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Characteristics of Pregnant Women at Risk of Child Stunting: A Descriptive Study in Stunting Locus Areas of Sorong Regency

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ABSTRACT/ ABSTRAK

ABSTRACT. *Child stunting remains a major public health problem in Indonesia, including Sorong Regency. Maternal characteristics during pregnancy play an important role in fetal growth and may influence the risk of child stunting. This study aimed to describe the characteristics of pregnant women in the stunting locus areas of Sorong Regency. This descriptive observational study used secondary data from the Stunting Case Audit worksheets of the National Population and Family Planning Board (BKKBN) in Sorong Regency. A total of 178 pregnant women who met the inclusion and exclusion criteria were included, and the data were analyzed using univariate analysis with SPSS. Most respondents were aged 20–35 years (68.0%), lived in rural areas (60.1%), were unemployed (91.6%), and had low economic status (53.4%). The predominant maternal health characteristics included multiparity (48.9%), risk of chronic energy deficiency based on mid-upper arm circumference (71.3%), anemia during pregnancy (52.2%), iron supplementation (71.9%), fewer than four antenatal care visits (58.4%), and passive cigarette smoke exposure (65.7%). These findings indicate that pregnant women in the stunting locus areas of Sorong Regency were characterized by several maternal conditions requiring strengthened nutritional monitoring, anemia prevention, improved antenatal care utilization, and reduced cigarette smoke exposure as part of comprehensive child stunting prevention efforts.*

Kata kunci:

Stunting, Ibu Hamil, Karakteristik Maternal, Anemia, Kekurangan Energi Kronis, Antenatal Care

ABSTRAK. Stunting pada balita masih menjadi masalah kesehatan masyarakat di Indonesia, termasuk di Kabupaten Sorong. Karakteristik ibu selama kehamilan berperan penting dalam pertumbuhan janin dan dapat memengaruhi risiko stunting pada anak. Penelitian ini bertujuan mendeskripsikan karakteristik ibu hamil di wilayah lokus stunting Kabupaten Sorong. Penelitian observasional deskriptif ini menggunakan data sekunder dari kertas kerja Audit Kasus Stunting Badan Kependudukan dan Keluarga Berencana Nasional (BKKBN) Kabupaten Sorong. Sebanyak 178 ibu hamil yang memenuhi kriteria inklusi dan eksklusi dianalisis secara univariat menggunakan SPSS. Sebagian besar responden berusia 20–35 tahun (68,0%), tinggal di wilayah pedesaan (60,1%), tidak bekerja (91,6%), dan memiliki status ekonomi rendah (53,4%). Karakteristik kesehatan maternal yang dominan meliputi multipara (48,9%), risiko kekurangan energi kronis berdasarkan lingkar lengan atas (71,3%), anemia selama kehamilan (52,2%), konsumsi suplemen zat besi (71,9%), kunjungan antenatal care kurang dari empat kali (58,4%), dan paparan asap rokok pasif (65,7%). Temuan ini menunjukkan bahwa ibu hamil di wilayah lokus stunting Kabupaten Sorong masih didominasi oleh karakteristik yang memerlukan perhatian dalam upaya pencegahan stunting melalui penguatan pemantauan gizi ibu, pencegahan anemia, peningkatan cakupan antenatal care, dan pengendalian paparan asap rokok.

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INTRODUCTION

Child stunting is a chronic growth disorder characterized by a height-for-age below the World Health Organization growth standards. It reflects the cumulative effects of long-term undernutrition, recurrent infections, and impaired growth during early life, resulting in adverse consequences for physical growth, cognitive development, immune function, and an increased risk of non-communicable diseases in adulthood (Kementerian Kesehatan Republik Indonesia, 2022; World Health Organization, 2024).

Child stunting remains a major global public health challenge. The World Health Organization estimated that approximately 150.2 million children under five years of age were affected by stunting in 2024. Although the prevalence of child stunting in Indonesia declined from 37.6% in 2013 to 19.8% in 2024, it remains a national public health priority because the prevalence is still above the expected target (Kementerian Kesehatan Republik Indonesia, 2025; World Health Organization, 2024).

