Nutrition Management of Children Age 1-4 Years in Health Center Jayapura City

Anggraymun. H M. Arwam ¹, A. L. Rantetampang², Rosmin Tingginehe³ and Anwar Mallongi⁴

¹ Concentration of Health Policy Administration, Master Program in Public Health Faculty of Public Health, Cenderawasih University, Jayapura

Abstract; Ministry of Health data recorded that at least 3.5 million children died from malnutrition and poor food quality. Regional Health Research (Riskedas) results in 2007, 2010, and 2013 of 61.1% ideal toddlers with good weight and height but 38.9% of them are experiencing nutritional problems. While the results of basic health research in Papua itself is 16.4% of under-fives who suffer from malnutrition. The research type is descriptive qualitative using primary and secondary data. This research was conducted in 5 health institutions in Jayapura District. This research will be conducted in 5 health centers representing 5 districts located in Jayapura City area. The 5 Health Centre are: Yoka Health Center, Hedam Community Health Center, West Koya Community Health Center, Elly Uyo Community Health Center and Tanjung Ria Public Health Center (Health centre). It is planned to collect data from the second week of July-August 2017. The population in this study were all children aged 1 - 4 years who visited during January -December 2016. The sample is a total sample of 97 children under five suffering from malnutrition. The respondents in this study were all mothers with under-fives children under nutrition and nutrition officers and nutrition cadres in each Health centre (each Health centre 1 nutritionist and 1 nutrition cadre), and mothers with toddlers who were sampled. The results of in-depth interviews related to the management of children aged 1-4 years in the Jayapura city who experienced less nutrition showed that of the five procedures implemented are organizing or division of tasks but the procedures in the field, follow-up, recording / reporting and supervision is not fully executed so that handling cases are not appropriate with the anthropometry of malnourished children, it is necessary to have nutrition related policy and supervision from provincial and regency / municipal health office in Papua especially in Jayapura city.

Keywords: Management of malnourished children, nutritional status

1. INTRODUCTION

Implementation of nutritional management involves many aspects such as the presence of nutritional teams needed to perform anunnesa activity, nutritional status determination and nutritional services, both nurse and food management, to under-five malnourished children (Arwan, 2015; Kemenkes RI, 2015). According to (Kemenkes RI, 2014)

there are several ways to assess the nutritional status of anthropometry presented in the form of indexes associated with other variables, these variables are age, weight and height. Study argues that weight and height are important parameters for determining human health status, particularly related to nutritional status. The use of the BB / U and BB / TB index is an indicator of nutritional status to see the presence of impaired growth function and body composition.

ISSN: 2349-4689

Anthropometric index that is often used is BB / U (weight by age) describes the presence or absence of malnutrition, cannot explain whether chronic or acute. TB / U (height by age) describes the presence or absence of less acute nutrition (MOH, 2014). Weight is one measure that provides a picture of tissue mass including body fluids. Weight is very sensitive to changes in body weight at the time of measurement, which in its measurements provides an overview of the present state. Weight is most widely used because it requires only one measurement, it is only dependent on age determination, but less able to describe the trend of nutritional change over time (Kemenkes RI, 2011).

Indonesia is among the top five countries in the world for the number of stunting in children. This means 9.5 million children under the age of five suffer from malnutrition (WFP, 2010). The national weighing coverage of common targets is 73.0%, but the lowest first-order coverage of under five weighing is 25.0% of 34 provinces in Indonesia (Indonesia's health profile, 2015).

Riskedas results in 2007, 2010, and 2013 of 61.1% ideal toddlers with good weight and height but 38.9% of them are experiencing nutritional problems. While the results of basic health research in Papua itself is 16.4% of under-fives who suffer from malnutrition. The results of pra-survey at several health centers in Jayapura can be explained as follows: Yoka Community Health Center was found to be 44 under-five children under five years old, Hedam Community Health Center was 44 children, Elly

^{2.3} Master Program in Public Health Faculty of Public Health, Cenderawasih University, Jayapura

⁴ Environmental Health Department, Faculty of Public Health, Hasanuddin University, Makassar

Uyo Public Health Center in Polimak as many as 2 children under five malnourished and Tanjung Ria Health centre there were 7 less malnutrition.

