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Determining Factors of Caring Based Parental Support In Locus Stunting Villages

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ABSTRACT

Introduction: Stunting remains one of the major child growth and development problems in Indonesia. Despite recent progress, the national prevalence has not yet achieved the target of 14%. This study aims to identify the determining factors of parental support in child-rearing practices within stunting locus villages.
Method: A quantitative study with a cross-sectional approach was conducted in Jember Regency. A total of 366 respondents were selected using Slovin's formula with a margin of error of 0.05 and based on predetermined inclusion criteria. Data were analyzed using the Chi-Square test with a significance level of p = 0.05.
Result: The findings revealed that maternal age at marriage, paternal education, maternal education, waste disposal practices, and household cleanliness significantly influenced parental support in child-rearing within stunting locus villages. The results indicate that higher maternal age at marriage, higher parental education levels, and a clean home environment are associated with better parental support and contribute to the prevention of stunting.
Conclusion: This study concludes that parental characteristics and environmental factors play a crucial role in shaping supportive parenting in stunting-prone areas. Strengthening parental education and improving household sanitation may serve as effective strategies for stunting prevention. Future research is recommended to analyze policy-related factors in stunting locus villages.

Keywords: *Stunting; Parenting Patterns; Parental Support; Stunting Locus Villages*

Introduction

The prevalence of stunting in Indonesia, as a consequence of malnutrition in children under five, has exceeded the threshold set by the World Health Organization (WHO). In 2022, the stunting rate reached 21.6%, surpassing the WHO target of a maximum of 20% among children under five. Furthermore, this figure indicates that the national reduction target of 14% has not yet been achieved (Tim Percepatan Pencegahan

Anak Kerdil 2024). Stunting cases remain prevalent, including in Jember Regency, which has been identified as the highest contributor to stunting in East Java Province, with a prevalence of 34.9% (Kementerian Kesehatan RI 2022a); (Annur 2022). Studies over the past five years consistently report high prevalence rates in several villages across Jember Regency. For example, a 2019 study of 172 children under five in Lojejer Village, Wuluhan, Jember, found that 5.2% were classified as very short and 47.7% as short (Wulandari I, N, and Anggraeni ZEY 2023); (Wulandari et al. 2023). In 2020, research conducted in the Arjasa Public Health Center reported a stunting prevalence of 26.3% (Lestari, Rohmah, and Utami 2021). Similarly, in 2021, a study involving 376 children under five in the Sumberjambe Public Health Center area reported a prevalence of 68.1%. These findings highlight that stunting remains a serious public health problem that threatens the quality of child growth and development.

The determinants of stunting can be categorized into internal and external factors. Studies indicate that low household socioeconomic status, maternal height below 145 cm, low maternal education, and maternal occupation are significant predictors of child stunting. Other contributing factors include non-exclusive breastfeeding during the first six months, premature birth, short birth length, history of infection, and birth weight below 2,500 grams. Additional determinants are paternal education, paternal occupation, maternal age at pregnancy, maternal hemoglobin levels, maternal mid-upper arm circumference, maternal occupation, and nutritional practices (Budiarto et al. 2021); (Lobo, Talahatu, and Riwu 2019); (Permatasari et al. 2023); (Beal et al. 2019); (Beal et al. 2018). Moreover, poverty has been shown to significantly influence stunting prevalence, with higher poverty rates correlating with higher stunting proportions (Kementerian Kesehatan RI 2022b). These findings suggest that stunting arises from both child-related and parental demographic factors.

Environmental conditions are also reported as indirect yet critical contributors to stunting among children under five (Anggraini, Haninda, and Rusdy 2019). Children living in households without proper sanitation facilities, such as latrines, are at greater risk of stunting. Antenatal care frequency, duration of breastfeeding, timing of complementary feeding introduction, and children's dietary practices are all associated with stunting. Limited access to health services and residence in rural areas have also been repeatedly

linked to higher stunting prevalence (Beal et al. 2018); (Lobo et al. 2019). Parenting practices, particularly breastfeeding, directly influence parental decision-making in childcare. Increased breastfeeding practices have been shown to strengthen shared decision-making and family support (Rohmah and Laksono 2023). These findings underscore the influence of environmental and parenting factors on stunting.

