



## Knowledge Level Regarding Stunting Among Pregnant Women's

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### ABSTRACT

**Introduction:** Stunting is a critical public health issue caused by chronic malnutrition, particularly during the first 1,000 days of life, leading to irreversible impacts on child growth and development. Assessing pregnant women's knowledge about stunting is essential to understanding their role in preventing this condition and improving maternal and child health outcomes.

**Objective:** The objective of this study is to assess the level of knowledge among pregnant women about stunting to identify potential gaps and inform targeted interventions for its prevention.

**Methods:** This study employed a cross-sectional design to assess the knowledge level of pregnant women about stunting. The population consisted of all pregnant women in Mulyajaya, Sumedang Regency, with total sampling used to recruit participants. Data collection took place from March 14 to May 14. The data were analyzed using frequency and percentage distributions with the assistance of SPSS software.

**Results:** The results of this study indicate that the knowledge level of pregnant women about stunting in Mulyajaya Village, Wado Subdistrict, Sumedang Regency is predominantly adequate, with 75% of participants demonstrating a good level of understanding.

**Conclusions:** Strengthening maternal education on stunting is essential for effective prevention efforts. Improving knowledge through targeted educational programs and integrating stunting awareness into antenatal care can enhance maternal and child health outcomes. These efforts can help establish better nutritional practices, reducing the risk of stunting in future generations. Health practitioners play a crucial role in ensuring comprehensive stunting education at the community level.

**Keywords:** knowledge, pregnant women, stunting

## Introduction

One of the main objectives of the Independent Higher Education Program for Mutual Cooperation in Village Development (PTMGRMD) is Zero New Stunting. This program involves 251 villages in Sumedang Regency, 2,510 students, and 112 higher education institutions. The five key performance indicators (KPIs) to be implemented by PTMGRMD in 2024 are Zero New Stunting, Social Welfare Centers, Innovation Programs, Extreme Poverty Community Literacy, and One Village One Product (OVOP). The government is working to achieve a stunting-free Indonesia by reaching the ambitious target of "New Zero Stunting." By achieving the "New Zero Stunting" goal, the government aims to make Indonesia free from stunting. This concept emphasizes the importance of preventing stunting from an early stage, starting from the root by raising public awareness about the causes and effects of stunting, as well as encouraging behavior changes in nutrition, sanitation, and hygiene practices (Zahra & Sulaeman, 2024). This program focuses on collaboration among various stakeholders, including universities, communities, and both central and local governments, to ensure comprehensive and integrated interventions. As a result, the country will no longer experience stunting, as future generations will be healthy, intelligent, and productive (Gitasavitri et al., 2024).

Stunting, also known as short stature in children, occurs when a child's physical growth is delayed, causing them to be shorter than the average height for their age (Fadlilah et al., 2022). Long-term malnutrition in young children, particularly during the first 1,000 days of life (the critical window), can affect their physical growth, intelligence, and potential in adulthood (Lestari, 2022). Factors that influence fetal growth and the risk of stunting include the mother's health and nutrition before and during pregnancy, maternal body posture, closely spaced pregnancies, and teenage mothers (Monica et al., 2024).

The negative impacts of stunting include impaired brain development, reduced intelligence, growth disturbances, and metabolic disorders in the body (Safitri et al., 2023). Long-term consequences include decreased cognitive abilities and learning achievements, weakened immunity leading to frequent illness, and an increased risk of diabetes, obesity, heart disease, and coronary artery disease (Fauziah et al., 2024).

According to the World Health Organization-Multicentre Growth Reference Study (WHO-MGRS), data from 2020 estimated that 22% of children under five years old worldwide are affected by stunting, which is equivalent to 149.2 million individuals (Inayah et al., 2024). Stunting remains a serious issue faced by Indonesia (Benita, 2020). Based on the 2022 National Nutritional Status Survey data, the prevalence of stunting in Indonesia stands at 21.6%. This means that approximately 5.33 million children under five in Indonesia suffer from stunting. Although the stunting rate in Indonesia has decreased, the government continues to make efforts to significantly reduce the prevalence of stunting (Hamid, 2024).