Southwest Papua Province continues to face challenges in reducing child stunting. Based on the data used in this study, the prevalence of child stunting was 21.0% in Southwest Papua Province and 16.2% in Sorong Regency. Furthermore, the number of reported cases in Sorong Regency increased from 707 in 2022 to 792 in 2023 and 1,097 in 2024. These findings highlight the need to identify the characteristics of pregnant women in stunting locus areas to support more effective stunting prevention strategies.

Maternal characteristics during pregnancy play an important role in fetal growth and may influence the risk of child stunting. Frequently reported maternal factors include maternal age, parity, pregnancy interval, nutritional status, mid-upper arm circumference, anemia, malaria, preeclampsia, iron supplementation, and antenatal care utilization, while social characteristics include place of residence, population status, educational attainment, employment status, economic status, marital status, and cigarette smoke exposure. These factors may influence fetal growth through maternal nutritional status, maternal health conditions, access to health services, and the household environment (Black et al., 2013; UNICEF, 2024; Vaivada et al., 2020).

Previous studies have reported that maternal education, economic status, employment, nutritional status, anemia, pregnancy complications, malaria, antenatal care utilization, and cigarette smoke exposure are associated with child stunting (Ashar et al., 2024; Aticeh et al., 2023; Delcroix-Gomez et al., 2022; Laltanpuii et al., 2024; Maulina et al., 2024; Reviani & Tampubolon, 2025; Royani et al., 2021; Wulandari et al., 2022). However, descriptive evidence describing the characteristics of pregnant women in the stunting locus areas of Sorong Regency, particularly using Stunting Case Audit data, remains limited. Therefore, this study aimed to describe the characteristics of pregnant women at risk of child stunting in the stunting locus areas of Sorong Regency.

RESEARCH METHOD

This descriptive observational study aimed to describe the characteristics of pregnant women at risk of child stunting in the stunting locus areas of Sorong Regency. The study population comprised all pregnant women recorded in the Stunting Case Audit worksheets maintained by the National Population and Family Planning Board (BKKBN) of Sorong Regency. A total of 178 pregnant women who met the inclusion and exclusion criteria were

included using purposive sampling. Pregnant women recorded in the Stunting Case Audit worksheets were eligible for inclusion, whereas records with incomplete data were excluded.

The study was conducted at BKKBN of Sorong Regency and eight Primary Health Centers located in the stunting locus areas, namely Mariat, Malawili, Mayamuk, Makbon, Majaran, Klamono, Sayosa, and Seget, from October 2025 to February 2026.

Secondary data were obtained from the Stunting Case Audit worksheets maintained by BKKBN. The variables analyzed included place of residence, population status, maternal age, employment status, economic status, educational attainment, marital status, parity, pregnancy interval, nutritional status based on body mass index (BMI), mid-upper arm circumference (MUAC), history of anemia, iron supplementation, history of preeclampsia, history of malaria, antenatal care (ANC) utilization, and cigarette smoke exposure. Data were analyzed using univariate analysis with SPSS and are presented as frequencies and percentages.

Ethical approval was obtained from the Health Research Ethics Committee of the Health Polytechnic of the Ministry of Health, Palu, Indonesia (No. 005318/KEPK POLTEKKES KEMENKES PALU/2025). All data were treated confidentially and used exclusively for research purposes.

RESULTS

A total of 178 pregnant women who met the study eligibility criteria were included in the analysis.