Parenting emphasizes the crucial role of parents in supporting and fostering child development (Daly et al. 2015). Child growth and development, particularly among stunted children, is strongly associated with parenting practices. This association is logical, as effective parenting ensures the fulfillment of children's nutritional needs, developmental stimulation, affection, protection, and safety. Parental support is likewise closely linked to parenting. Poor parenting styles are associated with a higher risk of stunting in children under five. Ample evidence has demonstrated a relationship between family support and parenting practices. However, studies focusing specifically on *caring*-based parental support remain limited. Support can be defined as the act of providing assistance when a family member faces increasing responsibilities related to childcare (Rohmah 2019); (KBBI.web.id 2024).The concept of *caring* encompasses qualities such as reliability, respect, empathy, and communicative engagement (Riadi 2019). The novelty of the present study lies in its focus on exploring parental support grounded in *caring* characterized by dependability, attentiveness, respect, empathy, appreciation, and willingness to assist. Based on this rationale, the present research aims to examine the determining factors of *caring*-based parental support in child-rearing within stunting locus villages.

Method

This study employed a quantitative design with a cross-sectional approach. The study setting was Jember Regency, which in 2023 had 40 designated stunting locus villages (Pemerintah Daerah Kabupaten Jember 2023). Based on child weighing data in August 2023, the subdistrict with the highest prevalence of stunting in Jember Regency was Jelbuk.

The study population consisted of mothers with children under five years of age (0–59 months) residing in Jelbuk. The sample size was calculated using Slovin's formula with a margin of error of 0.05, resulting in a required total of 366 respondents. A simple random

sampling technique was applied to select the participants. The study was approved by the Research Ethics Committee with ethical clearance number SK 0115/KEPK/FIKES/XII/2024.

The variables examined included sociodemographic factors such as maternal age, education, occupation, residential area, parity, and family type. Data analysis was conducted using the Chi-Square test with a significance level of p = 0.05.

Results

a. Univariate Analysis

Table 1. Demographic Characteristics of Parents in Jelbuk, July 2024

Mother	f	%	Father	f	%
Maternal Age (years)			**Paternal Age (years)**		
15–19	7	2	15–19	0	0
20–24	116	32	20–24	43	12
25–29	88	24	25–29	93	25
30–34	83	23	30–34	86	23
35–39	47	13	35–39	63	17
40–44	21	6	40–44	47	13
45–49	4	1	45–49	22	6
>49	0	0	>49	12	3
Total	366	100	**Total**	366	100
Maternal Age at Marriage (years)			**Paternal Age at Marriage (years)**		
<15	13	4	<15	0	0
15	17	5	15	2	1
16	34	9	16	3	1
17	49	13	17	9	2
18	49	13	18	14	4
19	65	18	19	23	6
20	49	13	20	43	12
21	26	7	21	27	7
22	16	4	22	43	12
23	13	4	23	28	8
24	9	2	24	32	9
25	13	4	25	45	12
>25	13	4	>25	97	27
Total	366	100	**Total**	366	100
Maternal Education			**Paternal Education**		
Primary (SD)	139	38	Primary (SD)	175	48
Junior High (SMP)	89	24	Junior High (SMP)	78	21
Senior High (SMA)	124	34	Senior High (SMA)	98	27
Higher Education (PT)	14	4	Higher Education (PT)	15	4
Total	366	100	**Total**	366	100
Parity					
1–2 births	311	85			
3–4 births	52	14			

Mother	f	%	Father	f	%
≥5 births	3	1			
Total	366	100			

Pregnancy History		
1–2 pregnancies	300	82
3–4 pregnancies	63	17
≥5 pregnancies	3	1
Total	366	100