According to the 2024 Indonesian Health Survey, the stunting prevalence rate in West Java is 23.2% for children aged 0-59 months (Auliyah et al., 2024). This figure is higher than the national average stunting prevalence rate of 21.5%. Based on the 2023 Indonesian Health Survey (SKI) by the Health Development Policy Agency of the Indonesian Ministry of Health, the stunting prevalence in Sumedang Regency stands at 14.4%, a decrease of 13.2 percentage points from 2022 (27.6%). In 2022, Sumedang had the highest stunting prevalence in West Java compared to other regencies and cities (Husain et al., 2024).

The Sumedang Regency Government continues to make significant efforts to reduce stunting in Sumedang. In addition to targeting zero new stunting, interventions for stunted infants are also being carried out through collaboration, mobilization, and digitalization. The

Zero New Stunting program in Sumedang is an initiative aimed at preventing the emergence of new stunting cases in the region. This program involves various stakeholders, including local governments, universities, and the community.

A study conducted by Ai Fitri in 2023 found that 60% of pregnant women, with the majority having limited knowledge, are likely influenced by several factors: education, age, and parity. The study showed that 60% of pregnant women in Cibentar Village, Jatiwangi Subdistrict, Majalengka Regency, were unaware of stunting. The results suggest that the limited knowledge of stunting among pregnant women is influenced by factors such as education, age, parity, and overall knowledge. Mothers must understand the importance of a balanced diet and nutrition for the growth and development of their children (Hamil & Fatimah, 2024). With this knowledge, they can make informed decisions about healthy food choices and provide adequate nutrition for their children. It is crucial to assist and educate mothers on the importance of applying this knowledge in their daily lives.

### **Objective**

The objective of this study is to assess the level of knowledge among pregnant women about stunting to identify potential gaps and inform targeted interventions for its prevention.

### **Methods**

#### ***Research design***

The design of this study is descriptive with a cross-sectional approach.

#### ***Population and sample***

The population used in this study consists of all pregnant women in Mulyajaya Village, with a total of 28 pregnant women selected in March from Mulyajaya Village, Wado Subdistrict, Sumedang Regency.

#### ***Research instrument***

This study utilizes a multiple-choice questionnaire that allows respondents to answer based on the information they possess. The questionnaire, adapted from a study conducted by Jontra Hendrik in 2022, contains 10 questions regarding the knowledge of stunting among pregnant women. The questions in the questionnaire are in the form of a checklist. Once completed, it is returned to the researcher. All responses will be aligned with the completed questionnaire.

#### ***Data collection***

The method used for data collection involves distributing questionnaires to pregnant women in Mulyajaya Village. Before distributing the questionnaires, the researcher informs the selected respondents. Once the respondents agree, the survey is sent directly to them to be completed according to the instructions. Respondents may ask questions related to any statements they do not understand in the questionnaire to prevent them from making errors while filling out the answers.

#### ***Data analysis***

The analysis is conducted univariately. This means that the analysis is performed on all variables that affect the research outcomes. In most cases, this analysis only produces the

distribution of variables and their percentages. Descriptive statistical processing generates the frequency and percentage of each variable after the data is collected

## Result

After conducting the study titled "Overview of Pregnant Women's Knowledge Level About Stunting in Mulyajaya Village, Wado Subdistrict, Sumedang Regency," using the total sampling method, the results are as follows:

Tabel 1. Respondents characteristic

Data	n	(%)
<b>Age</b>		
<20 Years	0	0%
20-35 Years	26	92,9%
>35 Years	2	7,1%
<b>Occupation</b>		
Housewife	28	100%
Entrepreneur	0	0%
Laborer	0	0%
Civil Servant	0	0%
<b>Education</b>		
Elementary school	1	3,6%
Junior high school	18	64,3%
Senior high school.	9	32,1%
Higher education	0	0%

Based on Table 1, the total number of respondents is 28. The majority were aged between 20 and 35 years, with 26 respondents (92.9%), followed by 2 respondents aged over 35 years (7.1%). All 28 respondents (100%) reported being housewives. Most of the respondents had completed Junior High School, with 18 respondents (64.3%), followed by 9 respondents (32.1%) who had completed Senior High School, and 1 respondent (3.6%) who had completed Elementary School.