Table 1. Sociodemographic Characteristics of the Participants (n = 178)

Characteristics	N	%
Primary Health Center		
Mariat	40	22.5
Malawili	33	18.5
Mayamuk	27	15.2
Seget	21	11.8
Sayosa	20	11.2
Majaran	18	10.1
Klamono	11	6.2
Makbon	8	4.5
Place of residence		
Urban	71	39.9
Rural	107	60.1
Population status		
Indigenous Papuan	90	50.6
Non-Indigenous Papuan	88	49.4
Maternal age (years)		
<20	23	12.9
20–35	121	68.0
>35	34	19.1
Employment status		
Employed	15	8.4
Unemployed	163	91.6
Economic status		
Low	95	53.4

Moderate	74	41.6
High	9	5.1
Educational attainment		
No formal education	7	3.9
Primary education	66	37.1
Secondary education	88	49.4
Higher education	17	9.6

The participants were recruited from eight Primary Health Centers located in the stunting locus areas of Sorong Regency, with the largest proportion originating from Mariat Primary Health Center (22.5%), followed by Malawili (18.5%) and Mayamuk (15.2%), whereas Makbon contributed the smallest proportion (4.5%). Most participants resided in rural areas (60.1%), while 39.9% lived in urban areas. The distribution of population status was nearly balanced, with 50.6% identified as Indigenous Papuans and 49.4% as non-Indigenous Papuans.

Most participants were within the optimal reproductive age of 20–35 years (68.0%), whereas 19.1% were older than 35 years and 12.9% were younger than 20 years. The majority were unemployed (91.6%), more than half had low economic status (53.4%), and nearly half had completed secondary education (49.4%). Overall, the sociodemographic profile indicates that the study population predominantly consisted of rural, unemployed pregnant women with low socioeconomic status and secondary educational attainment.

Table 2. Obstetric Characteristics of the Participants (n = 178)

Characteristics	N	%
Marital status		
Unmarried	62	34.8
Married	116	65.2
Parity		
Primigravida	48	27.0
Multiparous	87	48.9
Grand multiparous	43	24.2
Pregnancy interval		
<2 years (at risk)	77	43.3
≥2 years (not at risk)	101	56.7

As shown in Table 2, most participants were married (65.2%). Multiparous women represented the largest parity group (48.9%), followed by primigravida (27.0%) and grand multiparous women (24.2%). More than half of the participants had a pregnancy interval of at least two years (56.7%), whereas 43.3% had an interval of less than two years, which was classified as at risk. Overall, the obstetric characteristics suggest that most participants had previous pregnancy experience and a relatively favorable pregnancy interval, although a considerable proportion remained within the high-risk interval category.

Table 3. Maternal Nutritional and Health Characteristics (n = 178)

Characteristics	N	%
Body mass index (BMI)		
Underweight	82	46.1
Normal	88	49.4
Overweight	8	4.5
Mid-upper arm circumference (MUAC)		
At risk of chronic energy deficiency	127	71.3

Normal	51	28.7
Anemia		
Yes	93	52.2
No	85	47.8
History of preeclampsia		
Yes	5	2.8
No	173	97.2
History of malaria		
Yes	12	6.7
No	166	93.3

Maternal nutritional and health characteristics are presented in Table 3. Nearly half of the participants had a normal BMI (49.4%), whereas 46.1% were underweight and 4.5% were overweight. Despite the relatively high proportion of women with a normal BMI, MUAC assessment indicated that 71.3% were at risk of chronic energy deficiency. In addition, more than half of the participants experienced anemia during pregnancy (52.2%). Histories of preeclampsia (2.8%) and malaria (6.7%) were relatively uncommon. Overall, these findings indicate that maternal nutritional problems, particularly chronic energy deficiency and anemia, remained common among pregnant women in the stunting locus areas.

Table 4. Maternal Health Service Utilization (n = 178)

Characteristics	N	%
Iron supplementation		
Yes	128	71.9
No	50	28.1
Antenatal care (ANC) visits		
<4 visits	104	58.4
≥4 visits	74	41.6

Most participants reported receiving iron supplementation during pregnancy (71.9%). Nevertheless, more than half attended fewer than four ANC visits (58.4%), whereas only 41.6% completed at least four visits. These findings suggest that although iron supplementation coverage was relatively high, adequate utilization of antenatal care services remained suboptimal among the study population.

