

Evaluation of the Program to Overcome Undernutrition in the Working Area of Cendrawasih City Health Center, Makassar

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ABSTRACT

Poor or insufficient nutrition can have serious impacts, especially on vulnerable groups such as toddlers, pregnant women and the elderly. Malnutrition not only has a direct impact on physical health conditions, but can also hinder optimal growth and development, both physically and mentally. **Objective:** The aim of this study to evaluate the implementation of the malnutrition prevention program in the Cendrawasih Health Center work area, Makassar City in 2023. **Method:** This type of research is qualitative research. The samples for this research are community health center staff, stakeholders and program users. **Results:** Evaluation of the malnutrition prevention program in the Cendrawasih Health Center working area, Makassar City is based on *Context, Input, Process* and *Product analysis*. The research results show that in *terms* of social and cultural conditions, some communities pay less attention to children's nutrition. *Input* is in the form of funds used, namely BOK funds and funds from the local government. Apart from that, the availability of human resources is inadequate. The facilities and infrastructure used are quite complete with the availability of anthropometric tools. *Process* Growth monitoring is carried out by community health center officers and posyandu cadres every 10 days. *Product* The nutritional status of toddlers is starting to improve, this is proven by the number of cases which has decreased. Mothers' knowledge about the characteristics or signs that children are experiencing malnutrition is still lacking. Apart from that, mothers still don't fully understand parenting patterns for toddlers. **Conclusion:** The evaluation of the malnutrition prevention program at the Cendrawasih Community Health Center in 2023 is still not going well because the *input* is not adequate, *the process* has not been carried out optimally so that *the product* produced does not meet the achievement targets. Efforts that can be made include active cadres in socializing children's nutrition. Apart from that, counseling efforts regarding malnutrition among pregnant women also continue to be increased. **Keywords:** Evaluation, Program, Malnutrition.

INTRODUCTION

Adequate and balanced nutrition is a crucial element in establishing the foundation for individual and community health as a whole. ¹ Poor or insufficient nutrition can have serious impacts, especially on vulnerable groups such as toddlers, pregnant women and the elderly ². Malnutrition does not only have a direct impact on physical health conditions, but can also hinder optimal growth and development, both physically and mentally ³.

The problem of malnutrition has a significant long-term impact on the productivity and human resource potential of a country ⁴. Children who are malnourished have a higher risk of experiencing developmental delays, learning difficulties, and chronic health problems throughout their lives ⁵. In addition, pregnant women who are malnourished are at risk of giving birth to babies with low birth weight, increasing the risk of infant death and health complications for the mother. Therefore, overcoming malnutrition is not only the responsibility of the health sector, but is also a national priority in the context of sustainable human development. By improving the nutritional status of society, it is hoped that optimal human resource potential will be achieved, as well as reducing the burden of disease and long-term health care costs ⁶.

According to a Unicef report, in 2021, the number of people suffering from malnutrition in the world will reach 767.9 million people, an increase of 6.4% compared to the previous year ⁷. Another report stated that in 2020, the number of people suffering from malnutrition in the world reached 768 million people, an increase of 18.1% from the previous year ⁷. In addition, UNICEF estimates that 45.4 million children under five years globally experienced acute malnutrition (wasting) in 2020 ⁸. The problem of malnutrition remains a serious challenge in improving global health ^{9,10}.

According to the results of the 2022 Indonesian Nutrition Status Survey (SSGI), Indonesia experienced a reduction in stunting rates of 2.8% from 2021 to 2022, with the achievement of reducing stunting by 14% in 2024 in accordance with the RPJMN target ^{11,12}. Several cases of malnutrition in Indonesia include malnutrition, stunting, wasting and underweight. According to a report from the Center for Indonesian Policy Studies (CIPS), there are 21 million Indonesians who are malnourished ¹³. Then, the stunting rate in Indonesia will increase to 21.6% in 2022 ¹⁴. Furthermore, the prevalence of wasting under five in Indonesia will increase by 0.6 points from 7.1% to 7.7% in 2023 ¹⁵. Then, the prevalence of underweight toddlers in Indonesia increased to 7.7% in 2022 ¹¹.

