

## Original Research Article

## Stunting Prevention Through Promoting Fish Consumption

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**Abstract:** Implementation of Malang Regent's Regulation Number 33 of 2018 Concerning Stunting Prevention Efforts with the Fish-Eating Socialization Movement is an effort by the Malang District Government through the Fisheries Service to educate the public on the benefits and significance of consuming fish and increase the Fish Consumption Rate in Malang Regency. This study seeks to increase fish consumption in the community, particularly among those suffering from stunting, and to determine the Malang Regency government's strategy for educating the public about the benefits and significance of consuming fish. The researchers employ qualitative research methods. The research was conducted in Sananrejo Village, Turen District, Malang Regency, with data collection techniques including observation, documentation, interviews, and the distribution of questionnaires to pregnant women and breastfeeding mothers participating in the Integrated healthcare center village of Sananrejo Village, Turen District, in order to determine how much they know about the nutrition contained in fish. The findings of this study indicate that a high intake of fish will reduce the incidence of stunting because fish is a rich source of protein and Omega 3, both of which are essential for the growth and development of children. To support the priority program for addressing stunting, you can begin ingesting fish in a variety of fish-based processed diets at an early age.

**Keywords:** Stunting, Fish Consumption, Prevention.

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### INTRODUCTION

According to a report by the World Health Organization, an estimated 149 million infants worldwide will be stunted in 2020, while an additional 45 million will be underweight or too thin. Stunting is a developmental disorder characterized by a child's short stature, while his weight may be normal for his age. These child growth and development disorders are typically caused by inadequate nutrition (malnutrition), repeated infections, and inadequate stimulation or psychosocial care during the first one thousand days from conception to age two. Stunting prevention also focuses on the first thousand days of pregnancy. One thousand pregnancies is a critical development period and the most appropriate time for recovery from developmental disorders. Through the Ministry of Home Affairs, the government has issued Circular Number 050/4890/SJ concerning the Acceleration of Handling Stunting in the Regions. This circular letter, dated August 24, 2022, is a derivative of Presidential Regulation Number 72 of 2021. It relates to the national action plan to accelerate the reduction of Indonesia's

stunting rate in 2021-2024. These regulations are implemented through a series of actions and programs down to the village level and have been included in the regional development planning document.

Prevention of stunting in children is still the primary mission to improve the quality of human resources in an area. East Java Province is no exception, which recorded a positive score because the number of stunting cases is slowly decreasing. Based on data from the Indonesian Toddler Nutrition Status Survey, the target and achievement of the prevalence of stunting by the East Java Provincial Government has declined since 2019. It was recorded that the prevalence of stunting in 2019 was 26.86 per cent to 25.64 per cent in 2020. Then in 2021, it fell again to 23.5 per cent. In Malang, stunting is a severe condition characterized by the child's height being below average or the child being very short, and his body does not grow and develop appropriately according to his age and persists for an extended period of time; the number is still high. In this instance, the Malang Regency Fisheries Service is also a component of the Regional Apparatus that has

contributed to the accelerated reduction of malnutrition rates in Malang Regency through the Fisheries Service Program, the Community Eat Fish Movement. Movement to Popularize Fish Consumption in Malang's Stunting Districts by emphasizing the necessity of serving fish as a side dish at the dinner table. Fish can be one of the primary solutions to societal nutritional issues. Fish is an excellent source of protein, carbohydrates, vitamins, minerals, and omega-3 fatty acids. The content of amino acids and omega-3 fatty acids is superior to that of other protein food sources, and the price is reasonable.

Stunting impairs a person's physical and mental development; children at high risk of stunting are malnourished, particularly in terms of protein. Animal products, such as meat and milk, are indeed the greatest sources of protein, but because they are so expensive, not everyone has access to them. Fish can be a solution, given that its price is significantly lower and affordable to the community. Protein in fish is needed to help the growth and development of children, which is taking place at that age. Fish also contains about 1 to 20 per cent fat, most of which are unsaturated fats, so they are easily digested and used by the body directly. Besides having unsaturated fats, sea fish has omega three acids, EPA (Eicosapentaenoic acid) and DHA (docosahexaenoic acid), suitable for cell regeneration, brain and eyes. There are many local fish at low prices whose benefits far outweigh expensive fish such as salmon, tuna or dory fish; mackerel, for example, is rich in Omega-3 at a lower price. Even the omega-3 content of mackerel reaches 2.6 grams per 1 ounce, while salmon is only 1.6 grams. So the protein in fish for people from lower economic circles can still reach them while still being able to fulfil their nutrition without any obstacles to the limitations of their wallets.

