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Youth Empowerment Model Through Preventive Education Stunting for Prospective Husband and Wife Couples in the Bogor Region, Indonesia

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Abstract

This research aims to find out an empirical picture regarding the initial understanding of stunting prevention for prospective married couples in Bogor Regency as well as formulate a conceptual model of stunting prevention education for prospective married couples and implement a stunting prevention educational model for prospective married couples in Bogor Regency. The method used in the research is descriptive quantitative using a Quasi-Experiment approach without Control Group Pretest-Posttest Design. The research results show that almost all prospective married couples in Bogor Regency and City know about stunting, but the level of knowledge is not yet in line with stunting prevention practices, because there are confounding factors that influence preventive practices or behavior, namely socio-economic status, poor lifestyle patterns or habits, and beliefs. The youth empowerment model through preventive stunting education for prospective married couples has proven to be effective in increasing stunting prevention knowledge, attitudes and skills.

Keywords: *Stunting, Empowerment, Education, Social Status, Prospective Husband and Wife.*

INTRODUCTION

The world is currently faced with two nutritional problems in toddlers that occur simultaneously another term is Double Burden of Malnutrition (DBM). These problems are over-nutrition and under-nutrition. This double burden of malnutrition is caused by the coexistence of nutritional deficiencies and excesses, both macro and micro, that occur from early life (Stein et al., 2010). These nutritional problems have the same consequences, namely increasing mortality and morbidity, disrupting physical and cognitive development, reducing productivity and economic status and increasing the risk of infectious and degenerative diseases such as diabetes mellitus (Reading & Reading, n.d.). The two nutritional problems are obesity and stunting.

Obesity is a complex chronic condition described as the result of interactions between the obesogenic environment, epigenetic factors, stress, lifestyle, genetic inheritance, growth and development, diabetes, and mood disorders (Shekhawat et al., 2014). Obesity occurs due to consuming food and drinks that exceed requirements, both in quantity and quality. Meanwhile, stunting is a condition of failure to grow in children under five which is caused by chronic malnutrition so that the child is too short for his age (WHO Child Growth Standards, 2009), (Organization, 2018). Of these two problems, the one that is of particular concern to the world at the moment is the problem of stunting, although the number of stunting problems continues to decline, both at the global and national levels.

Based on data from various sources related to the number of stunting cases in the world, including from the World Health Organization or WHO (2023), the prevalence of stunting in the world in 2022 will reach 22.3% or 148 million. (The United Nations Children's Fund) notes that 80% of children experience stunting spread across 24 countries, especially in Asia and Africa (Cetthakrikul et al., 2018). The distribution of stunting cases, especially in Asia and Africa, is mostly in developing countries, including Indonesia. Indonesia is in fifth place after India, China, Nigeria and Pakistan. At the Asian or Southeast Asia Regional (SEAR) level, Indonesia is in third place, with an average stunting case of around 36.4% in 2005-2017 (RI Ministry of Health, 2018). In 2018, the prevalence of stunting was 30.8%, or around 7 million. From 2021 to 2022, the prevalence of stunting will

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decrease, although not significantly, namely from 24.4% or around 5,253,404 children under five to 21.6% or around 4,558,899 children under five. This figure is still higher than the target set by WHO, namely 20%.

In Indonesia, the highest cases of stunting are in East Nusa Tenggara (NTT). Based on the results of research conducted by Torlesse et al in 3 regions in Indonesia: Sikka (NTT), Jayawijaya (Papua), and Klaten (Central Java), it was found that 28.4% suffered from stunting, 6.7% suffered from severe stunting. With the highest stunting prevalence of 37.7% in children aged 12-23 months, 22.6% in children aged 6-11 months, and 13.3% in children aged 0-5 months, with boys aged 45% higher. compared to girls. The risk of stunting is 53.3% higher in rural areas compared to urban areas of 34.9% (Beal et al., 2018). In West Java, the prevalence of stunting has also decreased, from 24.5% in 2021 to 20.2% in 2022 (SSGI, 2023). Meanwhile, for the Bogor Regency area, in 2018 the prevalence of stunting was around 32.9% of the total number of children under five or around 282,627 children under five, then in 2021 it fell to 56,967 children under five, and in 2022 the prevalence of stunting was around 24.9%. Currently, Bogor Regency is in 6th place in the entire West Java region.

The causes of stunting are multifactorial, namely direct and indirect factors. The direct causal factors are related to inadequate nutritional intake that occurs during the 1000 HPK (golden period), namely from the pre-conception, conception and post-conception phases (Id et al., 2021). The pre-conception phase is related to the health condition of the prospective mother before marriage. The conception phase is influenced by the nutrition consumed by pregnant women, whether their nutritional needs are met or not. Post-conception is influenced by the adequacy of nutrition consumed by the toddler and the mother. Meanwhile, indirect causal factors are infectious diseases, poor environmental sanitation, poverty (socioeconomic) and the level of community affordability of health services, culture or customs, mother's education level, knowledge of mothers and young women about nutrition (Quamme & Iversen, 2022), (Desmond & Casale, 2017). Based on a preliminary study in Bogor Regency and City, shows that the level of knowledge of prospective married couples regarding stunting prevention of 30 people, some (50%) have good knowledge, and a small part (10%) have poor knowledge.

There are several health conditions for pregnant women due to inadequate nutritional intake and other conditions that hurt the baby's health, including; pregnant women with anemia, low birth weight babies, premature babies, early marriages, and short birth intervals. Health problems experienced by pregnant women and toddlers due to malnutrition and other risk factors are still quite high. Based on data obtained from Riskesdas (2018), the number of pregnant women with anemia is 8.1% or 593 thousand (Ministry of Health of the Republic of Indonesia, 2018), low birth weight babies are 192 thousand, babies born with a length < 48cm are 4% (Riskesdas 2018), 13.5% of babies were born prematurely or 675 thousand, 2.29% of women were married aged 10 - 19 years, 9% or 663 thousand were born less than 24 months apart (SUPAS, 2015).

