



# Implementation of Government Policy in the Context of Accelerating the Reduction of Stunting Through Analysis of Health Literacy Level to *Stunting* (Nutrition Inadequate) in the District Semanding, Regency Tuban, East Java, Indonesia

Anita Tri Widiyawati<sup>(✉)</sup>

Library Science Study Program, Universitas Brawijaya, Malang, Indonesia  
anitatriw@ub.ac.id

**Abstract.** Indonesia is currently facing the problem of stunting. Stunting is a chronic nutritional problem due to a lack of nutritional intake for a long time, causing impaired growth and development in children. Tuban Regency, East Java, is one of the districts with relatively high stunting cases. The highest stunting case in the Tuban district occurred in Semanding District. The high number of stunting cases is caused by many young women who experience anemia and the lack of public attention to child nutrition. This indicates a shared understanding of stunting. Therefore, it is necessary to study the level of health literacy on stunting to be used as a reference for the government to improve health literacy to overcome stunting. This study aims to measure the level of health literacy on stunting in Semanding District, Tuban Regency, East Java. The method used is descriptive and survey with a quantitative approach. While the analysis technique used is descriptive statistical analysis. The results of this study are the understanding of health, disease prevention, the ability to assess health promotion information, and the application of information from health promotion classified as very good. Meanwhile, the ability to access health information and disease prevention, the ability to assess disease prevention efforts, the implementation of disease prevention, and the ability to access health promotion are also classified as good. However, two factors have the lowest average: mastery of health issues and the ability to assess information from the mass media, both print and online. In conclusion, the level of public health literacy in Semanding District on stunting is already high, but there are still factors that need more attention to improve.

**Keywords:** Health Literacy · Health Literacy Level · Stunting · Child Nutrition · Child Development

## 1 Introduction

Indonesia is currently facing a severe nutritional problem, including *stunting*. *Stunting* is a health problem that cannot be secondary, given that the impact it causes is quite fatal for children. *Stunting* is a chronic nutritional problem caused by a lack of nutritional intake over a long period, disrupting children's growth and development. According to the World Health Organization (WHO) [1], it was *stunting* is a condition of failure to thrive in children caused by repeated infections and malnutrition in the first 1000 days of life (HPK) in children based on height for age or body length for age with a z-score limit of  $-2$  Standard Deviation [2].

WHO stipulates problem health Public could consider chronic if the level of prevalence *stunting* is more than 20% [1]. Based on Raskesdas data [3], the prevalence of *stunting* in Indonesia in 2018 reached 30.8%, then fell in 2019, namely 27.7% [4]. Though the number of *stunting* experiences declined, this is still very worrying because Indonesia's percentage still fluctuates. Reviewing the percentage *stunting* year 2019, approx one in four child toddlers in Indonesia experience *stunting*, or more than eight million Indonesian children fail to grow. The figure is still very high if compared with the threshold WHO limits.

Based on Document Plan Work East Java Regional Government (RKPD) (2020) [5], East Java experienced a decline in prevalence *stunting* by 0.2% during five year period, recorded by 36% (2015) to 32.81% (2018), until the latest data in 2019 showing percentage *stunting* by 26.9%. Referring to the data, events *stunting* in East Java still go beyond the limit maximum set by WHO [1]. So that problem fails to grow and still becomes fundamental for the whole area in Indonesia. *The United Nations Children's Fund* (UNICEF) stated condition malnutrition, like *stunting* caused by three factors main, namely: (1) quantity and quality source power potential in society, e.g., education, environment, people, economy, organization, and technology; (2) pattern foster child who doesn't adequate, no enough access to food and access service health, as well clean water sanitation no adequate; and (3) intake food that doesn't guarantee the adequacy, infection status, and health toddler [6].

*Stunting* has quite a fatal impact on the continuity of children's growth and development, such as delays in children's mental, physical and emotional development. The Indonesian Ministry of Health stated that *stunting* could slow down the growth of a child's brain, with long-term effects in the form of mental retardation, low learning ability, and a high risk of developing chronic diseases such as obesity, diabetes, and hypertension [7]. *The stunt* could become a threat to the demographic bonus that impacts the development of the social economy. Respond to problematic health son, then handling government to *stunting* embodied with various regulations, for one Regulation President No. 72 of 2021 concerning Acceleration Decline *stunt*. Based on the principle, implementation action intervention specifics and interventions sensitive to lower number *stunting* must be conducted integrative, convergent, and holistic through collaboration with the whole actor good level center, region, and village.