Table 5. Cigarette Smoke Exposure (n = 178)

Characteristics	N	%
Active smoker	41	23.0
Passive smoker	117	65.7
Not exposed	20	11.2

The distribution of cigarette smoke exposure is presented in Table 5. Most participants were exposed to cigarette smoke as passive smokers (65.7%), whereas 23.0% were active smokers and only 11.2% reported no exposure. Overall, these findings indicate that cigarette smoke exposure was highly prevalent among pregnant women in the stunting locus areas of Sorong Regency, particularly through passive exposure.

DISCUSSION

The present study demonstrated that most pregnant women included in the BKKBN stunting case audit resided in rural areas. This finding indicates that the maternal profile

identified in the stunting locus areas of Sorong Regency was predominantly derived from rural communities. Although this study did not evaluate the association between place of residence and child stunting, the geographical distribution of the respondents provides important contextual information regarding the maternal characteristics in the study area. Similar findings have been reported by Suratri et al. (2023), Aprina et al. (2023), Wahyuningrum and Utari (2025), and Siswati et al. (2023), who observed that child stunting remains more prevalent in rural communities than in urban settings. These studies suggest that disparities in access to healthcare services, educational opportunities, and socioeconomic resources may contribute to differences in maternal and child health conditions across geographical areas. Therefore, the predominance of rural residents in the present study should be interpreted as a description of the study population rather than evidence of an association with child stunting.

More than half of the respondents were Indigenous Papuans, indicating that the maternal characteristics described in this study primarily represented the indigenous population living in the stunting locus areas of Sorong Regency. This finding reflects the demographic composition of the study area and is consistent with previous studies conducted in Papua. Wulandari et al. (2024) reported that infant and young child feeding practices remain an important nutritional concern among Indigenous Papuan communities, while Adimuntja et al. (2023) highlighted the importance of dietary diversity in supporting child growth. Similarly, Ramadhani et al. (2019) reported that energy intake, complementary feeding practices, and food consumption patterns are important nutritional characteristics among Papuan communities. Nevertheless, the present study was designed to describe maternal characteristics and did not compare health outcomes between Indigenous and non-Indigenous populations. Consequently, population status should be interpreted solely as a demographic characteristic of the respondents.

Most respondents were within the reproductive age of 20–35 years, indicating that pregnancies predominantly occurred during the age range generally considered optimal for reproduction. However, pregnant women younger than 20 years and older than 35 years were also identified. These findings suggest that maternal characteristics associated with the stunting locus areas were not limited to pregnancies occurring outside the recommended reproductive age. Similar observations have been reported by IR Watin (2025), Adimuntja et al. (2023), and Ramadhani et al. (2019), who described maternal age as one of the demographic characteristics commonly reported in maternal and child health research. The authors also emphasized that maternal nutritional status and dietary practices remain important considerations throughout pregnancy regardless of maternal age. In the present study, maternal age provides a description of the respondents' demographic profile and should not be interpreted as indicating an association with child stunting.

The findings also revealed that most respondents were unemployed, indicating that the majority of pregnant women included in the study were homemakers. This socioeconomic profile is consistent with previous studies by Savita and Amelia (2020), Wulandari (2025), Helti and Hayati (2025), and Rahmawati et al. (2023), which described maternal employment as one of the characteristics frequently reported in studies of maternal and child health. Previous studies have suggested that employment status may influence household resources available for nutrition and healthcare utilization. However, because the present study employed a descriptive design, employment status should be interpreted only as one of the respondents' socioeconomic characteristics and not as evidence of an association with child stunting.

More than half of the respondents belonged to households with low economic status, indicating that economic limitations were common among pregnant women living in the stunting locus areas of Sorong Regency. Comparable findings were reported by Aprina et al. (2023), Wulandari (2025), Helti and Hayati (2025), and Siswati et al. (2023), who described low household economic status as a common characteristic among families affected by child stunting. Limited economic resources may influence household capacity to obtain nutritious foods and utilize healthcare services during pregnancy. Nevertheless, because this study did not examine the relationship between economic status and child stunting, these findings should be interpreted only as a description of the socioeconomic characteristics of the study population.