Stunting rates and risk factors are still high. Stunting (short stature) is a nutritional problem in toddlers that requires serious treatment. Even though cases have decreased, the impact caused by stunting is quite large, not only the mismatch between height and age (short), However, there are pathological conditions that have an impact on the economy, health, education, social affairs, and the quality of human resources and productivity (Organization, 2018).

Based on the research results, shows that the impacts of stunting include health, social, economic, educational, and psychosocial. The impact on health is; that children experience decreased intellectual abilities (intelligence quotient), inaccuracy in storing objects, verbal and non-verbal delays, and delays in thinking (Lindayani et al., 2020), risk of degenerative diseases, have low immune system which results in being susceptible to infectious diseases (Black et al., n.d.), and can cause obesity in adulthood (Onis et al., 2012). Social impact, namely low-quality human resources, unable to compete and be productive according to their age (Victora et al., 2008). The economic impacts include lower earnings when working, a person who is six feet or 1.82 m tall on average earns a salary over a 30-year career of around $166,000 more than someone who is five feet five inches or 1.55 m tall…(Judge & Cable, 2004).

Apart from the economic impact on individuals, it also has an impact on the country's economy. This is because solving the problem of stunting requires very large funds and quite a long time, from prevention, treatment,

and care, to ensuring the survival of toddlers with stunting. The impact of education is that children will experience delays in completing school for almost a year (Dewey & Begum, 2011); (Crookston et al., 2011); (Analysis & East, 2013). Meanwhile, the psychosocial impact is that children are easily anxious and prone to depression, have low self-confidence, and display hyperactive behavior which leads to behavior that is contrary to normal conditions (Casale et al., 2014), (Rafika, 2019). If these conditions are not resolved properly, a young generation of low-quality, unproductive, low competitiveness, and high levels of mortality and morbidity will be born, and a lost generation could even occur.

The Indonesian government has so far made various policies in the form of programs related to preventing and overcoming stunting, such as specific nutrition and sensitive nutrition intervention programs, namely providing nutritious food for pregnant women and toddlers, health education for teenagers, and improving environmental sanitation. However, the level of reduction in stunting cases in Indonesia is not significant, including stunting cases in the Bogor Regency, so there is a need for program evaluation and further research related to stunting in Indonesia and especially in the Bogor Regency.

Seeing these conditions, the government has taken various policy steps to reduce the stunting rate. through Presidential Regulation Number 72 of 2021 concerning the Acceleration of Stunting Reduction. This regulation is intended as a form of commitment to accelerate the reduction of stunting, the government has issued. This Presidential Decree is the legal umbrella for the National Strategy (Stranas) for Accelerating Stunting Reduction which has been launched and implemented since 2018. (Secretariat of the Vice President of the Republic of Indonesia. 2021) In 2017 the government launched the National Action Plan program for handling stunting at the national and regional levels, especially in villages. This program prioritizes specific and sensitive nutritional treatment in the first 1000 days of life up to children aged 6 years.

Society is one of the components that determine the level of success in preventing and overcoming stunting. A form of community involvement that has not been carried out by the government so far is in the form of empowerment, especially family empowerment. The family is a support system for family members who experience health problems (Given et al., 2001). The family as a support system has a big influence on every decision that must be taken to solve the problems faced by the family, including the problem of stunting. As research results from Wiliyanarti (2022), family support, especially immediate family, has an influence on behavior in meeting the needs of children under 5 years of age who experience stunting (Wiliyanarti et al., 2022), (Halimatunnisa et al., 2020).

Empowerment is an alternative development concept that essentially emphasizes autonomy in making decisions in a community group that is based on personal resources, is direct, democratic, and social learning through direct experience. Family empowerment hopes for the birth of an independent family, that can manage resources, pressure problems, and find solutions to problems for prosperity and quality. Family empowerment is useful for improving the quality of family welfare, making poor families independent, upholding the honor and dignity of poor families, and making families the subject of action. To achieve this goal, it is necessary to create an empowerment program at the rural and urban levels with a family approach, so that it can improve the welfare of families and communities. Family empowerment is an effort to improve socio-economic welfare and quality of life through an approach based on the potential of the family, both the potential that exists in nature and the potential of human resources. This follows the results of research from Dewi (2018) regarding the family empowerment model through cultural factors and socio-economic structures in preventing stunting.

In this case, improving knowledge, attitudes, behavior, beliefs, and sociocultural norms through assistance in the form of providing education or education for prospective married couples using the stunting prevention educational model is one of the educational strategies to reduce the prevalence of stunting (Prince et al. al., 2020). Family empowerment in preventing stunting in the form of education can be provided to prospective married couples or bride and groom through religious institutions (KUA), and this approach is one approach that combines health and religion using a non-formal education model (community education). The health education provided to prospective married couples is related to nutrition and stunting, that prospective couples understand nutrition, the importance of nutrition for themselves and their babies, and are willing and able to practice it and have a sense of responsibility towards the offspring or generation that will be born from their

womb. Providing education to prospective married couples aims not only to change behavior but also to create confidence that a healthy mother will give birth to a healthy baby, free from disease, and free from malnutrition or stunting.

Education for prospective brides and grooms is how to prepare Indonesian citizens who will get married and form a family, to be able to create a happy family physically and mentally, giving birth to a generation of quality and dignity and healthy physically and mentally. Forms of education for prospective brides or couples, or pre-marital education, can be included in formal education, non-formal education and informal education. Therefore, education for prospective brides about stunting is the most important part of education for prospective brides. The results of research conducted by Bahkali (2022) show that providing education for prospective married couples has a positive effect on life and increases awareness of health needs (Stanley et al., 2006), (Bahkali et al., 2022).

The stunting prevention education model is a model that uses various approach methods, namely teaching, guiding, supporting, and providing an environment that will contribute to increasing the knowledge, attitudes, behavior, beliefs, and social culture of prospective married couples in preventing stunting, so that has an impact on reducing the problem of stunting. This is to the results of research conducted by Sukmawati (2021), that providing education through demonstrations and direct practice can increase knowledge in feeding practices, food preparation, amount of food, energy intake, and protein intake to prevent stunting so that it can prevent incidents. stunting.....(Sukmawati et al., 2021). Apart from that, education and counseling can increase parental awareness about birth outcomes and the consequences of stunting in childhood, growth, delaying the first pregnancy, recording and considering parental characteristics, and monitoring the child's height from birth as an effective strategy for preventing stunting across generations (Sari & Sartika, 2021).

