

# Concept Analysis of Self-Efficacy in Early-Married Adolescents Regarding the Incidence of Stunting

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**Abstract.** Teenagers who marry early often face the risk of stunting in their children, which can have long-term implications for the health and development of the child. The global attention to the phenomenon of early marriage is noteworthy. The consequences of early marriage are associated with health risks, teenage pregnancy, school dropout, and the risk of stunting. The aim of this study is to understand the self-efficacy aspects of teenagers who marry early in facing the phenomenon of stunting in their children. The concept of self-efficacy, which includes an individual's belief in their own abilities, is crucial in efforts to prevent stunting in the children of these teenagers. The analysis of this concept, following the Walker and Avant approach, aims to delve into the meaning of the concept of self-efficacy in earlymarried teenagers and its impact on the occurrence of stunting. The analysis steps include understanding attributes, identifying concrete case models, discussing borderline cases, as well as examining relevant and opposing cases. Focusing on early-married teenagers, this research opens a window into insights on how the selfconfidence of teenagers can shape child health. The results of this analysis can provide a foundation for the development of more effective interventions and health programs, enhance understanding of the concept of self-efficacy, and support efforts to prevent stunting in the group of teenagers who marry early.

Keywords: Early Marriage Adolescents, Self-Efficacy, Stunting.

### 1. Introduction

Early marriage among adolescents constitutes a group vulnerable to the risk of stunting in their children. The concept of self-efficacy, encompassing individual belief in one's own capabilities, can be a crucial factor in preventing stunting in the children of adolescents who marry early. Marriages that occur in girls under 16 years old, known as early marriages, involve both formal and informal unions below the age of 18. According to the 2019 National Socio-Economic Survey (SUSENAS) data in Indonesia, there are 20 provinces with a higher prevalence of child marriages compared to the national average (22.8%) [1].

Adolescents who marry early constitute a vulnerable group facing health risks, including the occurrence of stunting in their children. Stunting, or inhibited growth in children, can have long-term impacts on health and development. In this context, the concept of self-efficacy emerges as a key factor that can play a crucial role in preventing stunting in the children of adolescents who marry early. Self-efficacy, encompassing an individual's belief in their own capabilities, serves as a critical foundation for understanding how these adolescents can successfully navigate the challenges of complex child care [2].

Analyzing the concept of self-efficacy in early-married adolescents regarding the occurrence of stunting becomes essential to examine the elements involved in this concept and how it can influence preventive actions against stunting. The concept analysis approach, as proposed by Walker and Avant, provides a systematic framework for exploring the dimensions of this concept. These steps help in constructing a deeper understanding of the concept of self-efficacy and its relationship with preventing stunting in the children of early-married adolescents [3].

In the context of this concept analysis, we will explore the attributes of the concept of self-efficacy, identify case models reflecting concrete situations, discuss borderline cases highlighting the complexity of the relationship between self-efficacy and child health outcomes, and engage in related and contrasting cases to detail and strengthen the understanding of the concept. [4].

With a focus on early-married adolescents, this analysis is directed towards providing a richer insight into how the self-confidence of adolescents in managing the role of parenthood can shape the health reality of their children. Therefore, a profound understanding of this concept can provide a solid foundation for the development of interventions and health education programs that are more effective in preventing stunting in this group [5]

Through the steps of concept analysis, this research aims to explore the meaning and implications of the concept of self-efficacy in early-married adolescents regarding the occurrence of stunting. Thus, it is anticipated that the results of this analysis can contribute significantly to theoretical and practical understanding in efforts to prevent stunting in the early-married adolescent group [2].

# 2. Analysis Objectives

The analysis aims to gain a more detailed and profound understanding of the concept of self-efficacy in Early-Married Adolescents Regarding the Incidence of Stunting. This involves utilizing attributes within case models, borderline cases, related cases, and opposite cases, elucidating antecedents and consequences, considering empirical references for additional information stated as theoretical and operational definitions of self-efficacy in Early-Married Adolescents Regarding the Incidence of Stunting.

