

THE EFFECTIVENESS OF STUNTING EDUCATION IN IMPROVING KNOWLEDGE OF PREGNANT WOMEN IN INDONESIA : LITERATURE REVIEW

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ABSTRAK

Stunting merupakan salah satu masalah kesehatan masyarakat utama di banyak negara di dunia. Indonesia memiliki angka stunting tertinggi pada tahun 2021, yaitu 31,8% dibandingkan dengan negara lain di Asia Tenggara. Data Kementerian Kesehatan Republik Indonesia pada tahun 2022 juga menyatakan bahwa jumlah anak stunting terbanyak di Indonesia berada di Provinsi Nusa Tenggara Timur (37,8%) dan Sulawesi Barat (33,8%). Beberapa dampak stunting pada anak adalah berpotensi memperlambat perkembangan otak dengan efek jangka panjang berupa keterbelakangan mental, kemampuan belajar yang rendah, dan meningkatkan risiko penyakit kronis. Penelitian ini bertujuan untuk menilai efektivitas pendidikan stunting dalam meningkatkan pengetahuan ibu hamil di Indonesia dan meningkatkan kesadaran akan pentingnya pengetahuan stunting kepada ibu hamil. Penelitian ini menggunakan metode tinjauan literatur yang bersumber dari Pubmed, ScienceDirect, dan Google Scholar dengan rentang publikasi dari tahun 2013-2023. Setelah disaring melalui proses inklusi dan eksklusi, ditemukan enam jurnal untuk ditinjau lebih dalam. Hasil penelitian dari 6 jurnal tersebut ditemukan bahwa edukasi stunting terbukti efektif meningkatkan pengetahuan ibu hamil di Indonesia. Metode edukasi yang efektif untuk meningkatkan pengetahuan ibu hamil tentang stunting adalah ceramah, bermain peran, simulasi, permainan, kampanye komunikasi interpersonal, menggunakan media *booklet*, dan grup WhatsApp. Edukasi stunting efektif dalam meningkatkan pengetahuan ibu hamil dan diharapkan dapat menjadi upaya untuk menurunkan angka stunting di Indonesia.

Kata kunci : edukasi, maternal, stunting

ABSTRACT

Stunting is one of the major public health problem of many countries worldwide. Indonesia has the highest number of stunting in 2021, which is 31,8% compared to other country in Southeast Asia. Some of the effects of stunting are the potential to slow brain development with long-term effects in the form of mental retardation, low learning ability, and the risk of developing chronic diseases. This study aimed to assess the effectiveness of stunting education in increasing the knowledge of pregnant women in Indonesia and increasing awareness of the importance of stunting knowledge among pregnant women. This study used a literature review method sourced from Pubmed, ScienceDirect, and Google Scholar with publications ranging from 2013-2023. After being filtered through the inclusion and exclusion process, six journals were found for further in-depth review. The results of the research from the 6 journals found that stunting education proved effective in increasing the knowledge of pregnant women in Indonesia. Effective educational methods to increase pregnant women's knowledge regarding stunting are lectures, role-playing, simulations, games, interpersonal communication campaign, using booklet media, and WhatsApp groups. Stunting education is effective in increasing the knowledge of pregnant women and is expected to be an effort to reduce stunting rates in Indonesia.

Keywords : education, maternal, stunting

INTRODUCTION

Stunting is one of the major public health problem of many countries worldwide. WHO (2015) defines stunting as a growth and development children's disorder as one of consequences by lack of intake nutrition and psychosocial stimulation, and also repeated

infections, such as dehydration. UNICEF (2023) estimates that in 2022, 148,1 million or 22,3% of all children under 5 years old worldwide were too short for their age. In Southeast Asia, stunting is one of the triple burden of malnutrition that threatens the survival, growth, and development of children (UNICEF East Asia and Pacific Region, 2021). UNICEF reports that 31,8% of stunted children in Southeast Asia lives in Indonesia, followed by Laos (30,2%), Cambodia (29,9%), Philippines (28,7%), Myanmar (25,25), and Vietnam (22,3%). Data from Ministry of Health of Indonesia (2022) shows that the highest number of stunted children in Indonesia located in East Nusa Tenggara (37,8%) and West Sulawesi (33,8%). All of these data show that Indonesia is still far from the target in Sustainable Development Goals (SDGs), that shows that each country can reduce the prevalence of child stunting to 10 per cent in 2030.

