EVALUATION OF THE HEALTHY INDONESIA PROGRAM MODEL IN STUNTING PREVENTION MANAGEMENT IN THE WORKING AREA OF PUSKESMAS TAJINAN, MALANG DISTRICT

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ABSTRACT

Stunting is one of the problems that can human development globally. East Java is one of the provinces that has a high prevalence of stunting. This shows the low quality of health services. The government is committed to reduce stunting rates through several health policies. The policy is in the form of a program launched by the Indonesian Ministry of Health (Kemenkes), namely the Healthy Indonesia Program with a Family Approach (PIS-PK), Provision of Supplementary Food and the First 1000 Days of Life (HPK). The purpose of this study was to evaluate the intervention program for the management of nutritional status of stunting under five with elements of input, process and output. This research is a qualitative research. The initial informants were determined by purposive sampling technique. The data collection method was through in-depth interviews, observation and documentation of 6 initial informants consisting of the head of the puskesmas, the coordinating midwife for Children and Mother Health, the nutrition coordinator, the village midwife, framework and some target mothers. Two triangulation informants consisting of the family health coordinator and the district health office nutrition coordinator. The results showed that at the input stage, the health workers involved still needed additional, there were no nutrition workers. In the process element, some of the programs were well implemented including the family approach through home visits by framework, healthy programs for pregnant women, exclusive breastfeeding, growth monitoring, supplementary feeding, giving vitamin A except for the taburia program. In the output element, the coverage of the prevalence of stunting in the Tajinan Public Health Center, Malang Regency in 2018 was 17.24%

BACKGROUND

Stunting is one of the problems that can human development globally. Currently, around 162 million children under the age of five are stunted. If this trend continues, it is projected that by 2025 there will be 127 million children under five years of age who will be stunted. According to the United Nations Children's Emergency Fund (UNICEF) more than half of children are stunted or 56% live in ASIA and more than a third or 37% live in Africa. (1)

Indonesia is a country with a high number of stunting, namely there are 32 provinces out of 34 provinces whose numbers are above 20% based on the stunting rate limit from WHO. Based on data from Riskesdas (2018), the stunting rate in Indonesia for toddlers reaches 30.8%, consisting of 11.5% very short children and 19.3% short children. The stunting rate in Indonesia decreased when compared to the 2013 Riskesdas data, which reached 37.2%, consisting of 18% very short toddlers and 19.2% short children under five (2)

According to the results of Riskesdas, East Java is one of the provinces that has a high prevalence of stunting. The number of children under five with stunting in East Java in 2018 reached 25.2%.
Malang Regency is included in the 100 priority districts for stunting with a stunting rate of 20% spread over 6 priority villages. (3) Based on data from the District Health Office. In Malang in 2017, the prevalence of stunting in toddlers was 30,323 out of the total number of toddlers 154,188 under five, while for the Takarya Puskesmas it had 3,443 children under five with 607 short children and 322 very short toddlers so that the stunting cases were 929 under-five. (4) Preliminary study data dated March 12, 2019 in Malang Regency, in the working area of the Tajinan Public Health Center, to be precise in Jambearjo Village, there were 145 children under five who were stunted, while at the Wagir Health Center, there were 136 children under five who were stunted.

There are many factors that cause stunting, including LBW. Babies whose birth weight is less than 2,500 grams will carry the risk of death, child growth disorders, including the risk of stunting if not handled properly. This is also supported by research conducted by Tiwari which states that children with a history of LBW birth are at risk of suffering from stunting compared to children who do not suffer from LBW. (5) Research conducted in Nigeria also states that children who experience LBW are at risk of suffering from stunting. (6)

The level of education also affects the incidence of stunting, children born to educated parents are less likely to be stunted than children born to parents with low levels of education. (7) Research conducted in Nepal also states that children born to parents who are well educated educated children have a lower potential to suffer from stunting than children who have uneducated parents. This is supported by research conducted by Haile which states that children born to parents who have higher education tend to receive health education more easily during pregnancy, for example in the importance of meeting nutritional needs during pregnancy and exclusive breastfeeding for 6 months. (7)

The problem of stunting is an intergenerational nutritional problem. Women who are stunted will give birth to babies with low birth weight, which in turn contribute to the cycle of malnutrition in life. (7) Children born to mothers with a height less than 150 cm tended to have more stunted babies (42.2%) than the group mothers with normal height (36%). (3) According to a study conducted in Ghana with a sample of children under five years of age, it was shown that children whose mothers were less than 150 cm were at risk of suffering from stunting. (7)