Therefore, prospective couples must understand healthy nutrition and be willing to take care of themselves, as well as be responsible for the child who will be born from their womb. The implementation of the stunting prevention educational model in the form of training aims to increase the competency of prospective married couples in preventing stunting so that it is hoped that the prevalence of stunting in Indonesia will decrease following the National Medium Term Development Plan (RPJMN) 2020 - 2024 with a target of a significant reduction from 27.6 percent. in 2019 it is expected to be 14 percent in 2024, including in the Bogor Regency area.

LITERATURE REVIEW

Empowerment

Empowerment is an effort to increase people's capabilities by encouraging, awakening, and motivating their potential and being able to work hard to develop this potential. Empowerment is a process of developing, becoming independent, self-sufficient, and strengthening the bargaining position of the lower levels of society against pressing forces in all fields and sectors of life (Eko, 2002). Empowerment is the interpersonal process of providing the right tools, resources, and environment to build, develop, and increase the ability and effectiveness of others to set and achieve individual goals (Brady et al., 2019).

According to Usman (1998), community empowerment is a process within the framework of efforts to strengthen what is commonly called community self-reliance or independence. In this process, the community is accompanied to analyze the problems they face, is helped to find alternative solutions to the problem, and pays attention to strategies for utilizing the various resources they own and control. In this process, the community is assisted in how to design an activity according to their capabilities, how to implement the design, and how to develop a strategy to obtain the external resources needed to obtain optimal results. The essence of empowerment is enabling (development), strengthening potential or power (empowering), and creating independence.

Education

A good nation is a nation that pays attention to and builds a good education system. If a country has not been able to develop a good education system, then it can be said that the country has not been able to achieve prosperity (Abbas, 2018), because education can create a smart, sustainable and inclusive economy, so that it can deliver prosperity and prosperity to society (Greetings, 2002). Education is a process or stage in changing attitudes, ethics and behavior of a person or group in improving human thought patterns through teaching and training as well as educational actions. This is related to the aim that the meaning of education is not only as a process or system of transferring knowledge but also as a process of changing the ethics, norms, or morals of each student.

Education is a conscious effort by individuals to gain several experiences through interaction in the form of communication with other people, groups, and the environment, which is organized and sustainable and is designed to foster learning (Simkins, 1977) so that a process of change (learning) occurs and results in development for the life of a person or group in their environment (Shala & Grajcevci, 2016). Change can mean that education can increase knowledge and insight as well as the ability to analyze situations and conditions as well as the problems faced, to be able to solve problems. Meanwhile, development can be interpreted as meaning that with education a person can develop their potential to have religious spiritual strength, self-control, personality, intelligence, noble morals and skills.

Community Education

Community education is a series of learning processes carried out based on the needs of the community to prepare and develop the community's abilities to be able to progress and be able to participate in the entire series of development, both for themselves and the surrounding community. CeVe in Smith (2013) suggests that community education is a process designed to enrich the lives of individuals and groups by involving people who live in a geographic area or share the same interests, to voluntarily develop a variety of learning, action, and reflection, opportunities, determined by personal, social, economic and political. With this understanding, community education prioritizes processes designed to enrich the lives of individuals and groups by expanding the reach of community life itself, both in terms of geography, common interests, building independence in the learning process, opportunities for action and reflection determined by personal, social, and social needs. economics and politics.

Adult Learning or Andragogy

Learning is a lasting change in behavior or the capacity to behave in a certain way, resulting from practice or other forms of experience (Acuña et al., 1995), (Madichie & Fiberesima, 2021). According to Schunk (2012), learning is a process of acquiring knowledge by modifying knowledge, skills, strategies, beliefs, attitudes, and behavior (Acuña et al., 1995). Everything is interconnected and complements and supports each other. Learning is a lasting change in behavior, or in the capacity to behave in a certain way, resulting from practice or other forms of experience. The criteria for learning are that learning involves change, learning persists over time, and learning occurs through experience. There are three general learning criteria, namely learning involves change, learning endures over time, and learning occurs through experience.

Adult Education

According to Malcolm Knowles, andragogy is the art and science of teaching adults. Apart from that, Knowles also considers that andragogy is not a theory, but rather a conceptual framework of "assumptions" that can direct the development of theory, practice and research (Knowles, Holton, & Swanson, 2005). There are six principles of adult learning according to Knowles, namely the need to know, independent learning, initial learning experiences, readiness to learn for life experiences, problem-solving orientation in learning, and high learning motivation (Huang, 2002). These six principles provide a foundation for understanding lifelong learning that emphasizes the endless scope of a person's ability to learn as an adult. Learning occurs continuously throughout a person's lifetime through continuous learning and informal learning. For adults, learning is related to how to direct themselves to ask questions and look for answers (Najamuddin, 2009). Six characteristics of adult learners were identified by Knowles (1970), namely, autonomous and independent,

accumulating a foundation of experience and knowledge, goal-oriented, relevance-oriented, practical, and need to be shown respect. He advocates creating a climate of mutual trust and clarifying mutual expectations with students. In other words, a cooperative learning climate is fostered (Russell, 2006). Knowles (1986), states that there are 4 (four) principles of adult learning, namely; Adults need to be involved in designing and creating learning objectives. They must understand the extent to which the results have been achieved, experience is the basis of learning activities. It is the responsibility of students to accept experience as meaningful, adults are more interested in studying things that are directly related to their work and life, learning is more problem-centered and requires encouragement and motivation.

Stunting Concept

Stunting is a condition of failure to thrive in children under five caused by chronic malnutrition. Stunting indicates a person's failure to achieve their genetic height potential (Golden, 2009). The characteristics of failure to thrive in stunted children are that the child's height is not appropriate compared to age, or the child's body condition is shorter than other children of the same age (MNC, 2009). WHO-MGRS (World Health Organization-Multicare Growth Reference Study) determines the classification of stunting based on height adjusted for age, namely the short category (stunted), if the z-score value is less than -2 SD, and the very short category (severely stunted). , if the z-score value is less than -3 SD. (Ministry of Health, 2016). Apart from characteristics based on the anthropometric index of height according to age, stunting can also be determined based on the child's performance, such as signs of late puberty, poor attention, and learning memory tests, late teeth growth, aged 8-10 years the child becomes quieter, does not make much eye contact. , height growth slows down, the face looks younger than his age.

