunting in Nagari Sinuruik, Talu Community Health Center Working Area. These findings indicate that stunting remains a relatively high nutritional problem among toddlers aged 24–59 months. Stunting is influenced not only by direct factors such as nutritional intake and infectious diseases, but also by indirect factors, including maternal nutritional knowledge, maternal education, family economic conditions, food availability, caregiving practices, and the environment. Based on the researcher's analysis, stunting among the 26 toddlers in this study was associated with indirect factors, particularly poor maternal nutritional knowledge, low maternal education, and low family income. Therefore, efforts are needed to improve mothers' knowledge and understanding of toddler nutrition and to support families in meeting children's food and nutritional needs as part of stunting prevention.

b. Frequency Distribution of Maternal Nutritional Knowledge of Nutrition among children under five Aged 24–59 Months in Nagari Sinuruik, Talu Community Health Center Working Area

Based on the research findings, among 46 respondents, most mothers had poor nutritional knowledge, namely 28 mothers (60.9%), while 9 mothers (19.6%) had moderate nutritional knowledge and 9 mothers (19.6%) had good nutritional knowledge. Questionnaire analysis showed that mothers still had limited understanding of complementary feeding, feeding frequency, and food consistency according to the child's age. This condition indicates that poor maternal nutritional knowledge may affect mothers' ability to select, prepare, and provide food according to toddlers' nutritional needs. Good knowledge is expected to help mothers implement appropriate feeding practices so that children's nutritional needs can be met and the risk of stunting can be prevented. Based on the researcher's analysis, low maternal knowledge regarding the definition, manifestations, causes of stunting, and nutritional needs of toddlers is an important issue that needs attention. Therefore, improving maternal knowledge through nutrition education and counseling on stunting prevention is



necessary so that mothers are better able to recognize and address nutritional problems in children from an early age.

c. Frequency Distribution of Maternal Educational Level among children under five Aged 24–59 Months in Nagari Sinuruik, Talu Community Health Center Working Area

Based on the research findings, most mothers had a lower educational level, namely 28 mothers (60.9%), while 18 mothers (39.1%) had a higher educational level. Maternal education can influence the ability to receive, understand, and apply information regarding child nutrition and health. Low education may be associated with knowledge, attitudes, behavior, caregiving practices, and the ability to provide nutritional intake according to toddlers' needs. Mothers with higher education tend to find it easier to receive health information, which can support better decision-making regarding children's nutritional needs. Therefore, low maternal education needs to be considered in stunting prevention efforts, particularly through nutrition education and counseling that are simple, clear, and easy to understand. With improved maternal understanding, children's nutritional needs, caregiving practices, and health are expected to be fulfilled optimally, thereby reducing the risk of stunting.

d. Frequency Distribution of Family Income among children under five Aged 24–59 Months in Nagari Sinuruik, Talu Community Health Center Working Area

Based on the research findings, most mothers had a low educational level, namely 28 mothers (60.9%), while 18 mothers (39.1%) had a higher educational level. Maternal education plays a role in the ability to receive, understand, and apply information regarding child nutrition and health. Low education may be associated with knowledge, attitudes, behavior, caregiving practices, and the ability to provide nutritional intake according to toddlers' needs. Therefore, maternal education is an important factor to consider in stunting prevention efforts through simple, clear, and easy-to-understand nutrition education and counseling. With improved maternal understanding, nutritional needs and caregiving practices can be provided more appropriately, thereby reducing the risk of stunting.

4. CONCLUSION

Based on the research entitled “Family Characteristics and the Incidence of Stunting among children under five Aged 24–59 Months in Nagari Sinuruik, Talu Community Health Center Working Area, 2024,” the following conclusions can be drawn:

1. A total of 56.5% of toddlers aged 24–59 months in Nagari Sinuruik, within the working area of Talu Community Health Center, experienced stunting.
2. A total of 60.9% of mothers had poor nutritional knowledge.
3. A total of 60.9% of mothers had a lower educational level.
4. A total of 52.2% of families had low income.

There were significant relationships between maternal knowledge, maternal education, and family income and the incidence of stunting among toddlers aged 24–59 months.

5. REFERENCES

- Adnyana, I. M. D. M. (2021). Populasi dan Sampel. *Metode Penelitian Pendekatan Kuantitatif*, 14(1), 103–116.
- Agustin, L., & Rahmawati, D. (2021). Hubungan Pendapatan Keluarga dengan Kejadian Stunting. *Indonesian Journal of Midwifery (IJM)*, 4(1), 30. <https://doi.org/10.35473/ijm.v4i1.715>
- Astuti, S., & Lia Idealistiana. (2023). Analisis Faktor Risiko Kejadian Stunting Pada Balita Di Desa Ragemanunggal Wilayah Kerja Puskesmas Setu Ii Bekasi. *Jurnal Ilmiah Keperawatan (Scientific Journal of Nursing)*, 9(4), 230–235. <https://doi.org/10.33023/jikep.v9i4.1611>
- Dasril, O., & Annita. (2019). Karakteristik Keluarga terhadap Kejadian Stunting pada Anak SD di Kec. Nanggalo Kota Padang. *Jurnal Sehat Mandiri*, 14(2), 48–56. <http://jurnal.poltekkespadang.ac.id/ojs/index.php/jsm>
- Di, B., Kerja, W., & Abang, P. (2024). Hubungan Pengetahuan Ibu Terhadap Kejadian Stunting Pada



