



The Role of Mothers in Health Promotion on Prevention of Stunting: A Preliminary Study

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Abstract. Health promotion is the first and main stage in disease prevention. Health promotion is a process of providing health information to the community so that people are willing and able to maintain and improve their health. Health promotion efforts include health education which is related to improving nutrition, living habits and sexuality. Stunting is a description of toddlers who have less length and height at the age they should be. The incidence of stunting can occur since the fetus in the womb and will be seen when the toddler is 24 months old. The role of mothers in the golden phase is very important to prevent stunting in children. The purpose of this study was to determine how the role of a mother in health promotion on stunting prevention. The method used is a narrative review. The conclusion based on the perspective of community empowerment shows that the role of mothers is very strong in the process of the concept of stunting prevention. The role of community empowerment, in this case mothers, in preventing stunting requires strengthening support from all parties, including government policies.

Keywords: Mother, Health Promotion, Prevention of Stunting.

1 Introduction

Stunting is a nutritional status that indicates undernutrition and chronic and recurrent infectious diseases [4]. Based on WHO data, the current evaluation of stunting in the world is 22% in 2020 or 149.2 million children suffering from stunting [5]. Stunting is a description of toddlers who have less length and height at the age they should be. The incidence of stunting can occur since the fetus in the womb and will be seen when the toddler is 24 months old [2].

Health promotion is the first and main stage in disease prevention. Health promotion is the process of providing health information to the community so that people

are willing and able to maintain and improve their health. Health promotion activities or efforts include health education including improved nutrition, living habits, sexual health, and health promotion. [1]. Seeing the effects that can occur in stunting requires prevention through health promotion. Health promotion targets that can be empowered are women, especially mothers.

The role of mothers in the golden phase is very important to prevent stunting in children [3]. The golden phase in children is 0-6 years old. The three main phases that require optimal maternal roles are preconception, prenatal phase, and infant-toddler phase. Although the conception period does not yet have a fetus, early strengthening of maternal nutrition must be done so that the mother's body is ready to undergo the prenatal phase for fetal development, which then continues in the infant-toddler phase until adolescence [3]. The purpose of this study is to find out how the role of a mother in health promotion on stunting prevention. Researchers conducted a narrative review process, an in-depth study related to the role of mothers for stunting prevention.

2 Tools and Method

The method used is narrative review. The approach used is by reviewing each article with the theme that has been conceptualized. From each data obtained, it is then analyzed and combined with existing references. The data is strengthened with scientific arguments. The theme taken in this study is the Role of Mothers in Health Promotion for Stunting Prevention. There are four articles that are examined in depth based on the objectives that researchers expect. Furthermore, it is strengthened by the existing theoretical basis. Here's a description of the source article:

Table 1. Article Description

No	The Article Title	Author	Theme Discussed	Article Source
1	A Review of Child Stunting Determinants in Indonesia	T. Beal, A. Tumilowicz, A. Sutrisna, D. Izwardy, and L. M. Neufeld	reviewing the causes of stunting in Indonesia	<i>Matern Child Nutr</i> , vol. 14, no. 4, pp. 1–10, Oct. 2018
2	Stunting Status of Ever-Married Adolescent Mothers and Its Association with Childhood Stunting with a Comparison by Geographical Region in Bangladesh	Haque <i>et al.</i> ,	Stunting Status in Teenage Married Mothers	<i>Int J Environ Res Public Health</i> , vol. 19, no. 11, pp. 1–12, Jun. 2022
3	Role of Maternal in Preventing Stunting: a Systematic Review	A. Saleh, S. Syahrul, V. Hadju, I. Andriani, and I. Restika,	the role of mothers in stunting prevention	<i>Gac Sanit</i> , vol. 35, no. S2, pp. S576–S582, Jan. 2021.
4	Evidence for causal links between education and maternal and child health:	B. S. Mensch, E. K. Chuang, A. J. Melnikas,	education in maternal and child health	<i>Tropical Medicine and International Health</i> , vol. 24, no.