During the process of data collection in the current month, the researcher found blank blanks within a certain month so that the completeness of the data becomes an important issue. Initial data collection conducted in Kota Jayapura was only obtained from four Health centre, whereas one Health Centre did not get data of nutritional status report because of various constraints. This is what encourages researchers to see more deeply related to management at health centers located in the city of Jayapura

II. MATERIALS AND METHODS

The research type is descriptive qualitative using primary and secondary data. This research was conducted in 5 health institutions in Jayapura City. This research will be conducted in 5 health centers representing 5 districts located in Jayapura City area. The 5 Health Centre are: Yoka Health Center, Hedam Community Health Center, West Koya Community Health Center, Elly Uyo Community Health Center and Tanjung Ria Public Health Center (Health centre). It is planned to collect data from the second week of July 2017. The population in this study were all children aged 1 - 4 years who visited during January - December 2016. The sample is a total sample of 97 children under five suffering from malnutrition. Respondents in this study were all mothers with underfives children under nutrition and nutrition officers and nutrition cadres in each Health Centre (each Health centre1 nutrition officer and 1 nutrition cadre), and mothers with toddlers who were samples. Data sources were primary data is taken from the results of direct interviews with secondary respondent. Data obtained from medical record records of nutrition officers at the local health center. For example, the nutritional status data less toddlers (Kuntjojo, 2009).

III. RESULTS

Overview of Jayapura City

The area of Jayapura is 94,000 ha. The administrative boundaries of the northern part of Jayapura bordered with pacific ocean, western part with east sentani district Jayapura regency, south with skamto regency kerom, and east with papua new guinea. Based on data bps (2012) the population of the city of Jayapura is 286.956 inhabitants.

According to the spread of hugs spread over five districts. Abepura district as many as 81,777 people, south Jayapura district 74.825 inhabitants, north Jayapura as many as 72,704 inhabitants, 45,200 inhabitant district, and the last district estuary of tami as many as 12.450. For the

category of gender in the city of Jayapura with 152,683 men and women of 134.273 inhabitants. According to the age group 0-4 years as many as 14,000 inhabitants (male) and 12,000 inhabitants (women).

ISSN: 2349-4689

Number of Human Resources of Jayapura City Health Office

Health workers in the city of Jayapura consist of 523 people consisting of medical, nurse, midwife, pharmacy, nutrition, medical technical, sanitation and public health spread all over the work unit of health center and Jayapura city health office. At the Jayapura health center, there are 29 doctors, 147 nurses, 8 dental nurses, 73 midwives, 30 pharmacies, 42 nutritionists, 56 health analysts, 20 sanitation and 25 public health workers, totaling 454 health workers level of Health center. Especially for nutrition workers at the health center consist of nutrition, nutrition and nutrition D-III with total of 42 nutrition officer at Health

Characteristics of Children 1-4 Years Older Who Have Less Nutrition In Jayapura City Result of research at five Health Centre in Jayapura city especially children 1-4 years which become research target to see management of child less nutrition in Jayapura region, here is characteristic of child:

Table 1 Characteristics of children aged 1-4 Years

Characteristics of	n	%
children		
Age 1-4 year	36(1575)	2,28
Sex		
	15(685)	2,18
Male	21(890)	2,35
Female		
Tribe		
Papua	11(36)	30,5
Non Papua	25(36)	69,4
Father occupation		
Ojek	11	30,5
Private	13	36,1
Army	5	13,8
Not work	7	19,4

Based on table 1, there is a picture about the characteristics of toddlers covering gender, ethnicity and father's work. Based on the information conveyed by the respondents / mothers of children aged 1-4 years of male sex of 15 children while women as many as 21 children, especially for the tribe of papua as many as 11 children and non papua as many as 25 children seen from the status of the

father's work of the child aged 1-4 years who experienced less nutrition divided by three forms of private employment as many as 13 people, 5 soldiers and do not have a job as many as 7 people.