Stunting potentially slow the brain development, with long-term effects in the form of mental retardation, low learning ability, and the risk of developing chronic diseases such as diabetes, hypertension, and obesity (P2PTM Kemenkes RI, 2018). Stunting has a correlation on learning achievement/children's academic abilities with short nutritional status (stunting) tend to achieve low academic in comparison with children who are not stunted, and some studies show that stunting hurts children's academic achievement on number of subjects, eg required math numeracy skills (Pratiwi, Sari and Ratnasari, 2021).

Based on Permatasari et al., (2021), one of the characteristic that affects the case of stunting in Indonesia are maternal knowledge, attitudes, and practices about her children's nutrition (Simanjuntak et al., 2019). In parenting, the mother's education is a reference for her child's nutrition, such as exclusive breastfeeding, age at which complementary foods are given, zinc and iron adequacy, history of infectious diseases, and genetic factors (Yuwanti, Mulyaningrum and Susanti, 2021). Furthermore, if a mother is breastfeeding her infant, it can provides multiple benefits for healthy growth and development (World Health Organization, 2014). Exclusive breastfeeding for six months provides protection for infants against infection, such as diarrhea and dehydration, and it can minimize stunting. Mother's education is also important for the adequacy of daily nutritional intake for children. If the child's nutritional daily intake is fulfilled, they will grow as optimal as they can, and vice versa. Children with malnutrition history will affect their growth into adulthood (Agustina, 2022).

Education about children's nutrition and stunting, including the earlier signs of stunted children, must be known by pregnant woman. Based on studies from Ekayanthi and Suryani (2019), antenatal class as the medium of disseminate education significantly increases the pregnant women's knowledge about stunting. This increase affects their attitudes and behaviours during pregnancy. The purpose of this study was to assess the effectiveness of stunting education in improving knowledge of pregnant women in Indonesia. Seeing that there are still many stunting cases in Indonesia, this study was aim to help increase awareness about the importance of knowledge about stunting for pregnant women.

METHODS

This study used a literature review method that discusses the effectiveness of stunting education in improving knowledge of pregnant women. This review is based on *Preferred Reporting Items for Systematic Reviews and Meta-Analysis* (PRISMA) guidelines. The literature review process by searching through electronic databases such as Pubmed, ScienceDirect, and Google Scholar. Journal articles are searched for by the keywords "stunting", "maternal", and "education". Literature review is carried out by analyzing secondary data obtained from the results of previous research and conducting an in-depth and critical evaluation of the research.

For this study, data extraction tools were designed to guide information from records according to study objectives. The data were extracted from studies that have inclusion criteria, such as articles in the 2013 – 2023 year range, focusing on pregnant women, studies discussing

stunting education in Indonesia, and using Bahasa and English language. The articles excluded from the analysis are abstract only articles and review articles.

RESULTS

Table 1. Results of Literature Review

No	Author/Year	Title	Country	Population	Types of Study	Purpose of Study	Findings
1.	Permatasari et al., (2021)	“The Effect of Nutrition and Reproductive Health Education of Pregnant Women in Indonesia Using Quasi Experimental Study”	Indonesia	Pregnant Women in Bogor Regency	Quasi Experimental Study	To determine the impact of nutrition education and reproductive health of pregnant women in Bogor Regency, Indonesia.	Pregnant women in the intervention group showed a significant increase in knowledge, attitudes, and practices regarding nutrition and reproductive health after receiving education.
2.	Gamboa et al., (2020)	“Interpersonal Communication Campaign Promoting Knowledge, Attitude, Intention, and Consumption of Iron Folic Acid Tablets and Iron Rich Foods Among Pregnant Indonesian Women”	Indonesia	Pregnant Women in Indonesia	Cross Sectional Study	To comprehend how participation in IPC activities influenced knowledge, attitude/intention, and consumption of IFA supplements and ATIKA among pregnant Indonesian women.	Women that were exposed to the campaign reported significantly higher knowledge of IFA tablets and ATIKA, and improved attitudes towards IFA, compared to non-exposed women. Exposure was not correspond with actual consumption behaviors