3 Term and Discussion

Stunting according to WHO is defined as the failure of growth and development experienced by children due to prolonged inadequate nutritional intake, recurrent infectious diseases, and inadequate psychosocial stimulation. [4]. Stunted is defined as a child's length-for-age (PB/U) that is lower than -2 standard deviations (<-2 sd), the WHO Child Growth Standards median standard. A stunted child is not necessarily stunted. Short body size is at least an indicator of the long-term impact of stunting, because it can be recognized at the earliest. The impact of stunting that occurs before the age of two years is an indication of decreased cognitive abilities at a later age if not followed by adequate psychosocial stimulation, it can have an impact on academic or educational abilities in the future [4].

According to Beal et al, one of the causes of stunted incidence is from household and family factors, namely the mother. These maternal factors include poor nutrition during pre-conception, pregnancy and lactation, infection, teenage pregnancy, mental health, IUGR and premature birth, short birth spacing, and hypertension [6]. These conditions are extensive and long-lasting, hence the need for prevention. Prevention can be done earlier. It can start from the preconception period to motherhood. Seeing the effects that can occur in stunting requires prevention through health promotion. Health promotion targets that can be empowered are women, especially mothers.

Judging from the conceptual framework according to WHO, the factor of the mother stands alone as a reinforcement that the mother's condition must be healthy, even before becoming a mother. So this maternal empowerment can be strengthened by good health promotion. Empowerment is a process by which people gain greater control over decisions and actions that affect their health. Empowerment is a social, cultural, political, psychological process by which individuals and social groups are able to express their needs, demonstrate their concerns, strategize for involvement in decision-making, and achieve political, social and cultural actions to meet those needs [1]. Important aspects of a community empowerment program are that it is self-designed by the community, supports the involvement of the poor, women, illiterates, other neglected groups, builds on local resources, is sensitive to local cultural values, takes into account environmental impacts, does not create dependency, various stakeholders are involved, and is sustainable [7].

Before discussing the role of mothers related to stunting prevention, we can discuss how the role starts from the preconception period, which is before the mother is pregnant. Adolescents are the main target of stunting prevention efforts, because adolescents will become parents. Adolescence is considered a stage of life worthy of strategic health investment because it is a critical period of development of physical and neural maturity [8]. The implementation of Garda Remaja Pencegah Stunting (GRPS), especially adolescent girls who voice stunting prevention as agents of change in Tawang Sari, Semarang. Teenagers conduct education at the posyandu with

attractive posters. The targets are parents who have toddlers aged 0-3 years and pregnant women [9]. Youth empowerment is one of the effective methods in reducing the prevalence of stunting. However, it requires training, orientation, continuity, guidance, and follow-up programs. The challenge with youth empowerment is funding, time, and the readiness of the human resources involved [10].

Next, we move on to the role of mothers in the golden phase to prevent stunting in children. The golden phase in children aged 0-6 years. The three main phases that require optimal maternal roles are preconception, prenatal phase, and infant toddler phase. Although the conception period does not yet have a fetus, early strengthening of maternal nutrition must be done so that the mother's body is ready to undergo the prenatal phase for fetal development, which then continues in the infant-toddler phase until adolescence [3]. The various roles of mothers include fulfilling maternal, fetal, infant, and child nutrition, conducting early breastfeeding initiation, exclusive breastfeeding, and providing appropriate complementary foods. Furthermore, optimizing the environment for child development, optimizing family support, and avoiding various psychosocial factors that can be detrimental to child growth and development.