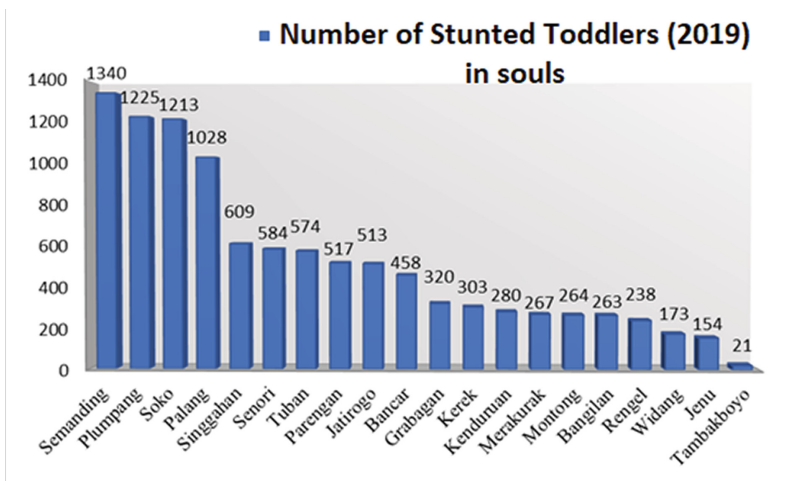
The problem is that District Tuban, East Java, also donate a case of *stunting* in Indonesia. In 2019 level *stunting* in the district Tuban reached 14%. Then in 2021, it declined to 12.24%. Though has are below the threshold limit WHO established prevalence, which is 20%, case *stunting* in the district is still high enough. Problems

Become a priority area to increase the health of society because Regency Tuban has hope for becoming an area free of *stunting* [1]. Though the government has pushed case *stunting*, if reviewed from spread *stunting* per sub-district, the percentage of *stunting* in villages is still high enough, namely 30% - 40%.

Subdistrict Semanding is one district in Tuban that became a location intervention handling *stunting*. In the District Semanding, case *stunting* infected 1,340 children. Then in 2020, birth in the District Semanding reached 1,522 souls, with the number of Low Weight Babies (BBBR) 80 babies and infants nutritious bad as many as 52 souls [8]. Chart numbers *stunting* in the District Semanding compared with other districts in the District Tuban (Fig. 1).

Chairman Public Health Sector Tuban Health Office, Lulut Purwanto, informs one reason emergency risk increase toddler *stunting* in Tuban is that many teenage women in areas experiencing anemia, about 23% to 26% of adolescent daughters [9]. More more, lacking attention Public to nutrition son, since child in content until growth. This indicates effort handling *stunting* through education, health, and fulfilment nutrition is still not optimal. Information from Hall Counseling Family Planned Semanding on duty handle problem *stunting* on the scope districts states that *stunting* in the District Semanding is still very high, with villages included in area locus *stunting* as Village Mining, Village Bektiharjo, and Village Tegalagung.

Data height experienced toddler *stunting* in the District Semanding; District Tuban shows low understanding related *stunting* exists. So that need studied about health literacy to *stunting*. With knowing level health literacy to *stunting*, then can made reference for government for taking step increase literacy health in an effort to resolve *stunting*. Literacy health refers to knowledge a person, motivation, and competence to access, understand, assess, and apply information with destination for give assessment and take the decision in life daily related care health, preventing disease, and promoting health to maintain quality life in undergo life [9]. Based on the data that has been exposed so,



**Fig. 1.** Case *stunting* in the district Tuban in numbers.

a researcher interested for To do research related to level literacy health to *stunting* in parents who have vulnerable children aged 0–5 years in the village Becomes locus *stunting* in the District Semanding, District Tuban, Province East Java, Indonesia. Research results this expected could Becomes reference for Health Center and Government Sub-district Semanding in effort resolve *stunting*, as well give knowledge / insight related literacy health about *stunting* in society.

## 2 Literature Reviews

Over time, the definition of literacy is growing. Today literacy is defined as a basic ability that must be possessed by individuals to be able to process, analyze and think critically about the information obtained. This ability is not only limited to reading and writing, but also the ability to be able to understand and utilize media, technology, visuals, and so on in a good, effective and efficient manner, so as to be able to manage and apply information as needed. Literacy which is seen as an ability in various aspects of life is referred to as multiliteracy [10]. According to UNESCO cited by Kariono, literacy is categorized into six types, namely: 1) *basic literacy* or *functional literacy* (reading, writing, arithmetic); 2) *computer literacy*; 3) *media literacy*; 4) *distance learning and e-learning*; 5) *cultural literacy*; and 6) *information literacy*. Information literacy includes the individual's ability to find, understand, use, and evaluate the information received. Information literacy in this context is comprehensive. Everything capable of providing information/news that informants can understand can be categorized as information, including health information. Literacy related to health information is also known as health literacy.

