



The Effect of Pregnant Woman Classes on Stunting Prevention Efforts

Risqi Utami^{*1}, Hafizah Che Hassan², Nur Syazana Umar³

¹ Programme Doctor of Philosophy (Ph.D.) in Health Sciences, Lincoln University College, Malaysia

¹ Study Program Midwifery, Faculty of Health Sciences, University of Batam, Indonesia

² Faculty of Applied Sciences, Lincoln University College, Malaysia

³ Faculty of Applied Sciences, Lincoln University College, Malaysia

Abstract

One of the nutritional issues that continues to be a problem in Indonesia is stunting. For the time being, the percentage of babies and toddlers who are stunted is still relatively high, which means that it is necessary to lower it. The reduction in the number of kids who are stunted can be prevented as early as feasible. Classes for pregnant women are one method of preventing stunting. These classes are designed to educate and enlighten pregnant women about stunting, which is one of the ways that stunting can be prevented. This study was conducted to determine the impact that classes for pregnant women have on the prevention of stunting issues. This secondary research utilized a literature review approach by examining pertinent information on a specific topic. Articles were sourced from the Pubmed and Google Scholar databases using the "publish or perish" search tool from 2019 to 2024, based on predefined inclusion and exclusion criteria and articles were screened using PRISMA. The research findings indicate that prenatal classes serve as a platform for education and support to convey information, enhance and influence knowledge, and alter attitudes and behaviors about stunting. Conclusion: Offering classes for pregnant women can help reduce stunting.

Keywords: Pregnant Mother Class, Stunting Prevention, Pregnant Mom

Corresponding Author: Risqi Utami

Email: risqi0512@univbatam.ac.id

1. Introduction

The national under-five nutritional status survey report 2021 findings indicate that the percentage of infants born with low birth weight (LBW) has increased from approximately 6.6% to 6.4% in 2018 over the past three years. According to the information





gathered by the World Health Organization (WHO) regarding the prevalence of stunting in toddlers, Indonesia is the third country in Southeast Asia with the highest incidence of stunting (Kemenkes, 2020). Stunting affects not only several different aspects but also one's health. Specifically, growth failure in toddlers, which includes low weight at birth and height not proportional to age, can lead to difficulties in motor and cognitive development. Additionally, it can cause metabolic disorders in adults, which are often accompanied by non-communicable diseases such as diabetes, stroke, and heart disease (Valeriani *et al.*, 2022).

Several variables contribute to the prevalence of stunting, such as a lack of access to sanitation and clean water, the consumption of food deficient in nutrients, and a lack of awareness regarding health and nutrition before and during pregnancy (TNP2K, 2017). According to Kemenkes (2020), several characteristics can make the condition of pregnant women worse. These factors include being too young or too elderly, giving birth frequently, and having a close separation between births. It is also possible to acquire information or education on the variables that cause stunting as well as about pregnancy through classes that are specifically designed for pregnant women (Santosa *et al.*, 2022).

To expedite the decrease in stunting (to reach 14% by the year 2024), it is necessary to implement a novel approach that incorporates collaborative, convergent, and sustainable methodologies and involves several different stakeholders. To accelerate the reduction of stunting, one form of renewal of the strategy is a family approach through family assistance provided by a team of family facilitators in the village (midwives, Family Empowerment and Welfare Team Cadres, and Family Planning cadres) who work together (Aritonang, Nababan and Siregar, 2023). This approach is efficient in families that are at risk of stunting, with targets/targets consisting of adolescents, prospective brides / prospective Fertile Age Couples (PUS), pregnant and lactating mothers until post-coital, and children aged 0-59 months. In this way, early risk factors for stunting can be identified, and then measures can be taken to mitigate or prevent the impact of those risk factors. Family members are provided with aid, counseling, referral services, social assistance programs,





and surveillance through pregnant women's classes to identify potential risk factors for stunting at an earlier stage (Kartika *et al.*, 2023).