The role of mothers from adolescence to motherhood can certainly be carried out well if the mother has good knowledge. Studies say that good knowledge results from good education. Advances in women's education have been instrumental in improving health in many places [11]. Women themselves have a very strong role in childcare, so education must be a strong foundation for women. A study in Bangladesh found that children whose mothers were stunted were 2.36 times more likely to be stunted. The study shows that education for women can help them achieve self-reliance and as a result, reduce the prevalence of stunting [8]. Furthermore, studies in Indonesia suggest that mothers who are highly educated and live in low-income families have a 1.69 to 2 times higher risk of overweight and obesity from stunting conditions. Thus, the importance of basic education and health education for women to improve children's future health [12]. The prevalence of stunting in Sub-Saharan Africa has decreased over the past two decades, although it is still lagging behind global targets. Policies and interventions target women's education, child feeding practices, and environmental factors including climate change [13]. In Indonesia, specifically in Papua, there is a study to see the characteristics of mothers who are appropriate for implementing policies related to stunting prevention. Based on this study, the target group for stunting prevention policies are mothers who have low education and are single. The lower the mother's education, the greater the chance of having a stunted child compared to those with a college education [14]. So the high education factor of a mother can help reduce the prevalence of stunting. To get good knowledge not only from maternal education, it can be obtained from education that we can provide to mothers. Education about stunting detection given earlier can significantly increase mothers' knowledge about preventing stunting in children aged 0-24 months. Providing education regularly is needed to prevent stunting optimally [15].

The role of good knowledge can certainly change maternal behavior as well. Research on behavioral interventions resulted in strong improvements in mothers' self-efficacy to engage in physical activity, eat fruits and vegetables and provide children with growth-promoting animal protein [16]. Next, research conducted in Indonesia

related to the influence of health promotion models on stunting prevention is very influential [17]. The development of a health promotion model based on the health promotion model for stunting prevention and social capital has also been able to improve maternal behavior in stunting prevention [18]. In subsequent studies, there were highly significant differences in mothers' knowledge and reported practices and health belief models. Nutrition education based on the health belief model can help reduce stunting in early childhood. To avoid stunting in children, mothers should be encouraged to participate in ongoing nutrition education programs [19].

Prevention of stunting with the role of mothers is very strong, but the support of state policies related to stunting will be even stronger. Fighting stunting requires stunting prevention and nutrition interventions, as well as cross-sector collaboration. Actions can be pursued from the start of the pregnancy phase to 2 years of age [20]. In Indonesia too, integrated interventions are needed to reduce stunting. Interventions should be directed at the prenatal and postnatal periods, using a multisectoral approach to address a range of factors from the community to individual level. There is a strong need for efforts to increase adequate food intake during pregnancy complemented by educational interventions. It is important to encourage pregnant women to seek adequate antenatal care, which benefits not only the mother but also her children. After delivery, optimal infant and young child feeding practices, from exclusive breastfeeding in the first six months to appropriate complementary feeding, are essential for optimal food intake, child development, and to prevent infections and diseases that can ultimately affect growth. Improved household economic status, as well as improved water, sanitation and hygiene are also necessary. In addition, it is important to ensure the availability and accessibility of safe and healthy food to improve food security within the household [21].

From the 4 articles discussed in the preliminary study discussion which is corroborated by the theoretical basis, the focus of stunting prevention can be done during adolescence up to the first 2 years of the child and continued up to 6 years (golden phase). There are gaps that researchers find, related to the preparation of stunting prevention from adolescence. This study only discusses the effects of teenage pregnancy, so it has not discussed how the effectiveness of education that starts from adolescence is useful in preventing stunting.

4 Conclusion

The role of mothers in stunting prevention begins during adolescence until motherhood, focusing on the first 2 years of the child and continuing until 6 years (golden phase). Reinforcement of education that triggers good knowledge and behavior related to stunting prevention. Education can also be provided as reinforcement. Finally, the role of mothers needs to be strengthened by multisectoral government policies. The conclusion based on the perspective of community empowerment shows that the role of mothers is very strong in the process of the concept of stunting prevention. The role of community empowerment, in this case mothers, in preventing stunting requires strengthening support from all parties, including government policies.

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