# 3. Method

The concept analysis employed to clarify the meaning of a concept utilizes the Walker and Avant concept analysis approach, comprising eight steps. The steps are as follows: 1) selecting the concept for analysis, 2) determining the analysis objectives, 3) identifying all instances of the concept's usage, 4) defining attribute definitions, 5) identifying case models, 6) identifying borderline, related, contradictory, constructed, and invalid cases, 7) identifying antecedents and consequences, 8) defining empirical references. [3]

Relevant literature findings related to the concept were obtained through concept databases such as Google Scholar, PubMed, Science Direct, EBSCO, and ProQuest. Keywords used in literature searches include "self-efficacy," "Adolescents," and "Stunting." Inclusion criteria for articles are those written in both English and Indonesian, complete texts, and articles published within the last 10 years.

# 4. Results and Discussion

# 4.1. Concept Analysis

The selected concept for the concept analysis is self-efficacy, developed by Bandura's theory. The rationale behind choosing this concept is that the aspect of adolescents' self-efficacy in facing the phenomenon of early marriage is robust, supported by various factors such as adolescent resilience, resilience in abstaining from dating, restrictions in socializing, parental support to set boundaries for adolescents in interacting with the opposite sex, adolescent support to abstain from dating, and education bout early marriage. These elements significantly contribute to the strength of adolescents' self-efficacy [6]

By understanding the dynamics of the concept of self-efficacy in the context of early marriage and stunting, more effective strategies can be designed to prevent stunting in the children of adolescents. Intervention and education measures that focus on enhancing adolescents' self-efficacy can be key to minimizing health risks associated with early marriage [7].

# 4.2. Concept of Self-Efficacy

According to the attributes and definitions outlined by Walker & Avant (2014), the exploration of the concept involves discovering as many uses of the term as possible, utilizing dictionaries, thesauruses, input from colleagues, and available literature. According to the Oxford Dictionary, "Self" is defined as a verb, signifying: 1) the type of person, especially behavior that is observed and perceived, and 2) an individual's personality or character that distinguishes them from others. "Efficacy" is defined as the ability to produce something desired. When combined into "self-efficacy," it denotes an individual's belief in their success

in executing specific tasks. Perceived self-efficacy refers to an individual's belief in their ability to exert control over activities.

Cambridge online Dictionary describes "Self" as a set of characteristics of an individual, such as personality and abilities that are non-physical and differentiate them from others. "Efficacy" is defined as the ability or method to achieve something, to produce desired outcomes. Overall, self-efficacy is defined as an individual's belief that they can succeed when exerting control over activities. Self-efficacy is a personal belief in one's ability to motivate, cognitive capability, and perform actions necessary for success in undertaking task [8]

# 4.3. Definition of Attributes

Attributes involve discovering as many uses of the concept as possible using dictionaries, thesauruses, input from colleagues, and available literature [3]. Several attributes in the analysis of Self-Efficacy in early-married adolescents regarding the incidence of stunting are as follows:

### **Belief in Providing Care:**

The extent to which early-married adolescents believe they have the ability to provide proper care to their children, including understanding nutrition and health needs.

# **Resource Management:**

The ability of early-married adolescents to manage resources such as finances, time, and social support to ensure their children receive adequate nutrition.

### **Understanding of Nutrition and Child Health:**

The level of understanding early-married adolescents have regarding the importance of nutrition and child health care in preventing stunting.

# **Handling Conflict and Stress:**

How early-married adolescents handle conflicts and stress that may arise in their roles as parents and the extent to which they believe they can overcome these challenges.

### Access to Information and Support:

The level of access early-married adolescents has to information and support related to child care, as well as their confidence in utilizing it.

Analyzing these attributes can provide insights into the extent to which the self-efficacy of early-married adolescents influences the occurrence of stunting in their children. This analysis offers valuable insights for the development of intervention programs and education aiming to enhance the well-being of young families and prevent stunting.

# 4.4. Operational Definitions

# Early-Married Adolescent Self-Efficacy

The level of confidence of early-married adolescents in their ability to provide adequate care, including nutrition and health care, to their children. The measurement indicators such as: A self-efficacy scale comprising statements assessing the ability to provide nutrition, health care, and meet the needs of children.