There are no more than ten persons who are permitted to take part in a session that is designed specifically for pregnant women. This class serves as a forum for learning together. During this activity, pregnant women can study together, talk, and exchange views regarding the health of the mother and child. In addition, this activity is carried out in a manner that is both planned and sustainable, and it is often monitored by midwives or local health institutions (Delzer, Kkonde and McAdams, 2021). Pregnant women's classes can help moms learn how nutritional planning during pregnancy can boost their understanding of preventing stunting (Riyanti and Saputri, 2022). Based on the explanation above, researchers are interested in conducting a literature study of previous studies titled "The Effect of Pregnant Women's Classes on Stunting Prevention Efforts".

2. Research Method

The method of study that is utilized is the literature review. According to Indra and Cahyaningrum (2019), a literature review is a study carried out to review or collect pertinent information on a subject or problem that will be evaluated utilizing literature as the primary source. Using this literature review, researchers will examine past studies conducted between 2019 and 2024 that are specifically customized to the research issue.

Data searches were conducted using the PubMed database and Google Scholar with the assistance of the publish or perish application. The keywords that were used to search for literature in Indonesian included "stunting prevention," "pregnant women class," "pregnant women class to prevent stunting," and "pregnant women." Keywords that were used to search for literature in English included "pregnancy class," "stunting prevention," "pregnancy class to stunting prevention," and "pregnant women class." The Boolean logic method "AND, OR, and NOT" was used to narrow the search results to match the objectives. The criteria for inclusion and exclusion, as determined by the PICOS criteria, are presented in Table 1. The writers each conducted their independent review of the publications that were retrieved. This investigation was carried out in a manner that was





consistent with the reporting standards for Systematic Reviews and Meta-analyses (PRISMA), which are depicted in Figure 1.

Table 1. Criteria for the Inclusion and Exclusion of Review Studies (PICOS)

Criteria	Inclusion	Exclusion
Population	Pregnant women, cadre, adolescent girls	Infant <i>and</i> toddler
Intervention	Education, health education, pregnant women classes with brochures, counseling, leaflets, audio-visual media.	In addition to those mentioned
Comparison	If a comparator is included	-
Outcomes	Reduce and prevent stunting and improve knowledge, attitudes, and behavior.	In addition to those mentioned
Study Design	Unique research, case studies, cross-sectional studies, case-control studies, randomized controlled trials, quasi-experimental studies, pre-post investigations, qualitative formative studies, and clinical control trials are all examples of research methods that are included in this category.	Editorial, perspective, proceedings of a symposium, abstract of a conference, commentary, meta-analysis, systematic review, literature review, and thesis.
Language	In English or Indonesian	In addition to English or Indonesian
Period	January 2019 - January 2024	< 2019

3. Results And Discussions

a. Result

251 publications were retrieved from the PubMed database (n=82) and Google Scholar (n=169). Among these, 84 articles contained duplicate data, 109 were excluded





based on title and abstract, 44 were excluded based on research design, 5 had inaccessible full texts, and 1 had full text with unreported results. The review comprised 9. Figure 1 illustrates this point.