Characteristics of respondents in 5 health centers of Jayapura city

The results of this study found the respondent characteristic who was a mother of 1-4 years old children who suffered less malnutrition cases registered in five health centre representing Jayapura city area, with the following characteristics:

Table 2 Respondent Characteristics

Respondent	n	Percentage
Characteristics		
Age		
< 23	24(36)	66,6
> 23	12(36)	33,3
Education		
High school	31(36)	86,1
(SMA)		13,8
Bachelor (S1)	5(36)	
Occupation		
House wife	21(36)	58,3
Private	15(36)	41,6

Based on table 2 on the characteristics of respondents when viewed from the age group <23 as many as 24 mothers while> 23 as many as 12 mothers, for the last high school education as much as 31 mothers and S1 5 mothers, while for the working group of mothers who daily as housewives or do not have a job as many as 21 mothers and private workers as many as 15 mothers.

IV. DISCUSSION

The results of the research have explained in full how the process of nutritional management is less implemented in every health centre that becomes the sample in this research. Weight and height are important parameters for determining human health status, particularly related to nutritional status. The use of index BB / U and BB / TB is an indicator of nutritional status to see the existence of impaired growth function and body composition. From the results of research that some health centre constrained in the scales in situation no hangers and not in accordance with age needs of children who come weighing so that the results from team not accurate.

Organization

Organizing is one of the five functions of management. This function is defined an activist who determines who does it, how it is done, and to whom it is reported. According to (Marlina 2012), organizing is the process of determining, grouping, and arranging the various activities required to achieve the goals, placing people in every activity, providing the necessary tools to assign authority relative to the delegate of individuals who will carry it out.

ISSN: 2349-4689

Looking back at the results of the research, the organizing function is very contrary to the facts and the circumstances of implementation in five health centers, which becomes the main obstacle is the limited power to cause double task so that it affects the recording and reporting. The serious impacts that will be faced by Health centre related to organizing or division of tasks is the assignment of the nutrition officers and the cadres in the field, especially the limited staff leads the management process in filed that seem to hurry because the time must go again doing other service tasks so that the application of good management of preparing tools scales at integrated health service (posyandu) to regularity in recording outcomes of children with malnutrition (BPS, 2016; Bapenas 2016).

Other cases in the field of knowledge of cadres related to the management of malnutrition due to lack of cadre refreshment is rarely done for some health centre running but there are some not running.

Procedures

In the ordinance guidelines used in the management of nutrition refers to the anthropometry of determining the nutritional status of children. From the results of research based on the observation sheet that has been made by researchers and make direct observations to see the implementation of the field. The first part is the medical consent part more on the role of nutrition officers both in the preparation and promotion phase related to the nutritional needs of children, in the second stage of preparation for weight measurement, in the next stage is the height measurement but in integrated health service (Posyandu) not provide the measuring tool height then enter into the next procedure is the determination of nutritional status then in determining the officer only use the child's weight and age.

It can be seen very clearly that the anthropometric procedures for determining the nutritional status of children are not fully implemented. Procedures cannot be fully implemented accordingly due to the availability of insufficient or complete supporting tools and materials such as height measuring instruments for children and the appropriate scales based on the child's data each year because based on the delivery of cadres in the results of the

submission there is a tool of scales but not age-appropriate children should wear toddler scales.

