

## **ANALYSIS OF IMPLEMENTATION OF INTEGRATED MANAGEMENT OF SICK TODDLERS (MTBS) BY MIDWIFE**

**Anah Hidayati\*, Novita**

STIKES Abdi Nusantara, Jl. Swadaya No. 7, Jatibening, Pd. Gede, Bekasi, West Java 17412, Indonesia

[\\*anahhidayati3@gmail.com](mailto:*anahhidayati3@gmail.com)

### **ABSTRACT**

In order to reduce the Mortality and Illness Rate in Toddlers (angka kematian balita /AKABA) in Indonesia, the Government implements the Integrated Management of Sick Toddlers (manajemen terpadu balita sakit / MTBS) strategy. However, the implementation of MTBS has not been effective. The purpose of this study was to analyze the implementation of MTBS at the location of midwife independent practice (PMB). This study was cross-sectional. The research location is in the working area of the Lebak Wangi Health Center from May to June 2023. The sample in this study was 30 midwives practice locations. Independent variables are facilities and infrastructure, midwives' education level about MTBS, midwives' age, and socialization of MTBS practices. The analysis to be used is multiple logistic regression with results in the form of aOR (adjusted odds ratio). The results of multivariate analysis on facilities and infrastructure factors that have a 3-fold influence on MTBS completeness and are statistically significant (aOR= 3.38; 95% CI= 1.34 to 646.9;  $p= 0.032 < 0.05$ ) and MTBS socialization factors that have been followed by midwives also affect the completeness of MTBS up to 2.8 times compared to never getting MTBS socialization (aOR= 2.85; 95% CI= 1.15 to 257.6;  $p= 0.039 < 0.05$ ).

Keywords: integrated management of sick toddlers; midwife; socialization

### **INTRODUCTION**

Toddlers are children under five years old aged 0-4 years 11 months, toddlerhood is an important period in the process of human growth and development. Development and growth in toddlerhood determine the development of children in the next period. Toddlers will determine the future of a nation and affect the quality of human resources both from physical, psychological and intelligence, so that their health becomes very important to pay attention to. More than 12 million children in developing countries each year die before the age of five.(Wardani, 2016) In order to reduce the Infant Mortality Rate (AKB) and Infant Mortality Rate (AKABA) in Indonesia, the Government implemented the Integrated Management of Sick Toddlers (MTBS) strategy and began to be developed in Indonesia in 1997. This is an approach to prepare health workers by assessing, classifying, and taking action on children against commonly life-threatening diseases such as pneumonia, diarrhea, measles, malaria, ear infections and malnutrition. Puskesmas is said to have implemented MTBS at least 60% of the number of visits of sick toddlers at the puskesmas get services according to MTBS standards. (Suparmi, 2018) (Lewandowski, 2015)

The target of achieving MTBS is 100%, which means that every sick toddler must be approached by MTBS. In order for the implementation of MTBS to run as expected, systematic and comprehensive steps are needed, including the development of a tiered training system, post-training monitoring by local leaders and health offices, availability of equipment and drugs, technical guidance and others (Ministry of Health of the Republic of Indonesia 2019). The implementation of MTBS if carried out properly, then this effort is quite complete because it includes curative efforts (treatment), preventive (prevention), improved nutrition, immunization, and counseling (promotive) to anticipate diseases that often cause death in infants and toddlers.

(Sudirman, 2021) According to the World Health Organization (WHO), if this management is done well, it will be able to prevent the death of toddlers due to acute respiratory tract infections (ARI) by 60-80%, and prevent death from diarrhea by 90%. The implementation of MTBS will be effective if the mother / family immediately takes the sick toddler to a trained health worker and gets the right treatment. Therefore, the message of when mothers need to seek help if their children are sick is an important part of MTBS(Ritonga, 2022)

However, the implementation of MTBS has not been effective. This condition is experienced by most Puskesmas in Indonesia, due to various obstacles, including the limited number of personnel trained by MTBS, the transfer of personnel who have been trained, the lack of complete supporting facilities and infrastructure. Of all provinces in Indonesia, Puskesmas that have implemented MTBS until the end of 2009 amounted to 51.59%.(Saputro, 2022) Improving the skills of nurses and midwives in the management of sick toddlers is comprehensively carried out with an Integrated Management approach for Sick Toddlers or better known as MTBS. This activity is carried out by pre-service and / or in-service training. Integrated management of sick toddlers is a standard of service for sick toddlers and is considered cost effective and contributes greatly to reducing the mortality rate of neonate, infants and toddlers if implemented widely, properly and correctly. Based on this background, researchers are interested in analyzing the implementation of MTBS at the midwife independent practice location (PMB) in the Lebak Wangi health center work area in 2023.

