

Studi Kualitatif Persepsi Guru Sekolah Menengah Tentang Stunting di Kabupaten Majene Provinsi Sulawesi Barat

A Qualitative Study on Secondary School Teacher's Perceptions of Stunting in Majene District, West Sulawesi Province

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ABSTRAK

Latar belakang: Stunting remains a major public health problem in Majene, Indonesia. Teachers are the key to implementing the strategy of school-based nutrition education in order to improve the students' nutritional status

Tujuan: Penelitian ini bertujuan untuk mengetahui persepsi guru tentang stunting.

Metode: Studi kualitatif dengan pendekatan studi kasus telah dilakukan menggunakan dua diskusi kelompok terfokus di empat sekolah. Populasi penelitian adalah guru SMP dan SMA yang mengajar mata pelajaran terkait gizi-kesehatan. Total 22 informan yang telah terpilih secara purposive yaitu guru biologi, pendidikan jasmani dan kesehatan, agama atau pembina kegiatan ekstrakurikuler, diwawancarai mengenai definisi, sumber informasi, penyebab, dampak, pencegahan dan pengendalian, dan penanggung jawab program pengendalian stunting menggunakan pedoman wawancara, direkam menggunakan kamera dan tape recorder. Transkripsi dilakukan dengan menggunakan model induktif-interaktif.

Hasil: Mayoritas informan adalah perempuan dengan tingkat pendidikan sarjana dan telah bekerja selama 14 tahun. Guru menganggap bahwa stunting adalah ketidaksesuaian antara berat badan dan usia anak. Informasi stunting didapat dari media sosial dan petugas kesehatan. Genetika merupakan penyebab utama stunting, diikuti dengan asupan makanan dan agama. Kognitif rendah, keterampilan, produktivitas, penyakit, dan merugikan negara merupakan dampak dari stunting. Pencegahan dimulai dari 1000 hari pertama kehidupan, doa selama kehamilan, dan diperlukan peraturan daerah tentang pembatasan makanan instan. Beberapa instansi dapat terlibat dalam program intervensi stunting. Persepsi guru tentang stunting bervariasi, berdasarkan pengetahuan, nilai, dan pengalamannya

Kesimpulan: Terdapat variasi persepsi guru tentang pengertian stunting, penyebab, dampak, pencegahan, dan pelaksana program stunting.

Kata Kunci: Guru Sekolah Menengah, Stunting, Persepsi

ABSTRACT

Background: Stunting remains a major public health problem in Majene, Indonesia. Teachers are the key to implementing the strategy of school-based nutrition education in order to improve the students' nutritional status

Purpose: The study aimed to explore teachers' perceptions about stunting.

Method: A qualitative case-study approach was employed using two focus group discussions in four schools. The study population was junior and senior high school teachers who teach nutrition-health related subjects. A total of 22 informants were selected purposively, namely teachers of biology, physical education and health, religion, extracurricular activities supervisor, interviewed regarding definitions, sources of information, causes, impacts, prevention and control, and who are responsible for stunting control program using the guidelines, recorded using a camera and tape recorder. Transcription was done using an inductive-interactive model.

Result: The majority of informants were women with educational levels were undergraduate and have been working for 14 years. Teachers perceived that stunting is a mismatch between child's weight and age. Stunting information obtained from social media and health workers. Genetics is main cause of stunting, followed by food intake and religion. Low cognitive, skill, productivity, illness, and detrimental to the state are the impacts of stunting. Prevention starts from the first 1000 days of life, prayer during pregnancy, and needed local regulations regarding restrictions on instant food. Several agencies can involve in stunting intervention programs. Perceptions of teachers about stunting are varied, based on their knowledge, value, and experiences.

Conclusion: There were variations of teacher perceptions about stunting definition, causes, impacts, prevention, and implementers of stunting programs.