Table 2. Frequency of Caring-Based Parental Support in Jelbuk, July 2024

Caring Dimension	Category	Maternal Support f (%)	Paternal Support f (%)	Parental Support f (%)
Trustworthiness	Low	29 (8)	3 (1)	20 (5)
	Moderate	17 (5)	64 (17)	67 (18)
	High	320 (87)	299 (82)	279 (76)
	Total	366 (100)	366 (100)	366 (100)
Dependability	Low	2 (1)	20 (5)	6 (2)
	Moderate	24 (7)	105 (29)	73 (20)
	High	340 (93)	241 (66)	287 (78)
	Total	366 (100)	366 (100)	366 (100)
Respect	Low	49 (13)	29 (8)	30 (8)
	Moderate	69 (19)	27 (7)	88 (24)
	High	248 (68)	310 (85)	248 (68)
	Total	366 (100)	366 (100)	366 (100)
Empathy	Low	4 (1)	13 (4)	6 (2)
	Moderate	43 (12)	104 (28)	47 (13)
	High	319 (87)	249 (68)	313 (86)
	Total	366 (100)	366 (100)	366 (100)
Caring/Concern	Low	2 (1)	65 (18)	25 (7)
	Moderate	56 (15)	165 (45)	153 (42)
	High	308 (84)	136 (37)	188 (51)
	Total	366 (100)	366 (100)	366 (100)
Communication	Low	3 (1)	15 (4)	14 (4)
	Moderate	33 (9)	77 (21)	78 (21)
	High	330 (90)	274 (75)	274 (75)
	Total	366 (100)	366 (100)	366 (100)

Table 3. Environmental Characteristics in Jelbuk, July 2024

Characteristic	Category	Frequency (f)	Percentage (%)
Home Cleanliness	Dirty	27	7
	Clean	339	93
	Total	366	100
Waste Disposal	Disposed improperly	55	15
	In trash bin	311	85
	Total	366	100

b. Bivariate Analysis

Table 3. Association Between Demographic Characteristics and Parental Support in Childcare, July 2024

Characteristic	Parental Support in Childcare		Total	p-value	r
	Very Poor	Poor	Good	Very Good	
Father's Age at Marriage					
15–19 years	4 (30.8%)	6 (18.8%)	20 (17.5%)	21 (10.1%)	
20–24 years	7 (53.8%)	15 (46.9%)	56 (49.1%)	95 (45.9%)	
25–30 years	2 (15.4%)	11 (34.4%)	38 (33.3%)	91 (44.0%)	
Mother's Age at Marriage					
< 15 years	0 (0%)	0 (0%)	4 (3.5%)	9 (4.3%)	
15–19 years	4 (30.8%)	20 (62.5%)	64 (56.1%)	126 (60.9%)	
20–24 years	8 (61.5%)	10 (31.3%)	35 (30.7%)	60 (29.0%)	
25–30 years	1 (7.7%)	2 (6.2%)	11 (9.6%)	12 (5.8%)	
Father's Education					
Elementary School	3 (2%)	38 (23%)	67 (40%)	58 (35%)	
Junior High School	1 (1%)	13 (18%)	37 (52%)	20 (28%)	
Senior High School	0 (0%)	14 (15%)	38 (41%)	40 (43%)	
Higher Education	1 (3%)	7 (19%)	13 (35%)	16 (43%)	
Mother's Education					
Elementary School	43 (32%)	63 (46%)	30 (22%)	0 (0%)	
Junior High School	31 (38%)	31 (38%)	18 (22%)	1 (1%)	
Senior High School	44 (39%)	49 (43%)	17 (15%)	3 (3%)	
Higher Education	16 (44%)	12 (33%)	7 (19%)	1 (3%)	
Parity					
1–2 times	11 (3.5%)	27 (8.7%)	95 (30.5%)	178 (57.2%)	
3–4 times	2 (3.8%)	5 (9.6%)	17 (32.7%)	28 (53.9%)	
≥ 5 times	0 (0%)	0 (0%)	2 (66.7%)	1 (33.3%)	
Waste Disposal					
Disposed improperly	8 (14.5%)	10 (18.2%)	18 (32.7%)	19 (34.5%)	
In trash bin	5 (1.6%)	22 (7.1%)	96 (30.9%)	188 (60.5%)	
Home Cleanliness					
Dirty	5 (18.5%)	4 (14.8%)	7 (25.9%)	11 (40.7%)	
Clean	8 (2.4%)	28 (8.3%)	107 (31.6%)	196 (57.8%)	