Etiology of Stunting

Short stature can be caused by genetic factors from parents and family. Short stature caused by genetics is known as familial short stature. The height of the parents and the growth pattern of the parents are the keys to knowing the child's growth pattern. Genetic factors are not visible when the baby is born but will appear after the age of 2-3 years.

Growth hormone (GH) or growth hormone is an essential hormone for the growth of children and adolescents. Growth hormone has metabolic effects such as stimulating bone remodeling by stimulating osteoclast and osteoblast activity, stimulating lipolysis and the use of fat to produce energy, playing a role in growth and forming tissue and muscle function, and facilitating fat metabolism. Genetic diseases and syndromes are etiologies whose causes are not yet clearly known and are related to stunting. Some chromosomal disorders, skeletal dysplasia, and certain syndromes are characterized by short stature. These syndromes include Turner syndrome, Prader-Willi syndrome, Down syndrome, and bone dysplasia such as Osteochondrodystrophies, achondroplasia, and hypochondroplasia.

Concept of Prospective Husband and Wife Couple

According to the Indonesian Ministry of Health (2018), prospective married couples are couples who will get married. Prospective brides and grooms can be said to be couples who have no ties, either according to religious or state law, and the couple is in the process of getting married and the process of fulfilling the requirements in completing the data needed for marriage (Depag Surabaya, 2010). Prospective married couples according to the Big Indonesian Dictionary is a term used for women of childbearing age who are in a healthy condition before pregnancy so they can give birth to a normal and healthy baby as well as prospective grooms who will be introduced to the reproductive health problems of themselves and their partners, whom he will marry (KBBI, 2019).

Prospective husband and wife consist of two words, namely candidate and bride, which have the following meaning, "A candidate is a person who will become a bride and groom". Meanwhile, "The bride and groom are the people who are getting married." So the bride and groom are a man and a woman who want or intend to get married. In other words, the prospective bride and groom are participants who will take part in pre-marital

guidance held by the Office of Religious Affairs before the prospective bride and groom will carry out their marriage contract (Fatmawati, 2016).

Educational Model Concept

A model is a representation of an object, thing, or idea in a simplified form of a natural condition or phenomenon. A model is a procedure that is arranged in an orderly and logical manner which is outlined in an activity plan to achieve goals (Kusnadi et al., 2005). A model is a pattern (example, reference, variety, etc.) of something that will be created or produced. A model is a description of objects, procedures, situations, or thoughts to design a learning program. A model is also a picture of a general form or pattern plan, representation, or description, which explains an object, system, or concept which is often a simplification or idealization. The form can be in the form of a physical model (models and prototypes), an image model (design drawings and computer images), or a mathematical formulation (Junaidi, 2018)

The failure of a model to predict change itself is also useful because it can reveal deficiencies in the conceptual framework from which the model was developed. The research model that will be created by researchers. This research is specifically designed to create a product using systematic steps to be applied and carried out in an activity following the objectives of the research. The product that will be produced in this research is a design or model using a quantitative and qualitative approach or mixed method. The product is a stunting prevention educational model. Apart from the approach using a mixed method, the researcher also adopted the model from Borg and Gall (1989) to determine the steps in the research.

Guidance is assistance provided by someone to another person in making choices and adjustments in making problem solutions to help foster a person's freedom and ability to become an individual who is responsible for himself (Jones, 1977). Through guidance, teaching and support activities, contact between participants and trainers is more intensive, every problem faced by participants can be corrected and helped to resolve, and ultimately participants will voluntarily change their behavior based on awareness and understanding (Notoatmojo, 2010).

Research Methods

This research is specifically designed to create a product using systematic steps to be applied and carried out in an activity following the objectives of the research. The product that will be produced in this research is a design or model using a quantitative approach, this product is a youth empowerment model through preventive stunting education for prospective married couples using a Quasi-Experiment without Control Group Pretest-Posttest Design. In this model, researchers collect the required data before the intervention (pre-test) and after the intervention (post-test) (training). Apart from the approach using Quasi-Experiment without Control Group Pretest-Posttest Design, the research also adopted the model from Borg and Gall (1989) to determine the steps in research which was modified with a 4D model consisting of 4 stages. The stages are define, design, develop, and disseminate) (Thiagarajan et al., 1974).

The method used in the research is descriptive quantitative using a Quasi-Experiment approach without Control Group Pretest-Posttest Design. In this research, a hypothesis will be tested to prove whether or not there is an increase in knowledge, attitudes, and stunting prevention skills after being given treatment to prospective married couples in the form of providing stunting prevention education using training methods that have been developed and modified using a teaching, guiding, supporting approach. , and giving environment. In this research, a trial was carried out using one independent variable, namely the use of a youth empowerment model through preventive education, then the effect was observed on the dependent variable, namely knowledge, attitudes, and skills in preventing stunting.

This research was carried out from November 2023 to April 2024, located in Bogor City and Regency. Research data was obtained from the Religious Affairs Office (KUA), Bogor District and City Health Services. The reason for choosing these two locations is because stunting cases in the area are still quite high, the level of knowledge and attitude of prospective married couples towards stunting and its prevention is still low, and there has been no similar research in the area. The population in this study were all prospective married couples in the Bogor Regency and Bogor City. Meanwhile, the sample for this research is respondents who were

selected based on the results of sampling using cluster random sampling or regional sampling techniques, namely sampling carried out by researchers based on region (stunting locus) and sample characteristics of 60 respondents.

The form of hypothetical model testing carried out on research subjects was using a quasi-experimental one-group pretest-posttest design. The model implementation stage was carried out to measure the level of effectiveness of the model based on changes in the level of knowledge, attitudes, and skills (psychomotor) of prospective married couples regarding stunting prevention. The assessment was carried out before and after the intervention was given in the form of training which was carried out for three days, starting from April 19 2024 to April 21, 2024, at the campus hall of the Bogor Midwifery Nursing Study Program, Health Polytechnic, Ministry of Health, Bandung.