Keywords: Secondary School Teacher, Stunting, Perception



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INTRODUCTION

Adolescence is the second period of rapid growth that is biologically sensitive, hormone driven but requires adequate nutrition (quantity and quality) for optimal growth & development.¹ The second period of rapid growth can serve as a window of opportunity to compensate for early childhood growth failure, although the potential for significant catch-up at this point is limited. Also, even if adolescents catch up with some of the lost growth, the effects of early childhood malnutrition on cognitive and behavioral development may not be fully ameliorated.² Adolescent girls as a second window of opportunity cannot be ignored because they have an intergenerational effect.³

Study in Indonesia found that adolescents aged 15-18 years have a double risk of stunting.⁴ Riskesdas 2018 reported that 26.9% of adolescents aged 16-18 years of age were stunting, while those aged 13-15 were 25.7%. In West Sulawesi province, the prevalence of stunting is 44.5% among adolescents aged 16-18 years and 31.8% in the 13-15-year age group. In Majene Regency, 37.77% of adolescents aged 13-15 years were classified as stunting, while 16-18 years was 48.57%.⁵

Stunting in adolescent girls can occur from the womb to childhood according to the life cycle approach. A girl who is stunted is more likely to become a stunted teenager and then a stunted adult woman.² Study in Bangladesh proved that stunting in adolescents occurs because of stunting in childhood, namely children who experience moderate stunting and severe stunting have the opportunity to experience stunting in adolescence respectively 1.64 and 7.4 times compared to children who are not stunted.⁶ Long-term caloric and micronutrient deficiencies during critical periods of growth spurt, older menarche, and lower socioeconomic status and from poorer households found in Klaten and West Lombok Districts can lead to failure to reach their potential height optimal.⁴ In addition, maternal height and female gender are also predictors of stunting in adolescents.⁶ In principle, the causes of stunting in adolescents are multifactorial.^{7,8} Therefore, the complexity of the causes of stunting demands an ecological approach that provides direction for sensitive and specific interventions, which can ultimately improve health outcomes.⁹

Stunting reduction is the first of the six goals in the Global Nutrition Targets for 2025 and the key indicator in the second Sustainable Development Goal, namely "zero hunger",¹⁰ as well as the World Health Assembly targeting for 40% reduction in stunting worldwide by 2025, with an average annual derivation of 3.9%.¹¹ A country is considered free of stunting (zero stunting) and zero hunger if the prevalence of stunting less than 2.3%.¹² A better understanding about stunting, including problem

identification and measurement are important before taking action to achieve this target.¹¹ However, people in the community may have difficulties in understanding stunting problem that only associated with lack of nutrition. Thus, intervention programs mainly focus on giving nutritious foods. The global nutrition report shows that stunting is higher in rural children with low maternal education (39.2%) compared to mothers with higher education (24.0%).¹³ In fact, many factors associated with stunting, such as the physical, economic, demographic, and social environment.⁹

Stunting cannot be overcome if it has occurred and prevention is the best way to tackle stunting. Interventions to prevent an increase in the prevalence of stunting can be carried out in the life cycle, starting in adolescent girls. The way to break the chain of stunting in adolescents is investing clean and healthy living behaviors and consumption of balanced nutrition in girl adolescent, considering that the next generation of the nation will be strong and healthy if born from mothers with healthy conditions.¹⁴ Improved nutrition and delayed pregnancy in adolescence contribute to break the life cycle of malnutrition and chronic disease,¹⁵ which requires a multifactorial approach.¹⁶

An innovative community-based intervention should be developed to accelerate stunting reduction and support WHO and UNICEF programs to combat growth problems in the world. Investments in integrated adolescent nutrition program such as nutrition and sexual health education intervention are likely to improve nutritional and health outcomes in adolescents.⁷ Providing education about the importance of a healthy diet, physical activity, and better hygiene practices in the school environment can be beneficial for encouraging female students to have healthy lifestyles.¹³

Teachers play an important role as educators in supporting and providing adequate information of a healthy lifestyle to students. Most of studies report only on primary school teachers, who may have different environmental challenges.^{17,18} However, lack of studies reported the impact of secondary school teachers as an educator on adolescent knowledge and behavior. They can be a target of intervention because their students are the adolescent in the age group of the second period of "window of opportunity" to reach optimal growth. Nutrition education for female students through their trained teachers can be sustained as the teachers have continuity to teach and supervise their students. Therefore, nutrition-health education and training interventions for teachers are reasonably important.