Tabel 2. Knowledge Level

Data	n	(%)
Good (30-40)	5	17,9%
Fair (22-29)	21	75%
Poor ( 0-21)	2	7,1%

Based on Table 2, the results of the study conducted on the knowledge of pregnant women about stunting in Mulyajaya Village, Wado Subdistrict, Sumedang Regency in 2024, and the data processing performed, it can be concluded that the majority of pregnant women have fair knowledge about stunting, with 21 respondents (75%), while 2 respondents (7.1%) have poor knowledge.

## Discussion

The results of the frequency distribution of demographic knowledge data indicate that the majority of pregnant women have fair knowledge about stunting, with 21 respondents (75%) having fair knowledge and 2 respondents (7.1%) having poor knowledge. The researcher's assumption regarding the most dominant knowledge level of pregnant women about stunting is that the majority fall under the fair knowledge category, with 21 respondents (75%) being aware of what stunting is, its causes, signs of stunting, and methods of preventing stunting.

Pregnant women's classes play a significant role in increasing mothers' knowledge about ways to prevent stunting (Suhartati et al., 2024). A mother's knowledge about her pregnancy influences her perspective and behavior during pregnancy. Mothers who are unaware of nutrition will be greatly impacted by their nutritional status, as knowledge about nutrition helps in selecting a balanced diet (Frey et al., 2024)

Age is an important factor in determining pregnant women's knowledge, particularly related to stunting (Lestari, 2023). According to the researcher, the assumption that age reflects an individual's experience is strong. A woman is likely to have more life experience as she ages, including health and child-rearing experiences (Tomahayu, 2024). Information about stunting shows that young pregnant women have an advantage. They are more likely to access and understand current information sources. Younger generations are more familiar with the internet and social media, which offer rich and easily accessible sources of information (Apriana et al., 2024). They are also more open to new information and more adaptable to recent developments in the field of health. This makes it easier for them to find and learn from various sources of information about stunting, such as scientific articles, publications, research, and reviews on the issue (Nesa, 2024).

Education is a continuous process of improving an individual's abilities throughout their life, both inside and outside of school (Sari & Haliza, 2024). The researcher's belief that education plays a crucial role in shaping an individual's knowledge is strong. Education has a significant influence on what pregnant women know about stunting (Agusting, 2024). Pregnant women with higher levels of education tend to have a better understanding of stunting, its causes, and ways to prevent it. Education enables them to more easily access and comprehend health information, including nutrition and child development. It also teaches them problem-solving skills and critical thinking, which allows them to apply their knowledge to improve their own health and the health of their children (Kusumaningrum, 2022).

The researcher's assumption that a person's occupation can influence their knowledge and experience is well-founded (Pusmaika et al., 2022). Professions that require analysis, problem-solving, decision-making, and other mental activities and brain usage tend to enhance brain function and information retention abilities (Majid et al., 2024). This can increase pregnant women's knowledge about stunting. Pregnant women working in health, education, or research fields are more likely to understand stunting and the factors that influence it (Amalia et al., 2024). Additionally, they are more likely to access and comprehend scientific information about nutrition, child development, and ways to prevent stunting.

## Conclusion

The majority of pregnant women in Mulyajaya Village, Wado Subdistrict, Sumedang Regency, demonstrated adequate knowledge about stunting, with 75% achieving a good understanding. However, there remains a need to address knowledge gaps among the rest of

the population. Strengthening maternal education on stunting is essential for effective prevention efforts. Improving knowledge through targeted educational programs and integrating stunting awareness into antenatal care can enhance maternal and child health outcomes. These efforts can help establish better nutritional practices, reducing the risk of stunting in future generations. Health practitioners play a crucial role in ensuring comprehensive stunting education at the community level.

### **Conflict of interest**

The researchers stated that there is no conflict of interest related to the implementation and publication of the results of this research. The entire research process, from planning, data collection, analysis, to report preparation, was carried out independently without any influence or pressure from any third party. A commitment to research ethics is upheld throughout the research process, ensuring transparency, accuracy and honesty in reporting results. Respondents' participation was voluntary with informed consent, and their confidentiality and privacy were maintained in accordance with applicable research ethics standards. With this statement, researchers hope that the research results can be trusted and used as a valid reference for the development of science and health practices related to ethnomedicine and reproductive health.

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### **Authors' contribution**

Each author makes an equal contribution to all parts of the research. All authors have reviewed and approved the final draft critically and are responsible for the index and similarity of the manuscript.

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