The Indonesian government has carried out several interventions to overcome nutritional problems,

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such as providing additional food, exclusive breastfeeding, providing animal protein, and nutritional counseling. Apart from that, the government has also allocated a switch from providing additional food in the form of biscuits to local food to help overcome nutritional problems¹⁵.

Suboptimal nutritional conditions are still a serious public health problem in various regions, including Makassar City, where cases of malnutrition and stunting are still serious problems. For example, in 2023, an 8-month-old baby boy in Makassar was reported to be experiencing malnutrition and stunting¹⁶. In 2022, the number of malnourished and malnourished children under five in South Sulawesi, including Makassar, will reach 41 thousand children under five¹⁷. The local government continues to strive to overcome this problem of malnutrition. Deputy Mayor of Makassar, Fatmawati Rusdi, requested that assistance for families affected by malnutrition be strengthened, and provide additional nutritional assistance such as eggs, vitamins and basic necessities to help with recovery¹⁸. Apart from that, efforts to prevent stunting are also continuing, with the stunting rate in Makassar in 2022 dropping to 21.6%¹⁴.

Although various malnutrition prevention programs have been implemented, evaluation of the success and impact of these programs is still an important need^{19,20}. One of the areas in Makassar City that is the focus of attention is the Cendrawasih Community Health Center Work Area. This health center has a big responsibility in ensuring public health services, especially related to overcoming malnutrition²¹. In the context of the Cendrawasih Community Health Center Working Area, Makassar City, the urgency of overcoming malnutrition becomes increasingly important considering the demographic characteristics and local environmental conditions. Therefore, evaluating malnutrition prevention programs in this region is a strategic step to ensure that the efforts made can have a maximum and sustainable impact on the health and welfare of local communities. Therefore, the malnutrition prevention program implemented by the Cendrawasih Community Health Center is key in ensuring that public health efforts achieve targets effectively and evenly.

The relevance of this program lies in the strategic role of Community Health Centers as primary health care providers. By focusing on overcoming malnutrition, the Cendrawasih Community Health Center can provide a more proactive preventive and promotive approach, including early identification and intervention for groups at high risk, such as toddlers, pregnant women and the elderly. Apart from that, the Cendrawasih Community Health Center also has the capacity to become a center for information and education regarding healthy nutrition, helping the community adopt a balanced diet and providing an understanding of the importance of nutrition in maintaining health. Thus, this program not only aims to treat malnutrition conditions but also encourages sustainable behavior change.

The programs to overcome malnutrition at the Cendrawasih Community Health Center include IMD (Early Breastfeeding Initiation), providing additional food, care for toddlers with malnutrition, and macronutrient supplementation, it is clear that the Cendrawasih Community Health Center is working hard to overcome the problem of malnutrition in that community. These programs reflect a serious commitment to improving the nutritional status of the community, especially among children under five who are vulnerable to malnutrition.

The Supplementary Feeding Program (PMT) is an intervention program carried out for toddlers who suffer from malnutrition. The aim of PMT is to improve children's nutritional status and to meet children's nutritional needs in order to achieve good nutritional status and nutritional conditions according to the child's age. PMT can be local food or factory food, and can be used to restore children's nutritional and health conditions. PMT is needed because

malnutrition is a nutritional status based on an index of weight and height according to age in toddlers, which is important because it is one of the risk factors for morbidity and death. PMT achievements at the Cendrawasih Community Health Center increased to 100% in 2023. Two other programs, namely care for toddlers with poor nutrition and macronutrient supplementation, were no longer carried out in 2023, while the achievements in 2022 were 86% each.

Several obstacles are faced in implementing malnutrition programs. Factors such as accessibility, availability of resources, community understanding, and environmental factors often influence the effectiveness of these programs. Therefore, formative evaluation becomes important in this context. Formative evaluation can provide in-depth insight into how programs are implemented in the field. This includes assessing the implementation of IMD, the effectiveness of supplementary feeding, the quality of care for children under five with malnutrition, and the level of participation and compliance in macronutrient supplementation programs. By understanding the obstacles faced during the implementation process, Cendrawasih Community Health Center can make relevant improvements to increase the effectiveness and positive impact of the malnutrition prevention programs.

