



Management Function Study based on under-five Nutritional Status Screening

Sutio Rahardjo*, Sri Wayanti, Suparji Suparji 

Department of Midwifery, Politeknik Kesehatan Kementerian Kesehatan Surabaya, Surabaya, Indonesia

Abstract

Edited by: Ana Vucurevic

Citation: Rahardjo S, Wayanti S, Suparji S. Management function study based on under-five nutritional status screening. Open Access Maced J Med Sci. 2022 Apr 27; 10(G): 633-637.

<https://doi.org/10.3889/oamjms.2022.8947>

Keywords: Management function; Midwife performance; Malnourished; Screening

*Correspondence: Sutio Rahardjo, Department of Midwifery, Politeknik Kesehatan Kementerian Kesehatan Surabaya, Indonesia., Jl. Pucang Jajar Tengah No. 56 Surabaya, Indonesia. E-mail: sutiorahardjo@gmail.com

Received: 23-Mar-2022

Revised: 05-Apr-2022

Accepted: 17-Apr-2022

Copyright: © 2022 Sutio Rahardjo, Sri Wayanti, Suparji Suparji

Funding: This research did not receive any financial support

Competing Interests: The authors have declared that no competing interests exist

Open Access: This is an open-access article distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (CC BY-NC 4.0)

BACKGROUND: Based on the manual book Village Midwife, published by the Ministry of Health of the Republic of Indonesia in 2008, one of the visions of empowering midwife is to reduce the case of malnourished toddlers and got diarrhea, so screening is essential to do.

AIM: This research analyzes the efforts to control the incidence of malnourished toddlers based on the analysis to management function of midwife performance in the screening of malnourished toddlers in Bangkalan Regency.

MATERIALS AND METHODS: This is a descriptive research. The research was conducted in Bangkalan Regency. Research participants consisted of 376 midwives located in 22 Community Health Centers in Bangkalan Regency. The sampling technique was proportional random sampling, with a sample size of 331 midwives. The data collection tool is in the form of a questionnaire, before being used, the validity and reliability tests are carried out, the results are valid and reliable. Data analysis used descriptive statistics, the form of frequency distribution and percentage.

RESULTS: Supervision on the parameters that most take effect to the midwife performance in the screening of malnourished toddlers. Moreover, then, the variables of the planning function and the mobilization function were affect the performance of midwife in screening malnourished toddlers in Bangkalan Regency. While the variable of the organizing function does not affect to the performance of midwife in malnourished screening.

CONCLUSION: To improve the performance of midwife in screening malnourished toddlers in Bangkalan Regency, good cooperation and coordination is most needed between the Health Office, related organizations, the community, and parents/families of toddlers as well as important officials at Bangkalan Regency. Especially to the health-care workers to announced information and socialized about the health of toddlers to the community and parents/families. So that the incidence of malnourished toddlers can be detected early for follow-up.

Introduction

Data on the nutritional status of children under five in Bangkalan Regency in the month of Weighing toddlers in August 2018 found 2.39% of very poor nutrition based on the index TB/U, 1.38% of very poor nutrition based on the BW/U index, and 6% of very poor nutrition based on the BB/TB index. This condition requires serious attention from various parties related parties, especially the midwife profession who is responsible for screening status toddler nutrition in the community [1], [2], [3].

Performance is the output produced by the functions or indicators of a job within a certain time. Performance is a function of competence, attitude and action. If the competencies, attitudes and actions of employees toward his job is high, it can be predicted that his behavior will work hard to achieve organizational [4], [5], [6].

In the Midwife's Guide at the village level, the objectives of empowering midwives at the village level are explained village is to reduce the number of children under five with malnutrition and diarrhea, so that the

role of village midwives in carrying out malnutrition screening is very important. Task village midwives in the screening of malnourished toddlers include; (1) check the readiness of the facilities and infrastructure needed at the posyandu, (2) verify the results of weighing on toddlers 2T, BGM and in toddlers with clinical signs, namely doing anthropometric re-measurements (BB/TB) (3) Reporting to the puskesmas if you get a toddler who suspected of malnutrition within 1 × 24 h, (4) tracking with TPG and cadres for malnourished toddlers, (5) refer to the Puskesmas or Hospital cases malnourished toddlers, and (6) evaluate the results of weighing at the posyandu and provide counseling to staff [7], [8].

Materials and Methods

This is a descriptive research. The research was conducted in Bangkalan Regency. Research participants consisted of 376 midwives located in 22 Community Health Centers (Puskesmas) in Bangkalan

Regency. The sampling technique was proportional random sampling, with a sample size of 331 midwives. The study's independent variable is the management function (planning, organizing, moving, supervising). Performance of village midwives in screening for malnutrition. The data collection tool is in the form of a questionnaire, before being used, the validity and reliability tests are carried out, the results are valid and reliable. Data analysis used descriptive statistics, the form of frequency distribution, and percentage.