Prior to give an intervention, a baseline condition regarding the perception of teachers about nutrition and health especially about stunting is necessary, because they have variations of background education and



experience. In this study, we will explore the perceptions of teachers about stunting to develop an integrated nutrition-health investment model for adolescent girls to accelerate the reduction of stunting.

METHODS

Study Design & Location

This study used a qualitative design with a single case study approach to describe the process of what, why and how something happens, leading to an understanding of the meaning of a social phenomenon.¹⁹ The main focus of the research is the teachers' perception of stunting definition, sources of information, causes, impacts, prevention and control of stunting, as well as who are responsible for the stunting control program. This research activity obtained the ethics approval from the health research ethics commission, Faculty of Medicine, Hasanuddin University (No:195/UN 4.6.4.5.31/PP46/2020). This study was conducted in Majene Regency because this area has the second highest stunting prevalence in Indonesia (45.89%).²⁰ This study was a part of our main research entitled the development of an integrated nutrition-health investment model for adolescent girls in accelerating the reduction in the prevalence of stunting in children. This research was carried out in March 2021. There were 4 schools in Majene district that became the study sites consisting of two school levels, senior high schools represented by SMAN 1 and MAN 1, and junior high schools represented by SMPN 1 and Madrasah Tsanawiyah (MTs).

Participants & Recruitment Process

Informants involved in this study were teachers (science/biology, physical education/sports, and religion), and/or school health supervisor, youth red cross supervisors, and intra-school student organizations as requested by the research team to school management. The study participant selection was conducted using purposive sampling after considering the role of the teachers in the school which is probably relevant with the topic of nutrition-health. The teachers were asked for their approval to participate the study prior to collecting the data. The number of participants involved in this study was 22 teachers consisted by 8 teachers from SMAN 1 (2 biology teachers, 2 religion teachers, 2 physical education teachers, 1 UKS Supervisor, and 1 teacher as an Intra-school student organizations supervisor), 4 teachers from MAN (1 biology teacher, 1 physical education/sports teacher, 1 religion teacher, and 1 UKS supervisor), 6 teacher from SMPN 1 (2 biology teachers, 2 physical education/sports teachers, 1 religion teacher, and 1 UKS supervisor), and 4 teachers from Madrasah Tsanawiyah (MTs) (1 biology teacher, 1 physical education teacher) / sports, 1 religion teacher, and 1 person as UKS supervisor). According to Morgan (1988) that the selection of informants by purposive sampling is widely recommended because focus group discussions depend on the ability and capacity of participants to provide relevant information.²¹ Purposive sampling is widely recommended since focus group discussion relies on the

ability and capacity of participants to provide relevant information.²¹

Collecting and Data Analysis

This study used focus group discussions as the method to collect data from participants. This method can be used for preliminary research, to prepare a specific subject in a large project; or even to illuminate other data results.²² The focus group discussions in this study were divided into 2 FGD groups based on school level to ensure sample homogeneity. The number of participants in the first FGD was 10 participants and the second FGD was 12 teachers. The results of the two FGDs have shown the saturation of the information that has been obtained, thus 2 FGDs are sufficient. In the focus group discussions, there might be a variation in the role of teachers according to job at school. Therefore, they need to represent information related to the object being studied, and the information obtained has appeared repeatedly in the focus groups that have been studied. With 2 FGDs, there were no more information codes that appear variably that show differences with the first FGD. Saturation is defined as the point at which the conjunctive concept of two successive focus groups does not reveal an additional second-level category. Strata is most useful for determining saturation which is often guided by the research literature and incorporated into study designs. Overall, it is not the number of groups that determines the saturation of meaning but the point at which all strata are included in the study.