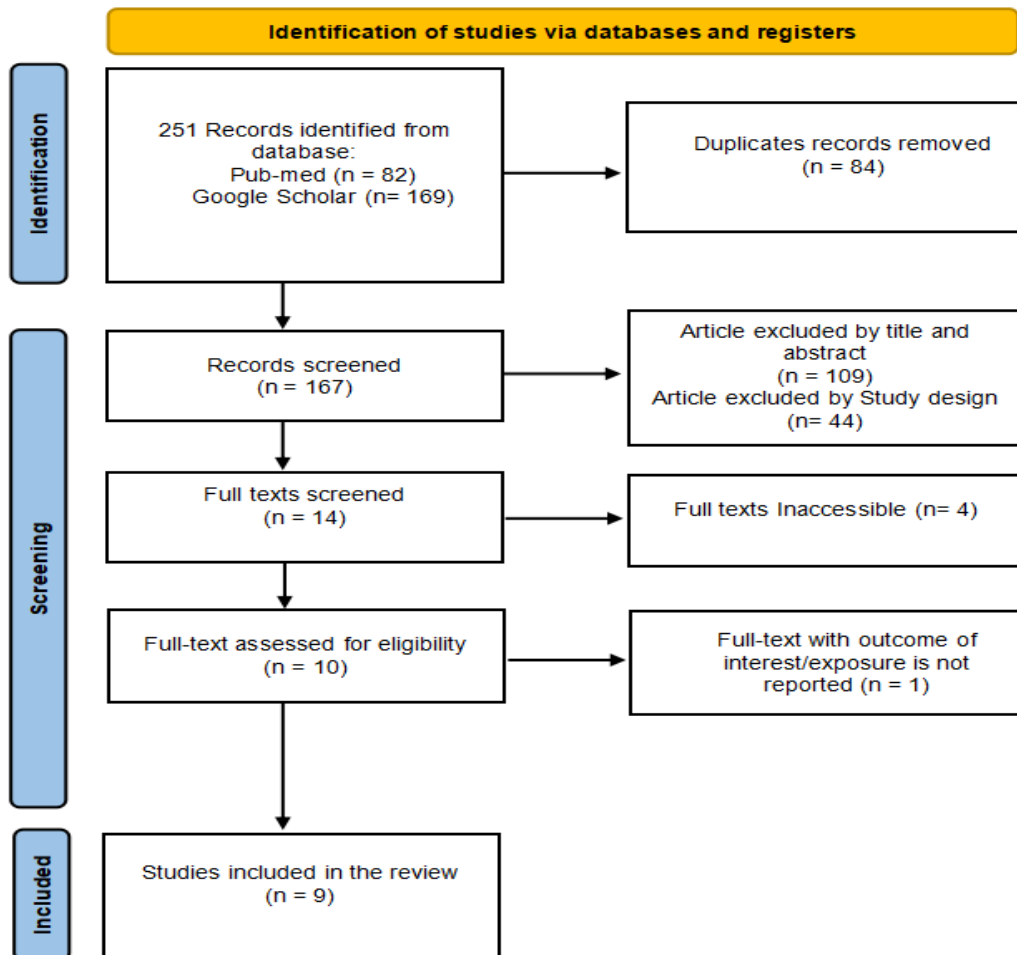


Figure 1. PRISMA Flow Diagram

Table 2: The Findings Of The Literature Review

Author	Purpose	Population and sample	Intervention	Outcomes	Study Design	Result
(Pratiwi and Muhlisin, 2023)	This study aims to examine the impact of public health education on the level of knowledge	34 Pregnant women	Provided with a health education intervention on the prevention of stunting interventions	Reduce and prevent stunting	Pre-experimental design with one group Pretest-posttest design	Health education has a significant effect on the level of knowledge and attitude of pregnant





	and attitudes that pregnant women have on efforts to avoid stunting.					women, with p-values of 0.000 which is less than 0.05.
(Patimah <i>et al.</i> , 2023)	To evaluate the impact of mentorship on the knowledge, attitudes, and self-efficacy of families at risk of stunting and future family assistance team officers in efforts to reduce stunting.	Adolescent girls, pregnant women, moms of children under five, and potential members of the family aid team (28 individuals)	Applying the KIME method to address malnutrition and its consequences through communication, information, motivation, and education.	Reduce and prevent stunting	pre-experimental design (one group pre-test post-test)	When it comes to avoiding stunting, mentoring participants has a favorable impact on enhancing their knowledge, attitudes, and self-efficacy, as evidenced by a p-value of less than 0.05.
(Muhama d <i>et al.</i> , 2023)	To analyze the effectiveness of providing nutritional education to pregnant women with short stature in preventing stunting during pregnancy.	82 participants	intervention with leaflets and cadre assistance for 6 months.	Reduce and prevent stunting	quasi-experimental design in the intervention group and the control group	The research findings indicated significant variations in pregnant women's knowledge, attitudes, and behavior about prenatal care services and nutrition before and after the intervention, with a p-value of less than 0.05.
(Ekayanthi D.W.N and Suryani P, 2019)	To determine the impact of prenatal education programs on enhancing understanding and attitudes towards	35 pregnant women in the first trimester	Considering the intervention involving pregnant women attending three class meetings	Reduce and prevent stunting	pre-experimental design (one group pre-test post-test)	Pregnant women's classes substantially enhanced the knowledge and attitudes of pregnant women about stunting