This research was initiated out of concern about the low achievement of targets for the malnutrition prevention program in the Cendrawasih Community Health Center Working Area. The existence of cases of stunting and malnutrition among children under five, as well as suboptimal nutritional requirements for vulnerable groups such as pregnant women and the elderly, are indicators that the programs that have been implemented have not been completely successful. Therefore, a comprehensive evaluation is needed to get an accurate picture of the effectiveness and sustainability of the malnutrition prevention program at the Cendrawasih Community Health Center.

In addition, this evaluation will also open up opportunities to explore various factors that might influence program success, including operational constraints, community participation, and resource support. By understanding the context of the problem in more depth, it is hoped that this research can provide a valuable contribution to increasing the effectiveness of malnutrition prevention programs at the local level and provide recommendations that can be adopted by the Cendrawasih Community Health Center and related agencies in efforts to improve overall community health.

METHOD

This research uses qualitative methods, the decision to use a qualitative approach was based on several in-depth considerations. One reason is to achieve an in-depth understanding of the social, cultural, and economic contexts that can influence program implementation and outcomes. By applying qualitative methods such as in-depth interviews and observations, researchers can explore the complex layers of this context, providing a deeper picture of the program's impact. The data sources used are primary data and secondary data, with a total of 15 informants. Determining informants used the *Snowball* sampling technique and data obtained from in-depth *interviews*.

RESULTS AND DISCUSSION

The results of this research were obtained through in-depth interviews using an interview guide, which aims to determine the evaluation of the malnutrition prevention program in the Cendrawasih Health Center working area, Makassar City. This evaluation is based on *Context, Input, Process* and *Product analysis*.

1. Context

Context evaluation is an activity carried out to collect various information to determine the objectives and background of the

program²². Context evaluation aims to understand these factors and how they influence program implementation²³. Therefore, this evaluation is related to the planning stage in a program which must pay attention to several things before the program runs.

Based on the results of in-depth interviews with key informants, information was obtained that the social and cultural conditions of some communities pay little attention to children's nutrition and still provide formula milk to toddlers. Apart from that, economic factors also play an important role in fulfilling toddler nutrition. A good economy can reduce cases of malnutrition among children under five.

Many factors cause malnutrition, including parenting errors, inadequate nutritional intake, economic factors and comorbidities. Therefore, the Health Service aims to improve the nutritional status of children under five, starting from providing quality nutrition program services, increasing knowledge about nutrition both in child care and daily balanced nutritional needs, increasing assistance with infrastructure at posyandu, as well as providing additional food (PMT) of good quality for people suffering from malnutrition and toddlers who do not suffer from malnutrition²⁴.

2. Inputs

The nutritional status of toddlers can be evaluated in various ways, but usually the assessment is carried out using anthropometry which is used to calculate three indicators: weight for age (WW/U), height for age (TB/U), and weight for height (WW) /TB). When the third index above is out of balance, nutritional problems occur.

a. Human Resources (HR)

Program implementation is the implementation of the plans that have been made. The program that has been implemented actually contains many risks of failure. The success of the implementation of a program is determined by human resources and organizational units and various variables that are interconnected with each other²⁴. Human resources (HR) are one of the input components, namely employees who play a very important role in implementing a program in health services in order to achieve the desired goals²⁵. Apart from looking at it in terms of availability and adequacy, human resources must also have the appropriate capabilities and qualities and be able to implement malnutrition prevention programs.

The human resources (HR) that are really needed in relation to handling malnutrition are trained Community Health Center nutrition officers and skilled Posyandu cadres²⁶. Human resources who play a role in implementation are nutrition officers at Cendrawasih Health Center, Makassar City, village midwives and posyandu cadres. Community Health Center nutrition officers play a major role in coordinating program implementation. This is in accordance with the 2017 Technical Instructions for Providing Additional Food from the Ministry of Health of the Republic of Indonesia which states that the parties who play a role in the PMT provision program at the Community Health Center level are the person in charge of the nutrition program, village midwife or cadre.