According to Sorensen, cited by Bittlingmayer et al. [9], health literacy refers to personal knowledge, motivation, and competence to access, understand, assess, and apply information with the aim of providing judgment and making decisions in everyday life related to healthcare, disease prevention, and health promotion to maintain quality of life in living life. This health literacy has an essential role for the community, including 1) increasing knowledge and skills regarding meeting needs and how to utilize health information; 2) increasing knowledge about mass media for the use of understanding sanitation in health literacy; and 3) being able to choose and sort out which information to consume until they can evaluate and utilize information, mainly related to health [11]. Given the importance of health literacy in society, it needs to be improved on an ongoing basis. Efforts to increase health literacy can be done one way through health education. According to Nugraheni, Indarjo, and Suhat, health education has the following roles [12]: 1) has knowledge about health issues; 2) have positive values and attitudes towards healthy living principles; 3) apply the principles of disease prevention; 4) have skills in maintenance, assistance, and health care; 5) having healthy living habits and transmitting healthy living behaviors; and 6) have optimal physical fitness and health.

The level of health literacy can be different. This is caused by several factors such as socioeconomic status and home/family environment, social support, family or peer influence, media, health and education systems, demographics, and politics [13]. Meanwhile, according to Santosa and Pratomo, factors that influence public health literacy are access to information and level of education [14]. Same with Wahyuningsih's opinion,

one of which is the level of health literacy is influenced by one's education [15]. The level of education can affect a person's preferences, behavior, and lifestyle, so that it can affect his health. In addition, the level of health literacy can also be affected by a person's age and occupation. The level of health literacy in the age group over 56 years is usually lower than in the younger age group. This is because the younger age group is more proficient in using technology to access information. The level of health literacy in the working group is usually higher than in the non-worker group. This is because the working group can meet and communicate with many people from various levels of education. So, communication often influences lifestyle and health.

To determine the level of health literacy in individuals, it is necessary to measure it. This measurement is based on the dimensions of health literacy, namely: 1) obtaining relevant health information; 2) understanding relevant health information; 3) assessing relevant health information, and 4) using relevant health information [16]. Various health literacy measurement tools are being developed to obtain valid and reliable measurement tools for multiple conditions and populations. One health literacy measurement tool has been developed based on a multidimensional concept and tested in several countries, including Indonesia, namely the HLS-EU-Q (*Health Literacy Scale-European-Questionnaire*). HLS-EU-Q consists of 12 domains/ indicators and 47 items [9]. This measuring tool integrates the three health contexts (care, disease prevention, and health promotion) with the four dimensions of health literacy (access, understand, assess, and use) [17]. Most studies use the HLS-EU-Q to measure public health literacy toward disease. Meanwhile, health literacy measurement on nutrition has not been widely carried out.

One case of malnutrition that still needs attention is *stunting* or malnutrition. According to the *World Health Organization* (WHO), *stunting* was defined as a height of less than two standard deviations ( $<2SD$ ) [1]. This case can occur in babies aged 1000 days of first birth. However, according to a WHO statement, children under five years ( $<5$  years) are also still vulnerable to contracting *stunting*. *Stunting* cases occur due to inadequate nutrition and infection, causing growth disorders in children. The effects of *stunting* themselves last for a long time, namely reduced cognitive and physical development of children, facilitated productive capacity, poor health, and an increased risk of degenerative diseases such as diabetes. Based on the Decree of the Minister of Health No. 1995/MENKES/SK/XII/2010 concerning anthropometric standards for assessing the nutritional status of children and toddlers' healthy status categories (Fig. 2).

Several factors can influence *stunting* cases, namely: 1) parents' education, influencing knowledge and ability to choose quality food, fulfill nutritional needs, and eating patterns; 2) parents' occupation affects family purchasing power; 3) parents' height, genetically influences the child; and 4) the nutritional status of parents affects the adequacy of the baby in the womb [18]. According to Khasanah et al., *stunting* is caused by multidimensional factors, where intervention is most decisive at 1,000 HPK (Day One Life) [19]. Factor multidimensional among others: 1) practice parenting that isn't good; 2) limited service health; 3) lack access to nutritious food; and 4) lack access to clean water and sanitation. To avoid cases of *stunting*, it is necessary to take preventive measures by 1) improving diet (nutrition), 2) parenting style improvement, and 3) improving

Indicator	Nutritional Status	Z-Score
BB/U	Severe Malnutrition	< -3,0 SD
	Nutritional Deficiency	-3,0 SD s/d < -2,0 SD
	Good Nutrition	-2,0 SD s/d 2,0 SD
	Over Nutrition	> 2,0 SD
TB/U	Very Short	< -3,0 SD
	Short	-3,0 SD s/d < -2,0 SD
	Normal	≥ -2,0 SD
BB/TB	Very Thin	< -3,0 SD
	Thin	-3,0 SD s/d < -2,0 SD
	Normal	-2,0 SD s/d 2,0 SD
	Fat	> 2,0 SD

Note:

- BB = *Berat Badan* (weight)
- U = *Umur* (Age)
- TB = *Tinggi Badan* (Height)
- SD = Standard Deviation

Fig. 2. Child nutrition status category.

sanitation and access to clean water. In addition, *stunting prevention* can also be carried out through specific and sensitive nutritional interventions [20]. Specific nutrition interventions were carried out in groups of pregnant women and toddlers. Meanwhile, nutrition-sensitive interventions were conducted for the general public, not specifically for pregnant women and toddlers [20].

