



The Utilization of Mch Books by Families in Monitoring the Nutritional Status of Toddlers

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Abstract

The low nutritional status of toddlers indicates a non-optimal level of health. Family empowerment is the key to toddler care to improve nutritional status. Kia books are an excellent medium for monitoring nutritional status (Susilo et al., 2021). Cibeet Village is the village with the highest cases of malnutrition in the Ibun health center area of Bandung regency with toddler visits to posyandu only 50%. MCH books were used in this study to monitor the nutritional status of toddlers. The study was designed using an analytical cross-sectional study, with a sample of 57 mothers under five and family. Samples from each of these villages were randomly selected and re-selected from each posyandu. Data related to the use of Kia books by families are carried out through observation of family members and direct measurement of nutritional status. The results showed that mothers of toddlers who used MCH books periodically were 42.1%, mothers were family members who used MCH books 89.5%, nutritional status of toddlers 84.2% were *baik* nutrition. Based on the analysis of the relationship between the use of MCH books and the nutritional status of toddlers, a p-value (0.000) was obtained, < with an alpha value (0.05). Thus there is a relationship between the use of MCH books and the nutritional status of toddlers. There is a relationship between the use of Kia books and toddler caregivers obtained p-value (0.004) < alpha value (0.05). Kurang from half of the families of toddlers have not used the MCH book as a medium for determining the nutritional status of toddlers and there are still toddlers with malnutrition, in Cibeet village, the working area of the Ibun Health Center. Efforts are needed to empower families in utilizing Kia books so that family participation increases in maintaining family health.

Keywords: Toddlers, maternal and child health books, utilization, status nutrition

1. Introduction

Nutrition or nutrition is the most important component in supporting the continuity of the growth and development process where nutrition is an element found in food and can be used directly by the body. One of the nutritional problems that occur in children under five is malnutrition. Malnutrition is a health disorder due to a lack or imbalance of nutrients needed for growth, thinking activities, and all things related to life (Bernstein & Munoz, 2012).

Low nutritional status of toddlers indicates a degree of health that is not optimal. Family empowerment is the key to toddler parenting to improve nutritional status. Government policies and various efforts to improve the nutritional status of toddlers by procuring Maternal and Child Health (MCH) books. The information contained in the MCH book is expected to increase maternal knowledge related to maternal and child health. The MCH book apart from being a tool for recording is also used as a tool to monitor children's health in growth and development (Bhuiyan & Nakamura, 2009).

In Indonesia, the Ministry of Health collaborated with the Japan International Cooperation Agency (JICA) through the Family Planning / MCH project in 1989-1994 in Central Java in developing the Maternal and Child Health Book (MCH) as one of the media that can be used to monitor the nutritional status of toddlers, so that growth and development deviations can be detected early (Bingham, 2007). This is by the function of the MCH book, one of which is as a means of recording the health status of mothers and children, educational facilities, and information facilities (Biviji, et al., 2021). The use of MCH Books as a tool to monitor the health and nutrition of toddlers needs to be socialized so that monitoring of toddlers will get great benefits if it is carried out on all toddlers in an area, but to be

able to carry out this is not an easy one because many factors affect the use of the MCH Book for toddlers themselves (Souza, et al., 2011).

MCH books are always taken to mothers or children coming to the health service point from wherever the MCH service. The use of MCH Book Information can be defined as a mother's activity Use the MCH manual to search for nutritional information for young children and as a source of records to monitor the baby's diet. Monitoring children's growth and development is very important to do regularly (Endo & Sistiarani Colti, 2014). Using the MCH Book as a follow-up tool The health and nutrition of young children must be socialized to get the care of young children needs to be socialized Parenting has a great advantage when you take care of all the young children in the area, but it is not easy because of the many factors of using the pediatric MCH guide. Completing the correct MCH book to provide information to the mother about the health of herself and her child. Please note that we are ready to support updated information from mothers about personal health and child health, because perfection affects children's growth and development. Early detection of child growth and development disorders is very helpful to start diagnosis and recovery early to support the child's growth and development as optimally as possible (Endo & Sistiarani Colti, 2014).