Based on the results of the interview, there is one nutrition officer who is responsible for coordinating program implementation. The limited number of nutrition officers means that officers do not always come to program implementation because it coincides with other duties. This can affect success because a lack of resources to carry out implementation results in implementation not running effectively.

Previous research at the Lolowa'u Community Health Center showed that the malnutrition prevention program was implemented despite human resources that did not match educational qualifications, very minimal facilities and infrastructure, and an implementation process that was not in accordance with proper management. Coverage of all

programs that are not achieved due to the background of the Input component and its implementation process²⁷.

Apart from nutrition officers, posyandu cadres are also the main movers in implementing posyandu activities. Posyandu cadres have a very important role in posyandu activities. In implementing posyandu activities, cadres are required to be active in promotive and preventive activities, as well as motivators for community members. The role of cadres is very important because cadres are responsible for implementing the posyandu program, if cadres are not active then the implementation of posyandu will also not run smoothly and as a result the nutritional status of babies or toddlers cannot be detected early and clearly. This will directly affect the level of success of the posyandu program, especially in monitoring the growth and development of toddlers. Cadres play a role in child outcomes and maternal health, because through cadres mothers receive health information first²⁸.

b. Fund

Adequate funding will have a significant impact on the implementation of a program. Funds are a component that is no less important in implementing growth and development monitoring programs for toddlers²⁵. The Makassar City Health Service receives a budget that comes from central BAK funds and from Makassar City APBD funds. From the South Sulawesi Province APBD, it depends on existing cases of malnutrition, the form of PMT and medicines. Meanwhile, health operational assistance (BOK) is directed directly to the community health center. However, it is felt that the existing budget is still not optimal for implementing this program considering the large number of program activities that must be carried out.

The source of funds obtained is in line with previous research which states that the source of funds for overcoming malnutrition in improving nutritional status in Semarang comes from the APBD and is supported by BOK funds. The government provides BOK program funds to all community health centers to increase preventive health efforts²⁴. Apart from that, this is in accordance with the 2021 Republic of Indonesia Ministry of Health regulations Chapter 1 Article 1 Paragraph 2 which states that BOK is a fund used to ease the community's burden on financing the health sector, especially services at Community Health Centers, reducing maternal mortality rates, infant mortality rates and malnutrition.

Thus, it can be concluded that the evaluation of the malnutrition prevention program at the Cendrawasih Community Health Center, Makassar City through Input indicators still requires several improvements in terms of infrastructure, some complete equipment is still needed both at the community health center and at the posyandu, and still requires several more human resources in carrying out the nutrition prevention program. not enough.

c. Facilities and infrastructure

The availability of facilities and infrastructure is also an inhibiting factor in the success of malnutrition prevention programs. The facilities and infrastructure available at the community health center are adequate, but it is different at the posyandu, which does not yet cover posyandu activities. Availability of posyandu facilities is defined as all types of equipment, work equipment and facilities that function as main or auxiliary tools in carrying out the work of posyandu cadres²⁸.

The results obtained from in-depth interviews are that the facilities and infrastructure used by the Cendrawasih Health Center in Makassar City are adequate and have been used optimally so that they can support program implementation. A complete anthropometry kit is used as a measuring tool in program implementation. Program implementers can also use measuring tools properly so that the tools can be used optimally.

Health facilities are an important part of efforts to implement health programs. Means for preventing and dealing with malnutrition include screening facilities for the discovery of malnutrition cases, means for dealing with and recovering from malnutrition cases, as well as means for maintaining children's health in an effort to maintain good nutritional status in children ²⁶.

Other facilities used, for example tables, chairs and waiting chairs, are still lacking. The place used for outreach and counseling regarding nutritional information is also inadequate because it is not spacious enough. Socialization and counseling in an effort to increase nutritional needs require a spacious and comfortable place so that information can also be received well. The hope is that the facilities and infrastructure in posyandu activities will be further improved and a suitable place such as a hall will be provided so that mothers, toddlers, and posyandu cadres will also feel safe and comfortable ²⁸. This is in accordance with previous research that health facilities and infrastructure are in the form of health facilities, counseling and information centers for individual communities ²⁴.