There were several ideas were asked to informants, starting with the question "Have you ever heard of stunting, including where is the source of information. After that, we then followed the interview guide to collect participants' response. The moderator uses probing to ask participants to explain further about what the teacher has said, and finally the moderator closes the discussion after the discussion series is over. FGD 1 and 2 were held on the same day, but at different times, where FGD 1 was held in the morning and lasted approximately 2 hours and FGD 2 was held in the afternoon for 1 hour 30 minutes. The data obtained from the group discussions were analyzed inductively using an interactive model approach consisting of a data reduction process, data display, and finally verification/conclusion.²³ The data reduction process refers to the process of selecting, focusing, simplifying, abstracting, and transforming the data that appears in field notes or written transcriptions. In this study, the reduction process begins with listening to the recorded discussion results, then it is matched with field notes that have been made by 2 assistant moderators, then the answers from the informants are sorted according to the topic in question, from the informants' answers, data is removed that does not match the focus. Then coding and grouping were made as a simplification process, then continued with translation and preparation of transcripts according to the informants' statements. The final stage is to present the data in the form of a matrix by presenting an emic perspective (from the informant) and an ethical perspective (the researcher) to before drawing conclusions from the questions.



RESULTS AND DISCUSSION

Characteristic of Informants

Based on the characteristics of the informants involve in the FGD activities, more than half participants (59.1%) were women. The average age was approximately 41

years, with an average working period as a teacher of around 14 years. The majority of education levels (90.9%) have an undergraduate degree and others as a master's degree. The details are described in Table 1

Table 1. Characteristics of Informants

Informants Code	Sex	Age (yr)	Education Level	Years of teaching experience	Job	Site of Study
NB	F	53	Degree	29	Science Teacher	Junior high school (SMPN 1)
JM	M	48	Degree	21	Islamic religion teacher Junior of red cross supervisor (PMR)	
HB	M	51	Degree	27	Science Teacher	
RT	M	44	Degree	15	Physical education & health teacher	
RD	F	47	Degree	16	Islamic religion teacher	
MS	F	43	Degree	14	Science Teacher	Islamic Junior high school (MTs)
SRU	F	42	Degree	16	Islamic religion teacher (Quran & Hadist)	
SB	M	33	Degree	7	Physical education & health teacher	
HL	F	50	Master	20	Intra-school student organizations supervisor	Senior High School (SMAN 1)
GT	F	37	Degree	12	Physical education & health teacher	
MS	M	49	Degree	18	• Physical education & health teacher • Junior of red cross supervisor (PMR),	
PH	F	41	Degree	13	Biology Teacher	
BH	M	34	Degree	11	Islamic Religion teacher	
AS	F	34	Degree	11	Biology Teacher	
ML	M	33	Degree	5	Islamic Religion teacher	
FT	F	42	Degree	17	Biology Teacher	
NM	M	35	Degree	6	Physical education & health teacher	Islamic Senior high school (MAN 1)
MUS	M	45	Degree	11	Islamic Religion teacher	
SR	F	47	Degree	16	Supervisor of the school health unit	Junior high school (SMPN 1)
SF	F	42	Degree	16	Supervisor of the school health unit	Islamic Junior high school (MTs)
MA	F	36	Master	10	Supervisor of the school health unit	Senior High School (SMAN 1)
MJ	F	26	Degree	2	Supervisor of the school health unit	Islamic Senior high school (MAN 1)

Knowledge about stunting

We have asked teachers' perceptions about several things about stunting, as the follow:

Have you ever heard of the term stunting?

The results of focus group discussions obtained information that they have heard of the term stunting from social media, and health workers through the Junior Red Cross organization at schools, and from their friends who are also health workers.

"We are PMR management have participated in the socialization about stunting from the health department" (JM, Islamic Religion Teacher, SMPN 1)

"Often hear about stunting. stunting is a retardation growth" (FT, Biology Teacher, MAN)

"Stunting information got from the social media from celebrities. Stunting is growth not optimally due to

malnutrition" (MJ, Supervisor of the school health unit, MAN)

The stunting prevention campaign remains to be promoted by the government by involving several related ministries and institutions, such as the Ministry of Health, the Ministry of Finance, the Ministry of education and culture, the ministry of communication and information technology, the Ministry of women's empowerment and child protection, the Ministry of social affairs, the Ministry of Village, Development of Disadvantaged Regions, and Transmigration, as well as The National Team for the Acceleration of Poverty Reduction (TNP2K), through a wide range of methods, TV, radio, social media, or seminars and workshops.