RESEARCH RESULT

Respondent Characteristics

Characteristics of respondents in this study include; age, gender, education, occupation, income, training, marital status, body mass index, upper arm circumference, hemoglobin, nutritional status, and disease history. For the characteristics of respondents, the results can be seen in Table 1 below:

Table 1: Characteristics of Respondents (n=60)

No	Characteristics of Respondents	Frequency	Percentage
1.	Age		
	• 18 – 22 years	8	13,33%
	• 23 – 26 years	29	48,33%
	• 27 – 30 years	21	35%
	• >30 years	2	3,33%
	Total	60	100%
2.	Gender		
	• Male	25	41,66%
	• Female	35	58,33%
	Total	60	100%
3.	Education		
	• Did not graduate from elementary school	1	1,66%
	• Basic Education (Graduated elementary school and/or middle school)	5	8,33%
	• Secondary Education (Graduated MA/SMA/SMK	30	50%
	• Higher Education (Diploma/Bachelor's/Master's/Doctoral)	24	40%
	Total	60	100%
4.	Work		
	• Working	53	88,33%
	• Not Working	7	11,66%
	Total	60	100%
5.	Income		
	• < 3,5 Million	35	58,33%
	• > 3,5 Million	25	41,66%
	Total	60	100%
6.	Training		
	• Once	14	23,33%
	• Never	46	76,66%
	Total	60	100%
7.	Marital Status		
	• Once	0	0
	• Never	60	100%
	Total	60	100%
8.	Body mass index (IMT)		
	• < 18,5	5	8,33
	• > 18,5	55	91,66%
	Total	60	100%

No	Characteristics of Respondents	Frequency	Percentage
9.	Upper arm circumference (LiLA)		
	• < 23,5	21	35%
	• > 23,5	39	65%
	Total	60	100%
10.	Hemoglobin (HB)		
	• < 12 mg/dl	20	33,33%
	• > 12 mg/dl	40	66,66%
	Total	60	100%
11.	Nutritional status		
	• Good	39	60,00%
	• Not Good	21	35%
	Total	60	100%
12.	Disease History		
	• There isn't any	58	96,66%
	• Yes Have	2	3,33%
	Total	60	100%

Source: Results of research data analysis

Table 1 shows that almost half of the respondents in this study (48.33%) were between 23 - 26 years old, most were female (58.33%), and half had secondary education (50%). Nearly all respondents (88.33%) work with incomes the majority (58.33%) of less than 3.5 million, and almost all respondents (76.66%) have never attended training. The results of measuring the health status of 60 respondents, showed that almost all of them (91.66%) had a Body Mass Index (BMI) within normal limits, and the majority (65%) had an upper arm circumference >23.5 with hemoglobin levels in the majority. (66.66%) were within normal limits and most of the nutritional status was good, namely (60%), and almost all respondents (96.66%) had no history of chronic disease.

Description of the initial conditions for understanding stunting prevention among prospective married couples in Bogor Regency and City

Respondent's initial understanding of the aspects of knowledge and attitudes towards stunting prevention before implementing the youth empowerment model through preventive stunting education can be seen below:

Table 2. Description of Understanding of Stunting Prevention in the Knowledge Aspect of Respondents Before Implementing the Youth Empowerment Model through Stunting Preventive Education (n=60)

Variable	Category	F	Percentage
Knowledge	Good	45	75%
	Enough	15	25%
	Not enough	0	0%
	Amount	60	100%

Source: Results of research data analysis

Table 2 shows that the level of knowledge of respondents regarding stunting prevention before implementing the model from 60 people was mostly good (75%).

Table 3. Description of Test Results Analysis of Respondents' Knowledge and Attitudes towards Stunting Prevention Before Implementing the Youth Empowerment Model through Stunting Preventive Education in Bogor City and Regency (n = 60)

Variable	Pre-Test				
	Mean	Median	SD	Min	Max
Knowledge	23,19	26	2,687	17	28
Attitude	85,29	86,25	9,51	74,58	92,91

Source: Results of research data analysis

Table 3 shows that the mean or average value and standard deviation of the knowledge and attitude aspects of stunting prevention before implementing the model was 23.19, and the standard deviation was 85.29.

The Effectiveness of the Youth Empowerment Model through Preventive Stunting Education on the Knowledge Aspect of Stunting Prevention for Prospective Married Couples

Table 4. Effectiveness of the youth empowerment model through preventive stunting education for prospective married couples on the knowledge aspect using paired samples t-test (n=60)

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre-Test Knowledge	24.2000	60	2.12969	.27494
	Post-Test Knowledge	26.8500	60	1.60323	.20698

Source: Results of research data analysis

Table 4 shows that there was an increase in the mean score in the knowledge aspect of prospective married couples regarding stunting prevention after being given intervention in the form of a youth empowerment model through preventive stunting education, namely the pre-test mean score from 24.2000 to 26.8500 in the post-test results or an increase of 2.42. Next, to determine whether the application of this model is effective or not based on the increase in the average value, the paired samples t-test is used.

Table 5. Statistical test results of the effectiveness of the youth empowerment model through preventive stunting education for prospective married couples on the knowledge aspect using paired samples T-test

			Std. Error Mean	95% Confidence Interval of the Difference				
	Mean	Std. Deviation		Lower	Upper	t	df	Sig. (2-tailed)
Pre-Test – Post-Test Knowledge	-2.65000	1.40006	.18075	-3.01167	-2.28833	-14.661	59	.000

Source: Results of research data analysis

Table 5 shows the results of statistical tests using the paired samples t-test, namely that there is a significant influence of the youth empowerment model through stunting preventive education on the knowledge aspect of prospective married couples in preventing stunting with a mean score = -2.65000, t score = - 14.661 and ϱ-value = 0.000, meaning that the youth empowerment model through preventive stunting education is effective in increasing the knowledge of prospective married couples in preventing stunting.