3. Process

Process evaluation aims to evaluate whether the strategies and activities used are effective in achieving program objectives and whether interactions between personnel and program participants are positive. To identify a problem in a process, whether it is an activity or event, with the aim of finding out to what extent the plan has been implemented and which components need to be improved ²³.

The evaluation *process* describes the implementation of the program. The process evaluation in the malnutrition prevention program discusses what activities are carried out in the program, the obstacles encountered and the effectiveness in completing the program.

a. Growth Monitoring

Growth monitoring is aimed at early detection of growth disorders to prevent signs of malnutrition in children ²⁹. The series of activities in monitoring the growth and development of children under five include routinely measuring children's growth and development such as weighing, filling out the KMS, determining the nutritional status of children based on weight gain and height of toddlers ²⁵. The existing body weight is made into a point in the KMS so that it can be connected to the child's growth line. The aim of this activity is none other than to find out from an early age whether the child's growth is normal or not. From the identification of growth monitoring, various efforts will be made to follow up if there are several obstacles that cause the child's growth to be hampered ²⁶.

Posyandu has a role in monitoring the nutritional status of toddlers so that malnutrition can be prevented by monitoring every month at the posyandu. Counseling about the growth and development of toddler nutrition at posyandu can increase the knowledge and attitudes of mothers of toddlers in monitoring the growth and development of toddlers ³⁰. Monitoring growth and development is an activity to detect early deviations in growth (deficient or poor nutritional status, short children), developmental deviations (delayed speaking) and mental and emotional deviations in children (impaired concentration and hyperactivity) ³¹.

This Posyandu activity is routinely carried out in the implementing midwife's village, however, the lack of awareness of parents of toddlers regarding the importance of bringing their children to the Posyandu to see their nutritional status means that early detection of malnutrition cases is not carried out properly. The regularity of mothers of toddlers going to Posyandu will influence the achievement of good monitoring of toddler growth. This is in line with research on factors related to maternal participation in weighing toddlers, where

there is a relationship between knowledge and attitudes and maternal participation in weighing toddlers in the Cendrawasih Health Center UPT Makassar City ^{32 work area}.

Posyandu cadres have the role of monitoring the health of mothers and toddlers. Forms of monitoring carried out by posyandu cadres include home visits and monitoring toddler nutrition. Posyandu cadres carry out home visits if there are toddlers who do not participate in posyandu activities for three consecutive times. This attendance monitoring is carried out so that parents of toddlers understand and are aware of the importance of attending posyandu activities.

The supporting factor in the program is the response of mothers of malnourished toddlers as program recipients. Mothers of malnourished toddlers accepted the program and did not reject it. This makes it easier for officers to implement programs in anthropometric measurements and record and report. The role of parents is very influential in the care of malnourished toddlers which is an advantage in outpatient care for malnourished toddlers ²⁴.

The inhibiting factor in implementing the program is that parents of toddlers rarely attend posyandu and do not record or monitor weight gain in toddlers. Parents of malnourished toddlers do not record their acceptance of PMT. This is not in line with the Ministry of Republic of Indonesia's 2011 Guidebook for Providing Additional Recovery Food which states that recording activities can be carried out starting from the parents of toddlers who make simple notes regarding the acceptability of additional recovery food. Parents of malnourished toddlers do not attend posyandu activities regularly because the children always cry when invited to posyandu and are embarrassed because the toddlers are not gaining weight and are considered sick by the community. This is in line with previous research which states that mothers of toddlers who are disobedient or routine in posyandu activities are influenced by educational, accommodation, environmental and social factors ³³.

b. Supplementary Feeding (PMT)

Implementing a supplementary feeding program (PMT) for toddlers is very important because it can optimize all aspects of children's growth and development in terms of increasing human resources ³⁴. Providing additional nutrition is also one way to instill a healthy lifestyle. The benefit of providing additional food is to improve and increase the nutritional status of children ³⁵.

The implementation of the PMT program at the Cendrawasih Community Health Center is in accordance with the SOP. The facilities and infrastructure available are capable of supporting the implementation of the program, but not all toddlers in the Cendrawasih Community Health Center working area receive PMT, this is because there are still some mothers who rarely bring their toddlers to weigh them so that their child's growth and development is not known to the community health center staff or cadres.