A preliminary study was conducted in Cibeet Village, which is the village with the highest cases of malnutrition in the Ibun health center area of Bandung regency with toddler visits to posyandu only 50%. This study aims to determine the use of MCH books in monitoring the nutritional status of toddlers. Early detection of the nutritional status of toddlers can be done by utilizing the Maternal and Child Health Book (MCH) given to mothers of toddlers who are brought during visits to health facilities such as puskesmas, or posyandu.

2. Literature Review

Nutrition is very closely related to health. In order for this function to run well, the amount of food consumed by a person must be in accordance with the needs of his body. If the body absorbs less nutrients than it needs, then malnutrition occurs, while if the nutrients absorbed are too much, this leads to a surplus of nutrients in the body (Sidiq, 2021; Bernstein & Munoz, 2012).

Based on the results of the study, it is known that the majority of mothers with malnourished toddlers are 59.2%. This research is in line with the research of Siagian & Halisitijayani, (2015) results were not much different, namely 39.25 toddlers in the region were malnourished. Similarly, based on the results of research by Carolin, et al., (2022) at the Sukadiri Health Center, Tangerang Regency, it was found that 24.7% of children suffered from malnutrition (Nasreddine, et al., 2018).

Studies conducted in Japan show that maternal and child health books are a tool used by almost all parents in Japan as environmental conservation that parents share over time from pregnancy to toddlerhood. Information in this book is the growth and nutrition of a child's child. The information in the MCH manual can be so more information (Takeuchi et al., 2016).

Mothers who use the MCH Book for Child Growth and Development aged 12-59 months will get more complete information about children's growth and development in the MCH Book. It is also hoped that mothers who use MCH books can increase their knowledge about the importance of monitoring the nutritional status of toddlers, therefore continuous maternal education is very important. The utilization of MCH book data on the growth and development of babies aged 12-59 months with fewer and more complete records is 67.0% (Bhuiyan & Nakamura, 2009).

The use of MCH books during the Covid-19 pandemic is sufficient (60%), both (38.3%) and less (1.7%) to assist mothers in managing maternal and child health during the Covid-19 pandemic. The use of MCH books during the Covid-19 pandemic can be maximized by providing infant nutrition to toddler mothers through various media (Puspita Sari et al., 2021).

The MCH manual is not the only information it requires to feed children under the age of 5 years mama Also in this study The instrument was compiled in the form of a questionnaire compiled by himself the researcher used this information obtained from the MCH book. That there may be other factors that do not cause. There is a relationship between independent and bound variables although the questionnaire was given the mother confirmed first until now. The results of this study showed that mothers who used the MCH book on early childhood growth and development 12-59 years a month were good, then the record increased Child development in the MCH manual was more complete. May mothers use the MCH manual and expand the knowledge of mothers (Nakamura, 2012).

3. Materials and Methods

3.1. Materials

The number of samples for mothers under five and their families was around 57 people. A sample of each of those villages is random. Samples of toddler mothers and families were then selected by random sampling from each posyandu. Data related to the use of MCH books by families are carried out through observation and means on family members with nutritional status measurements carried out through direct measurements. The research location was in Cibeet Village, to be precise, at the Ibun Community Health Center, Bandung Regency.

3.2. Methods

This study uses an analytical observational study design with a cross-sectional approach to analysis cause and effect variables that occur in research objects collected at the same time. The population is mothers who have children aged less than 12-59 months who are in the village of Cideet. The size of the sample using simple random sampling from each posyandu obtained was 57 people the number of samples that met the criteria. The inclusion criteria are mothers who live in Cibeet Village, Bandung Regency and have MCH books. Exclusion criteria are mothers who have physical pain, toddlers who are not directly cared for by their mothers and toddlers who are physically disabled. Assessment of the Use of Information About Toddlers Aged 0-59 Months in the MCH Book. Observation of the recording function of the MCH book is carried out on the mother's understanding book of the information listed in the child's MCH book. Data related to the use of KIA books by families are carried out through observation and means on family members with nutritional status measurements carried out through direct measurements. Data were analyzed by the chi square method at a meaningfulness level of $\alpha = 0.05$.