	stunting prevention in pregnant mothers.					prevention (p-value <0.05).
(Malia <i>et al.</i> , 2022)	to explain the execution of maternity classes	23 pregnant women	Implementation of prenatal classes focusing on stunting.	Reduce and prevent stunting	descriptive survey	One hundred percent of those who participated in the survey believed that there are advantages to implementing classes for pregnant mothers in order to prevent stunting.
(Nasir, Amalia and Zahra, 2021)	To a reduction in stunting rates and the development of social media platforms	35 pregnant women in the first trimester	Organize a seminar and workshop program for pregnant women to create socialization media for the socialization process.	Reduce and prevent stunting	pre-experimental design (one group pre-test post-test)	A notable correlation exists between offering classes for pregnant women and enhancing their knowledge and attitudes toward stunting prevention (p-value <0.05).
(Oktaviani, Ayue and Natalina, 2020)	Enhancing maternal understanding and expertise on stunting	8 pregnant women	health education through maternity classes	Reduce and prevent stunting	One group Pretest – Posttest	Knowledge about stunting is growing, allowing pregnant women to engage in discussions about their pregnancy-related issues and requirements.
(Diadjeng, 2022)	To determine whether or not the	60 pregnant women	There were 30 pregnant women in the	Reduce and	pre-experimental design (one	Using audiovisual methods is





	audiovisual technique is more effective than the Tele-education method in terms of the knowledge and attitudes of pregnant women on the practice of exclusive breastfeeding as a means of preventing stunting.		audiovisual group intervention and 30 pregnant women in the teleducation group intervention.	prevent stunting	group pre-test post-test)	more effective for educating pregnant women to prevent stunting.
(Oktaviani and Sulistyawati, 2022)	The purpose of this study is to investigate the level of efficacy that mentoring has on the attitudes and behaviors of pregnant mothers about stunting the child.	60 pregnant women	Traditional counseling as the control group. The experimental group consists of regular counseling supplemented with a pocketbook.	Reduce and prevent stunting	quasi-experimental (one group pre-test post-test)	Pocketbooks are more beneficial for enhancing attitudes and behaviors related to stunting prevention.

b. Discussion

A study conducted by Pratiwi and Muhlisin (2023) discovered a correlation between the degree of knowledge and attitudes of pregnant women and the presence of health education. Compared to conduct that is not based on information, behavior based on knowledge, awareness, and positive attitudes will last longer. Behavioral factors are determined by three (three) components, including predisposing factors such as level of education, attitude, age, and occupation, according to the Precede-Proceed theory, which Lawrence W. Green presented. The fourth aspect is the driving factor, which includes the support of family members and community leaders. Supporting variables include, among other things, the type of available health services and facilities (Kim *et al.*, 2022).

It was stated by Patimah *et al* (2023) that assisting in the form of communication, information, motivation, and education has a positive impact on improving the knowledge,





self-efficacy, and attitudes of families who are at risk of stunting and prospective family assistance team officers in the prevention of stunting children. The Communication, Information, Motivation, and Education (KIME) activities are a method of behavior change communication that can be utilized as a form of sensitive nutrition intervention. The goal of these activities is to improve the knowledge, attitudes, and self-efficacy of at-risk groups and family support team officers in order to reduce the number of children who are stunted. Health workers must continuously implement this effort at the community level in conjunction with cadres as community representatives using IEC media. This is necessary to ensure that the behavior of preventing stunting in children can be consistently applied by at-risk groups, ultimately leading to the incidence of stunting being controlled within the community (Palapessy *et al.*, 2023).

With a p-value of less than 0.05, the findings of the research conducted by Muhamad *et al* (2023), show variations in the knowledge, attitudes, and behaviors of pregnant women regarding prenatal care services before and after the intervention. Additionally, there were differences in the knowledge of pregnant women regarding nutrition before and after the intervention. This is because the attitude improves in proportion to the level of knowledge. Individuals will then put this positive attitude into effect in their day-to-day actions through their actions. It is necessary to have health cadres in order to encourage wellness activities within the community. HealthHealth cadres who are actively involved in the community will be responsible for bringing about a shift in behavior within the community to bring about a shift in behavior within the community (Windarwati *et al.*, 2023).