In this program notification is made from the community health center nutrition officer to the village midwife. Then the village midwife notifies mothers of malnourished toddlers through cadres. Cadres will submit notifications offline or online using the WhatsApp application. This is in accordance with the Technical Instructions for Providing Additional Food from the Indonesian Ministry of Health (2017) which states that there must be notification from the District or City Health Service to the Community Health Center and Community Health Center to cadres before distribution takes place. So it can be concluded that the distribution notification is in accordance with the instructions used.

Recording and reporting on implementation is carried out by program implementing officers. Recording is carried out by each implementing officer and reported every month. The recording is carried out by the village midwife who is then reported to the implementing nutrition

officer. Then the implementing nutrition officer records and reports to the person in charge of Community Health Efforts (UKM) who will then proceed to the person in charge of Individual Health Efforts (UKP) and the Head of the Community Health Center. After that, a final report is made to the Makassar City Health Service.

This research is in line with research which shows the results that there is a significant relationship between the consumption of additional food and the weight gain of toddlers. Consumption of PMT according to needs and supervision from nutrition officers will improve the nutritional status of malnourished toddlers²⁷. In addition, economic conditions can affect children's nutrition, a poor economy causes children to have insufficient nutritious food, so that parents' income becomes a determining factor in food purchasing power³⁶. To deal with malnourished toddlers, the Community Health Center can only provide additional food from the Health Service and provide education in the form of counseling about nutritious food to the families of malnourished toddlers.

Food intake or feeding to toddlers is not only related to availability but must also pay attention to 6 conditions. The 6 requirements for feeding toddlers are frequency, quantity, texture, type, activity and cleanliness. If the provision of food refers to these 6 conditions, it can help in increasing the weight of toddlers²⁷. The frequency of giving food to toddlers is 2-3 times for staple foods and 1-2 times for snacks. Meanwhile, the amount of food given depends on the toddler's receptivity. Efforts that can be made by the government in order to meet the lack of nutritional needs and daily food consumption which results in the emergence of health and nutritional problems in nutritionally vulnerable groups are food supplementation in the form of Providing Supplementary Food (PMT)²⁷.

c. Counseling or Counseling on Toddler Nutrition

Good knowledge creates good attitudes, which can then influence the habits carried out in implementing parenting patterns towards children. Mothers who have a high level of knowledge are more aware of healthy lifestyle patterns, reflected in the implementation and fulfillment of adequate nutrition, whereas mothers who have a low level of knowledge are less aware of the importance of implementing a healthy lifestyle and fulfilling adequate nutrition in caring for children³⁷. Lack of knowledge is the cause of many risk factors for health problems in toddlers, one of which is malnutrition³⁸.

Based on the results of interviews with key informants and supporting informants, information was obtained that the process of outreach or counseling regarding toddler nutrition in overcoming malnutrition was carried out by community health center officers and posyandu cadres. Counseling or counseling about toddler nutrition is given when parents of toddlers take their toddlers to the Community Health Center to monitor their growth. The obstacles faced in nutritional counseling for toddlers are mothers who are not focused on listening and conditions that are not conducive. Efforts to overcome these obstacles are carried out by taking a *face-to-face approach*, as well as increasing counseling when the mother is pregnant.

Increasing knowledge regarding balanced nutrition can be one of the efforts to overcome malnutrition. These efforts can take the form of health education carried out in various ways, namely by methods in the form of health education, group methods with lectures, discussions, seminars, simulations, and *face-to-face approaches*³⁹. The front guard in overcoming malnutrition among children under five is the posyandu and posyandu cadres. One of the tasks of posyandu cadres is nutrition education. Nutrition education to the community can be carried out by posyandu cadres, which is a form of nutrition counseling outside the building by holding meetings with primary target groups (pregnant women, breastfeeding mothers), secondary targets and the wider community⁴⁰.

4. Products

Product evaluation describes the program's achievements during implementation. This achievement can be seen using three assessments, namely things that were done after the program was running, program advantages and expected and unexpected results. Product evaluation is an assessment that determines the achievement of results from program implementation. This evaluation will compare the results achieved from the measurements and the targets set by both national and regional governments²⁵. This evaluation can help in making further decisions in interpreting and measuring the results obtained in accordance with the objectives that have been set. Information about these activities determines whether the program can be continued, changed or even stopped²³.