# Stunting Incidence in Early-Married Adolescent Children

The physical condition where the growth of early-married adolescent children is hindered, measured by the child's height being shorter than the average height should be for their age. The measurement indicators such as: child height data, measured and compared against growth standards recommended by health organizations.

#### Socioeconomic Factors

Economic and social factors influencing the ability of early-married adolescents to provide adequate care and nutrition to their children. The measurement indicators such as: family income, education level, access to health services, and other socioeconomic factors influencing the family's living conditions.

# Social Support

The level of social support received by early-married adolescents from family, friends, and the surrounding community in the context of providing child care.

The measurement indicators such as: A social support scale encompassing emotional, instrumental, and informational support.

#### **Educational Nutrition**

The level of knowledge and understanding of early-married adolescents about nutrition and the importance of a balanced diet for their children. The measurement indicators such as: A nutrition knowledge scale comprising questions about nutrition, children's nutritional needs, and daily nutrition practices.

#### 4.5. Cases model

Case Model: Improving Self-Efficacy in Preventing Stunting among Early-Married Adolescents in Village X

Case Title: "Enhancing Self-Efficacy in Preventing Stunting among Early-Married Adolescents in Village X"

*Background:* In Village X, there is a high prevalence of early marriages, with many adolescents marrying at a young age. Over the past few years, the incidence of stunting among children in this village has also increased. Stunting incidents are closely related to suboptimal

feeding patterns and child care. Previous research has indicated that the self-efficacy of early-married adolescents can play a crucial role in preventing child stunting.

Case Overview: In this case, the focus is on a 17-year-old female adolescent, Maria, who got married to John at the age of 16. They have an 18-month-old son, Michael, who is currently experiencing stunting. Maria has low self-efficacy in managing the nutrition and care of Michael. However, Maria is deeply concerned about her child's health and is eager to make positive changes in Michael's care.

*Problem Identification:* Maria becomes aware that Michael is experiencing slow growth and low weight. She seeks information about stunting and realizes that this condition can adversely affect her child's health.

Improving Self-Efficacy: Maria meets with a health counselor who helps boost her self-efficacy. The counselor provides education on child nutrition and optimal healthcare.

Learning and Support: Maria joins a support group for teenage mothers in her village, where she can share experiences and learn from other mothers. This enhances her self-efficacy through social support and gained information.

*Behavioral Change:* Maria begins to apply her knowledge in caring for Michael. She changes her child's eating habits and ensures he receives good healthcare.

Evaluation of Results: After several months, Michael shows improvement in weight and better growth. Maria feels more confident in managing her child's health.

Conclusion: In this case, Maria's self-efficacy in caring for her child improves through education, social support, and positive behavioral changes. This demonstrates that the self-efficacy of early-married adolescents can influence actions and decisions that support the prevention of stunting incidents in their children. This case highlights the importance of education and support in enhancing self-efficacy in the context of stunting incidents.

#### 4.6. Borderline Cases

Borderline Cases in the Concept Analysis of Self-Efficacy among Early-Married Adolescents in Relation to Stunting Incidence:

# Early-Married Adolescent with High Self-Efficacy, Yet Stunting Occurs in Their Child:

Description: An early-married adolescent exhibits high self-efficacy in caring for their child and possesses good knowledge of nutrition and child healthcare. However, their child still experiences stunting. This case raises questions about factors causing the mismatch between high self-efficacy and poor outcomes.

Early-Married Adolescent with Low Self-Efficacy, Yet No Stunting in Their Child:

Description: Conversely, an early-married adolescent may have low self-efficacy in caring for their child, but the child does not experience stunting. This could be a case where other factors such as family support, access to health resources, or chance prevent stunting despite low self-efficacy.

# Early-Married Adolescent Initially with Low Self-Efficacy, Later Improved Self-Efficacy Preventing Stunting:

Description: An early-married adolescent initially has low self-efficacy in caring for their child. However, through education and support, they experience an increase in self-efficacy and successfully prevent stunting in their child. This case highlights the importance of changes in self-efficacy over time and interventions that can assist early-married adolescents in overcoming challenges in child care.