Follow-up

The national target for malnutrition of Indonesian children is targeted to decrease to 22% to 25% by 2019. Government Regulation no. 42/2013 on the acceleration of nutrition improvement, this policy emphasizes the concept of how important the first 1000 days of life for a person. This movement promotes joint efforts between the government and the community through the mobilization of stakeholder participation and concerns in a planned and coordinated way, aiming to accelerate the improvement of community nutrition with priorities in the first 1000 days of life. According to Health department Republic of Indonesia 2004, health centre is a technical implementation unit of regency / municipal health service responsible for organizing regional health development. Health envoys in the offices are issued several laws, among others, regulation no 36 year2009 about health, regulation no 22 of 1999 about local government and regulation about special funding special fund 30% one of them financed the program of first 1000 days of life. Program and priority realizing Papua rise, independent, and prosperous is the gate communities of the desire of Papua is the program 1000 days of life first (Kemenkes RI 2015).

a. From the government-related program of child nutrition cases is not very clear regulations issued both the national government and local government of Papua but the results of fact-based research in the field is not as planned. From the results of research officers and cadres health centre specializing in nutrition directly convey no follow-up in four health centre but in one health centre there is additional food but not supervised the development. It is very clear that programs in some health centre are not working.

Recording and reporting

Recording and reporting is an activity that must be considered by health personnel in this case nutrition officers in order to provide the best service for individuals and the community. To perform the activities of recording and reporting need accurate data and information. Recording and reporting according to chronicles and grays is communicating in writing to other health teams that require health data. The purpose of recording and reporting :

a. Communication: as an effective communication tool between health workers so that

information continuity and health service efforts can be achieved.

b. Education: as information about disease picture and its solution.

c. Allocation of funds: can be used to plan appropriate actions and activities with available

ISSN: 2349-4689

funds.

d. Evaluation: as a basis for evaluation of given interventions.

From the result of the research, the human resource deficiency becomes the obstacle in the recording so that often happens is the data vacuum because one officer must serve the child and record in the amount that quite much especially if come with various complaints of pain then one child just enough time in the registration process until the service, other issues related to human resources due to these limitations then the long service time makes the officers tired and not recorded at all so that the visit today seemed a little or even empty but vice versa very solid. When viewed from the purpose of recording and reporting then the consequences of not doing good recording activities and correct it will be very influence to reporting that will impact the long term from evaluation to the allocation of funds that are not appropriate to health problems especially case of malnourished children so that the impact on generation Papua not become gold generation because of malnutrition (persagi, 2012; Sediaoetama, 2012; Supariasa, 2013; Santoso, 2011).

Supervision

The purpose of supervision as follows:

- a. Knowing the extent to which the implementation of health services, whether the standards or work plan, whether the resources have been there and used in accordance with the established effectively and efficiently.
- b. Knowing the obstacles, obstacles / challenges in implementing health services, so that problem solving can be determined as early as possible.
- c. Knowing the existence of irregularities in the implementation of health services so that clarification can be done immediately.
- d. Provide information to decision makers about the existence of irregularities or causes, so that it can take a decision to make corrections on the implementation of activities or programs related either ongoing or in the future.
- e. Provide information or report to the decision maker about environmental changes that must be followed up with the adjustment of activities.
- f. Provide information on the accountability of the implementation and the work of the program to stakeholders regularly and continuously from time to time.

The above supervisory function provides a very clear picture of the very important supervision, from the results of supervisory research is not at all executed. From the

research result of one Health Centre that is Hedam Health Centre which given food in the form of raw material but from the respondent's acknowledgment that there is no good monitoring in processing process, consumption until the time of giver during one month we have never visited officer and seen its development. While four Health Centre provide no additional food for children who suffer from malnutrition.

V. CONCLUSION

- a. Based on the data of children aged 1-4 years who have less nutrition is more female than male.
- b. Data of respondents age <23 more than age> 23 is greatly affect the system of the readiness of a reproductive system of a mother, if seen from the average of the last education of respondents then that until more high school compared to undergraduate (S1) of education we can measure a knowledge mothers especially in terms of children's nutrition knowledge.
- c. The procedures implemented and used are nutritional anthropometry but facilities such as height measuring instruments are not available so that procedures or procedures are not fully implemented.
- d. Follow-up becomes a separate problem case of children aged 1-4 years who experience less nutrition continues to grow but the government from the city health office to the health center level there is no follow-up in addressing the case.
- e. Recording and reporting not well systematically so that the completeness of data related cases of children who have less nutrient not acute so that very impact to program planning even to allocation of fund.
- f. Supervision at Health Centre in Jayapura city is still very weak both in the implementation of anthropometry in field and record activity which is very weak so that become its own problem.

