

Effectiveness Of Education Regarding Stunting Prevention to Cadres: Systematic Literature Review

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Abstracts: Stunting, a disease characterized by prolonged nutritional deficiency during the initial 1,000 days of a newborn's life, continues to be a significant health concern in Indonesia, holding the second highest global prevalence. Ineffective parenting practices, insufficient prenatal care, challenges getting nutrients and clean water, and infectious illnesses are some of the factors that contribute to childhood stunting. The provision of education to cadres on the prevention of stunting is one of the aspects of stunting prevention that plays a significant role in the process of overcoming the variables which lead to stunting from their underlying causes. Through the transmission of health information, the training that is offered to cadres has the potential to promote public health. This research wants to see how effective stunting education is in increasing cadres' knowledge about stunting prevention. In this study, a systematic literature review was combined with a search for systematic studies using the PRISMA technique, and the search was conducted on two national journal portals. The primary discussion of the study was based on six papers, all of which were investigated with a cross-sectional design that included stunting prevention instruction for cadres. These studies were chosen for the research project. Education with audiovisual media and lecture and discussion techniques has a 70% efficacy rate in expanding cadre knowledge. This is the way with the highest effectiveness rate.

Keywords: Stunting, Stunting Prevention, Education, Cadre, Systematic Literature Review.

1. INTRODUCTION

The issue of stunting remains a persistent global health concern that has yet to be effectively addressed. Stunting refers to a condition of impaired linear growth resulting from inadequate food intake and malnutrition, as shown by a height-for-age z-score (height/age) that falls below -2 standard deviations according to the guidelines set by the WHO. Based on the WHO in 2019, the prevalence of stunting was estimated at 21.3% or 144.2 million children's toddlers in the world experienced stunting. The World Health Assembly is determined to reduce the prevalence of stunting toddlers globally by 40% in 2025, so that the stunting rate in children toddlers will decrease from 171 million in 2018 to around 100 million in 2025. (1)

Stunting is a significant health concern due to its correlation with increased susceptibility to morbidity and mortality and developmental abnormalities. In Indonesia, the problem of stunting and the development of children toddlers has decreased in number but has not yet been the government's achievement targets. Appropriate efforts are needed to improve nutrition and developmental deviations for stunting toddlers, especially at the age of toddlers less than 5 years or referred to as the golden age period so that characteristic problems can be quickly intervened.(2)