# Early-Married Adolescent with High Self-Efficacy Focusing on Other Aspects Besides Child Nutrition and Health:

Description: In some cases, an early-married adolescent may have high self-efficacy, but their focus might be on other aspects of life, such as education, employment, or personal development, neglecting the nutrition and health of their child. This serves as an example where high self-efficacy in a specific context does not always correlate with actions supporting stunting prevention.

These borderline cases aim to shed light on the complexity of the concept of Self-Efficacy among Early-Married Adolescents in relation to Stunting Incidence. They illustrate how variability in contextual and individual factors can influence the relationship between self-efficacy and outcomes related to child stunting.

#### 4.7. Related Cases

Related Cases in the Concept Analysis of Self-Efficacy among Early-Married Adolescents in Relation to Stunting Incidence:

# Case of Early-Married Adolescent with Low Self-Efficacy Showing Positive Change:

Description: A 17-year-old early-married adolescent with initially low self-efficacy in caring for her child. After participating in a health education program focusing on child nutrition and healthcare, along with receiving support from family and the community, her self-efficacy significantly improves. She successfully prevents stunting in her child, reflecting how interventions can transform the self-efficacy of early-married adolescents.

#### Case of Family Impact Influencing Self-Efficacy:

Description: An early-married adolescent has relatively high self-efficacy in caring for her child, but her husband's family provides only partial support. Due to family conflicts, her self-efficacy becomes ambiguous, affecting her actions in preventing stunting in her child. This case underscores the role of family and social interactions in shaping self-efficacy.

# Case of Government and Non-Governmental Organization Support:

Description: A community receiving strong support from local government and non-governmental organizations in efforts to prevent stunting in the children of early-married adolescents. These programs include education, healthcare services, and financial assistance to support child care. Early-married adolescents in this community exhibit higher self-efficacy and result in lower levels of stunting in their children.

# Case of Early-Married Adolescent with High Self-Efficacy but Limited Access to Resources:

Description: An early-married adolescent has high self-efficacy in caring for her child and good knowledge of child nutrition and health. However, she resides in a remote area where access to healthcare services and resources is limited. This leads to an inability to apply her knowledge and self-efficacy, and her child still experiences stunting. This case highlights the importance of access to resources.

#### 4.8. Antecedent

Antecedents refer to factors that have occurred previously and influence the attributes that characterize the concept (Walker & Avant, 2014). Antecedents in this concept analysis encompass factors such as adolescent resilience, limited dating experience, restricted social interactions, parental support and guidance, education about early marriage, and educational priorities by both parents and adolescents.

Reflects the ability of adolescents to cope with pressure, challenges, and changes in life, including the context of early marriage. Adolescents demonstrating high resilience may be more likely to possess strong self-efficacy in facing the role of parenthood and preventing stunting. Indicates the constraints in romantic or dating relationships before marriage. Adolescents with limited dating experience may require additional adjustment to the role of parenthood. Their self-efficacy can be influenced by their experiences and readiness in facing childcare tasks [2].

# 4.9. Consequences

The consequences of self-efficacy in early-married adolescents involve the outcomes of the concept. Specifically, the consequences include the formation of confidence in one's abilities to prevent stunting in children born to early-married adolescents. Having this belief in their own capabilities enables early-married adolescents to take appropriate actions to prevent stunting in their children. Additionally, this understanding of the concept of self-efficacy in the context of early marriage and stunting prevention provides deeper insights for nursing practices [7].

### 4.10. Conceptual Model

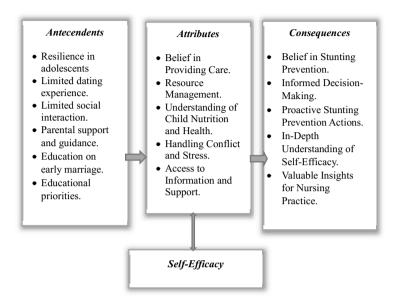


Fig 1 Conceptual model of Self-Efficacy

# 4.11. Empirical References

Empirical references are how one recognizes or determines the existence of a concept and are used to develop instruments and measure the concept in research to define attributes. Here are examples of empirical references that can be used to support the concept analysis of self-efficacy in early-married adolescents concerning stunting incidents:

A longitudinal study investigating the relationship between the level of self-efficacy in teenage mothers and the occurrence of stunting in their children. Findings from this research could provide empirical evidence of the role of self-efficacy in preventing stunting. (Kamil et al. 2020). Research exploring the impact of parental support and education on self-efficacy in teenage mothers. The results of this study may offer insights into external factors influencing self-efficacy [8]. Another study examining and evaluating the effects of educational interventions on teenage self-efficacy in preventing stunting in their children. The outcomes could provide empirical evidence regarding the effectiveness of educational intervention [9]. Research examining the relationship between knowledge, beliefs, and practices of teenage mothers in preventing stunting in their children. Findings from this study may support the understanding of the concept of self-efficacy in the context of stunting prevention [10]. These examples of empirical references contribute to the analysis of the concept of self-efficacy in early-married adolescents regarding stunting incidents by providing real-world evidence and insights into the factors influencing self-efficacy.

# 4.12. Nursing Practice Implications

The analysis of this concept emphasizes the importance of providing education and support to teenage mothers to enhance their self-efficacy in preventing stunting in their children. Nurses can play a crucial role in delivering health education programs focused on nutrition and child care while providing guidance and support to teenage mothers. By empowering young mothers and boosting their self-efficacy, nurses can contribute to preventing stunting and enhancing the overall health and well-being of both mothers and their children [11].

Here are some examples of implications in nursing practice:

- a. Nurse Education and Support: Nurses can offer health education programs tailored to enhance the self-efficacy of early-married adolescents in child care and stunting prevention. Targeted health education can provide practical information and skills to adolescents in caring for their children, thereby boosting their self-confidence.
- b. Social Support: Nurses can facilitate social support groups for teenage mothers, where they can share experiences, tips, and strategies in overcoming child care challenges. Social support can enhance self-efficacy by creating a supportive environment and instilling confidence in teenage mothers to face child care responsibilities.
- c. Psychosocial Interventions: Nurses can develop psychosocial interventions aimed at managing stress and anxiety in early-married adolescents, as psychological factors can influence self-efficacy. Managing stress and anxiety can help create a more stable psychological condition, enabling adolescents to focus more on child care and enhance their self-efficacy.
- d. Family Counseling: Nurses can involve the family in the care process and provide counseling on how the family can support the self-efficacy of early-married adolescents. Supportive families can strengthen self-efficacy. Family counseling can help build positive support and understanding among family members.
- e. Access to Resources: Nurses can collaborate with government agencies and non-governmental organizations to improve adolescents' access to health and education resources. Adequate access to information and health services will support early-married adolescents in applying their knowledge and skills, enhancing self-efficacy, and preventing stunting.

### 5. Discussion

The analysis of this concept highlights the importance of understanding the relationship between the self-efficacy of early-married adolescents and the occurrence of stunting in their children. Key findings indicate that a high level of self-efficacy does not always lead to the prevention of stunting. Other factors, such as socioeconomic status and nutritional understanding, also play a crucial role. Implications for Practice and Policy include:

Expansion of Nutrition Education: The analysis suggests a need for expanding nutrition education because a high level of self-efficacy in early-married adolescents does not always

translate to adequate nutritional understanding. Therefore, there is a need to broaden nutrition education programs that encompass critical aspects such as balanced dietary patterns and children's nutritional needs.

Holistic Intervention Programs: Interventions to reduce the occurrence of stunting among early-married adolescents should be holistic. In addition to enhancing self-efficacy, these programs should also address socioeconomic aspects, including economic empowerment and access to healthcare services. Strengthening social support from family, friends, and the community can be a determining factor in the success of early-married adolescents in providing good care and nutrition.

Economic Empowerment and Healthcare Access: Policy implications involve the implementation of programs that focus on economic empowerment and improved access to healthcare services for early-married adolescents. Economic empowerment can contribute to their ability to provide better care and nutrition for their children. Ensuring access to healthcare services is equally essential for preventive measures.