Overall, the sociodemographic findings indicate that pregnant women included in the BKKBN stunting case audit in the stunting locus areas of Sorong Regency were predominantly characterized by rural residence, Indigenous Papuan population status, reproductive age between 20 and 35 years, unemployment, and low household economic status. These findings provide a comprehensive overview of the maternal profile in the study area and may serve as baseline information for maternal and child health programs in stunting locus areas. However, because the present study was descriptive in nature, these characteristics should not be interpreted as determinants or predictors of child stunting.

Most pregnant women had completed secondary education, although a considerable proportion had only primary education or no formal education. This finding indicates that educational attainment among pregnant women in the stunting locus areas of Sorong Regency remained heterogeneous. Previous studies by Husnayah (2020), Putu Lina Putri Prapatti and Made Bayu Permasutha (2025), and Siswati et al. (2023) have reported that maternal education is an important sociodemographic characteristic because it influences the ability to understand health information, adopt appropriate nutritional practices, and utilize maternal healthcare services. Although educational attainment has frequently been discussed in relation to maternal and child health, the present study was designed solely to describe respondent characteristics. Therefore, the observed educational profile should be interpreted as part of the respondents' sociodemographic characteristics rather than as evidence of its relationship with child stunting.

The study also demonstrated that most respondents were married. This finding reflects the marital profile of pregnant women included in the BKKBN stunting case audit in the stunting locus areas of Sorong Regency. Similar observations have been reported by Laksono et al. (2022), who described marital status as one of the demographic characteristics frequently reported in maternal health studies. Torlesse et al. (2016) also suggested that family circumstances may influence maternal and child health through various socioeconomic and environmental pathways. Nevertheless, because marital status was not evaluated analytically in the present study, the findings should be interpreted only as a description of respondent characteristics rather than as evidence of an association with child stunting.

Multiparous women represented the largest obstetric group in this study, indicating that most respondents had experienced one or more previous pregnancies. This finding is consistent with Siswati et al. (2023), who reported that multiparity was commonly observed among mothers of children with stunting. Similar observations were reported by Khan and Rahman (2023) and Adewumi et al. (2024), who described parity as an important maternal characteristic frequently included in studies of maternal and child health. However, because the present study employed a descriptive observational design, parity should be interpreted

only as part of the obstetric profile of pregnant women in the stunting locus areas of Sorong Regency and not as evidence of a relationship with child stunting.

Most respondents had a pregnancy interval of at least two years, while a smaller proportion experienced pregnancy intervals of less than two years. This finding suggests that the reproductive characteristics of pregnant women in the study population were relatively diverse. Sukmawati et al. (2020) described pregnancy interval as one of the reproductive characteristics commonly considered in maternal health assessments, whereas Samsudin et al. (2023) emphasized that pregnancy interval should be interpreted together with maternal nutritional status and overall maternal health conditions. Within the context of the present study, pregnancy interval provides descriptive information regarding the reproductive profile of pregnant women in the stunting locus areas of Sorong Regency. Since no analytical assessment was conducted, no inference regarding its relationship with child stunting can be drawn from these findings.

Assessment of maternal nutritional status based on body mass index (BMI) indicated that normal BMI was the most common nutritional category, although a substantial proportion of pregnant women were classified as underweight. These findings demonstrate that maternal nutritional status remained heterogeneous among pregnant women included in the BKKBN stunting case audit. Mahmood et al. (2022) reported that BMI is a commonly used anthropometric indicator for assessing maternal nutritional status during pregnancy, while Victora et al. (2021) emphasized the importance of maintaining adequate maternal nutritional status throughout pregnancy to support fetal growth. However, Hayana et al. (2021) and Pradani et al. (2022) also noted that BMI alone may not fully represent maternal nutritional conditions because maternal nutrition is influenced by multiple biological and environmental factors. Therefore, BMI in the present study should be interpreted as a descriptive anthropometric characteristic rather than as an indicator of child stunting.