3.	Darmawan et al., (2022)	“The Effect of Maternal Education and Knowledge on Stunting Incidence in Toddlers in Paya Baro Village, Meureubo District, West Aceh Regency”	Indonesia	Pregnant women in Paya Baro village	Analytical Quantitative	To inspect the impact between education and knowledge variables on stunting events in Paya Baro Village, Meureubo District, West Aceh Regency.	The education variables of pregnant women have a high relationship intensity with the incidence of stunting $p = \text{value} < 0.001$ and there is a meaningful influence between the knowledge of pregnant women on the incidence of stunting $p = \text{value} < 0.003$.
4	Listyarini and Fatmawati (2020)	“Edukasi Gizi Ibu Hamil Dengan Media Booklet Tentang Perilaku Pencegahan Balita Stunting di Wilayah Puskesmas Undaan Kabupaten Kudus”	Indonesia	1st trimester pregnant women in the region Undaan Health Center, Kudus Regency	Quasi Experimental Study	To discover the effect of nutrition education of pregnant women using booklet media on the stunting prevention behavior in the working area of Undaan Health Center, Kudus Regency.	The difference between the pre-test and post-test of nutrition education using booklet media was $p = 0.000 < \alpha = 0.05$. Thus H_0 is rejected, this result conclude that there is an effect of nutrition education on pregnant women using booklets on stunting prevention behavior in the working area of the Undaan Health Center, Kudus Regency.

5	Melati and Afifah (2021)	“Edukasi Gizi Pencegahan Stunting Berbasis <i>Whatsapp</i> Group Untuk Meningkatkan Pengetahuan dan Sikap Ibu Hamil”	Indonesia	Pregnant women in Kuripan Sari Village, Mojokerto	True Experimental	To discover the effect of stunting prevention education through WhatsApp groups as a medium in increasing pregnant women’s nutritional knowledge and attitudes.	The calculated t value is known to be -4.378 with a significance value of p = 0.000. From these results it can be seen that the significant value is <0.05. So it can be stated that there are significant differences in the knowledge and attitudes of mothers in preventing stunting before and after being given the material (p<0.05). The use of the WhatsApp group has the effect of increasing the knowledge of pregnant women by 56.6% and attitudes that are positive to prevent stunting.
6	Julita and Putri (2022)	“The Effectiveness of Nutrition Education on Stunting Prevention Behavior in Pregnant Women in Kaway XVI District, West Aceh Regency”	Indonesia	Pregnant women in Kaway XVI District	Quasi Experimental Study	To discover the effectiveness of education on prevention of stunting in pregnant women.	The outcome of the Wilcoxon test showed that there was a meaningful difference in the knowledge of the respondents after being

given
education
about
stunting
prevention
by the
researchers
(p-value =
0.002).

DISCUSSION

Based on 6 research articles obtained over the last 5 years and have been analyzed, stunting education has proven to be effective in improving knowledge of pregnant women in Indonesia. Based on research conducted by Permatasari *et al.* (2021) with a quasi-experimental study among 194 pregnant women from August to November 2019 in Bogor Regency shows that overall mean nutritional and reproductive health knowledge scores were significantly improved ($P < 0.001$) from 55.1 to 83.1 but there was no significant difference between the pre-test and post-test mean scores in the control group. This interactive education was given by facilitators using techniques such as lectures, role-playing, simulation, and games. This is in line with research by Jihad, Maisyaroh and Siregar (2022) shows that level of maternal education has a very significant influence on the incidence of stunting in Paya Baro Village, Meureubo District, West Aceh Regency the results used a chi square statistical test with a meaningfulness limit of $\alpha \leq 0.05$. With the results of the statistical test, a P-value of $0.015 < 0.05$ was obtained. Which means H_0 is denied and the concluded there is a relationship between parents knowledge of nutrition. Research by Gamboa *et al.* (2020) aimed to assess the effectiveness of an interpersonal communication campaign in promoting knowledge, attitude, intention, and consumption of iron folic acid (IFA) tablets 600 pregnant women in three rural districts in East Java Province, Indonesia.

Study from Listyarini and Fatmawati (2020) with a quasi-experimental methods among 54 sample of pregnant women in Kudus Regency shows that there are differences between pre test and post test score, and it can concluded that there are significance effect about the nutrition education with booklet methods in pregnant women Melati *et al.* (2021) also proves that WhatsApp group as a methods for nutrition education is effective to increase the knowledge and nutritional attitudes of pregnant women ($P < 0,05$). All of these literature show that improving pregnant women's nutritional knowledge aims to change their behavior. It also shows that maternal education that delivered with the proper methods will help a lot of pregnant woman reducing stunting number, especially in Indonesia.

CONCLUSION

Stunting is one of the children health issues worldwide, consequently by lack of intake nutrition and psychosocial stimulation, and also incurable infections. Maternal education is one of the factors that causes stunting. All of the results from literature review proves that stunting education is effective for increasing knowledge of pregnant women, especially in Indonesia. The intervention in the form of stunting education for pregnant women is expected to be one of the most effective programs to reduce stunting rates in Indonesia.

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