Results

Characteristics of research subjects

Based on Table 1, above, most of the village midwives in Bangkalan Regency have D III Midwifery education (58.61 %), 5-15 years of work (52.87%) and work place in Puskesmas (45.92 %).

Table 1: Characteristics of village midwives respondents in Bangkalan district

Characteristics of research subjects	Frequency (%)
Last education	
Midwife education program (DI)	5 (01.51)
Diploma (D III)	194 (58.61)
Applied bachelor (D IV)	119 (35.95)
S1 D4 profession	13 (03.93)
Length of working (years)	
<5	37 (11.18)
5-15	175 (52.87)
Over 15	119 (35.95)
Workplace	
Village health post	122 (36.86)
Auxiliary health center	57 (17.22)
Public health center	152 (45.92)

Management function

Based on Table 2, it shows that most of the village midwives in the screening for malnutrition have good planning on the parameters of setting goals and targets (79.15%), while based on the criteria, most of the implementers of the screening for malnutrition have good planning (73.71%).

Table 2: Frequency distribution of planning data based on parameters and criteria in the screening of malnutrition in Bangkalan regency

Planning parameters	Frequency (%)
Setting goals and objectives	
Well	262 (79.15)
Enough	37 (11.18)
Not enough	32 (09.67)
Calculating energy requirements	
Well	212 (64.05)
Enough	77 (23.26)
Not enough	42 (12.69)
Develop an activity plan	
Well	255 (77.04)
Enough	53 (16.01)
Not enough	23 (06.95)
Planning criteria	
Well	244 (73.71)
Enough	55 (16.62)
Not enough	32 (09.67)

Organizing

Based on Table 3 above, it shows that most of the village midwives in the screening for malnutrition have good organization on the parameters of the division of tasks (70.39%), while based on the criteria; most of the implementers of the screening activities for malnutrition have good organization (62.54%).

Table 3: Frequency distribution of organizing data based on parameters and criteria in the screening of malnutrition in Bangkalan regency

Organizing parameters	Frequency (%)
Preparation of working groups	
Well	222 (67.07)
Enough	81 (24.47)
Not enough	28 (08.46)
Division of tasks	
Well	233 (70.39)
Enough	68 (20.55)
Not enough	30 (09.06)
Delegation of authority	
Well	185 (55.89)
Enough	100 (30.21)
Not enough	46 (13.90)
Organizing criteria	
Well	207 (62.54)
Enough	96 (29.00)
Not enough	28 (08.46)

Movement

Based on Table 4 above, it shows that most of the village midwives in the screening for malnutrition have good mobilization on the parameters of involvement of Puskesmas implementers (86.71%), while based on the criteria most of the implementers of malnutrition screening activities have good mobilization (77.34%).

Supervision

Based on Table 5 above, it shows that most of the village midwives in the screening for malnutrition have good monitoring parameters (83.68%), while based on the criteria, most of the implementers of the malnutrition screening activities have good supervision (83.08%).

Table 4: Frequency distribution of actuation variables based on parameters and criteria in the screening of malnutrition in Bangkalan regency

Driving parameters	Frequency (%)
Giving direction	
Well	223 (67.37)
Enough	81 (24.47)
Not enough	27 (08.16)
Giving motivation	
Well	244 (73.72)
Enough	70 (21.15)
Not enough	17 (05.13)
Involvement of public health center implementers	
Well	287 (86.71)
Enough	32 (09.67)
Not enough	12 (03.62)
Driving criteria	
Well	256 (77.34)
Enough	60 (18.13)
Not enough	15 (04.53)

Table 5: Distribution of supervision frequency based on parameters and criteria in the screening of malnutrition in Bangkalan regency

Monitoring parameters	Frequency (%)
Supervision	
Well	241 (72.81)
Enough	71 (21.45)
Not enough	19 (05.74)
Monitoring	
Well	277 (83.68)
Enough	34 (10.27)
Not enough	20 (06.04)
Evaluation	
Well	256 (77.34)
Enough	47 (14.20)
Not enough	28 (08.46)
Supervision criteria	
Well	275 (83.08)
Enough	36 (10.88)
Not enough	20 (06.04)

Performance of village midwives in screening for malnutrition

Based on Table 6 above, most of the village midwives have a good performance on the cost effectiveness parameter (89.43 %), while based on the criteria most of the village midwives have a good performance (70.69 %).