The Effectiveness of The Youth Empowerment Model Through Stunting Preventive Education on The Attitude Aspect of Stunting Prevention for Prospective Married Couples

Table 6. Effectiveness of the youth empowerment model through preventive stunting education for prospective married couples in the attitude aspect (n=60)

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre-Test Attitude	102.35	60	8.733	1.12743.
	Post-Test Attitude	107.20	60	44.1667	0.870677

Source: Results of research data analysis

Table 6 shows that there was an increase in the mean score in the knowledge aspect of prospective married couples regarding stunting prevention after being given intervention in the form of a youth empowerment model through preventive stunting education, namely the pre-test mean score from 102.35 to 107.20 in the post-test results or an increase of 4.85. Next, to determine whether the application of this model is effective or not based on the increase in the average value, the paired samples t-test is used.

Table 7. Statistical test results of the effectiveness of the youth empowerment model through preventive stunting education for prospective married couples on the attitude aspect using paired samples T-test

			Std. Error Mean	95% Confidence Interval of the Difference				
	Mean	Std. Deviation		Lower	Upper	t	df	Sig. (2-tailed)
Pre-Test – Post-Test Attitude	-4.54167	6.89032	1.40648	-7.45119	-1.63214	-3.229	23	.004

Source: Results of research data analysis

Table 7 shows the results of statistical tests using the paired samples t-test, namely that there is a significant influence of the youth empowerment model through stunting preventive education on aspects of the attitude of prospective married couples in preventing stunting with a mean score = -4.54167, t score = -3.229 and ϱ-value = 0.004, meaning that the youth empowerment model through preventive stunting education is effective in improving the attitudes of prospective married couples in preventing stunting.

Effectiveness of Implementing the Youth Empowerment Model through Preventive Stunting Education in the Knowledge Aspect of Preventative Attitudes for Prospective Married Couples

Table 8. Statistical test results of the effectiveness of the youth empowerment model through stunting preventive education for prospective married couples on the aspect of knowledge of stunting prevention attitudes using paired samples t-test (n=60)

			Std. Error Mean	95% Confidence Interval of the Difference				
	Mean	Std. Deviation		Lower	Upper	t	df	Sig. (2-tailed)
Knowledge - Attitude	-80.35000	6.91063	.89216	-82.13520	-78.56480	-90.062	59	.000

Source: Results of research data analysis

Table 8 shows the results of statistical tests using the paired samples t-test, namely that there is a significant influence of knowledge on stunting prevention attitudes in prospective partners with a mean score = -80.35000, t score = -90.062 and ϱ-value = 0.000, meaning that the application of the youth empowerment model through preventive stunting education is effective in increasing knowledge which influences attitudes towards preventing stunting.

Effectiveness of Implementing the Youth Empowerment Model through Preventive Educational Stunting in the Knowledge Aspect of Education for Prospective Married Couples

Table 9. Results of statistical tests on the effectiveness of the youth empowerment model through preventive stunting education among prospective married couples on the aspect of knowledge on educational level using paired samples t-test (n=60)

Variable	Pre-test		Post-test		Sig
Attitude	*Mean*	*SD*	*Mean*	*SD*	
Elementary/Middle School	21.8000	1.09545	25.4000	1.81659	.018
SMA/SMK	23.5484	1.78585	26.3548	1.33037	.000
College	25.5417	1.88770	27.7917	1.41357	.000

Source: Results of research data analysis

Table 9 of the statistical test results shows that there is a difference in the mean score between the pre-test and post-test results. Respondents with elementary/middle school education levels had a greater increase in mean scores compared to high school/vocational school and tertiary education levels, namely 3.6 points.

Effectiveness of Implementing the Youth Empowerment Model through Preventive Stunting Education in the Knowledge Aspect of Training for Prospective Married Couples

Table 10. Results of statistical tests on the effectiveness of the youth empowerment model through preventive educational stunting among prospective married couples on aspects of knowledge regarding education, training, employment, and income using paired samples t-test (n=60)

Variable	Knowledge			Sig. (2-tailed
	Mean	*Sd*	*t*	
Education	23.53333	1.39572	130.606	.000
Training	-25.08333	1.78783	-108.676	
Work	-25.73333	1.71599	-116.160	
Income	25.43333	1.55538	126.661	

Source: Results of research data analysis

Table 10 shows the results of statistical tests using the paired samples t-test, namely that there is a significant influence of the variables education, training, employment, and income on the variable knowledge of stunting prevention in prospective partners with a value of ϱ-value = 0.000.

Effectiveness of Implementing the Youth Empowerment Model Through Preventive Educational Stunting in the Aspect of Attitudes towards Education for Prospective Married Couples

Table 11. Description of the effectiveness of implementing the youth empowerment model through preventive stunting education for prospective married couples in the attitude aspect using paired samples t-test (n=60)

Variable	Pre-test		Post-test		Sig
Attitude	*Mean*	*SD*	*Mean*	*SD*	
Elementary/Middle School	96.6000	2.70185	110.4000	5.36656	.002
SMA/SMK	101.2258	8.44081	106.7742	6.43278	.000
College	102.5417	9.23594	107.0833	7.43035	.004

Source: Results of research data analysis

Table 11. Statistical test results show that there is a difference in the mean score obtained from the pre-test and post-test results. Respondents with elementary/middle school education levels had a greater increase in mean scores compared to high school/vocational school and tertiary education levels, namely 13.8 points.

CONCLUSION

The conclusions from this research on the youth empowerment model through preventive stunting education for prospective married couples are as follows:

Prospective married couples in Bogor Regency and City almost all know about stunting, but the level of knowledge is not yet in line with stunting prevention practices, because there are confounding factors that influence preventive practices or behavior, namely socio-economic status, poor lifestyle patterns or habits, and beliefs.

The design of the youth empowerment model through preventive stunting education for prospective married couples has been prepared systematically following modeling rules, namely rationale, assumptions, objectives, principles, strategies, procedures, competencies, and success indicators of the model. This conceptual model is the result of a literature review, theoretical concepts, preliminary studies, and in-depth observations of field conditions regarding preventive stunting education for prospective married couples carried out so far.

The youth empowerment model through preventive stunting education for prospective married couples has proven to be effective in increasing knowledge, attitudes and stunting prevention skills.