Exclusive breastfeeding for less than six months is also a factor that causes stunting. A study conducted in Nepal stated that children aged 0-23 months had a significantly lower risk of stunting, compared with children aged > 23 months. This is due to the protection of breast milk that is obtained. (9)

The World Health Organization (WHO) states the resolution of global targets on maternal and child nutrition as a priority. Its main target is to reduce stunting in children by 40% globally or a 3.9% reduction annually between 2012 and 2025. (10) The 2015-2019 National Medium-Term Development Plan states that there are four priority health development programs in Indonesia, one of which is the reduction in the prevalence of stunting.

According to WHO, prevention efforts in stunting can be started in adolescence. Young women can begin to be given knowledge and understanding of the importance of fulfilling nutrition as a teenager. Fulfillment of nutrition during adolescence can prevent malnutrition during pregnancy. Adequate nutrition
during pregnancy can prevent stunted growth in the fetus.\(^{(1)}\)

In addition, stunting prevention is also focused on the first 1,000 days of life (HPK), namely pregnant women, nursing mothers, children 0-23 months. The 1,000 HPK period is an effective period in preventing stunting because it is a period that determines the quality of life. At 1,000 HPK children will experience a "Golden Period" where the child's growth will be rapid. Therefore, in this period, nutritional coverage must be fulfilled starting from 270 days during pregnancy and the first 730 days after the baby is born.\(^{(12)}\) However, according to WHO, prevention of stunting does not only start at 1,000 HPK, but begins in adolescence by improving nutrition during pregnancy and adolescence.\(^{(11)}\)

Prevention carried out in pregnant women can be done by improving the nutrition of pregnant women. Nutritional improvement that can be done during pregnancy is by giving blood plus tablets at least 90 tablets during pregnancy. In addition, mothers who experience chronic energy deficiency (KEK) need to get additional food to improve the nutrition of these pregnant women.\(^{(13)}\)

Increasing the practice of breastfeeding is also one of the measures to prevent stunting. Early initiation of breastfeeding and exclusive breastfeeding for six months can provide protection against gastrointestinal infections.\(^{(11)}\) This statement is supported by research conducted by Tiwari which states that children who are exclusively breastfed are less likely to suffer from stunting when compared to children who are not breastfed exclusive.\(^{(11)}\)

Based on research studies, it is known the factors that cause stunting. The factors that cause stunting from the mother are the mother's education level and the mother's nutritional status. Factors causing stunting in infants were history of FGR, history of LBW, sex of the child, and history of exclusive breastfeeding. Based on the data, this study aims to evaluate the management of the nutritional status of children under five with stunting in the work area of the Tajinan Public Health Center, Malang Regency through system elements (input, process and output) including programs.

: 1) healthy for pregnant women, 2) exclusive breastfeeding for infants 0-6 months, 3) monitoring of infant growth and development, 4) provision of supplementary food, 5) giving vitamin A supplements to toddlers, 6) giving taburia, 7) Approach Family

METHOD

This research is a qualitative research in the working area of Puskesmas Tajinan Malang Regency. The initial informants were determined by purposive sampling technique. The data collection method was obtained through in-depth interviews, observation and documentation of 6 initial informants consisting of the head of the puskesmas, the coordinating midwife for Child and Mother Health, the nutrition coordinator, the village midwife, framework and target Balinese mothers. The validity of the data was carried out on two triangulation informants consisting of the family health coordinator and the nutrition coordinator of the Malang Regency Health Office. The data analysis technique in this study is to reduce, display and draw conclusions.

RESULTS AND DISCUSSION

The results of the interview on the management of the nutritional status of children under five with stunting at the Tajinan PHC based on the input element in terms of human resources (human resources) still require additional nutrition coordinator positions. The task in the management of stunting toddlers has been
integrated, but there is no special team and the main tasks and functions are not according to their competence, especially the nutrition coordinator held by midwives. Health framework in participating in the management of children under five are very helpful, besides being active in every posyandu activity, framework also carry out home visits to motivate clients who have not received health services. The results of the observation of supporting facilities were sufficiently supportive in the management of stunting under five, including drugs, vitamins, micronutrients and the equipment used for examination. All of the funding is subsidized from the District Health Office, it's just that there is a shortage of anthropology for measuring Body Length (PB) in infants, because they only have one tool.