Strengthening Social Support: Given the significance of social support, efforts should be directed towards strengthening the social support systems around early-married adolescents. Enhancing support from family, friends, and the community can positively impact their ability to provide adequate care and nutrition. Therefore, there is a need for initiatives to reinforce social support in their surroundings.

In conclusion, the findings underscore the complexity of factors influencing the relationship between self-efficacy and stunting among early-married adolescents. Addressing these factors comprehensively in education and intervention programs is essential for effective preventive measures and improved overall well-being.

### 6. Conclusion

While early-married adolescents may have a high level of self-efficacy in caring for their children, it does not always result in the prevention of stunting. Other factors, such as economic aspects and a lack of understanding of nutrition, can remain causes of stunting. The high self-efficacy level may not be sufficient to overcome the socio-economic limitations faced by early-married adolescents. Insufficient economic support and limited access to resources may be obstacles in providing adequate care and nutrition.

Therefore, an integrated approach is necessary to reduce the occurrence of stunting among early-married adolescents. It is essential not only to enhance their self-efficacy but also to address other contributing factors to stunting, such as nutritional education, access to healthcare services, and social support. Moreover, improving the understanding of early-married adolescents regarding the importance of nutrition and child care, along with better education and awareness, can assist them in making more informed decisions about child care, despite facing economic limitations.

# **Authors' Contributions**

All authors actively contributed to the development and completion of this research. The specific contributions of each author are outlined below: **Wahyuningsih:** conceptualized the research design, conducted literature reviews, and played a crucial role in data analysis and interpretation. **Sabria:** contributed to the data collection process, statistical analysis, and interpretation of findings. **Mariaty Marjuki** played a significant role in drafting and revising the manuscript, ensuring its coherence and intellectual content. **Retno Hidayati Khasanah:** contributing valuable insights throughout the research process.

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# References

- 1. Sudikno, Widodo Y, Irawan IR, Izwardy D, Setiawaty V, Setyawati B, et al. Sosiodemografi stunting pada balita di Indonesia (sociodemography of stunting among children under-five year in Indonesia). Penelitian Gizi Dan Makanan (The Journal of Nutrition and Food Research) 2021;44:71–8.
- 2. Hardiyati MA. Analisis aspek efikasi diri remaja dalam menghadapi fenomena pernikahan dini di wilayah kabupaten mamuju 2023;11:945–52.
- Walker Avant. Strategies for Theory Construction in Nursing. Pearson Education Limited 2014.
- Kamil, R., Putra, R. I., & Sutarto B. The Role of Self-Efficacy in Preventing Stunting: A Longitudinal Study Among Adolescent Mothers. Journal of Adolescent Health 2020
- 5. Amanda R. Early Marriage in Provinces with the Highest Cases in Terms of Parental Support and Self-Concept 2023;2:1–8.

- 6. Zulkosky K. Self-Efficacy: A Concept Analysis. Nursing Forum 2009;44:93–102. https://doi.org/10.1111/j.1744-6198.2009.00132.x.
- Widiyastuti MA, Saelan, Rakhmawati N. Dengan Media Audio Visual Terhadap Self Efficacy Pencegahan Nursing Study Program of Undergraduate Programs Faculty of Health Sciences the Effect of Education on the Adverse Consequences of Premature Matrimony Using Audiovisual Media on Self-Efficacy for 2023;10:1–9.
- 8. Agustin, S., & Wibowo A (2018). mpact of Parental Support and Education on Adolescent Mothers' Self-Efficacy: A Cross-Sectional Study. Maternal and Child Health Journal 2018.
- 9. Soedarmo, F., & Pratiwi I. Assessing the Impact of an Educational Intervention on Adolescent Mothers' Self-Efficacy in Preventing Child Stunting. Journal of Community Health Nursing 2017.
- 10. Sutarto, B., & Hardiyati E. Exploring the Relationship Between Adolescent Mothers' Knowledge, Beliefs, and Practices in Preventing Child Stunting. Ournal of Pediatric Nursing 2019.
- 11. Hatimah I, Lutfiansyah DY. Pendampingan Keluarga Melalui Program Parenting Untuk Menekan Angka Stunting Di Kabupaten Cirebon. Juurnal Ilmiah Abdimas 2022;3:123–33.

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