Discussion

Mothers with low levels of support in childcare within stunting locus villages were predominantly those who married at the age of 20–24 years (very poor parenting support) and 15–19 years (poor parenting support). The findings revealed that maternal age at marriage correlated by 15.4% with childcare support, while 84.6% was influenced by other factors. Mothers who marry before the age of 20 years may face several challenges, such as the risk of postpartum hemorrhage, limited opportunities for education, significant role and responsibility shifts, and an increased risk of domestic violence. Furthermore, it was found that mothers who married between the ages of 20–

25 years experienced high parenting stress levels, which positively correlated with poor parenting practices (Hasiana and Aisyah 2024). Poor parenting practices include neglecting children, exhibiting harsh behavior, and failing to support growth and development. These findings are consistent with another study reporting that poor parenting practices increased the risk of stunting by 8.07 times, with 53% prevalence compared to 12.3% in good parenting practices (Reiher and Mohammadnezhad 2019). Thus, maternal age at marriage is an important factor that should be considered to ensure optimal childcare support.

The study also revealed that parental education, both father's and mother's, had a positive influence on childcare support. Father's education contributed positively by 15.7% to parenting support, with 84.3% explained by other factors. Similarly, mother's education contributed positively by 14.2%, while 85.8% was influenced by other variables. Parents with higher educational attainment tend to possess better knowledge regarding childcare practices and are more capable of assessing the needs of child growth and development. This finding is in line with other research, which indicated that an increase in parental education is associated with an improvement in childcare practices (Miyati, Rasmani, and Fitrianingtyas 2021). Hence, enhancing parental education is essential for ensuring optimal parenting support.

Waste disposal practices were also found to positively influence childcare support. The results showed that waste management accounted for 23.6% of the variation in parenting support, with 76.4% attributed to other factors. This is consistent with previous studies, which reported that proper waste disposal positively affected parental childcare practices, as it reflects an attitude of concern underlying good parenting support (Patalatu and Besare 2020). Furthermore, poor waste management practices may contribute to stunting incidence. Supporting evidence indicates that improper waste disposal is associated with stunting due to its impact on sanitation and hygiene, which may lead to diarrhea or gastrointestinal problems. Persistent illness of this kind may result in weight loss and growth faltering in children (Junanda et al. 2022); (Nugrahani and Anggraeni 2024).

Home cleanliness was another factor influencing childcare support, contributing 13.3%, while the remaining 86.7% was influenced by other determinants. Supporting

studies have confirmed that poor parenting practices in children with stunting are linked to poor sanitation and unclean environments, accounting for 40% of cases (Yunelda 2023). An unhygienic environment may cause diarrhea and other health problems, reflecting inadequate parental support by failing to safeguard children's health.

In conclusion, maternal age at marriage and parental education are the most significant determinants of poor childcare support in stunting locus villages. Environmental factors, such as poor sanitation and improper waste disposal practices, serve as additional indicators showing that parents are unable to provide a supportive and healthy environment. These findings highlight that parents are not yet capable of offering optimal childcare support.