Based on the process element, the Tajinan Public Health Center has implemented part of the 1000 HPK Program according to the guidebook. The Tajinan Public health center also has a policy in the management of stunting toddlers, namely by empowering village midwives as the main implementing staff with the help of framework and existing health workers to motivate all pregnant women to carry out integrated ANC visits at the PHC.

In accordance with the World Health Organization. Stunting can start from the nutritional condition of pregnant women, even before pregnancy will determine fetal growth. Undernourished pregnant women are at risk of giving birth to babies with low birth weight, and this is a major cause of stunting. (11) After birth, babies who are not properly breastfed will be at risk of suffering from various infections due to insufficient nutritional and unhygienic diet. Infant and Child Feeding greatly determines a child's growth. After the age of 6 months, children need to get nutritional intake to meet the needs of micro, macro and safe nutrition. (14). Socio-economic conditions, food security, availability of clean water and access to various basic service facilities have an effect on the high prevalence of stunting. (15)

Supported in his research on maternal factors and the quality of antenatal services at risk of low birth weight (LBW): A study on mothers who went pregnant to health personnel and gave birth at Banyumas Hospital in 2012 said that mothers who had poor quality antenatal services both have a chance of giving birth to a baby with low birth weight (LBW) 5.85 times compared to mothers who have good quality antenatal care because LBW is a factor that plays a role in the incidence of stunting. (5)

Based on the output element, the prevalence of stunting has decreased in 2018, namely 17.24%, this figure is much less than in 2017 and 2016, which reached up to 30% more. The prevalence reduction is supported by other programs including: Healthy program for pregnant women, exclusive breastfeeding, growth monitoring, supplementary feeding, vitamin A supplementation and taburia administration.

The healthy program for pregnant women in managing the nutritional status of children under five with stunting in the work area of the Tajinan Public Health Center, from the input element, namely human resources (HR) still requires additional, especially during health promotion related to nutrition improvement and health socialization. The main tasks are integrated, but not in accordance with their main duties. There are no nutritionists at the Tajinan clinic according to their competence, while the health promotion staff are also nurses. The health framework of the Tajinan Public Health Center in managing stunting toddlers, focusing on
healthy for pregnant women, have been very helpful. Last year, even though the Tajinan Public Health Center had implemented the 1000 HPK program, the difference in 2019 was that apart from the Tajinan Public Health Center still implementing 1000 HPKs, the Tajinan Public Health Center also mobilized framework for home visits for pregnant women to motivate them to carry out integrated ANC visits at the Puskesmas. Based on the results of the interview, the funding for the management of healthy focused stunting for pregnant women is subsidized by the District Health Office. The focus of attention, especially on pregnant women who experience Lack of Calorie Energy, is milk. The results of observations on the facilities and infrastructure of the Tajinan Public Health Center in the management of stunting with a healthy focus for pregnant women are good. The availability of vitamins and medicines for pregnant women, equipment for ANC and counseling media.

The results of the interview revealed that at the implementation stage, all health workers had run the 1000 HPK program according to the guidebook, even to reduce the prevalence of stunting at the Tajinan Public Health Center, which participates framework to go directly to home visits as monitoring targets who have not received health services, especially mothers. pregnant to do ANC as an early detection and examination. The results of documentation of the coverage of health program output for pregnant women include health services for pregnant women who are monitored through Antenatal Care visits. The percentage of K1 visits was 96.5%, and K4 visits were 84.8%.

Based on the results of the research that The implementation of the nutritional status of stunting toddlers in the work area of the Tajinan Public Health Center, related to the health program for pregnant women, has been integrated quite well but has not been 100% resolved, because Human Resources (HR) still need additional, especially implementing personnel who are in accordance with their competence for cross-sectoral socialization about integrated ANC services.

The integration of a healthy program for pregnant women at the Tajinan Public Health Center is influenced by many factors, namely health workers implementing the program according to procedures, framework are also mobilized for home visits to motivate pregnant women who have not carried out integrated ANC visits. This is also supported by the percentage of pregnant women who made ANC (Antenatal Care) visits during the K1 visit, which was 96.5%, and K4 visits were 84.8%. This means that the compliance of pregnant women in the ANC examination has met the standards of the Tajinan Public Health Center policy and thus greatly affects the prevalence of stunting.

According to research on the risk factors for stunting under five, one of them is ANC (Antenatal Care) visit. ANC visits that were carried out regularly were able to detect early pregnancy risks in 18 mothers, especially those related to nutritional problems. In this study, it was found that mothers who made ANC visits only once (less than the minimum standard, namely four times) had a 2.4 times risk of having a stunted toddler compared to mothers who had standard ANC visits.