What is stunting

Informants' perceptions about the definition of stunting were varied. Stunting is a physical and mental growth disorder for children who are still growing, as indicated by the child's height is not appropriate for their peers. Stunting in local terminology (Mandar language) is a child "sawangan" in the sense that the child's growth is less than optimal. Other informants considered that stunting was an imbalance in food intake with the child's age. However, there was informant perceived differ from the other informants, who thought that stunting was an imbalance of body weight with the age of the child or brain development based on the child's age.

"Stunting is a growth disorder for the growing age of the child. Both physical and mental disorders a cause by an insufficient food intake" (JM, Islamic Religion Teacher, SMPN 1)

"Stunting means that children's height does not match (lower) their ages" (AS Biology Teacher, SMAN 1)

"Development and growth are not appropriate, which in Mandar Language was to be "Sawangan" its mean growth is not normal" (SR, Supervisor of health school unit SMPN 1 Majene)

"The imbalance between food intake and the growing age of the child" (JM, Islamic Religion teacher SMPN 1)

"Stunting is an imbalance of brain development and weight growth with age" (SB, Physical education & health teacher, MTs)

Informants' perceptions of stunting indicate that this term has been widely recognized by the teachers. Among them there are those who have the right perception about stunting. This is in accordance with the results of a study by Liem et al (2019) on mothers of toddlers who have stunted children, who perceive that stunting is a child who is shorter than other children of the same age.²⁴ Few participants perceived that stunting is an imbalance of body weight with the child's age. This was not appropriated definition in which WHO (2018) defines stunting as a potential disorder of children's growth, where height according to age is low, indicating by Z-score below -2 standard deviations. In addition, there are still 2 informants who have the wrong perception regarding the definition of stunting by providing a nuanced statement of the causes and impacts of stunting, namely the imbalance between intake and child growth, and imbalances in brain development and weight growth with the child's age.²⁵

Causes of stunting

The perception about the causes of stunting from teachers quite varied, namely heredity, disease, unclean and healthy lifestyles, poor diet, process foods that resulted in nutrient loss, consumption of foods containing preservatives, mother's diet, un-healthy pregnancy, lack of exclusive breastfeeding, poor knowledge, early marriage, excessive activity, also economic factors. One teacher perceived that stunting is caused by the religious aspect. During the provision of food, it is necessary to pray to create a mindset of the food consumed. That's suggests that the cause of

stunting is multifactorial. The following are quotations from informants regarding the causes of stunting:

"It's heredity". (SF, Supervisor of school health unit MTS)

"Disease.... An unhealthy lifestyle it's an example of not washing hands before eating. Although a lot of food consume if the lifestyle not healthy, maybe also cause stunting. and also, how to process food is not good" (NB, Science teacher. SMPN 1)

"lifestyle or diet habit, maybe all this time she only ate fish water, even though it's supposed to eat vegetables. The mother's diet during pregnancy who ate instant food and chemicals contain so that at birth her child was underweight" (FT, Biology teacher MAN 1)

"Lifestyles that eat inappropriate food, consumption of foods that contain chemicals that cause failure to thrive in children" (ML, Islamic Religion Teacher of SMAN 1 Majene)

"Economic factors that hinder the provision of proper nutrition Also, Early marriage can cause health problems for children who are born later" (RD, Islamic Religion Teacher, SMPN 1)

"Prayer, because prayer is spirit. Anyone who reads the prayer in his heart already has a mind set on the food that will be consumed" (MS, Islamic Religion Teacher, MTs)

"Lack of exclusive breastfeeding for babies, breastfeeding contains immunity" (HL Supervisor of OSIS, SMAN 1).