### 3 Methodology

This research uses surveys and descriptive types with a quantitative approach. This method was used because it followed the researchers’ objectives: to measure the level of health literacy for *stunting* in Semanding District, Tuban Regency. The research has a broad scope, therefore using a survey type. This study also intends to describe the variables with the indicators they have. Therefore using descriptive type. Then, data collection to conclude this study using quantitative data. This study also intends to test the validity and reliability of a health literacy measuring instrument (questionnaire) for *stunting* cases in Semanding District, Tuban Regency. In other words, this research involves hypothesis testing. Therefore researchers use a quantitative approach.

This research is located in Semanding District, Tuban Regency, specifically in villages included in the *stunting locus*, namely Bektiharjo Village, Mining Village, and Tegalagung Village. This research’s object is parents with children aged 0–5 years. This study has only one variable, health literacy, with indicators and items according to HLS-EU-Q47. The total population of this study amounted to 28,229. Then the sampling was carried out with a *purposive sampling technique*. *Purposive sampling* is a sampling technique with specific considerations carried out by researchers based on previously known characteristics or characteristics of the population [21]. The references used in taking samples are 1) residents of Bektiharjo Village, Mining Village, and Tegalagung Village; 2) parents with children aged 0–5 years. After that, the sample was narrowed using the

Taro Yamane or Slovin formula to find a total sample of 394 for the examples that must be taken from each village, namely: 1) Village Bektiharjo as many as 131 respondents; 2) Village Mining as many as 66 respondents; and 3) Village Tegalagung as many as 197 respondents. Research data collection was conducted with a spread questionnaire or questionnaire manner *offline*. Whereas the instrument used alone, that is, a questionnaire refers to HLS-EU-Q47. Analysis technique led to the use of method analysis statistics descriptive. The stages of data analysis are: 1) create data tabulation; 2) test the validity and reliability of the instrument; 3) analyze descriptive statistics.

## 4 Results and Discussion

### 4.1 Research Results

Test the validity of the research this use method of *bivariate correlation* with correlation *product moment person*. An instrument is said to be valid if more *p-value* from the score of its *alpha*, which is 0.05. Based on the validity test results, all items are correct. At the same time, the reliability test was conducted using Cronbach's alpha method. Something indicator said reliable if the score *Cronbach's alpha* is more than 0.70. Based on reliability test results, four hands are unreliable, i.e., understanding health, assessment health, applicability health, and understanding promotion health. Order analysis permanent could be done, then need to select and eliminate items on each indicator that do not rely on. Based on the results selection, each can use arrows, i.e., understanding health. A hand could be used if item X2.1 (realize what the doctor said to you).

After the instruments have been tested, the next is descriptive analysis statistics. Analysis descriptive shared Becomes two types: description of the respondent's data and description of results in the questionnaire. Respondent data description discusses the description or background behind respondent research. Based on the results analysis, respondents in the study this majority manifold sex female, with the frequency of 390 respondents or 99%. At the same time, respondents manifold sex men only as many as 4 (four) respondents or 1%. As for base range age, most respondents were 34–36 years. Respondents with age amounted to 65 respondents or 16.50%. At the same time, respondents aged 49 – 51 have the lowest frequency, i.e., only 2 (two) respondents or 0.51%. Then, based on their marital status, the majority of respondent status married, that is, as many as 390 respondents or 98.9%. At the same time, status respondents divorced life only one respondent or 0.3%. Then respondent status divorced dead amounted to 3 (three) respondents or 0.8%. As for facet education Finally, the majority are Middle school graduates, with 144 respondents or 36.5%. Whereas the minority is diploma graduates, that is as many as 7 (seven) respondents or 1.8%. As for facet work, the majority is a motherhouse stair, with as many as 288 respondents or 73.1%. Whereas the minority is assistant house ladders and clerks, that is only 1 (one) person or 0.3%.

Then, for the description results questionnaire containing description results research obtained \_ from answer questionnaire respondents. The following is the description results of the questionnaire research.

Based on Table 1, indicators of access health have 4 (four) items, namely X1.1, X1.2, X1.3, and X1.4, with an average of 3.37 each; 3.29; 3.21; and 3.22. Items X1.1 and X1.2 are included in the very high category. At the same time, items X1.3 and X1.4