Although normal BMI predominated, assessment using mid-upper arm circumference (MUAC) showed that most pregnant women were at risk of chronic energy deficiency (CED). This finding indicates that maternal nutritional problems remained common among pregnant women in the stunting locus areas of Sorong Regency. Nguyen et al. (2019), Kavle et al. (2018), and Torlesse et al. (2016) described MUAC as a practical anthropometric indicator for identifying maternal undernutrition during pregnancy, particularly in primary healthcare settings and community nutrition programs. In the present study, the predominance of pregnant women at risk of CED based on MUAC provides an overview of maternal nutritional conditions within the study population. Nevertheless, because the study was descriptive, these findings should not be interpreted as demonstrating an association between maternal CED and child stunting.

Overall, the obstetric and nutritional characteristics observed in this study indicate that pregnant women in the stunting locus areas of Sorong Regency were predominantly married, multiparous, had pregnancy intervals of at least two years, and generally had normal BMI despite a high proportion being classified as at risk of chronic energy deficiency based on MUAC. These findings provide a broader understanding of maternal reproductive and nutritional characteristics in the study population and may serve as baseline information for strengthening maternal nutrition and reproductive health services in stunting locus areas. However, these characteristics should be interpreted within the descriptive scope of the present study and not as determinants of child stunting.

Maternal anemia was identified in more than half of the pregnant women included in this study, indicating that anemia remained a common maternal health condition in the

stunting locus areas of Sorong Regency. This finding is consistent with previous studies reporting that anemia continues to be one of the major nutritional problems during pregnancy. Aslikah and Lestari (2024) reported that maternal anemia was frequently observed among mothers of children with stunting, while Nadhiroh et al. (2023) emphasized that adequate prevention and management of anemia during pregnancy are essential components of maternal healthcare. The World Health Organization also recognizes anemia during pregnancy as an important public health concern because of its implications for maternal health and fetal development. Within the context of the present study, the relatively high proportion of maternal anemia provides an overview of the maternal health profile of pregnant women included in the BKKBN stunting case audit. However, because no analytical assessment was performed, these findings should not be interpreted as evidence of an association between maternal anemia and child stunting.

Most respondents reported receiving iron supplementation during pregnancy. This finding indicates that iron supplementation had been implemented among pregnant women in the study population as part of routine maternal healthcare services. Previous studies by Nisar et al. (2020) and Nadhiroh et al. (2023) highlighted that iron supplementation remains an important strategy for preventing maternal anemia and maintaining adequate maternal nutritional status throughout pregnancy. Nevertheless, the present study did not evaluate adherence to iron supplementation, dosage, or treatment effectiveness. Therefore, the findings should be interpreted as describing the coverage of iron supplementation among the respondents rather than demonstrating its relationship with maternal health outcomes or child stunting.

A history of preeclampsia was reported by only a small proportion of respondents, indicating that this pregnancy complication was relatively uncommon among pregnant women included in the study. Similar findings have been discussed by Aboud et al. (2021) and Christian et al. (2013), who described preeclampsia as one of the maternal complications requiring careful monitoring during pregnancy because of its potential consequences for maternal and fetal health. In the present study, however, the low frequency of preeclampsia simply describes the maternal health profile of the respondents. Since this study did not investigate pregnancy outcomes or evaluate statistical associations, no inference regarding the relationship between preeclampsia and child stunting can be drawn.

Similarly, only a small proportion of pregnant women had a history of malaria during pregnancy. Although malaria remains an important public health issue in several regions of eastern Indonesia, the findings of the present study indicate that most respondents did not report malaria during pregnancy. Rogerson et al. (2020) and Coffeng et al. (2021) described malaria during pregnancy as a condition that requires continuous prevention and surveillance, particularly in endemic regions. Nevertheless, within the present study, the history of malaria represents only one of the maternal health characteristics documented in the BKKBN stunting case audit. Because the study was descriptive, these findings should not be interpreted as demonstrating any relationship between malaria during pregnancy and child stunting.