"Excessive activity compared to the nutritional intake" (PH. Biology Teacher, SMAN 1)

"Early marriage can also make the health of the child born to be disturbed" (RD, Islamic religion teacher, SMPN 1)

Based on the various causes of stunting expressed by the informants, interaction between family factors, breastfeeding, inadequate complementary feeding, and infections are complex that can cause stunting, according to WHO (2013).²⁰ People in the community remain to believe that stunting is due to heredity factors and cannot be changed or modified. This perception is the barrier to the successfulness of the intervention which focus on the modifiable risk factors. As a result, it can trigger an attitude of resignation and accept the situation as it is because they think it's useless to address this problem because it been like this since long time ago. This shows that the emphasis on the meaning of stunting is still limited to the human physics. Stunted children are perceived as heredity caused.²⁴

Study in Tanzania also showed the same thing that the community (child caretakers) considered stunting as hereditary or God-given that could not be changed. But there were also people who stated that short stature was an indicator of stunting, but most of the participants (community and public health workers) said that it was unreliable, because there were many other signs of stunted children such as small face, wrinkled skin, dull or copper/brown hair, thinness, shortness, ability to crawl/stand/walk delayed, low IQ, and often get sick. In Bangladesh, study showed that mother's exposure to mass media seems to play an important role in child



stunting status because children of mothers who are not exposed to media are 1.20 times more likely to be stunted than children of mothers who are exposed to media. Mothers who are exposed to the media have the opportunity to get a source of nutritional knowledge for their children. Mothers with low education, lack of knowledge about child nutrition, and financial ability to buy appropriate food are factors associated with stunting.²⁶

The review results of studies in Indonesia showed that premature birth, short birth length, non-exclusive breastfeeding for the first 6 months, short maternal height, low maternal education, low household socioeconomic status, living in a household with a latrine inadequate and untreated drinking water, poor access to health, and living in rural areas are determinants of stunting in children in Indonesia.¹⁰ On the other hand, a systematic review in countries from 3 continents (Africa, Asia and America) showed that nutrition practices, family support systems, views on stunting, and barriers to providing interventions are socio-cultural aspects that contribute to stunting.²⁷ Raiten DJ and Bremer AA (2020) has identified the complex interactions between internal (biological systems, health/disease/genetic systems, diet/nutrition/nutrient exposure) and external (food and health systems, environmental, cultural, socio-economic and behavioral contexts) nutrition ecology that be a contributor to stunting.⁹

Impact of Stunting

The impact of stunting on children will cause growth disorders and brain development, which results in intelligence that makes children stupid, and has consequences for low competitiveness. This will be a burden for the nation and state. In addition, stunting can hinder the achievement of physical growth in adulthood which results in difficulty getting a job that requires a high posture, inhibits psychological development that makes you pessimistic, and can have implications for low work productivity, low immunity, and easy to get sick. The following is an excerpt from the interview with the informant.

"Decreased brain intelligence, no activity in the environment". (NB, Science Teacher, SMPN 1)

"Huge loss for the region and the country because if the less brain growth, automatically the intelligence is lacking, human resources can be stupid. If the growth of physic is short, the competitiveness is also low. Moreover, in Indonesia, many jobs require a lot of high body posture, for example, security guards and then the police, military, so there are many shortcomings, both in sports, maybe the competitiveness is also lacking". (SB, Physical education & health teacher MTs)

"Susceptible to disease due to lack of immunity, then low self-confidence" (FT, BiologyTeacher, MAN).

"Has a negative impact on both physical and psychological, so that it makes children pessimistic about everything" ((ML Islamic Religion teacher, SMAN 1)

"Become a child who is insecure and not achieving" (BH Islamic Religion teacher. SMAN 1)

Along with informants' perceptions of the impact of stunting, WHO (2013) has found that stunting children can impact both short and long-term effects covering three main aspects, namely health aspects, children's cognitive development, and economic impacts.²⁰ Furthermore, de Onis and Branca (2016) state that stunting can result in increased morbidity and mortality, loss of potential for physical growth, reduced neurodevelopmental and cognitive function, and an increased risk of chronic disease in adulthood.²⁸ The severe irreversible physical and neurocognitive damage that accompanies stunted growth poses a major threat to human development. The results of the Goudet et.al (2015) review show that stunted children are more likely to get sick due to their immunodeficiency status.²⁹ Meanwhile, children who always get sick is likely to be stunted due to poor nutrient absorption. In addition, in the long-term stunting children can affect adult body size, intellectual ability, poor school performance, economic productivity, and reproductive ability, and can increase the risk of metabolic disorders and cardiovascular disease. Short children are more likely to develop obesity and other chronic diseases in adulthood, placing them at greater risk in transitional countries experiencing increasing urbanization and shifting diets and lifestyles.²⁹