The current target for achieving the prevention and control of malnutrition is that the number of cases decreases. The success of the activity process in a program is closely related to the resource components in the input.

a. Nutritional status

Efforts to improve nutrition aim to improve the quality of community nutrition, food consumption patterns, nutritional awareness behavior, as well as the availability and quality of nutrition and health services in line with advances in science and technology. Good nutrition is the foundation of health and also influences the body's resistance to disease, as well as the growth and development of physical and mental systems. Good nutrition will reduce the rate of death, disease and disability, which will improve the quality of human resources⁴¹.

Nutrient intake is one of the direct causes that can influence the nutritional status of toddlers. Nutritional intake can be obtained from several nutrients, including macronutrients such as energy, carbohydrates, protein and fat. Malnutrition at the age of five has the impact of reducing the immune system so that it is susceptible to infectious diseases. Infectious diseases such as diarrhea, pneumonia, malaria, measles and AIDS are known to cause the most deaths in children under five with malnutrition²⁷.

Based on the results of interviews with key informants and supporting informants, information was obtained that the nutritional status of toddlers was starting to improve, this was proven by the number of cases which had decreased. The efforts made include active cadres in socializing children's nutrition. Apart from that, counseling efforts regarding malnutrition among pregnant women also continue to be improved. Nutritional needs are very important in helping the process of growth and development in toddlers. As a result of poor nutritional status during toddlerhood, it can cause stunted growth, cause toddlers to become lazy about carrying out activities related to energy production, disrupt the toddler's immune system so that they are easily attacked by infectious diseases, hamper optimal brain growth, as well as changes in behavior shown by toddlers such as being restless, irritable, crying and the ongoing impact is apathetic behavior⁴².

A good diet means that the child gets the nutritional needs that contain nutritious substances, so that the child's nutritional status is well controlled. Likewise, vice versa, if a child's diet is deficient then nutrients such as carbohydrates, proteins, fats, minerals, vitamins which are really needed by the body are not fulfilled, so that cells or body tissues can experience a decline in function which will affect the child's growth and development⁴³.

Factors that influence nutritional status in toddlers include family income or shopping budget. Low income means people are unable to buy food in the required quantities. However, there are residents or communities who have sufficient income and more than enough to provide family food but many do not utilize nutritious food ingredients,

this is caused by other factors⁴⁴. Another factor is a lack of knowledge about nutrition or the ability to apply this information in everyday life. Family size is also one of the factors that influences the nutritional status of children under five, where the amount of food available for a large family may be sufficient for a family half the size of the family, but not enough to prevent nutritional disorders in the large family. Apart from the factors above, there are many factors that influence a person's nutritional status, including individual, family and community factors⁴⁵.

b. Mother's Knowledge about Toddler Nutrition

The low knowledge of some mothers regarding the importance of providing nutritious and balanced food for their children can be linked to the PEM problem. Low knowledge and education of parents, especially mothers, is the most important underlying causal factor, because it greatly influences the level of ability of individuals, families and communities to manage existing resources, to obtain sufficient food and the extent to which nutritional health and environmental sanitation services are available. put to best use⁴⁶.

Based on the results of interviews with informants, mothers' knowledge about the characteristics or signs of children experiencing malnutrition is still lacking. Apart from that, mothers still don't fully understand parenting patterns for toddlers. Mothers' knowledge about nutrition is influenced by inappropriate parental behavior during infancy, namely a history of exclusive breastfeeding. Mothers do not know the importance of exclusive breastfeeding because they are given formula milk that does not suit the needs of the baby's age. Almost 80% of breastfeeding mothers are able to produce sufficient amounts of breast milk for their babies up to 6 months, even mothers who are malnourished can produce breast milk for up to the first 3 months. Exclusive breastfeeding can reduce the risk of malnutrition in toddlers 7 times because breast milk has a nutritional composition that suits the nutritional needs of babies aged 0-6 months⁴³.