Overall, the maternal health characteristics observed in this study indicate that anemia remained relatively common among pregnant women, while iron supplementation had been received by most respondents. In contrast, histories of preeclampsia and malaria were reported by only a small proportion of participants. Together, these findings provide a broader description of maternal health conditions among pregnant women in the stunting locus areas of Sorong Regency and complement the overall maternal profile described in the present study. However, the interpretation of these findings should remain within the

descriptive scope of the study and should not be considered evidence of determinants or predictors of child stunting.

Most pregnant women attended fewer than four antenatal care (ANC) visits during pregnancy. This finding indicates that ANC utilization among pregnant women included in the BKKBN stunting case audit remained below the recommended frequency for a considerable proportion of respondents. Previous studies by Ningsih et al. (2021) and Siahaan et al. (2023) reported that antenatal care provides an important opportunity to monitor maternal nutritional status, identify pregnancy-related health problems, and deliver health education throughout pregnancy. Within the present study, the distribution of ANC attendance provides an overview of maternal healthcare utilization in the stunting locus areas of Sorong Regency. However, because the study was descriptive, the findings should not be interpreted as evidence of a relationship between ANC attendance and child stunting.

Passive exposure to cigarette smoke was the most common category of tobacco smoke exposure identified among the respondents. This finding indicates that environmental tobacco smoke remained a common maternal characteristic in the study population. Similar findings have been reported by Wijaya et al. (2022), Dewi et al. (2021), and the World Health Organization (2021), which highlighted cigarette smoke exposure during pregnancy as an important maternal health concern because pregnant women may be exposed to tobacco smoke within the household environment. In the present study, the predominance of passive smoking reflects the environmental conditions experienced by pregnant women in the stunting locus areas of Sorong Regency. Nevertheless, because no analytical assessment was performed, these findings should not be interpreted as demonstrating an association between cigarette smoke exposure and child stunting.

Overall, the present study provides a comprehensive description of the maternal characteristics of pregnant women included in the BKKBN stunting case audit in the stunting locus areas of Sorong Regency. The maternal profile identified in this study was characterized by rural residence, Indigenous Papuan population status, reproductive age predominantly between 20 and 35 years, low household economic status, multiparity, a high proportion of chronic energy deficiency based on mid-upper arm circumference (MUAC), maternal anemia, limited antenatal care utilization, and frequent passive exposure to cigarette smoke. Together, these findings offer baseline information on the characteristics of pregnant women residing in stunting locus areas and contribute to a broader understanding of maternal conditions documented through the BKKBN stunting case audit.

The findings of this study may contribute to the planning and strengthening of maternal health and nutrition programs, particularly in areas prioritized for stunting prevention. As this study was descriptive in nature, the results should be interpreted as a profile of maternal characteristics rather than evidence of determinants, predictors, or causal factors of child stunting. Future analytical studies are warranted to further examine the relationships between maternal characteristics during pregnancy and child stunting outcomes using appropriate epidemiological study designs.

CONCLUSION

This study provides a comprehensive description of the characteristics of pregnant women included in the BKKBN stunting case audit in the stunting locus areas of Sorong Regency. The maternal profile was predominantly characterized by rural residence, Indigenous Papuan population status, reproductive age between 20 and 35 years,

unemployment, low household economic status, secondary educational attainment, multiparity, pregnancy intervals of at least two years, normal body mass index, a high proportion of chronic energy deficiency based on mid-upper arm circumference (MUAC), maternal anemia, receipt of iron supplementation, fewer than four antenatal care (ANC) visits, and frequent passive exposure to cigarette smoke. These findings provide baseline information on maternal characteristics in the stunting locus areas of Sorong Regency and may support the planning and strengthening of maternal health and nutrition programs. Further analytical studies are recommended to examine the relationships between maternal characteristics during pregnancy and child stunting outcomes.

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