Prevention of stunting

In order to address stunting problem, it is important to disseminate proper nutrition-health knowledge, including topics about nutritious foods, reproductive health to the targeted groups, such as school-age children and adolescence. Information dissemination can be carried out by cadres or government health workers to ensure its continuity, besides providing nutrition supplements for this population. Stunting prevention also can be done on a family basis by providing nutritious food to the first 1000 days of life. For example, providing exclusive breastfeeding to babies, taking care of the psychological condition of pregnant women, not smoking, not drinking alcohol, perform a clean and healthy lifestyle and consume foods without preservatives. All of the efforts need a requirement government movement to collaborate with related agencies, such as providing financial for cadres and providing healthy food to families, creating employment opportunities to alleviate poverty, and needing local regulations (PERDA) regarding restrictions on instant food. Another effort is to increase worship and prayer during pregnancy because this is a religious recommendation. The following is an excerpt from the interview with the informant

"it is required to share knowledge about nutrition to high school students as early as possible, and give nutritious food and tablets to prevent stunting" (MS, Physical education & health teacher, and Supervisor of PMR, SMAN 1)

"The stunting prevention is carried out during the first 1000 days of life, starting during pregnancy. Providing nutritious food, especially exclusive breastmilk, not a cow or buffalo milk, could result in cow and buffalo breed, but human breast milk for human child. In addition, there is a need for a joint government movement through the provision of



support for cadres." (JM, Islamic Religion teacher, SMPN 1).

"The local government regulations (PERDA) are needed to regulate instant food entries to the schools. Thus, socialization related to food provision is needed" (BH Islamic Religion Teacher, SMAN 1).

"Comprehensive dissemination of information-related stunting either in the schools, for cadres, PKK, or government, etc. is required. Furthermore, curbing clean and healthy living habits (PHBS) and food without preservatives" (MA, Supervisor of school health unit, SMAN 1).

"Increase the socialization frequency in the environment using attractive pictures so that they can be aware of the dangers of stunting. Increase their knowledge about nutrition to prevent stunting" (SR, Supervisor of school health unit, SMPN 1)

"The psychological condition of pregnant women should be maintained, a healthy lifestyle (not smoking and drinking alcohol)" (FT, Biology Teacher, MAN)

"Providing knowledge of reproductive health and food to the students through science subjects. Also, when pregnant women have to do more worship, listen to more divine verses because they are all religious recommendations." (HB, Science teacher, SMPN 1)

"Synergize and cooperate with related agencies in terms of food, especially instant food" (NB, Science teacher, SMPN 1)

"opening the employment opportunities to avoid" (RD, Islamic Religion Teacher, SMPN 1).

The results of the present study indicate that stunting prevention interventions can be divided into 2 groups, namely nutrition-specific and nutrition-sensitive interventions. Specifically, the methods of stunting prevention intervention should be adjusted to its causes, both directly and indirectly and underlying causes. Nutrition-specific interventions target the direct causes, and some of the indirect causes (care), while sensitive interventions are directed to some of the indirect causes (sanitation and access to health services) and the underlying causes (socio-economic-political). To address the direct causes interventions ((nutrition intake and disease), it needs to focus on improving nutrition (supplementation, micronutrient enriched food or complementary foods, nutrition promotion) and preventing related diseases (immunization, child health and reproductive health interventions, sanitation programs and hand washing Public). Interventions to improve the indirect and underlying determinants of stunting probably creates the supportive environment and political will to reduce stunting. The scope of the intervention can be carried out at the individual, household, community and state levels.²⁹