**Table 1.** Distribution questionnaire result frequency.

Items	Answer category				Means	Information
	1	2	3	4		
<b>Health access</b>						
X1.1	7	36	157	194	3,37	A
X1.2	7	54	150	183	3,29	A
X1.3	13	60	151	170	3,21	B
X1.4	10	71	134	179	3,22	B
X1	37	221	592	726	3,27	B
<b>Health understanding</b>						
X2.2	5	51	164	174	3,29	A
X2.3	4	70	159	161	3,21	B
X2.4	4	30	129	231	3,49	A
X2	13	151	452	566	3,33	A
<b>Disease prevention access</b>						
X5.1	9	58	187	140	3,16	B
X5.2	41	76	152	125	2,92	B
X5.3	7	49	173	165	3,26	B
X5.4	12	63	158	161	3,19	B
X5	69	246	670	591	3,13	B
<b>Understanding disease prevention</b>						
X6.1	6	42	157	189	3,34	A
X6.2	8	53	161	172	3,26	B
X6.3	4	39	157	194	3,37	A
X6	18	134	475	555	3,33	A
<b>Disease prevention assessment</b>						
X7.1	12	35	206	141	3,21	B
X7.2	8	27	198	161	3,30	A
X7.3	3	74	159	158	3,20	B
X7.4	7	79	173	135	3,11	B
X7.5	33	74	196	91	2,88	B
X7	63	289	932	686	3,14	B
<b>Application of disease prevention</b>						
X8.1	12	37	149	196	3,34	A

*(continued)*



**Table 1.** (continued)

Items	Answer category				Means	Information
	1	2	3	4		
X8.2	6	72	195	121	3.09	B
X8.3	25	71	192	106	2.96	B
X8	43	180	536	423	3,13	B
Promotion access						
X9.1	5	26	126	237	3.51	A
X9.2	29	80	140	145	3.02	B
X9.3	8	52	158	176	3,27	B
X9.4	81	91	123	99	2.61	B
X9.5	5	54	145	190	3,32	A
X9	128	303	692	847	3,15	B
Health promotion assessment						
X11.1	4	52	143	195	3,34	A
X11.2	7	25	154	208	3,43	A
X11.3	2	28	151	213	3.46	A
X11	13	105	448	616	3,41	A
Implementation of health promotion						
X12.1	3	29	143	219	3,47	A
X12.2	4	67	186	137	3,16	B
X12.3	1	54	153	186	3,33	A
X12.4	6	74	144	170	3,21	B
X12	14	224	626	712	3,29	A
Health literacy on <i>stunting</i>					3,23	B

are included in the category high. Indicator access health has a score maximum located in the class, which agrees with the answer with a distribution score of 726. The minimum value lies in the category where the solution does not agree with the distribution score of 37. Then, the grand mean value is owned at 3.27; this signifies that respondents' ability to access information health belong high (good).

Indicator understanding health has 3 (three) items, namely X2.2, X2.3, and X2.4, with an average of 3.29 each, 3.21, and 3.49. Items X2.2 and X2.4 are included in the very high category. At the same time, item X2.3 is included in sort high. Indicator understanding health have a score maximum located in the class very agree with the answer with a distribution score of 566. The minimum value lies in the category the answer is no agreement with a distribution score equal to 13. Then, the grand mean

value is owned at 3.33. This signifies that understanding respondent-related health is classified as very high.

Indicator access prevention disease has 4 (four) items, namely X5.1, X5.2, X5.3, and X5.4, with an average of 3.16 each; 2.92; 3.26; and 3.19. The entire item including in category high. Indicator access prevention disease has a score maximum located in the category answer agree with distribution score of 670. The minimum value lies in the type of answer that does not agree with the distribution score, which is 69. Then, the grand mean value is owned at 3.13. This signifies that the respondent's ability to access information-related methods prevents disease high (good).

Indicator understanding prevention disease has 3 (three) items, namely X6.1, X6.2, and X6.3, with an average of 3.34 each, 3.26, and 3.37. Items X6.1 and X6.3 are included in the very high category. At the same time, item X6.2 is included in sort high. Indicator understanding prevention disease has a score maximum located in the class very agree with an answer with a distribution score of 555. The minimum value lies in the category the answer is no agreement with a distribution score equal to 18. Then, the grand mean value is owned at 3.33. This signifies that understanding respondent-related prevention of disease is classified as very high.

Indicator evaluation prevention disease has 5 (five) items, namely X7.1, X7.2, X7.3, X7.4, and X7.5, with an average of 3.21 each; 3.30; 3.20; 3.11; and 2.88. X7.2 items are included in the very high category. While items X7.1, X7.3, X7.4, and X7.5 are included in category high. Indicator evaluation prevention disease has a score maximum located in the category answer agree with distribution score of 932. The minimum value lies in variety. The answer is absolutely no agreement with the distribution score is 63. Then, the grand mean value is owned at 3.14. This signifies that the ability of respondents to evaluate information related to disease prevention belongs to high (good).

Indicator application prevention disease has 3 (three) items, namely X8.1, X8.2, and X8.3, with an average of 3.34 each, 3.09, and 2.96. X8.1 items are included in the very high category. While items X8.2 and X8.3 incl in category high. Indicator application prevention disease has a score maximum located in the category answer agree with distribution score of 536. The minimum value lies in the type of the answer is absolutely no agreement with the distribution score is 43. Then, the grand mean value is owned at 3.13. This indicates that the respondent's ability to understand information related to disease prevention is high (good).