The role of cadres as health educators can be maximized by using various media, however, posyandu cadres still have not maximized the use of socialization media. It is hoped that the explanation given can also be accepted by mothers and toddlers. Counseling is carried out to increase the knowledge of mothers of toddlers regarding nutritional needs²⁸. In line with research⁴⁶ which states that the problem of malnutrition is still widespread in developing countries, including in Indonesia, there is a lack of education regarding nutrition, especially for toddlers, which influences the fulfillment of nutrition for toddlers.

c. Achievements of Supplementary Feeding (PMT)

The cause of health problems in children is due to the lack of providing nutritious food by parents with lower incomes. Research by (DiGirolamo et al., 2020) shows that it is important to provide assistance to parents with low incomes to overcome children's unmet nutritional needs, because nutrition has a big influence on cognitive development. One way to solve nutritional problems in children is that the government is holding a program, namely providing additional or healthy food (Tantriati & Setiawan, 2023).

Evaluation of the Supplementary Feeding Program (PMT) is something that needs to be done to maintain or serve as a reference in improving the quality and effectiveness of the program. Implementation guidelines already exist as a reference for implementation. This is the basis for the need to conduct an evaluation of the implementation of the Supplementary Feeding Program (PMT) which can be taken into consideration for improving the implementation of the Supplementary Feeding Program (PMT) in the future⁴⁷.

Toddler Supplementary Food is nutritional supplementation in the form of additional food in the form of biscuits with a special formulation and fortified with vitamins and minerals given to babies

and toddlers aged 6-59 months in the underweight category. For babies and children aged 6-24 months, this additional food is used together with Complementary Food for Breast Milk (MP-ASI)⁴⁸. Additional food given to children, especially in developing countries, should be fortified with micronutrients such as iron, calcium and zinc. Diet management is a way to overcome the problem of malnutrition in toddlers by the government with PMT for 90-120 days⁴⁹.

Providing PMT or MP-ASI that is not on target is also an obstacle to programs to overcome malnutrition. PMT or MP-ASI should be intended for malnourished toddlers but consumed by other families, economic factors, lack of community involvement in program activities and comorbidities. This is due to a lack of public knowledge about children's nutrition and parenting patterns. Even though this program has been implemented for several years, until now the results have not been as expected. This can be seen from the large number of people suffering from malnutrition from year to year. In fact, the program is aimed at reducing the number of cases of malnutrition and improving the nutritional status of the community⁴¹.

CONCLUSION

Evaluation of the malnutrition prevention program in the Cendrawasih Health Center working area, Makassar City is based on *Context, Input, Process* and *Product analysis*. Based on the research results, it was concluded that:

1. *The context* of the malnutrition prevention program shows that the social and cultural conditions of some communities still pay little attention to children's nutrition and provide formula milk to toddlers, so children are found to be malnourished. Apart from that, economic factors also play an important role in fulfilling nutrition for toddlers. A good economy can reduce cases of malnutrition in toddlers.
2. *Input* in the malnutrition prevention program shows human resources, namely nutrition facilitators, midwives, cadres in each sub-district and mothers of toddlers. Currently there is only 1 Nutrition Facilitator officer who has a large working area. Funds for overcoming malnutrition from the Community Health Center are in the form of BOK funds and funds from the local government. Facilities and infrastructure are quite complete with the availability of anthropometric equipment (scales and height measurements), but there is still no adequate educational media for counseling mothers of toddlers.
3. *The process* in the malnutrition prevention program shows that growth monitoring is carried out by community health center officers and posyandu cadres every 10 days. The type of PMT that is usually given is biscuits or porridge. Counseling or counseling about toddler nutrition is given when parents of toddlers take their toddlers to the Community Health Center to monitor their growth.
4. *Products* in the malnutrition prevention program show that the nutritional status of toddlers is starting to improve, this is evidenced by the number of cases which has decreased. Mothers' knowledge about the characteristics or signs that children are experiencing malnutrition is still lacking. Apart from that, mothers still don't fully understand parenting patterns for toddlers. PMT is not always available at the Puskesmas, so fees are collected which will be allocated to provide PMT at the next posyandu

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