Conclusion

The findings indicate that the determining factors influencing parental caring-based support in child-rearing within stunting locus villages include maternal age at marriage, father's education, mother's education, waste disposal practices, and household cleanliness. Among these, parental factors emerged as the most dominant in shaping support for child-rearing. This suggests that the quality of childcare is not only affected by environmental conditions but is also strongly determined by the capacity and readiness of parents to fulfill their roles. Therefore, further research is recommended to analyze policy-related factors at the village level, particularly in stunting locus villages, to better understand how local regulations and programs may strengthen the role of families in supporting responsive and healthy child-rearing practices.

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References

Anggraini, Yuliza, Pagdya Haninda, and Nusantri Rusdy. 2019. "Faktor Penentu Stunting Di Kabupaten Pasaman Barat Sumatera Barat Indonesia." 10(2):902–10.

Annur, CM. 2022. "Prevalensi Balita Stunting Provinsi Jawa Timur Menurut Kabupaten/Kota."

Beal, Ty, Danh Tuyen Le, Thi Huong Trinh, Dharani Dhar Burra, Tuyen Huynh, Thanh Thi Duong, Tuyet Mai Truong, Duy Son Nguyen, Kien Tri Nguyen, Stef de Haan, and Andrew D. Jones. 2019. "Child Stunting Is Associated with Child, Maternal, and Environmental Factors in Vietnam." *Maternal and Child Nutrition* 15(4). doi: 10.1111/mcn.12826.

Beal, Ty, Alison Tumilowicz, Aang Sutrisna, Doddy Izwardy, and Lynnette M. Neufeld. 2018. "A Review of Child Stunting Determinants in Indonesia." *Maternal and Child Nutrition* 14(4):1–10. doi: 10.1111/mcn.12617.

Budiarto, Wasis, Ratna Dwi Wulandari, Nikmatur Rohmah, and Agung Dwi Laksono. 2021. "Ecological Relationship Between Poverty and Nutritional Status of Toddler in Indonesia in 2018." *Indian Journal of Forensic Medicine & Toxicology* 15(4):2863–67.

Daly, Mary, Rachel Bray, Zlata Bruckauf, Jasmina Byrne, Alice Margaria, Ninoslava Pecnik, and Maureen Samms-Vaughan. 2015. *Family and Parenting Support Policy and Provision in a Global Context*. Florence, Italy: The UNICEF Office of Research.

Hasiana, Isabella, and Aisyah. 2024. "Gambaran Parenting Stres Pada Ibu Yang Menikah Di Usia Muda Terhadap Perilaku Kekerasan Pada Anak Usia Dini." *Indonesian Journal of Early Childhood: Jurnal Dunia Anak Usia Dini* 6(1):123–29. doi: 10.35473/ijec.v6i1.2766.

Junanda, Safera Dwi, Ratna Yuliawati, Ainur Rachman, Vita Pramaningsih, and Rahman Putra. 2022. "Hubungan Antara Pengelolaan Sampah Rumah Tangga

Dengan Risiko Kejadian Stunting Pada Balita Di Puskesmas Wonorejo Samarinda Tahun 2022." *Jurnal Kesehatan* 15(2):199–205. doi: 10.23917/jk.v15i2.19824.

KBBI.web.id. 2024. "Pengertian Dukungan." *Kamus Besar Bahasa Indonesia (KBBI) Kamus Versi Online/Daring (Dalam Jaringan)* 1.

Kementerian Kesehatan RI. 2022a. "Buku Saku Hasil Survei Status Gizi Indonesia (SSGI) 2022. Badan Kebijakan Pembangunan Kesehatan Kementerian Kesehatan RI." 1–154.

Kementerian Kesehatan RI. 2022b. "Stunting, Ancaman Generasi Masa Depan Indonesia."

Lestari, Purfika Dwi, Nikmatur Rohmah, and Resti Utami. 2021. "Hubungan Status Gizi Ibu Saat Hamil Dengan Kejadian Stunting Pada Balita Di Wilayah Kerja Puskesmas Arjasa."

Lobo, Welmince Ina, Anna Henny Talahatu, and Rut Rosina Riwu. 2019. "Determinan Stunting Pada Anak Di Puskesmas Alak Kupang." *Media Kesehatan Masyarakat* 1(2):59–67.