VI. SUGGESTIONS

The program is designed for children aged 1-4 years should be more specific to see the needs of children aged 1-4 years by sex, conduct further research related nutritional needs in girls and boys.

a. Health promotion related to the reproductive system of women when the age is good and ready, it is very important to be done regularly so that women know when the reproductive devices are ready and promotion related to the nutritional needs of children during the gold age mass brain formation, especially in the first thousand days of childhood.

b. Distribution of special nutrition health personnel should be planned better seen from the area of work of Health Centre so that officers can reach all working areas of Health Centre in carrying out their duties effectively and efficiently.

ISSN: 2349-4689

- c. The government needs to equip health support facilities in view of the proposed procurement from the Health centre, the need for health facilities needed to support government programs, especially in health sector.
- d. Especially for follow-up needs cross-sector from the health department to the food service in this case is the nutritional case of children aged 1-4 years need to be investigated first the specific nutritional needs after that just do the cooperation supply food to meet the needs of children.
- e. Recording and reporting there should be special training both officers and cadres can be training based on the needs of data in the planning or training model of recording and reporting in a systematic.

REFERENCES

- [1]. Arwam, 2015.Riset Kesehatan. Penerbit Ombak Yogyakarta.
- [2]. Kementrian Kesehatan, RI..(2015). Profil Kesehatan Indonesia.
- [3]. Kementrian Kesehatan, RI..(2014). Pedoman Gizi Seimbang.
- [4]. Kementerian Kesehatan, RI..(2011). StandarAntropometriPenilaianStatus GiziAnak.
- [5]. PKPP (2012). Profil Kesehatan Provinsi Papua, Ringkasan Eksekutif.
- [6]. Riskesdas, 2017. Laporan Hasil Riset Kesehatan Dasar Provinsi Papua. Badan Penelitian dan Pengembangan Kesehatan RI. Jakarta.
- [7]. Riskesdas, 2010. Laporan Hasil Riset Kesehatan Dasar Provinsi Papua. Badan Penelitian dan Pengembangan Kesehatan RI. Jakarta.
- [8]. Riskesdas, 2013. Laporan Hasil Riset Kesehatan Dasar Provinsi Papua. Badan Penelitian dan Pengembangan Kesehatan RI. Jakarta.
- [9]. Kuntjojo, 2009. Metodologi Penelitian. Kediri.
- [10]. Marlina, 2012. Pengaruh Penatalaksanaan gizi dan Pengetahuan Tenaga Pelaksana Gizi terhadap Keberhasilan Health Centre dalam Perbaikan Status Gizi pada Balita Gizi Buruk di Health Centre Se- Kota Medan. [Tesis]. Universitas Sumatra Utara. Medan.
- [11]. Badan Pusat Statistik, (2016). Potret tujuan pembangunan berkelanjutan SDG's.
- [12]. Bapenas, (2016). Upaya pencapaian target tujuan pembangunan berkelanjutan.
- [13]. Kementerian Kesehatan, RI (2015). Konversi Agenda Pembangunan nawacita, RPJM, SDG's.
- [14]. Kementerian Kesehatan, RI.(2015).Kesehatan dalam kerangka SDG's.

ISSN: 2349-4689

- [15]. Persatuan Ahli Gizi Indonesia (Persagi), 2012.Kamus Gizi. Penerbit Buku Kompas Jakarta.
- [16]. Sediaoetama, 2012.Ilmu Gizi. Penerbit Dian Rakyat Jakarta.
- [17]. Supariasa, 2013.Penilaian Status Gizi. Penerbit Buku Kedokteran EGC Jakarta.
- [18]. Santoso, 2011.Kesehatan dan Gizi. Penerbit Rineke Cipta Jakarta.