## METHOD

This study is a type of intervention research with cross-sectional. The location used for this research is the independent practice of midwives (PMB) in the working area of the Lebak Wangi Health Center during May to June 2023. The samples in this study were 30 locations of independent midwives and village midwives. Independent variables are facilities and infrastructure, midwives' education level about MTBS, midwives' age, and socialization of MTBS practices. The dependent variable is the completeness of the MTBS implementation. The bivariate analysis to be used is the chi-square. The multivariate analysis used is multiple logistic regression with results in the form of aOR (adjusted odds ratio).

## RESULT AND DISCUSSION

Table 1.  
Bivariate Analysis

Variable	OR	CI 95 %		p
		Upper limit	Lower Limit	
Facilities and Infrastructure	25	3.52	177.47	<0.000
Age of Midwives	3.18	0.53	19.05	0.249
Education	10	1.78	56.15	0.009
MTBS Socialization	40	4.83	330.9	<0.001

Table 2.  
Multivariate Analysis

Variable	Adjusted Odds Ratin (aOR)	CI 95 %		p
		Upper limit	Lower Limit	
Facilities and Infrastructure	3.38	1.34	646.9	0.032
Age of Midwives	-1.4	0.06	9.38	0.435
Education	2.49	0.33	442.7	0.175
MTBS Socialization	2.85	1.15	257.6	0.039

Table 1 the results of bivariate analysis, it can be seen that 3 factors have a strong correlation in determining the completeness of MTBS practices in the Lebak Wangi puskesmas area, including socialization about MTBS and infrastructure facilities can affect the completeness of MTBS practices 25 to 40 times and statistically significant. However, this result is still influenced by other confounding factors that are not analyzed. So the author continues the multivariate analysis step, namely multiple logistic regression.

The results of multivariate analyses have shown that there was an overestimate in previous analyses. In this multivariate analysis, together only 2 factors affect the completeness of MTBS implementation, namely facilities and infrastructure factors that have a 3-fold influence on the completeness of MTBS and are statistically significant (aOR= 3.38; 95% CI= 1.34 to 646.9;  $p= 0.032 < 0.05$ ) and MTBS socialization factors that have been followed by midwives also affect the completeness of MTBS up to 2.8 times compared to never getting MTBS socialization (aOR= 2.85; 95% CI= 1.15 to 257.6;  $p= 0.039 < 0.05$ ). Facilities in the implementation of Integrated Management of Sick Toddlers include Integrated Management of Sick Toddlers form, Mother's Advice Card, referral form, visit register book for Integrated Management of Sick Toddlers, special examination rooms for toddlers, ORS working group and nutrition working group (Anggraini R. , 2022). Meanwhile, infrastructure in the implementation of Integrated Management of Sick Toddlers includes medical equipment and medicines for Integrated Management of Sick Toddlers. All these conditions become absolute in determining the completeness of the examination. MTBS-based puskesmas services are very good if the implementation of MTBS is carried out by officers with good quality education and human resource knowledge and supported by facilities and infrastructure at the puskesmas. (Setiawan, 2019)

Facilities and infrastructure in MTBS are part of the input process, according to research facilities and infrastructure is the first process that determines the completeness of implementation, damaged tools, unavailable even drugs that have passed the validity period will directly disrupt the implementation of MTBS. (Ariyanto, 2023) Socialization or training is an attempt to develop personality and abilities inside and outside of school education also means the guidance that one gives to others in order for them to understand (Barbara, 2019). The higher a person's education, the easier they are to receive information so that the more knowledge they have. The compliance of officers in carrying out all procedures for implementing MTBS is a manifestation of adequate knowledge and skills by these officers (Faisal, 2021). Knowledge is the result of an observation about a particular object. Knowledge is an important factor for a person's attitude and actions. Knowledge includes several things, among others: knowing, understanding, application, analysis, synthesis, and evaluation. (Rodja, 2023) (Anggraini, 2022)

## **CONCLUSION**

Facilities and infrastructure can increase the possibility of completeness of MTBS implementation up to 3 times while socialization or training can be possible completeness of MTBS implementation up to 2 times and both are statistically significant.