The exclusive breastfeeding program at the input stage in the management of stunting toddlers in the work area of the Tajinan Center is not conducive, because health workers who socialize breastfeeding mothers to provide exclusive breastfeeding for their babies are not in accordance with their main duties and functions. Some health workers have not
received training on lactation counselors, so they lack confidence when providing health education to patients. Health workers are the key to success in exclusive breastfeeding education for patients. This fact is in accordance with research which states that the support of health workers is related to exclusive breastfeeding behavior.  

Based on an interview with the policy of exclusive breastfeeding for infants aged 0-6 months at the Takarya Public Health Center, namely: a) Skin to skin contact between mother and baby immediately after giving birth b) Breastfeeding in the first 60 minutes c) Giving colostrum d) Emptying one breast before transferring the baby to the other e) Not giving any additional food including plain water, sugar water or other food f) On-demand breastfeeding, according to the baby's wishes day and night at least 8 times per day. All health workers at the Tajinan Public Health Center must know the existing policies, so that at least they can provide counseling or health education related to standardized exclusive breastfeeding. Thus, the implementation process has been integrated in accordance with the policies of the Tajinan Public Center, although it is not yet optimal. Supported by the coverage of the exclusive breastfeeding program output at the Tajinan Public Health Center in 2018, which was 89.3%. This means that exclusive breastfeeding greatly affects the prevalence of stunting.

According to research conducted by saying that the gain in body length is significantly better at years 2 and 3 in children who are breastfed longer than children who are weaned at year 2, or vice versa, the earlier the toddler, no longer receiving breast milk, the gain in body length is lower than those who received breast milk, as a result the chances of stunting are greater.  

The growth and development monitoring program at the input stage in the management of stunting toddlers in the working area of the Tajinan Public Health Center is quite integrated. Every month the village midwife as the implementer with the help of framework carries out weighing and measuring the babies during the posyandu, it's just that the supporting facilities, one of which is anthropometry, is still lacking, because the Tajinan Puskesmas has 1, and 9 assisted villages. At the stage of the process, the Tajinan Public Health Center has a policy in monitoring the growth and development of infants, namely monitoring the body weight measured every month and the height of the toddler is measured simultaneously every year. These results are recorded and entered into a predetermined growth and development chart, if an obstacle is found in the anthropometric results, the village midwife will report it to the relevant Puskesmas and do a direct visitation to the target toddler's house. Based on the interview, the coverage of the infant's growth and development monitoring program is through weighing and measuring periodically every month and simultaneously through posyandu activities. The percentage of the presence of infants and toddlers in monitoring growth and development at the Tajinan Public Health Center in 2018 was 79.5%.

In accordance with research related to consumption patterns, health status and its relationship with nutritional status and development of toddlers, it is said that nutrition in children under five (0-5 years age group) is very important because it is the foundation for health throughout his life, as well as strength and intellectual abilities. The results of his research also said that toddlers had a greater average developmental value of 71.60 ± 11.91
compared to preschool-aged subjects who had an average developmental value of 68.08 ± 15.54 so that monitoring of children's growth and development should be taken into account. Pay attention because it will affect the nutritional status, one of which is stunting.\(^{(20)}\)

The supplementary feeding program at the input stage in the management of stunting toddlers in the working area of the Tajinan Public Center is quite integrated. Every month the village midwife as the implementer, assisted by framework, implements the posyandu, and that is where additional food is given to toddlers who come during weighing and measurement at the cost of PMT procurement from the Public and subsidized from the Health Operational Cost (BOK) fund. The policy of providing additional food at the Tajinan Public Health Center involves framework and the Public in posyandu activities. The Tajinan Public Health Center has standardized procedures related to PMT including: 1) Local food or food ingredients and not given in the form of money 2) PMT Recovery is only as an addition to the food consumed by target children on a daily basis, not as a substitute for the main meal 3) PMT intended to meet the nutritional needs of target toddlers as well as a learning process and a means of communication between mothers of target children 4) PMT is an activity outside the puskesmas building with a Public empowerment approach that can be integrated with cross-program activities and other related sectors. Based on the interview, the coverage of the supplementary feeding program was through activities during the posyandu by participating framework and the Public. The output coverage of infants and toddlers at the posyandu that received PMT at the Tajinan Public Health Center in 2018 was 79.5%. This means that it is in accordance with the policy standards of the Tajinan Public Health Center, however, children must always be considered in the quality and quantity of food so that their health status, especially nutritional status can be optimal.