- Balita Di Wilayah Kerja Puskesmas Abang I Ni Putu Manik Juniantari. 12(1).
- Kedokteran, P. S., Kedokteran, F., & Warmadewa, U. (2024). Hubungan Tingkat Pengetahuan Ibu Tentang Gizi dengan Kejadian Stunting Balita 12 - 59 Bulan di Wilayah Kerja Puskesmas Tegallalang 1 konsekuensi yang jarang diingat , tetapi. 4(2), 275–281.
- Kemkes RI. (2022a). Hasil Survei Status Gizi Indonesia (SSGI) 2022. Kemkes, 1–150.
- Kemkes RI. (2022b). Profil Kesehatan Indonesia 2021. In Pusdatin. Kemkes. Go. Id.
- Kemkes RI. (2023). Makanan Lokal. Buku Resep Makanan Lokal Bayi, Balita Dan Ibu Hamil, 1–52.
- Khofifah Indarwati, & Niluh Putu Evvy Rossanty 2. (2023). Promosi Kesehatan Tentang Pencegahan Stunting Pada Masyarakat Di Desa Kaliburu. Jurnal Publikasi Sistem Informasi Dan Manajemen Bisnis, 2(2), 152–160. <https://doi.org/10.55606/jupsim.v2i2.1323>
- Kusumaningrum, P. R., Khayati, F. N., & Arvita, D. (2022). Gambaran Pengetahuan Ibu Tentang Gizi pada Balita Description Of Mother ' S Knowledge About Nutrition In Tolls berhubungan dengan status kesehatan untuk dipahami dan dimengerti terutama merupakan kelompok umur yang paling pada kelompok rentan gizi . Kelom. Jurnal Keperawatan Notokusomo (JKN), 10(1), 1–10.
- Lestari, W., Samidah, I., & Diniarti, F. (2022). Hubungan Pendapatan Orang Tua dengan Kejadian Stunting di Dinas Kesehatan Kota Lubuklinggau. Jurnal Pendidikan Tambusai, 6 Nomor 1(2614–3097), 3273–3279.
- Maulida, M. (2022). Hubungan Karakteristik Keluarga Dan Status Gizi Dengan Kejadian Stunting Pada Anak Balita Di Wilayah Kerja Puskesmas Darul Aman Kabupaten Aceh Timur Tahun 2021. Getsempena Health Science Journal, 1(1), 19–35. <https://doi.org/10.46244/ghsj.v1i1.1705>
- Nurmalasari, Y., Sjariani, T., & Sanjaya, P. I. (2019). Hubungan Tingkat Kecukupan Protein dengan Kejadian Stunting pada Balita Usia 6-59 Bulan di Desa Mataram. Jurnal Ilmu Kedokteran Dan Kesehatan, 6(2), 92–97.
- Permenkes. (2020). Standar Antropometri Anak (Vol. 21, Issue 1).
- Qolbiyah, F. N., Yudia, R. C. P., & Aminyoto, M. (2021). Hubungan Praktik Pemberian Makanan dengan Kejadian Stunting pada Balita di Puskesmas Barong Tongkok Kabupaten Kutai Barat. Jurnal Sains Dan Kesehatan, 3(6), 853–863. <https://doi.org/10.25026/jsk.v3i6.901>
- Septina, Y., Nurasiah, A., & Rosdiana, R. (2023). Hubungan antara pendidikan dan pengetahuan ibu tentang menu gizi seimbang dengan kejadian stunting pada anak usia 24 – 59 bulan. Journal of Nursing Practice and Education, 4(1), 156–161. <https://doi.org/10.34305/jnpe.v4i1.948>
- Siregar, S. H., & Siagian, A. (2021). Hubungan Karakteristik Keluarga dengan Kejadian Stunting pada Anak 6 – 24 bulan di Kabupaten Langkat. Tropical Public Health Journal, 1(1), 1–8. <https://doi.org/10.32734/trophico.v1i1.6049>
- Sukanto, I. S., Juwita, S., & Argaheni, N. B. (2023). Upaya pencegahan dan penanganan stunting dengan pengenalan program stunting melalui kader di Kota Surakarta. JMC: Journal of Midwifery in Community, 1(2), 11–23. <https://jurnal.uns.ac.id/jmc/index>
- Utami, D. S., Rusmita, E., & Adji, D. R. (2022). Karakteristik Keluarga dan Karakteristik Pola Asuh Orang Tua dengan Balita Stunting Usia 23-59 Bulan Di Kelurahan Ciumbuleuit Kota Bandung. Jurnal Ilmiah JKA (Jurnal Kesehatan Aeromedika), 8(1), 52–62. <https://doi.org/10.58550/jka.v8i1.144>
- Waroh, Y. K. (2019). Pemberian Makanan Tambahan Sebagai Upaya Penanganan Stunting Pada Balita Di Indonesia. Embrio, 11(1), 47–54. <https://doi.org/10.36456/embrio.vol11.no1.a1852>
- World Health Organization. (2022). Level dan tren di anak kekurangan gizi. 1–32.
- Zogara, A. U., & Pantaleon, M. G. (2020). Faktor-faktor yang Berhubungan dengan Kejadian Stunting pada Balita. Jurnal Ilmu Kesehatan Masyarakat, 9(02), 85–92. <https://doi.org/10.33221/jikm.v9i02.505>