Indicator access promotion health has 5 (five) items, namely X9.1, X9.2, X9.3, X9.4, and X9.5, with an average of 3.51 each; 3.02; 3.27; 2.61; and 3.32. Items X9.1 and X9.5 included in very high category. While items X7.2, X7.3, and X7.4 are included in category high. Indicator access promotion health have score maximum located in the category very agree answer with distribution score of 847. The minimum value lies in category the answer is absolutely no agree with distribution score equal to 128. Then, the grand mean value is owned of 3.15. This signify that ability respondent in access information related promotion health belong high (good).

Indicator evaluation promotion health has 3 (three) items, namely X11.1, X11.2, X11.3, with an average of 3.34 each; 3.43; and 3.46. Item the entire item including in very high category. Indicator evaluation promotion health have score maximum located in the category very agree answer with distribution score of 616. The minimum value

**Table 2.** Distribution *stunting* rate frequency.

Category	Frequency	Percentage
<i>Stunt</i>	18	4.6%
Malnutrition	68	17.3%
Good nutrition	284	72.1%
Over nutrition	24	6.1%
Total	394	100%

lies in category the answer is absolutely no agree with distribution score equal to 13. Then, the grand mean value is owned of 3.41. This signify that ability respondent in evaluate information related promotion health classified as very high.

Indicator application promotion health has 4 (four) items namely X12.1, X12.2, X12.3, X12.4, with an average of 3.47 each; 3.16; 3.33; and 3.21. Items X12.1 and X12.3 included in very high category. While items X12.2 and X12.4 are included in category high. Indicator application promotion health has a score maximum located in the category very agree with the answer with a distribution score of 712. The minimum value lies in the category; the answer is absolutely no agreement with a distribution score equal to 14. Then, the grand mean value is owned at 3.29. This signifies that the respondent's ability to apply information related promotion of health is classified as very high. Then in a manner general, the grand mean in one variable is literacy health against stunting at 3.23. This show that the level of literacy health respondent against stunting is classified as high (good).

The description results from the study related to level *stunting* in the District Semanding can be seen in Table 2.

Based on Table 2, the frequency of stunting in the District Semanding is as many as 18 souls or 4.6%. Then 68 souls, or 17.3%, experienced nutrition less. Two hundred eighty-four souls, or 72.1%, are normal/have good nutrition. Whereas as many as 24 souls or 6.1% experienced nutrition more so that prone to problems obesity. These data could conclude that in 2022, the *stunting* rate in Kekamatan Semanding, represented by the Village Bektiharjo, village Tegalrejo, and Village Mining, under 10%.

## 4.2 Discussion

Stunting or malnutrition is a condition where the height or weight is less than the nutritional standards set by WHO. The minimum height or weight limit determined by WHO is two standard deviations. If the height or weight is less than two standard deviations (<2SD), it is included in the category of malnutrition or stunting. Stunting, still, a critical case in Indonesia, needs attention from all walks of life, including the government, academics, paramedics, and the general public.

Based on data for 2019, in Semanding District, Tuban Regency, the number of stunted children under five reached 1,340, the highest compared to other sub-districts [22]. However, based on the results of data processed by researchers, in 2022, the number of

stunting in Semanding District will decrease to less than 10%. Theoretically, the stunting rate in an area is influenced by several factors, such as parent's education and occupation [18]. These two factors are closely related to parents' knowledge of stunting. Therefore it is essential to know the level of health literacy regarding stunting in Semanding District.

Based on the results of the research that has been done, the level of health literacy regarding stunting is generally quite good. This is indicated by the grand mean value obtained, reaching 3.23. From the results of the descriptive analysis, health literacy regarding stunting is classified as suitable because of the following: (1) The ability to access health information is relatively good. This is because the respondent always seeks out information related to symptoms of a child's illness that worries him, constantly seeks out information regarding the care/medication of a child's condition that concern him, often finds out what action to take for a child in an emergency, and often find out where to get professional help when your child is sick. (2) Understanding health is excellent. This is because respondents can understand very well the information on leaflets that are included in children's medicines or vitamins, can understand very well what to do in a medical emergency, and can understand very well the doctor's or pharmacist's instructions about how to take medicine or vitamins that are prescribed and given to children. (3) The ability to access information on disease prevention in children is relatively good. This is because respondents often find out information about how to manage unhealthy behavior, often find out information about how to address mental health, often find out information about vaccinations and health checks that children should get, and always find out information about how to prevent or manage conditions that affect health. (4) Understanding disease/disorder prevention is excellent. This is because respondents understand very well health warnings about unhealthy behavior, why children need vaccinations, and why children need health checks. (5) Ability to assess disease prevention information is good. This is because the respondent can judge how reliable the health warning is, can judge very well when a child needs to go to the doctor for an examination, can determine which vaccinations the child may need well, can judge properly which health examination should be done for the child, and can adequately assess whether the information about health risks in the media is reliable. (6) Able to properly apply disease prevention information. This is because the respondent can decide very well whether a child should get vaccinated or not, can decide well how he can protect his child from disease based on advice from friends and family and can decide well how he can save his child from disease based on the information in media. (7) Able to access information related to health promotion properly. This is because respondents always seek information about healthy activities such as exercise, eating healthy food, and nutrition, often find out about activities that are good for children's mental health, often seek information about how their environment can be more health-friendly, often seek to know about political changes that can affect health, and always seek ways to improve the health and well-being of children. (8) Able to evaluate health promotion information very well. This is because respondents can judge which lifestyles affect their children's health and well-being very well, can feel very well whether the living conditions help children stay healthy, and can assume very well which daily behaviors are related to children's health. (9) Able to apply information from health promotion very well. This is because respondents can make decisions to improve children's health