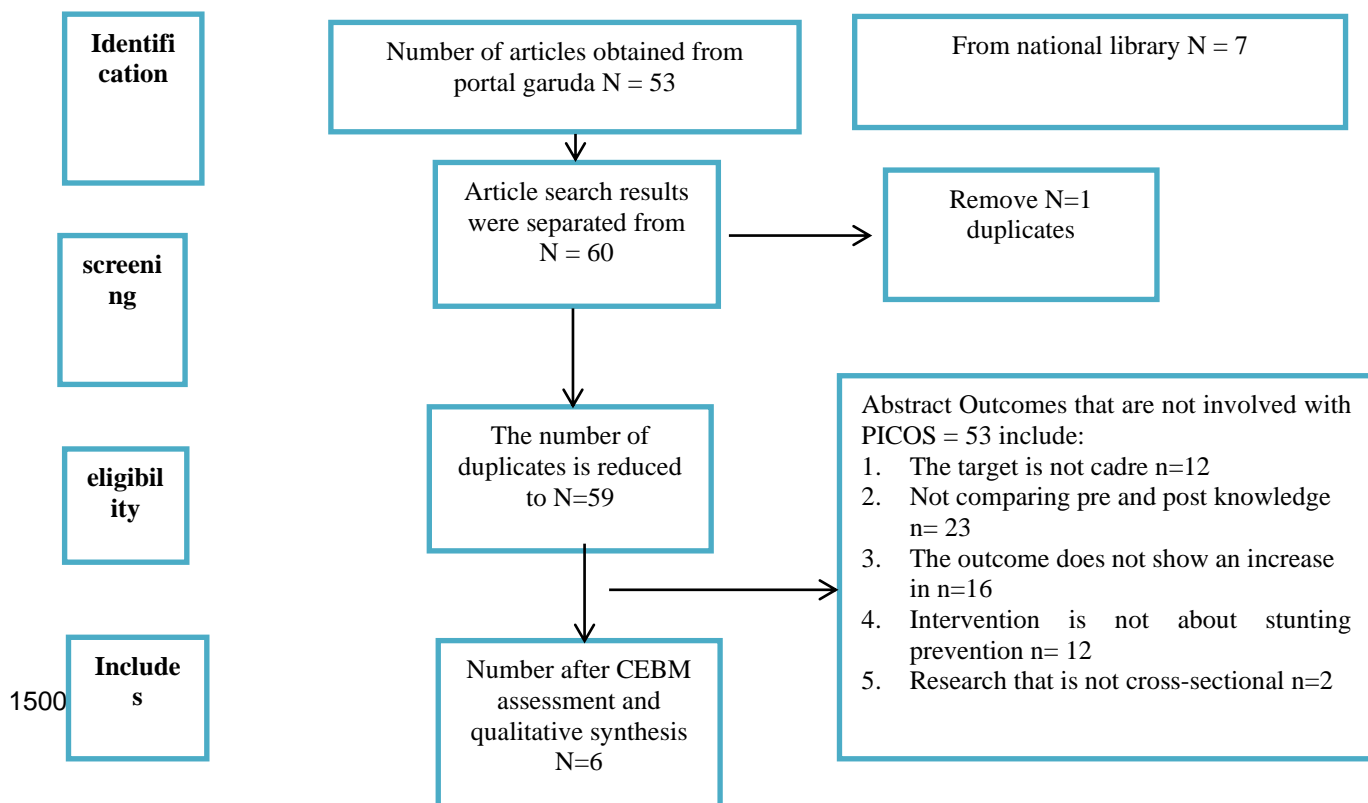
Responding to the data above, Indonesia determined that stunting is included in one of the national priority programs. To realize the stunting target of 14% by 2024, the government through the National Team for the Acceleration of Poverty Reduction has prepared a national strategy called the National Strategy for the Acceleration of Stunting Reduction. In this national strategy, there are obstacles, namely the lack of advocacy, campaigns and dissemination regarding stunting. Education carried out to health cadres regarding stunting is included in a specific strategy for developing the capacity of organizers.(3)

Health cadres, also known as village cadres, posyandu cadres, and PKK cadres, are officials in villages that empower their own communities voluntarily with the goal of improving community well-being, most commonly in the health sector. The provision of supplemental food, the distribution of vitamin A, educating on dietary concerns, home visits, and acting as a health advocate in the community are all examples of the roles that health cadres play in the fight against stunting.(4) By disseminating and educating people about health information, empowering cadres in a way that is both structured and thorough can contribute to an improvement in the overall level of public health.(5)

Training carried out for cadres is often hampered because the majority of cadres' jobs (76.7%) are housewives, of which 60% have high school education with very varied ages, namely in the range of 35 to 60 years. Apart from that, there are three factors that cause the lack of effectiveness of education provided to cadres, namely the lack of training provided to cadres, funding constraints for conducting training and the lack of technical guidance provided to cadres. In fact, the intensive training given to cadres can not only increase cadre skill scores, but also increase cadre knowledge.(4)(6) While research with other methods only collects data from small populations, systematic literature reviews can cross regional and population boundaries.

2. RESEARCH METHODS

This research was conducted in December 2021 with the PRISMA protocol starting from searching for Indonesian articles through the Garuda Portal and the National Library Portal within the upload period, namely 2011 to 2021. The keywords used in searching journals on both portals were "cadres AND stunting prevention" and "AND cadres prevent stunting". Search results on both portals were then combined and assessed for duplication. After removing duplication, the research was assessed based on eligibility criteria by both researchers using a question setting formula called PICOS (Population, Intervention, Comparison, Outcome, Study Type). Inclusion criteria are cross-sectional research, education is provided to cadres regarding stunting prevention, Pre and post tests were carried out in a series of education for cadres, and there was an increase in knowledge in the post test. The exclusion criteria are that there is no sample size of cadres who have been given education. Articles that were eliminated from the PICOS assessment results can be seen in Figure 1. After all articles were assessed for their suitability using PICOS, the number of articles accepted and not accepted by both researchers was calculated and compiled in a special table. To avoid the risk of bias, from this table the kappa value was calculated, then the appropriateness of the assessments from the two assessors was considered. If the kappa value falls within the appropriate criteria, then the assessments of the two assessors are entitled to be reviewed. In the next stage, the quality of the study is assessed using a check list called CEBM (Center for Evidence Based Medicine).