Implications

The results of this research provide several implications, namely:

The youth empowerment model through preventive stunting education for prospective married couples is a form of training model that combines related institutions to provide strengthening beliefs about the importance of preventing stunting before marriage in the form of providing knowledge so that prospective married couples in addition to knowledge, attitudes and skills and awareness in stunting prevention increase.

The youth empowerment model through preventive stunting education for prospective married couples has proven to be effective, so it is recommended that it continue to be developed using a cross-program and cross-sectoral approach to create a policy that regulates the implementation of this model, namely a policy from the mayor, regent, ministry of religion, as well as from the district health service. or city.

There is a need for further research on empowerment to improve the social economy which can have an impact on reducing stunting cases, such as providing training on digital-based entrepreneurship as a means for product marketing, skills training, and soft skills training.

Recommendations

For the sustainability of the research, the researcher conveys several recommendations, namely as follows:

For the Health Service. This model is a breakthrough in the government's program to prevent stunting. So that it can contribute to making policies related to accelerating stunting reduction through training programs involving related institutions.

For the Ministry of Religion. The youth empowerment model through preventive stunting education for the Ministry of Religion can be used as a basis for making policies in the form of innovative training programs for prospective married couples based on religion in collaboration with the health service, BKKBN, education service, and stakeholders from outside the government.

Prospective Husband and Wife Couple. The youth empowerment model through preventive stunting education for prospective married couples can increase knowledge, attitudes, and skills in preventing stunting. By increasing knowledge, attitudes, and stunting prevention skills, prospective couples will prepare their health, both physical and mental health before pregnancy and giving birth.

REFERENCES

Abbas, E. W. (2018). Penguatan Pendidikan IPS Di Tengah Isu-Isu Global. Program Studi Pendidikan IPS FKIP ULM.

Acuña, M. H., Ogilvie, K. W., Baker, D. N., Curtis, S. A., Fairfield, D. H., & Mish, W. H. (1995). The Global Geospace Science Program and its investigations. In Space Science Reviews (Vol. 71, Issues 1–4). https://doi.org/10.1007/BF00751323

Analysis, T. D., & Timur, S. (2013). Analisis Determinan Dan Pengaruh Stunting Terhadap Prestasi Belajar Anak Sekolah Di Kupang Dan Sumba Timur , NTT. 8(72), 55–62.

Bahkali, N. M., Eissa, G. A., Alharbi, F. M., Alzahrani, F. A., Edris, F. E., & Ibrahim, N. K. (2022). Effect of Premarital Education on the Quality of Life of Female Partners: A Cross-Sectional Study. Cureus, 14(12), 1–16. https://doi.org/10.7759/cureus.32186

Bloch, P., Toft, U., Reinbach, H. C., Clausen, L. T., Mikkelsen, B. E., Poulsen, K., & Jensen, B. B. (2014). Revitalizing the setting approach - supersettings for sustainable impact in community health promotion. International Journal of Behavioral Nutrition and Physical Activity, 11(1), 1–15. https://doi.org/10.1186/s12966-014-0118-8

Brady, S., Lee, N., Gibbons, K., & Bogossian, F. (2019). Woman-centered care: An integrative review of the empirical literature. International Journal of Nursing Studies, 94, 107–119. https://doi.org/10.1016/j.ijnurstu.2019.01.001

Casale, D., Desmond, C., & Richter, L. (2014). Child : The association between stunting and psychosocial development among preschool children : a study using the South African Birth to Twenty cohort data. 900–910. https://doi.org/10.1111/cch.12143

Cetthakrikul, N., Topothai, C., Suphanchaimat, R., & ... (2018). Childhood stunting in Thailand: when prolonged breastfeeding interacts with household poverty. In BMC pediatrics. Springer. https://doi.org/10.1186/s12887-018-1375-5

Crookston, B. T., Dearden, K. A., Alder, S. C., Porucznik, C. A., Stanford, J. B., Merrill, R. M., Dickerson, T. T., & Penny, M. E. (2011). Original Article Impact of early and concurrent stunting on cognition. 397–409. https://doi.org/10.1111/j.1740-8709.2010.00255.x

Desmond, C., & Casale, D. (2017). Catch-up growth in stunted children: Definitions and predictors. PLoS ONE, 12(12), 1–12. https://doi.org/10.1371/journal.pone.0189135

Dewey, K. G., & Begum, K. (2011). Original Article Long-term consequences of stunting in early life. 7, 5–18. https://doi.org/10.1111/j.1740-8709.2011.00349.x

Etika Dewi Cahyaningrum, A. S. S. (2018) "Faktor-Faktor Yang Berhubungan Dengan Tingkat Pengetahuan Ibu Dalam Penanganan Demam Pada Anak Di Puskesmas I Kembaran Kabupaten Banyumas," Jurnal Publikasi Kebidanan, 9(2), pp. 1–13.

Given, B. A., Given, C. W., & Kozachik, S. (2001). Family Support in Advanced Cancer. CA: A Cancer Journal for Clinicians, 51(4), 213–231. https://doi.org/10.3322/canjclin.51.4.213

Halimatunnisa, M., Indarwati, R., & Ubudiyah, M. (2020). Family Determinants of Stunting in Indonesia : A Systematic Review. May. https://doi.org/10.37200/IJPR/V24I9/PR290099

Handy, M. R. N., & Abbas, E. W. (2022). Menulis dan Mempublikasikan Artikel Akademis. 176. https://repo-dosen.ulm.ac.id/bitstream/handle/123456789/24673/Menulis dan Mempublikasikan Artikel Akademis+Cover.pdf?sequence=1

Id, T. M., Mohanty, I., & Id, V. W. (2021). Beyond personal factors : Multilevel determinants of childhood stunting in Indonesia. https://doi.org/10.1371/journal.pone.0260265

Judge, T. A., & Cable, D. M. (2004). The Effect of Physical Height on Workplace Success and Income : Preliminary Test of a Theoretical Model. 89(3), 428–441. https://doi.org/10.1037/0021-9010.89.3.428

Kemenkes RI. (2018). Bulletin Stunting. Kementerian Kesehatan RI, 301(5), 1163–1178.