very well, accustom children to exercise well, enhance lifestyles, the environment, and behaviors that affect children's health and well-being very well, and often participate in activities that can improve children's health.

From the results of this elaboration, what needs to be improved regarding health literacy regarding stunting is related to efforts to find out political changes that can affect health because the item has the lowest mean value, for example, in cases of war in other countries. The war impacted the international economy through increased fuel, which affected the rising prices of basic foodstuffs and vegetables. For families with a middle to lower economy, rising food prices will impact the difficulty of meeting nutritional needs properly. According to Khazanah et al., poor access to nutritious food can cause anemia, especially in pregnant women. This encourages stunting. Therefore, the community needs to emphasize knowledge related to health issues so they can take anticipatory action early on. This deficiency can be overcome through health education programs for gathering in villages [12]. This program can be carried out with the help of Community Health Centers or Hospitals to provide health education to the public regarding health and other issues.

Next is improving the ability to assess information in print and electronic media. This can be done by looking for other sources that can be more credible. This effort can later help parents decide how to protect their children from health problems based on information from the media. The next attempt is to increase the intensity and ability to find information on managing children's mental health. Because mental is very influential on the health of the body and children's appetite, the people of Semanding District must improve their ability to access and evaluate information. This follows the explanation of Rusmana et al., which explains that people must be able to increase their knowledge and skills regarding meeting needs and ways to utilize health information, have insight into mass media for the use of understanding sanitation in health literacy, and be able to choose and sort out which information to consume, responsible content and even at the stage of being able to evaluate and utilize information, especially health information more intelligently [11].

Then, theoretically, health literacy is influenced by parents' age, last education, and occupation. Based on the data on the distribution of respondents, most respondents were aged 25–27 years. The younger a person is, the higher the possibility of health literacy that he has mastered [15]. The reason is that at this age, individuals are already in a state of technological literacy. So the dependence on the internet is also high. Automatically, they often search for health-related questions online or through other health consultation applications such as halodokter, look, etc.

Meanwhile, in recent education, the average is junior high school and high school graduates. Middle and high school education is still relatively low. So that the impact is the lack of health literacy on stunting; according to Wahyuningsih, education can affect a person's preferences, behavior, and lifestyle, and it can affect his health. In addition, instruction will increase a person's ability to collect and interpret health information [15].

Meanwhile, in terms of work, the health literacy level of individuals who work at home (not working) is lower than that of individuals who work outside the home [15]. This is because if an individual works outside the house, he will interact a lot with

people, and from there, he can gain new knowledge related to child health. Based on the study results, most respondents in Semanding District work at home as housewives (not working). Thus, the level of health literacy should be low. However, as previously explained, because most parents in Semanding District are 25–27 years old, their health literacy may be high. Because offset by the diligent search for information via the internet. This follows what Wahyuningsih explained: the age group over 56 has a lower health literacy rate than the younger age group [15].

## 5 Conclusion and Future Scope

Stunting rate in the District Semanding Regency Tuban in 2022 will decrease becomes not enough by 10%. This is because the literacy health Public against stunting already belongs high. Understanding health, preventing illness, ability to evaluate information promotion health, and application information from promotion health are already classified as very good. Whereas the ability to access information on health and prevention of illness, the ability to evaluate in effort prevention disease, implementation prevention disease and abilities access promotion health already belong ok. Thus, there are two necessary factors \_ to improve Thing literacy health on stunting: (1) mastery issue health, (2) ability to evaluate information from the mass media, good print, and online.

## 6 Suggestion

Based on the study's deficiencies, the advice is as follows.

- Organize educational programs health for Public sub-district Semanding. This program could work the same with Public health centers or House Sick for socialization to public-related health issues.
- Ability to evaluate information could be improved with the method many read credible sources or could be held accountable. A credible source can make ingredient references to the individual to assess whether something information is Correct or wrong.
- Research this only limited analysis of level literacy health against stunting and linking Among factor age, education, and occupation to level literacy health in a heoretical manner. For the following study, you should effect test was carried out Among factors of age, education, and occupation to level literacy health.
- HLS-EU-Q47 instrument can be used to measure the level of literacy health against stunting. Next, the device should modify research so all indicators can be used.