4. Results and Discussion

4.1. Results

4.1.1. Univariate Analysis

Table 1: Utilization of MCH Books

Category	Number of Respondents	Percentage (%)
Not taking advantage	3	5.3
Infrequent leverage	30	52.6
Frequent leverage	24	42.1
Total	57	100.0

From Table 1 the results of the univariate analysis of the utilization of MCH books above show that a Percentage of respondents 3 (5.3%) categories are not, most of the respondents 30 (52.6%) categories are rare and almost half of the respondents are 24 (42.1%) 'frequent categories.

Table 2: Fostered (mother /other)

Category	Number of Respondents	Percentage (%)
Mother	51	89.5
Caregivers	2	3.5
Grandmother	3	5.3
Father	1	1.8
Total	57	100.0

From Table 2, the results of the univariate analysis of parenting above show that almost all respondents 51 (89.5%) categories are fostered by mothers, A small percentage of respondents 2 (3.5%) categories are in 'foster care by caregivers, Minority 3 (5.3%) categories are taken care of by grandmothers and A small percentage of respondents 1 (1.8%) categories are taken care of by fathers.

Table 3: Nutritional status

Category	Number of Respondents	Percentage (%)
Good Nutrition	48	84.2
More Nutritional Risks	8	14.0
Malnutrition	1	1.8
Total	57	100.0

From Table 3, the results of the univariate analysis of nutritional status above show that almost all respondents 48 (84.2%) are in the good nutrition category, a small percentage of respondents 8 (14.0%) are in the nutritional risk category, and a small percentage of respondents 1 (1.8%) in the malnutrition category.

4.1.2. Bivariate Analysis

Table 4: The relationship of kia books (read/other) to nurtured

Kia Book	Taken Care										P-Value
	Mother		Caregivers		Grandmother		Father		Total		
	F	%	F	%	F	%	F	%	F	%	
Do Not	2	3.9	0	0.0	0	0.0	1	100.0	3	5.3	0.004
Infrequently	28	54.9	1	50.0	1	33.3	0	0.0	30	52.6	
Often	21	41.2	1	50.0	2	66.7	0	0.0	24	42.1	
Total	51	89.5	2	3.5	3	5.3	1	1.8	57	100.00	

The results of the analysis of the relationship between the kia book (read / other) and nurtured obtained a pvalue (0.004) < from the alpha value (0.05) so that H_0 was rejected H_1 was accepted, thus there is a relationship between the The relationship of kia books (read/other) to nurtured.

4.1.3. The relationship of kia books (read/other) to nurtured

Table 5: Relationship of kia books (read/other) to BB/TB

Table 5: Relationship of Kia Books (read/care) to DD/ID									
Kia Book	Taken Care								P-Value
	Good Nutrition		More Nutritional Risks		Malnutrition		Total		
	F	%	F	%	F	%	F	%	
Do Not	2	4.2	0	0.0	1	100	3	5.3	0.000
Infrequently	30	62.5	0	0.0	0	0	30	52.6	
Often	16	8	0	100.0	24	42.1	24	42.1	
Total	48	84.2	8	14	1	1.8	57	100	

Results of the relationship analysis of the relationship between kia books (read/other) and BB/TB obtained $p - value$ (0.000) < from alpha value (0.05) so that H_0 is rejected H_1 is accepted, thus there is a relationship between kia book (read/other) and BB/TB.