According to the findings of Malia *et al* (2022), one factor that impedes the implementation of pregnant women's classes is the cadres accompanying the activities of pregnant women's classes. The cadres in question are health cadres in the village, and they ensure that pregnant women's classes are carried out efficiently and effectively. Considering that most cadres who assist midwives are cadres who have not received training in assisting in pregnant women's classes, it is imperative that training be provided





to them. This is done to ensure that the goals and objectives of the class for pregnant women are completed successfully (Chirwa *et al.*, 2023).

According to Nasir, Amalia and Zahra (2021), Oktaviani, Ayue and Natalina (2020), there is a substantial connection between the provision of classes for pregnant women and the enhancement of knowledge and attitudes toward preventing stunting. Pregnant women's classes are a form of face-to-face group learning for pregnant women. The purpose of these classes is to enhance the knowledge and abilities of mothers about pregnancy, childbirth, postpartum care, and newborn care. As a result, these classes are one of the most effective sources of knowledge improvement activities.

A study by Diadjeng (2022) found that the audiovisual method is more effective than other approaches when educating pregnant women about the importance of preventing stunting. The experiences that a person has gotten from numerous sources of information, such as social media, the internet, books, and so on, contribute to the accumulation of knowledge it possesses. Literature, the internet, and other places). Through the provision of health education concerning maternal, pregnancy, and fetal health, it is possible to enhance the knowledge of pregnant women. Providing adequate nutrition during the first one thousand days of a person's existence is one of the health problems that must be considered and addressed during pregnancy. This will affect the child's ability to grow and develop to their full potential; if the child does not receive adequate nourishment, the child will be more likely to experience stunting (Soliman *et al.*, 2021).

According to Oktaviani and Sulistyawati (2022), the pocketbook on stunting has a high level of effectiveness in providing pregnant women with information relevant to their needs. On the other hand, access to information is today a lifestyle choice for an individual, and it affects changes in attitudes and behaviors because of this lifestyle choice. Currently, the quantity of required information satisfies an individual's requirements. In addition, such an attitude is personal, and it unquestionably results in a departure from that mentality. When it comes to successfully internalizing information to change attitudes and behaviors, one of the most important factors is the family, especially the position that the spouse plays in the family (Stangl *et al.*, 2019).





The impact of prenatal education classes on pregnant women's attitudes and knowledge about measures to reduce stunting. Introducing lessons for pregnant women to avoid stunting offers advantages and impacts the attitudes and understanding of pregnant women regarding stunting prevention. Referencing studies by Malia *et al* (2022), Nasir, Amalia and Zahra (2021), Ekayanthi D.W.N and Suryani P (2019), and Oktaviani, Ayue and Natalina (2020). The four studies demonstrate that classes for pregnant women serve as a platform for disseminating information and education on stunting prevention. Pregnant women exhibit increased focus on nutritional intake to prevent stunting and show changes in attitudes after attending these classes. Mothers become more vigilant in monitoring their pregnancy as they understand the impact of fetal conditions on the growth, development, and health of their children.

Pregnant women's classes aim to enhance pregnant women's attitudes and knowledge regarding pregnancy issues and maternal and child health and serve as an informative platform. Research by Handayani *et al.* (2021) indicates that these classes significantly improve pregnant women's attitudes and knowledge. Therefore, it is strongly advised for pregnant women to participate in these classes to gain insights into pregnancy-related topics, particularly stunting prevention.

Pregnancy classes are anticipated to assist the government in achieving the Sustainable Development Goals (SDGs) target, including a 40% decrease in stunting rates by 2025 (Kemenkes, 2020). Factors that promote or hinder the introduction of maternity classes. Factors that contribute to the successful implementation of maternity classes. Various factors support the implementation of maternity classes, as identified in a study by Malia *et al.* (2022). These factors include regular maternity classes led by village midwives who are experts in their field, ensuring the information provided is trustworthy, valid, and aligned with their expertise.

4. Conclusion

The review results indicated that classes for pregnant women can influence their knowledge, attitudes, and behavior on stunting prevention. Pregnant women can participate in lessons aimed at preventing stunting using counseling, conventional approaches, or





multimedia media. To prevent stunting, various novel methods can be employed, such as enhancing mothers' knowledge, attitudes, and behaviors related to stunting prevention.

5. Compliance with ethical standards

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Disclosure of conflict of interest

This research has no conflict of interest.

Statement of informed consent

Every action we take as authors is a mutual agreement or permission.

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