In Sananrejo Village, the community's insight into the nutritional content of fish still needs to be improved, so most of their fish are sold outside the village and to the market, rarely for their consumption. All of that is due to their ignorance of the nutritional content of fish. Meanwhile, as the researchers wrote above, their livelihoods are many fish cultivators in the village. The purpose of this study is to describe and analyze the Implementation Policy for Stunting Prevention through the Fish-Eating Socialization Movement and to describe and analyze the inhibiting and driving factors for this Implementation Policy based on Malang Regent Regulation Number 33 of 2018. In the future, it is hoped that this research will contribute to knowledge, in particular implementation of policies and scientific references, and encourage and facilitate the community to be more active and routine in consuming fish as the leading complementary food. It is also hoped that this research can serve as input for policy implementation and decision-making related to the problem of malnutrition in stunting families and other communities that are vulnerable to nutrition.

## LITERATUR REVIEW

Public policy is a form of embodiment of making decisions from government action in response to something to invite some or all people either directly or indirectly so that the goals of policymakers are achieved. Public policies are made with specific objectives to achieve their own goals and find solutions to problems that occur. Dye ("1998: 4-5") in Sadhana ("2013:59") concluded that public policy is a decision intended to address particular problems, carry out certain activities, achieve specific goals, and carry out the tasks of state government and development. Implementation is an application or implementation of an activity that has a purpose. Implementation is also influenced by several factors in its application. Direct and Indirect Impact on Implementation is the title of this implementation model developed by George C. Edward III. It reveals that four variables, namely communication, resources, attitudes or dispositions, and bureaucratic structure, determine the success of policy implementation.

Stunting prevention also focuses on the first thousand days of pregnancy. One thousand pregnancies is a critical development period and the most appropriate time for recovery from developmental disorders. There are nine specific nutritional intervention points, namely the provision of Supplementary Food for pregnant women and underweight children, blood supplement tablets for adolescents, women of childbearing age and pregnant women, Breastfeeding Promotion and Counseling. In addition, there are promotions and counselling on infant and child feeding, management of malnutrition, growth monitoring and promotion, micronutrient supplementation, pregnancy checks, and integrated management of sick toddlers. Stunting is a failure to thrive in children under five due to chronic malnutrition, so children are too short for their age (National Team for the Acceleration of Poverty Reduction, 2017). Toddlers are infants aged 0 to 59 months; the toddler years are crucial to human development. Children's success in the subsequent period is contingent on their development and growth at that age. This age is characterized by rapid growth and development that will never be repeated. Consequently, it is referred to as the golden era (Nutrisiani, 2010).

Several factors cause stunting. The causes include poor parenting practices, limited health services, lack of family access to consumption of nutritious food, and lack of access to clean water and sanitation (National Team for the Acceleration of Poverty Reduction, 2017). This statement is supported by research by Rahmayana et al. (2014) which stated that there was a significant relationship between mothers' attention to children in feeding practices and the incidence of stunting, where feeding practices were in a suitable category showing 55.6% of normal children's height. One of the indirect causes of stunting

is parenting. Parenting is a parenting practice applied by mothers or caregivers to children related to feeding (Santoso and Ranti, 1995 Rusilanti et al., 2015).

Protein deficiency causes growth retardation and bone maturity because protein is an essential nutrient for growth. Even though energy intake is sufficient, if protein intake is lacking, it will inhibit growth in toddlers (Oktarina & Sudiarti, 2013). Efforts to overcome nutritional problems are nutritional interventions (Almatsier et al., 2013). One of them is nutrition assistance. Nutrition assistance is a support activity and service for families in order to prevent and overcome the nutritional problems of their family members. Assistance is carried out by giving attention, conveying messages, encouraging, inviting, providing solutions, delivering services, providing advice, referring, mobilizing, and collaborating (Siswanti et al., 2016). Applying a more varied diet for toddlers, implementing behavioural practices to prevent infection, increasing knowledge of proper parenting for toddlers, implementing Clean and Healthy Behavior, and providing nutritionally appropriate food, resulting in a change in the nutritional status of the toddler for the better (Siswanti et al., 2016).