3. RESULTS AND DISCUSSION

In the search process from two journal portals, a combination of 59 journal articles was obtained. After going through a systematic selection process, 6 articles were obtained which were appropriate and in accordance with PICOS and had complete text. The number of article selections from the first stage to the last stage is summarized in Figure 1.

No	Writer	Year	Location	Media	Method	Big Sample	Enhancement Knowledge
1	Rachma Purwanti	2019	Ngarap-arap Village, Ngaringan District, RegencyGrobogan	Videos and power point slides	Lectures and group discussions	22	70%
2	Citrakesuma, Yessy, Et all	2019	SubdistrictBarebbo, Bone Regency, Sulawesi South	Power point slides and prop	Lectures, demonstrations and practice	33	54.5%
3	Rudy Hartono, Et all	2018	Biringkayana District, District Mamajang,	Videos And poster	Team based learning	100	26%
4	Dedah Ningrum, et all	2020	Cibeureum Kulon Village, Cimalaka District, Sumedang Regency, West Java	Power point training materials, Infocus, Microtoise, and infantometer/tool measuringlong body	Delivery of material, mentoring and evaluation	30	9%
5	Heni Purnamasari, et all	2020	RegionMargadana Health Center work and Community Health Center work area South Tegal	Stunting cadre guidebook, cards core, And matgrowth	Lecture, discussion, And demonstration	32	41%
6	Ramadhan content, Yet all	2021	RegionTangkura Health Center work, DistrictPoso CoastalSouth, Regency Poso	Lecture videocadreWhich produced by the Foundation 1000 days	Watch 4 video episodes of lectures, discussions and questions and answers	53	33%

The studies included are studies originating from the publication years 2019 to 2021. Meanwhile, educational activities for cadres in the selected studies were carried out between 2018 and 2021 in various regions in Indonesia, namely the provinces of Central Java, West Java, South Sulawesi and North Sulawesi. All selected studies used a cross-sectional research design with a random sampling method in each study.

The media used by the selected studies varied greatly, ranging from videos, power point slides, visual aids for measuring body weight, posters, infocus for showing slides, microtoises for measuring height, tools for measuring body length, guidebooks for stunting cadres, score cards, and growth mat. The methods used vary, from delivering material through lectures, demonstrations, watching videos, discussions, to direct practice.

The methods used vary greatly and produce increased knowledge which also varies. In research using lecture and discussion methods, the increase in knowledge reached 70%.(7) This finding is in line with previous studies which say that a combination of lecture and discussion methods is the right method for education.(8)(9) Strengthened by study findings which state that educational methods using videos and focus group discussion (7)(10)(11)are very effective for increasing knowledge which intersects with previous research.(12)

The media used also varies greatly but ranges from audiovisual media, guidebooks and teaching aids. In a study using only guidebooks, score cards and growth mats, the increase in knowledge reached 40.6%,(13) supported by

the results of previous research.(14) Meanwhile, studies involving audiovisual media can increase knowledge by 54.5%,(15) 26%,(10) and 70%.(7) This finding is in accordance with previous research, namely that audiovisual media has been proven to be effective in increasing target knowledge.(16)

CONCLUSION

The conclusion of this research is that there is an increase in knowledge obtained by health cadres after receiving education or training regarding stunting prevention. Although various methods and media can be used, what has proven to be the most effective is the lecture and discussion method using audiovisual media. The advantage of this study is that it was conducted by two reviewers, thereby increasing the opportunity to avoid the risk of bias. The weakness of this study is that conclusions cannot be drawn in terms of cadre characteristics because not all studies describe the characteristics of the cadre sample. It is necessary to carry out in-depth studies that focus on the use of methods and media in educating cadres.

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