The interventions to prevent stunting in children should be initiated long way before conception. By providing nutrition intervention earlier can be beneficial to improve nutritional status of adolescence and pregnancy and facilitate adequate pregnancy growth and continue to 24 months old.¹⁰ Involving local wisdom approach in providing intervention might be useful, especially in the population where the religion aspect is

very solid. Therefore, a religious intervention is probably needed such as increasing worship and prayer during pregnancy according to religious recommendations. This intervention can probably be classified as interventions against immediate causes. This finding is in line with the results of a study in Nepal where rural communities believe in an omnipotent God and influence every aspect of daily life. God exerts a powerful influence on the cause of illness and the response to recovery. People believe that God causes and cures mother and baby problems throughout the pre-pregnancy to post-natal period, so prayer, mantra reading, worship and so on are needed as healing drugs.³⁰

The Implementer Stunting Prevention & Control Interventions

The perceptions of the informants regarding the implementers of the stunting prevention programs obtained from the government staffs from the health office, BPOM, the education office, the women empowerment, and child protection office, the industry and trade office, the fisheries and agriculture office, the BKKBN and the Ministry of Religion. The informant perceived that stunting is caused by many factors. Thus, the solution should come from related agencies, and they have to work collaboratively. So, the relevant agencies must work to deal with these causes. The informant said that a regional regulation (PERDA) was needed to handle the problem of stunting. The following are quotes from several informants

"The health office, child and women protection agency, hopefully, there will be a regional regulation" (BH, Islamic Religion Teacher of SMAN 1)

"The department of fisheries and agriculture. A socialization from the fisheries office about the importance of fish consumption is required. The agriculture office can teach people to grow their own vegetables" (FT, Biology Teacher, MAN))

"The department of religion, because they will provide counseling on the relationship of stunting and religion aspects, like "eat and drink only from the good sources" (JM, Islamic Religion Teacher, SMPN 1)

"The education office. So, all schools, both junior and senior high school, have materials/subjects about stunting to be actualized in the religious subjects, biology, or physical education. However, it doesn't require to be a specific material" (HL, Supervisor of OSIS, SMAN 1)

"The national population and family planning agency, because they have concern with family matters" (NB, Science Teacher, SMPN 1)

"The Food and Drug Supervisory Agency should monitor the distribution of food and beverages in Majene" (HB, Science Teacher SMPN 1)

Based on information obtained from teachers, it shows that the implementation of stunting prevention and control interventions must involve a number of stakeholders, even though they only mention in the government sector. Therefore, more information to teachers about who has an interest in handling stunting is needed. As stated by WHO (2018a), stunting management requires: (a) multi-sector efforts



(government, donors, private sector, and individuals/societies) with different levels of involvement,²⁵ (b) strengthening nutrition governance and accountability which is one of the cross-sectoral integrative areas to implement effective interventions.

The identification of the job description for the program or intervention is important to help the implementing agencies identifying potential partners and helps the government and donors to balance investment and tracking results. The involvement of various sectors in stunting handling interventions is mapped into two types, namely specific nutrition interventions (health sector) and sensitive nutrition (non-health sectors). Better coverage of specific nutrition interventions for women and children, with intensification of nutrition-sensitive measures for women is critical. Evidence shows that the involvement of multi-sectoral, evidence-based nutrition-specific interventions can reduce stunting in children by 20%, if increased to 90% coverage.²⁹

Overall, the results of our study show that perceptions of stunting differ from teacher to teacher. Theoretically, perception is influenced by various things including education, experience, and ability to understand external stimuli such as reading, social media, environmental electronic media, psychology and culture³⁰. Prior experience makes it possible to organize and interpret sensory experiences. Physiological and emotional conditions that vary from individual to individual, emotions and moods change the state of perception and influence it in a positive or negative direction. Perception diversity is also related to beliefs, values and attitudes, world views, and social organization as cultural factors³¹.

CONCLUSION

There were variations of perception about stunting definition, causes, impacts, prevention, and implementers of stunting programs. Comprehensive stunting promotion and education needs to be implemented in the school setting, especially for teachers in secondary schools who will educate adolescents to increase understanding of stunting to break the chain of stunting problems since adolescence.

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CONFLICT OF INTEREST AND FUNDING DISCLOSURE

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