## RESEARCH METHOD

### Research Approach

Research is conducted to understand the phenomena that occur in an object, in which the research process must be based on the concept of a good and correct research method. This type of research is descriptive through a qualitative approach by describing the commitment of the Sananrejo Village government. The objects and subjects studied are by the facts (Nanawi Hadari, 1991, p. 63). Descriptive research directs attention to solving current problems by the situations and conditions that occurred when the research was carried out.

### Research Locations

The location of the investigation was in Sananrejo Village, Turen District, Malang Province. Policy Implementation Study Based on Malang Regent Regulation Number 33 of 2018 Regarding Stunting Prevention Efforts in Sananrejo Village, Turen District, Malang Regency is the scope of this research.

### Data Sources

According to Arikunto ("1998:144"), data sources are subjects from which data can be obtained. The data sources used in this study are divided into two, namely primary data sources consisting of interviews and observations, as well as secondary data sources originating from written sources such as reading books on stunting, online on the internet, and documents from parties related to the stunting problem.

### Data Collection Techniques

Following qualitative research and the categories of data sources employed, this study's data collection technique consists of face-to-face and telephone interviews between the researcher and the respondent. The second is by observing a process or object with the intent of sensing and then comprehending the knowledge of a phenomenon based on previously acquired information and ideas. Sukmadinata, third, documentation by accumulating and analyzing written, graphic, and electronic documents ("2007:221").

### Data Analysis Techniques

According to Moleong ("2004: 280- 281"), "Data analysis is the process of organizing and sorting data into patterns, categories, and basic descriptive units so that themes and places can be found to formulate working hypotheses as suggested by the data." The data analysis technique used in this study is interactive analysis. This model has four analysis components: data collection, data condensation, data presentation, and conclusion.

## RESEARCH RESULTS

From the research, analysis results in Sananrejo Village, the level of education at school/equivalent ranks highest, and the high number of unemployed people indirectly affects the family's economic condition and the nutritional fulfilment of family members. One of the efforts that can be made to increase fish consumption is to form a positive attitude towards eating fish in mothers and children. The number of stunting in Sananrejo Village, Turen District, occupies the highest number of other villages in Turen District. Mass weighing is one of the activities for monitoring toddlers' growth, carried out 2 (two) times a year, namely in February and August. In 2023, at the mass weighing in February 2023, the number of stunted children in Sananrejo Village, Turen District, was 41. During the movement to socialize eating fish, processed fish products were diversified to teach integrated healthcare center participating women how to cook various dishes. So that they understand the various kinds of dishes made from fish and present them with various variations of dishes that are exciting at their dinner table.

Malang District Health Office is one of the Stakeholders that supports the implementation of stunting in Malang Regency and sponsors several activities related to stunting in Malang Regency. The Health Office has the main task of assisting the Regent in carrying out regional government affairs based on the principle of regional autonomy in the health sector and other tasks assigned by the Regent in his/her field of affairs. In carrying out these tasks, the Health Office is headed by a head of service assisted by a secretary and several fields. The Head of the Health Service is responsible to the Regent through the Regional

Secretary to carry out his duties and functions. The Population Control and Family Planning Service (DPPKB), to reduce stunting in Malang Regency as well, first launched Quality Families (KB) in 2016 with developments over time in the year 106 Quality Families were formed in Malang Regency. Meanwhile, in 2023, Qualified Families in Malang Regency became 179. The BKKBN related to Quality Families refers to the DPPKB, which used to be KB Village, now a Qualified Family. 2024 according to an informant from the DPPKB, 390 Quality Families will be formed, and later, in every District and Village, there will be Quality Families. According to the government's call to reduce stunting, which was previously 20%, it can be reduced to 14%.