## **REFERENCES**

Lewandowski, C. (2015). Manajemen Terpadu Balita Sakit. The effects of brief mindfulness intervention on acute pain experience: An examination of individual difference. 1, pp.1689–1699.

- Suparmi, S. e. (2018). Pelayanan Manajemen Terpadu Balita Sakit (MTBS) pada Puskesmas di Regional Timur Indonesia. *Media Penelitian dan Pengembangan Kesehatan*, 28(4), pp.271–278.
- Wardani, A. (2016). Analisis Penerapan Manajemen Terpadu Balita Sakit (MTBS) Terhadap Kejadian Pneumonia Balita di Puskesmas Halmahera Kota Semarang. *Jurnal Ilmiah Kesehatan Media Husada*, pp.1–133.
- Setiawan, A. B. (2019). Faktor Dominan yang Mempengaruhi Pelaksanaan Manajemen Terpadu Balita Sakit (MTBS) Di Seluruh Puskesmas Kota Tasikmalaya Jawa Barat. *HealthCare Nursing Journal*, 2(1).
- Rodja, D. A. (2023). Evaluasi Pelaksanaan Manajemen Terpadu Balita Sakit (MTBS) di Puskesmas Kota Ratu Kabupaten Ende Tahun 2021. *Jurnal Keperawatan Muhammadiyah*, 8(2).
- Anggraini, R. Y. (2022). Analisis Implementasi Manajemen Terpadu Balita Sakit (MTBS) Terhadap Kualitas Pelayanan Manajemen Terpadu Balita Sakit di Puskesmas Kota Padang. *JIK JURNAL ILMU KESEHATAN*, 6(2), 339-346.
- Ariyanto, M. F. (2023). Analisis Penerapan Manajemen Terpadu Balita Sakit (MTBS) dengan kejadian Gangguan Pernafasan balita di Puskesmas Dalu Sepuluh Kabupaten Deli Serdang. (Doctoral dissertation, Universitas Islam Negeri Sumatera Utara Medan).
- Sudirman, A. A. (2021). Penerapan Manajemen Terpadu Balita Sakit (MtbS) Di Puskesmas Kota Gorontalo. *Zaitun (Jurnal Ilmu Kesehatan)*, 3(1).
- Saputro, E. &. (2022). Perlakuan Balita Dengan Manajemen Terpadu Balita Sakit (MTBS) Di Puskesmas Sukadana. *J-CEKI: Jurnal Cendekia Ilmiah*, 1(2), 85-93.
- Ritonga, R. R. (2022). Implementasi Manajemen Terpadu Balita Sakit (MTBS) dalam Penanganan ISPA di Puskesmas Sipori-pori Kota Tanjung Balai. (Doctoral dissertation, Universitas Islam Negeri Sumatera Utara).
- Anggraini, R. (2022). Analisis Implementasi Manajemen Terpadu Balita Sakit Terhadap Kualitas Pelayanan Manajemen Terpadu Balita Sakit di Puskesmas Kota Padang. (Doctoral dissertation, Universitas Andalas).
- Barbara, M. A. (2019). Pengukuran Faktor Yang Berpengaruh Terhadap Produktivita Bidan Dalam Pelayanan Manajemen Terpadu Balita Sakit. *Jurnal Kesehatan Rajawali*, 9(1), 42-56.
- Faisal, T. I. (2021). Penerapan Manajemen Terpadu Balita Sakit (MTBS) Pada Kader Posyandu Dan Masyarakat. *Jurnal Kreativitas Pengabdian Kepada Masyarakat (PKM)*, 4(5), 1160-1167.