Supported by research on risk factors for underweight children aged 7-59 months said that parenting plays a very important role and greatly affects the nutritional status of children, one of which is stunting.\(^{(21)}\) One of the key aspects of nutritional parenting is the practice of compiling and giving complementary foods, namely in the form of additional food\(^{(22)}\) The preparation practice can include prelactal feeding, colostrum, exclusive breastfeeding and weaning practices\(^{(23)}\).

Program for giving vitamin A: The input element in managing the nutritional status of children under five with stunting in the work area of the Tajinan Public Health Center has been integrated. The village midwife as the implementer of giving vitamin A at the posyandu and assisted by framework to record the targets who have received and who have not received the vitamin. Provision of vitamin A is subsidized by the District Health Office. The policy of giving vitamin A in Tajinan was implemented in February and August by involving framework to give directly from house to house to targets who had not received vitamin A when they were recorded during the posyandu activities. The percentage of output of the distribution of vitamin A in infants in February was 100%, while in August it was 98.51% and the percentage of distribution of vitamin A to infants in February was 100%, while in August it was 98.77%. This supports the integration of the vitamin A administration program, thus it is in line with the policy target of the Tajinan Public Center and greatly affects the prevalence of stunting.
According to research on vitamin A and zinc deficiency as a risk factor for
stunting, it was revealed that vitamin A deficiency affects protein synthesis, thus
affecting cell growth. For this reason, children who suffer from vitamin A
deficiency will experience growth failure and lack of micronutrients (Vitamin A and
Zinc), one of the factors that influence the incidence of stunting. (19)

The program for giving taburia to
the input element in managing the
nutritional status of stunting under five in
the work area of the Tajinan Public Health
Center is not effective, because the health
workers who are nutrition coordinators are
not in accordance with their competence, so
they do not really understand what should
be the main task and function in procuring
Taburia. Procurement of Taburia is subsidized by the District Health Office,
while the Puskesmas only plans taburia
needs and distributes it to children under
five with the right target based on
projection calculations from the Central
Statistics Agency. The policy of giving
Taburia at the Tajinan Public Health Center
in terms of duties and implementation
tools has not been integrated, especially in
the management of the provision of Taburia,
which includes planning needs, provision,
storage, distribution, recording and
reporting, monitoring and evaluation has
not been coordinated at all. Based on
interviews and documentation, the
coverage of the 2018 Taburia distribution
program output for children under five is
0%. This did not have a positive effect on
reducing the prevalence of stunting under
five.

In accordance with the research on
the evaluation of the Taburia giving
program, the organization must be
coordinated. This program involves other
sectors of the sub-district and sub-district in
disseminating Taburia to the Public. The
handbook on the management of giving
Taburia states that socialization is a very
important part of increasing the coverage of
Taburia giving. Socialization needs to be
carried out in order to mobilize all levels of
society to support the activity of giving
Taburia as a micronutrient to prevent
stunting. (24)

CONCLUSION
The healthy program for pregnant
women related to the reduction of stunting
under five has gone very well, this is
supported by pregnant women who made
ANC visits during K1, namely 96.5%, and
K4 visits by 84.8%. framework are also
mobilized for home visits to motivate
pregnant women who have not carried out
integrated ANC visits. The exclusive
breastfeeding program related to the
reduction of stunting under five has gone
very well, this is supported in 2018 the
coverage of babies using exclusive
breastfeeding, which is 89.3%.

The development monitoring
program for toddlers in relation to the
reduction in stunting of children under five
is running very well, this is supported by the
presence of infants and toddlers for growth
and development monitoring of 89.3%. The
village midwife also weighs body weight
every month and simultaneously every year
to measure body length in infants and
height in children.

The supplementary feeding
program related to reducing stunting of
children under five is running very well,
is supported by the presence of 79.5%
of infants and toddlers who get additional
food at the posyandu. The program of
giving vitamin A to infants related to the
reduction of stunting toddlers is running
very well, this is supported by the
distribution of vitamin A to infants in
February of 100%, while in August 98.51%
and the percentage distribution of vitamin
A to infants in February it was 100%,
while in August it was 98.77%. The taburia program related to reducing stunting under five is not effective. This is supported by the nutrition coordinator, who as the implementing staff is not in accordance with the main duties and competencies and the coverage of the 2018 taburia distribution program for children under five is 0%.

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