Based on Parmenides 8 of 2022, three things are currently prioritized in using village funds in 2023: national economic recovery, national priority programs, and mitigation and management of natural and non-natural disasters. In its use for national priority programs, it is explained that village funds can be used for several activities, which include improving and consolidating Village SDGs data and village development data collection through the village development index, plant and animal food security, prevention and reduction of stunting, improving the quality of human resources villagers, increasing overall community involvement in the development and empowerment of village communities, expanding access to health services according to village authority. Meanwhile, operational funds for the village government are allowed a maximum of 3 per cent of the ceiling for each village. In addition, it can also be used in activities to tackle extreme poverty. One way is through direct cash assistance.

The Malang Regency Fisheries Service, through its innovation, namely "Centing Mami", which stands for "Prevent Stunting with the Movement to Socialize Eating Fish", is an effort to increase knowledge of mothers about the nutrition of fish, especially among pregnant women, breastfeeding mothers, toddlers, teenagers women of childbearing age, and other nutrition-prone communities. The "Centing Mami" innovation provides education about the benefits of consuming fish, as well as ways to process fish into snacks that are healthy, attractive, varied, easy, and affordable for the wider community, and also have economic value with good potential as processed household products. Fish processing into healthy handlers can be done through various processes, namely by boiling, steaming, frying, grilling, and grilling so that eating fish becomes a habit in the family without feeling bored because of cooking it with various variations. In 2022, to be precise, in March 2022, the Malang Regency Fisheries Service is carrying out a Stunting Prevention Campaign with the Movement to Socialize Eating Fish which is located in Sananrejo Village, Turen District, which is a village

with a high potential for stunting compared to other villages in Turen District.

Through the implementation of promotional activities, fish markets and the diversification of processed fish-based products, the Malang District Fisheries Service has prioritized accelerating the prevention of stunting in order to encourage and facilitate the community to be more active and habitual in consuming fish as the primary complementary food. With regular consumption of fish, it is anticipated that the nutritional character of the community can be maintained and improved. With a strong immune system, the family will be robust and free of nutritional issues, including stunting. Knowledge of the nutritional value of fish encourages the community to cultivate their own fish, which, in addition to being ingested by the family, can also be sold, thereby boosting the economy of the local community.

Currently, by implementing Centing Mami in Sananrejo Village, Turen District, the number of stunted children in the village can be reduced from 70 to 41. Prior to the implementation of Centing Mami in Sananrejo Village, Turen District, there were 70 stunted children. Researchers through interviews and distributed questionnaires to respondents obtained from the interviews and results of filling out their questionnaires. The consumption of fish for the residents of Sananrejo Village, especially children under five, pregnant women, and breastfeeding mothers, has increased, as seen from their answers to the questionnaire about how many times they consume fish in 1 week. Another benefit of Centing Mami was that the Community of Sananrejo Village, Turen District increased their knowledge of the nutritional content of fish and could make various types of processed fish. In Sananrejo Village, Turen District, the Malang Regency Fisheries Service Program also assists fish cultivators; now, many Sananrejo Village, Turen District residents have their ponds. In addition to the results being consumed by residents, they are also sold in the market to increase the income of Sananrejo Village, Turen District residents.

## CONCLUSION

On the basis of an analysis of extant research data, the authors are able to draw the following conclusion: the Campaign to Popularize Eating Fish held in Sananrejo Village, Turen District, can reduce stunting rates in Sananrejo Village. Through the results of mass weighing conducted by the integrated healthcare center team twice a year in Sananrejo Village, Turen District, it has been determined that the potential for stunting in Sananrejo Village has decreased to 41 children under the age of five, or that the number of stunted children in Sananrejo Village has decreased by 57.14 percent. This is because they consume fish with greater diligence than in the past. The Malang District Fisheries Service team



implemented the Movement to Socialize Eating Fish. Based on the results of interviews and observations, it is clear that the decrease in the malnutrition rate in Sananrejo Village is attributable to the community's increased consumption of fish. In addition to being consumed by the residents, the crops are also sold on the market to increase their income. As a result, residents who were previously unemployed now have jobs and sufficient income to meet their daily requirements.

## SUGGESTIONS

In increasing development in Malang Regency in implementing stunting reduction programs in Malang Regency, especially in Sananrejo Village, Turen District, it is necessary to involve the participation of the private sector in the form of CSR (corporate social responsibility) facilitation.

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