## References

1. WHO, UNICEF: Global nutrition targets 2025: breastfeeding policy brief (WHO/NMH/NHD14. 7), Geneva: World Health Organization, (2014).
2. Ipan, I., Purnamasari, H., Priyanti, E.: Collaborative governance dalam penanganan stunting, *Kinerja*, 18 (3), 383–391 (2021).

3. Badan Penelitian dan Pengembangan Kesehatan: Laporan nasional raskesdas 2018. , Jakarta: Indonesia (2019).
4. Humas Litbangkes: Angka Stunting Turun di Tahun 2021, <https://www.litbang.kemkes.go.id/angka-stunting-turun-di-tahun-2021/>
5. Badan Perencanaan Pengembangan Daerah Jawa Timur: RKPD Perubahan Kedua Provinsi Jawa Timur, <http://bappeda.jatimprov.go.id>
6. Pratama, B., Angraini, D.I., Nisa, K.: Penyebab Langsung (Immediate Cause) yang Mempengaruhi Kejadian Stunting pada Anak, *Jurnal Ilmiah Kesehatan Sandi Husada*, 8 (2), 299–303 (2019).
7. Kementerian Kesehatan RI: Stunting, Ancaman Generasi Masa Depan Indonesia, <http://p2ptm.kemkes.go.id/kegiatan-p2ptm/subdit-penyakit-diabetes-melitus-dan-gangguan-metabolik/stunting-ancaman-generasi-masa-depan-indonesia>
8. Badan Pusat Statistik Tuban: Kabupaten Tuban dalam Angka 2021. (2021).
9. Bittlingmayer, U.H., Harsch, S., Isler, Z.: Health literacy in the context of health inequality—a framing and a research overview, *New Approaches to Health Literacy: Linking Different Perspectives*, 11–43 (2021).
10. Abidin, Y., Mulyati, T., Yunansah, H.: Pembelajaran literasi: Strategi meningkatkan kemampuan literasi matematika, sains, membaca, dan menulis. Bumi Aksara (2021).
11. Rusmana, A.: Pendidikan Pola Hidup Sehat Melalui Literasi Kesehatan di Kecamatan Lembang Kabupaten Bandung Barat, *Dharmakarya*, 6 (3), (2017).
12. Nugraheni, H., Indarjo, S.: Buku Ajar Promosi Kesehatan Berbasis Sekolah. Deepublish (2018).
13. Okan, O., Bauer, U., Levin-Zamir, D., Pinheiro, P., Sørensen, K.: *International Handbook of Health Literacy: Research, practice and policy across the lifespan*. Policy Press (2019).
14. Santosa, K.S., Pratomo, H.: Faktor-Faktor Yang Berhubungan Dengan Tingkat Literasi Kesehatan Pasien Pelayanan Kedokteran Keluarga, *PREPOTIF: Jurnal Kesehatan Masyarakat*, 5 (2), 681–692 (2021).
15. Wahyuningsih, T.: Faktor-Faktor Yang Mempengaruhi Literasi Kesehatan Masyarakat Di Puskesmas Banguntapan I Bantul DIY, *Jurnal Manajemen Informasi dan Administrasi Kesehatan*, 2 (1), (2019).
16. Utami, M.S.S., Rahayu, E., Psi, S., Parmitasari, D.L.N., Psi, S., Yudiati, E.A., Psi, S.: *Health Literacy*. SCU Knowledge Media
17. Ayunin, Nur, E., Handayani, S., Nia Musniati: Indeks Literasi Kesehatan Mahasiswa Universitas Muhammadiyah Prof . Dr . Hamka ( UHAMKA ), *ARKERMAS*, 6 32–38 (2021).
18. Yuliana, W., ST, S., Keb, M., Hakim, B.N.: Darurat stunting dengan melibatkan keluarga. Yayasan Ahmar Cendekia Indonesia (2019).
19. Uswatun Khasanah, S.S.T., Keb, M., Esyuananik, S., Keb, M., Laili, A.N., SiT, S., Keb, M., Saadah, N., Kp, S.: Kiat Mencegah Stunting pada Balita. *Media Sains Indonesia* (2021).
20. Saadah, N., Hanifah, A.N., Prakosa, H.: *Buku Panduan Praktis: Pencegahan dan Penanganan Stunting*. (2022).
21. Machali, I.: *Metode penelitian kuantitatif (panduan praktis merencanakan, melaksanakan, dan analisis dalam penelitian kuantitatif)*, (2021)
22. Beritabar.co Tuban: Dinkes Klaim Angka Stunting di Tuban 2019 Turun 14 Persen, <https://beritabar.co/dinkes-klaim-angka-stunting-di-tuban-2019-turun-14-persen/>

**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