Table 6: Frequency distribution of village midwife performance data based on parameters and criteria in malnutrition screening activities in Bangkalan regency

Performance parameters	Frequency (%)
Quality	
Well	271 (81.87)
Enough	44 (13.29)
Not enough	16 (04.84)
Punctuality	
Well	252 (76.13)
Enough	63 (19.03)
Not enough	16 (04.84)
Cost effectiveness	
Well	296 (89.43)
Enough	31 (09.37)
Not enough	4 (01.20)
Need for supervision	
Well	153 (46.22)
Enough	86 (25.99)
Not enough	92 (27.79)
The influence of personal relationships	
Well	223 (67.37)
Enough	90 (27.19)
Not enough	18 (05.44)

Discussion

Thus, in planning the screening activities for under-five malnutrition, this is in accordance with what Widjaja stated that the characteristics of planning include (1) looking far ahead, (2) there are predetermined goals in the form of programs and how to achieve them, (3) determining how achievement, and (4) the calculation. This is because the initial step for planning can be started with an idea or ideal that focuses on a particular situation [8]. With a fully structured plan, an implementer of malnutrition screening activities for children under five will clearly know the direction of a program. Muninjaya's opinion reinforces this condition

in his book Health Management explaining that health planning can be prepared on a large or small scale depending on the size of the area and the responsibility of the organization [9], [10]. The planning function is the essential function in management because this function will determine other management functions [11].

Organizing is one of the management functions that also has an important role [8], [11], [12] and the planning function. Through the function of organizing all available resources, their use will be regulated in an effective and efficient manner. This is in accordance with the concept of GR Terry quoted by Djoko Wijono in his book Management of Health Leadership and Organizations, suggesting that organizing is the act of seeking effective behavioral relationships between each person so that they can work together efficiently and gain self-satisfaction in carrying out their duties. -chosen tasks in the existing environmental conditions to achieve goals & objectives. This condition is not much different from the implementation of the screening for malnutrition for children under five in the District Health Center area. Bangkalan which consists of health workers, educators, and the local community (nurses, midwives, PAUD/TK teachers, and health cadres) [10], [13], [14].

The mobilization function in management emphasizes how managers direct and mobilize human and non-human resources to achieve agreed goals [15], [16], [17]. For this reason, the process of mobilizing and executing human resources in the organization, the role of leadership (Leadership), staff motivation, cooperation and communication between staff are the main things that need the attention of organizational managers, especially managers in health services in the field of MCH [18]. This condition is in accordance with the theory of GR Terry quoted by Djoko Wijono that mobilization is to make all group members want to work together and work sincerely and passionately to achieve goals in accordance with planning and organizing efforts [19]. Thus, mobilization is an activity carried out by the leader to regulate, guide, direct subordinates to carry out their activities to achieve goals [18], [20].

Supervision is carried out by observing the implementation of all aspects of health efforts to ensure that all activities being carried out run according to plans and applicable laws and regulations [21], [22], [23], [24]. Increased supervision will essentially lead to an increase and refinement of the administration as a whole, both expanding the ability to plan, implement, as well as improve control and assessment. Through the function of supervision and power, the standard of program success as outlined in the form of targets, work procedures and so on must always be compared with the results that have been achieved or what the staff is able to do [13], [25], [26], [27], [28].

Conclusion

Screening activities are carried out actively and passively. Active screening is carried out every two months or every three months in all posyandu. This activity is carried out by Puskesmas officers who are assisted by health cadres in the community, while passive screening is carried out during daily services at the Puskesmas and reports provided by cadres. Activities carried out in the screening included asking the names and ages of toddlers, weighing, measuring height, measuring head circumference, gross motor skills, and fine motor skills. After that, documentation is carried out and reported to the city government. The standard used in measuring under-five malnutrition uses the WHO-NCHS standard.

Tracking of malnourished toddlers was carried out to find out the factors related to the incidence of malnutrition through interviews and observations. Tracking is carried out after screening or cases of malnourished toddlers are found by visiting the home of the malnourished toddler. Activities carried out in tracking malnourished toddlers in the Puskesmas area include providing questionnaires or direct questions and answers to parents of severely malnourished toddlers, performing anthropometric re-measurements if needed, making referrals to Puskesmas and/or hospitals if there are accompanying diseases and doing documentation. This is in accordance with the Guidelines for the Management of Malnutrition in Households and Health Centers.

Ethical Clearance

Ethical permission is approval from the Health Polytechnic Research Ethics Commission of the Ministry of Health of Surabaya, Certificate number No. EA/526/KEPK-Poltekkes_Sby/V/2021.