4.2. Discussion

The results in this study found that toddler mothers who used MCH books effectively by 42.1%, family members who used MCH books 89.5% were mothers, Nutritional status of toddlers 84.2% good nutrition, Based on the analysis of the relationship between the use of MCH books and the nutritional status of toddlers, a p-value (0.000) < from alpha values (0.05) so that H_0 was rejected H_1 was accepted, Thus there is a relationship between the utilization of MCH books and the nutritional status of toddlers. There is a relationship between the use of MCH books and toddler caregivers obtained $p - value$ (0.004) < of alpha value (0.05) so that H_0 is rejected H_1 accepted.

Based on the results of this study, the MCH Book is very useful in improving the nutritional status of toddlers. The use of the Mother and Child Health Book is an effort to increase the effectiveness of communitybased activities in promoting maternal knowledge and behavior in maternal and child health. The use of MCH books in health education sessions will encourage effective communication between mothers and health workers. Health worker support can be provided when mothers take advantage of healthcare facilities, health workers can explain, an important point because mothers do not understand maternal and child health information (Carolin, et al., 2022). This aims to increase maternal knowledge about the importance of recording the nutrition of toddlers, in addition to that the completeness of MCH book recording in toddlers can be early detection of nutritional status disorders of toddlers. The use of MCH books can be a medium for mothers to understand the health conditions of mothers and children. The family will also be able to understand the use of the MCH Book so that there are three functions of the MCH book (recording function, educational function, and communication function) that can be maximized (Loeb, et al., 2004).

Mothers who have MCH books visit health services more often than mothers who do not have MCH books. Although mothers who have MCH books have less knowledge, mothers will be familiar with the health information that has been provided by health workers who use MCH books as guidelines for providing information. Thus, the use of this MCH book is considered very important, especially to maintain the health of mothers and children under five (Carolin, et al., 2022).

The use of MCH books can help mothers understand the health status of mothers and children. Families can also understand how to use the MCH manual to maximize the three functions (registration function, education function and communication function) of the MCH manual (Loeb, et al., 2004).

Research in Japan shows that the book Maternal and Child Health is a tool that almost all parents in Japan used as a recording tool that parents share during the period of pregnancy until toddlerhood. One of the pieces of information in this book is child growth and nutrition in children. Information in MCH books can increase knowledge so that parents use it as early detection of growth and development disorders in children (Takeuchi et al., 2016).

MCH has not been done optimally because there are still MCH books whose filling is not complete. The unfilled sections are on advice on nutrition and feeding fulfillment, Stimulation of Early Intervention Detection of Growth and Development, as well as child health records, from 10 MCH books of 100% on the record, are not filled (Mudany et al., 2015).

The results of this study show that for mothers who make good use of the MCH book on the growth and development of toddlers 12-59 months, the record of toddler growth and development in the MCH book is more complete. It is hoped that mothers use MCH books and increase maternal knowledge about the importance of monitoring the nutritional status of toddlers, so it is necessary to carry out sustainable education for mothers. The role of midwives is very large in improving the completeness of MCH records in toddlers (Nakamura, 2012).

According to research Souza, et al., (2011) explained that knowing on average has a significant relationship with the use of MCH books by parents of toddlers. Well-informed mothers are more likely to use MCH manuals to monitor their children's diets. But the use of MCH books in this study is not related to the role of health workers. This may indicate that many things other than healthcare workers can improve compliance with the MCH manual (Souza, et al., 2011). The MCH book is an important tool in our efforts to realize the idea of leaving no one in the SDG era. Each country has its own culture and customs. We must respect the values of each culture, share best practices and teachings, and promote the use of the MCH Book for the benefit of more people. We sincerely hope that MCH Book can contribute to the happy and healthy lives of mothers, children, and families around the world (Nakamura, 2019).

5. Conclusion

This study concludes that less than half of toddler families have not used the MCH book as a medium for determining the nutritional status of toddlers and there are still toddlers with malnutrition, in Cibeet village, the working area of the Ibun Health Center. Efforts are needed to empower families in utilizing the MCH book so that family participation will increase in maintaining healthy family health.

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