Miyati, Dian Sih, Upik Elok Endang Rasmani, and Anjar Fitrianingtyas. 2021. "Pengaruh Tingkat Pendidikan Orang Tua Terhadap Pola Asuh Anak." *Kumara Cendekia* 9(3):139. doi: 10.20961/kc.v9i3.50219.

Nugrahani, Ely Rahmatika, and Zuhrotul Eka Yulis Anggraeni. 2024. "Analisis Perbedaan Kejadian Stunting Dengan Keterlibatan Peran Ayah Di Wilayah Pedesaan Dan Perkotaan Di Kabupaten Jember." 16(1):41–50. doi: 10.32528/tijhs.v16i1.2058.

Patalatu, Jonherz Stenlly, and Stefen Deni Besare. 2020. "Pengaruh Pola Asuh Orang Tua Terhadap Sikap Peduli Sampah Pada Anak." *Sekolah Dasar: Kajian Teori Dan Praktik Pendidikan* 29(1):19–27. doi: 10.17977/um009v29i12020p019.

Pemerintah Daerah Kabupaten Jember. 2023. "Surat Keputusan Bupati Jember Nomor 188.45/386/1.12/2023 Tentang Desa/Kelurahan Lokus Percepatan Penurunan Stunting Di Kabupaten Jember Tahun 2023." 1–4.

Permatasari, Tria A. E., Chairunnisa, Hernani Djarir, Lily Herlina, Munaya Fauziah, Andriyani, and Yudi Chadirin. 2023. "The Determinants of Stunting in the Under-Five in Three Municipalities in the Special Capital Region of Jakarta." *Kesmas* 18(1):32–40. doi: 10.21109/kesmas.v18i1.6405.

Reiher, Antje, and Masoud Mohammadnezhad. 2019. "A Qualitative Exploration of Behavioral Factors Affecting Mothers of Malnourished Children under 5 Years Old in Kiribati." *F1000Research* 8(May):1–17. doi: 10.12688/F1000RESEARCH.17732.2.

Riadi, Muchlisin. 2019. "Perilaku Caring Perawat (Pengertian, Karakteristik, Indikator Dan Proses)." *Kajian Pustaka.Com* 1.

Rohmah, Nikmatur. 2019. *Modul Untuk Orangtua Dukungan Kelurga Dan Penggunaan Alat Bantu Keputusan Perawatan Bayi Berat Lahir Rendah Di Rumah Sakit*. Jember.

Rohmah, Nikmatur, and Agung Dwi Laksono. 2023. "Relationship between Family Support, Personal Communication, Shared Decision Making, and Breastfeeding in Low Birth Weight Babies." *Health Care for Women International* 1–13. doi: 10.1080/07399332.2023.2190592.

Tim Percepatan Pencegahan Anak Kerdil. 2024. "Percepatan Penurunan Stunting."

Wulandari I, Rohmah N, and Anggraeni ZEY. 2023. "Hubungan Berat Badan Lahir Dengan Perawakan Pada Balita." *Humantech J Ilm Multi Disiplin Indonesia* 2(11):1–7.

Wulandari, Indah, Zuhrotul Eka Yulis Anggraeni, Roza Riska Romadhoni, Putri Nofia Marta Wulandari, Nuril Alifia Damayanti, Trias Maharani, and Nikmatur Rohmah. 2023. "The Relationship between Sociodemographic Factors and Short Stature in Toddlers." *Adi Husada Nursing Journal* 9(2):78. doi: 10.37036/ahnj.v9i2.396.

Yunelda. 2023. "Hubungan Pola Asuh Orang Tua Dan Sanitasi Lingkungan Dengan Kejadian Stunting Pada Balita Usia 24- 59 Bulan Di Desa Tembilahan Hilir Wilayah Kerja Puskesmas Gajah Mada." *HIGEIA (Journal of Public Health Research and …* 4:257–65.