References

- Public health Office. (Bangkalan District Health Profile 2018), Bangkalan. Public Health Office. 2018.
- Azwar S. Human Attitude, Its Theory and Measurement. Yogyakarta: Student Library; 2010.
- Azwar A. Maintaining the Quality of Health Services. Jakarta: Sinar Harapan Library; 2011.
- Budiarto E. Biostatistics for Medicine and Public Health. Jakarta: EGC; 2016.
- Budi FW, Sriyono, Retno I. Analysis of factors related to malnutrition in toddlers. *Pedimatern J.* 2015;3(1):83-91.
- Dedi A, Maria M, Ani M. Several risk factors for undernutrition and malnutrition in toddlers. *Health Vocational J.* 2015;1(5):46-53.
- Kemenkes RI. Guidelines for the Implementation of Special Nutrition Surveillance in Districts/Cities. Jakarta: Directorate General of Maternal and Child Nutrition and Health; 2012.
- Kemenkes RI. Pocket Book of Prevention and Management of Malnutrition in Toddlers in Outpatient Services: For Health Workers. Jakarta: Ministry of Health Republic of Indonesia; 2020.
- Arnelia A. Study of handling children with malnutrition and prospects (Management of severe malnutrition and its prospect: A review). *J Nutrition and Food Research.* 2011;34(1):1-11.
- Depkes RI. Classification of Nutritional Status of Toddlers. Jakarta: Directorate General of Public Health; 2014.
- Wonoputri N, Djais JT, Rosalina I. Validity of nutritional screening tools for hospitalized children. *J Nutr Metab.* 2014;2014:143649.
- Subal D. Nutritional profile of preschool children: A review. *Anthropologist.* 2012;14(5):467-72.
- Neelemaat F, Meijers J, Kruijenga H, van Ballegooijen H, Schuuren M. Comparison of five malnutrition screening tools in one hospital inpatient sample. *J Clin Nurs.* 2011;20:2144-52.
- Lestari W, Margawati A, Rahfiludin MZ. Risk factors for stunting in children age 6-24 months in Penanggalan District, Subulussalam City, Aceh Province. *J Gizi Indones.* 2014;3(1):37-42.
- Hulst J, Zwart H, Hop W, Joosten K. Dutch national survey to test the STRONGKIDZ nutritional risk screening tool in hospitalized children. *Clin Nutr.* 2010;29(1):106-11.
- Hartman C, Shamir R, Hecht C, Koletzko B. Malnutrition screening tools for hospitalized children. *Curr Opin Clin Nutr Metab Care.* 2012;15(3):303-9. <https://doi.org/10.1097/MCO.0b013e328352dcd4>
PMid:22588189
- Gholampour ZE. Assessment of nutrition status based on STRONG kids tool in Iranian Hospitalized Children. *Int J Child Health Nutr.* 2015;4(1):61-6.
- Gerasidimis K, Macleod I, Maclean A, Buchanan E, MCGrogan P, Swinbank I, et al. Performance of the novel paediatric yorkhill malnutrition score (PYMS) in hospital practice. *Clin Nutr.* 2011;30(2):430-5. <https://doi.org/10.1016/j.clnu.2011.01.015>
PMid:21388725
- Indonesian Ministry of Health. The Strategic Plan of the Ministry of Health for 2015-2019. Jakarta: Ministry of Health of the Republic of Indonesia; 2015.
- Mutiara H, Apriliana E, Suwandi JF, Utami N. Child growth screening, education on stunting and training on monitoring child growth for parents of state elementary school students in Lampung Province in an effort to improve the health degree of Indonesian children. *JPM Ruwa Jurai.* 2019;4(1):36-41.
- Palupi KC, Sa'pang M, Swasmilaksmi PD. Balanced nutrition education for elementary school children in Cilincing District, North Jakarta. *J Abdimas.* 2018;5(1):49-53.
- Arfines PP, Puspitasari FD. Relationship between stunting and learning achievement of elementary school children in Slums, Central Jakarta Municipality. *Bul Penelitian Kesehatan.* 2017;45(1):45-52.
- Kementrian Kesehatan RI. 2018 Basic Health Research Main Results Report. Jakarta: Health Research and Development Agency; 2019.
- Kurniawan D, Syafri RA. Besale as Local Wisdom of the Orang Dalam Tribe in Nyogan Village, Mestong District, Muaro Jambi Regency. Jambi. 3rd National Seminar on Management and business, Management Study Program, Faculty of Economics and Business, University of Jember; 2018.

-
25. Haris A, Fitri A, Kalsum U. Determinants of stunting and underweight incidence in toddlers of the Anak Dalam Tribe in Nyogan Village, Muaro Jambi Regency in 2019. *J Kesmas Jambi*. 2019;3(1):41-53.
 26. Gorstein J, Sullivan K, Yip R, Onis M De, Trowbridge F, Fajans P, et al. Issues in the assessment of nutritional status using anthropometry. *Bull World Health Organ*. 1994;72(2):273-83. PMID:8205648
 27. Salimar S, Kartono D, Fuada N, Setyawati B. Child stunting schools in Indonesia according to family characteristics. *Research Nutrition And Food*. 2013;36(2):121-6.
 28. Rachmi CN, Agho KE, Li M, Baur LA. Stunting of school-age children in Indonesia according to family characteristics. *Plos One*. 2016;11(5):e0154756. <https://doi.org/10.1371/journal.pone.0154756>. PMID:27167973