Kusnadi, W. D. W., Rahajaan, W., & Jalal, F. (2005). Pendidikan Keaksaraan (Filosofi, Strategi, Implementasi). Cetakan Pertama. Departemen Pendidikan Nasional. Direktorat Jenderal.

Lindayani, L., Ilmu, J., & Anak, K. (2020). Info Artikel. 3(2), 31–41.

Notoatmodjo S. (2010). Metodologi Penelitian Kesehata. Edisi revisi. Jakarta: Rineka Cipta.

Onis, M. De, Blössner, M., & Borghi, E. (2012). Prevalence and trends of stunting among preschool children, 1990–2020. Public Health Nutrition. https://www.cambridge.org/core/journals/public-health-nutrition/article/prevalence-and-trends-of-stunting-among-preschool-children-19902020/6FDF3AC29E66FD148917CE2B26B84B2D

Organization, W. H. (2018). Reducing stunting in children: equity considerations for achieving the Global Nutrition Targets 2025. apps.who.int. https://apps.who.int/iris/bitstream/handle/10665/260202/9789241513647-eng.pdf

Parker R. (2005). Human Resource department-Capio Healthcare. United Kingdom.

Prince, J., Dukuzumuremyi, C., Acheampong, K., Abesig, J., & Luo, J. (2020). Knowledge, attitude, and practice of exclusive breastfeeding among mothers in East Africa : a systematic review. 9, 1–17.

Quamme, S. H., & Iversen, P. O. (2022). Prevalence of child stunting in Sub-Saharan Africa and its risk factors. Clinical Nutrition Open Science. https://www.sciencedirect.com/science/article/pii/S2667268522000092

Rafika, M. (2019). Dampak Stunting Pada Kondisi Psikologis Anak. Bulletin Jagaddhita. https://buletin.jagaddhita.org/es/publications/276150/dampak-stunting-pada-kondisi-psikologis-anak

Reading, R., & Reading, R. (n.d.). Child : https://doi.org/10.1136/adc.2007.124479.In

Riskesdas (2018). Riset Kesehatan Dasar, Badan Penelitian Dan Pengembangan Kesehatan Departemen Kesehatan Republik Indonesia, Jakarta.

Russell, S. S. (2006). An Overview of TQuel An Overview of TQuel. New York, 26(5), 1–24. www.hartfordign.org

Salam, B. (2002). Pengantar Pedagogik (dasar-dasar ilmu mendidik).

Sari, G. M. (2021). Early Stunting Detection Education as an Effort to Increase Mother's Knowledge about Stunting Prevention. Folia Medica Indonesiana, 57(1), 70. https://doi.org/10.20473/fmi.v57i1.23388

Sari, K., & Sartika, R. A. D. (2021). The effect of the physical factors of parents and children on stunting at birth among newborns in Indonesia. Journal of Preventive Medicine and Public Health, 54(5), 309–316. https://doi.org/10.3961/jpmph.21.120

Shala, A., & Grajcevci, A. (2016). Formal and Non-Formal Education in the New Era. Action Researcher in Education, 7, 119–130. https://www.researchgate.net/publication/328812348

Shekhawat, S., P P, G., Gupta, M., Kakkar, M., Mathur, M., Ahaluwalia, N., & Pahal, P. (2014). a Study of Nutritional and Health Status of Adolescent Girls (10 - 19 Years) in Jaipur City. Journal of Evolution of Medical and Dental Sciences, 3(16), 4299–4309. https://doi.org/10.14260/jemds/2014/2435

Simkins, T. (1977). Non-formal education and development: Some critical issues (Vol. 8). [Manchester]:[University of Manchester, Department of Adult and Higher ….

SSGI. (2023). Hasil Survei Status Gizi Indonesia. Kementerian Kesehatan Republik Indonesia, 77–77. https://promkes.kemkes.go.id/materi-hasil-survei-status-gizi-indonesia-ssgi-2022

Stanley, S. M., Amato, P. R., Johnson, C. A., & Markman, H. J. (2006). Premarital education, marital quality, and marital stability: Findings from a large, random household survey. Journal of Family Psychology, 20(1), 117–126. https://doi.org/10.1037/0893-3200.20.1.117

Stein, A. D., Wang, M., Martorell, R., Norris, S. A., Adair, L. S., Bas, I., Sachdev, H. S., Bhargava, S. K., Fall, C. H. D., Gigante, D. P., & Victora, C. G. (2010). Original Research Article Growth Patterns in Early Childhood and Final Attained Stature : Data from Five Birth Cohorts from Low- And Middle-Income Countries. 359(July 2009), 353–359. https://doi.org/10.1002/ajhb.20998

Sukmawati, S., Hermayanti, Y., Fadlyana, E., & Mediani, H. S. (2021). Stunting prevention with education and nutrition in pregnant women: A review of the literature. Open Access Macedonian Journal of Medical Sciences, 9(T6), 12–19. https://doi.org/10.3889/oamjms.2021.7314

Sutoro Eko, (2002), Pemberdayaan Masyarakat Desa, Materi Diklat Pemberdayaan Masyarakat Desa, yang diselenggarakan Badan Diklat Provinsi Kaltim, Samarinda. Jakarta: Elex Media Komputindo.

Usman, S. (1998). Pembangunan dan pemberdayaan masyarakat. Pustaka Pelajar.

Victora, C. G., Adair, L., Fall, C., Hallal, P. C., Martorell, R., Richter, L., & Sachdev, H. S. (2008). Maternal and Child Undernutrition 2 Maternal and child undernutrition : consequences for adult health and human capital. 371, 340–357. https://doi.org/10.1016/S0140-6736(07)61692-4

WHO Child Growth Standards. (2009). Developmental Medicine & Child Neurology, 51(12), 1002–1002. https://doi.org/10.1111/j.1469-8749.2009.03503.x

Wiliyanarti, P. F., Wulandari, Y., & Nasrullah, D. (2022). Behavior in fulfilling nutritional needs for Indonesian children with stunting : Related culture, family support, and mother's knowledge. https://doi.org/10.1177/22799036221139938.