



## THE RELATIONSHIP BETWEEN THE UTILIZATION OF KIA BOOK WITH KNOWLEDGE AND ATTITUDE OF MOTHERS IN MONITORING GROWTH AND DEVELOPMENT TODDLERS

Vera Selly Lestari, Rialike Burhan\*, Yuniarti

*Department of Midwifery, Poltekkes Kemenkes Bengkulu, Bengkulu, Indonesia*

*\*rialike@poltekkesbengkulu.ac.id*

### Abstract

In 2018, the World Health Organization (WHO) reported third highest prevalence in Southeast Asia was Indonesia, 28.7% children under five who experienced growth and development disorders. In Indonesia, the percentage 57.6% toddlers who receive growth, development monitoring and early detection stimulation in 2021 indicating that overall the number of toddlers receive early growth and development monitoring aged 1-5 years is 23.216,123. The Indonesian government launched a number of initiatives to highlight the monitoring of toddlers' growth and development. One such initiative used KIA to assess and track the health of mothers and children, from those who were pregnant to those who were five years old. With minimum service standards for under-five mortality, stunting, wasting, and enhancing quality of life, health workers and posyandu provide integrated health services at government and private health institutions. According to the above description, researchers who are interested in conducting studies to determine the association between moms' knowledge and attitudes toward monitoring toddlers' growth and development and the usage of MCH books. This kind of study employs a cross-sectional design, using accidental sampling as a sampling methodology, and employs 100 mothers living in Bengkulu City's working area of the Jembatan Kecil Health Center, whose children range in age from 12 to 59 months. The results of statistical tests indicate there is correlation between moms' attitudes toward keeping eye on their toddlers' growth and development ( $p = 0.000 < 0.05$ ) and their knowledge how to use KIA books ( $p = 0.000 < 0.05$ ).

**Keywords :** KIA Book, Mother's Knowledge, Growth and Development, Toddlers

### INTRODUCTION

Growth monitoring is an effort to identify early growth anomalies and poor nutritional conditions in children (Fatmawati, 2021). The World Health Organization (WHO) reports that Indonesia the third highest prevalence rate in Southeast Asia, with 28.7% of under-fives experiencing growth and development disorders (WHO, 2018). The percentage of toddlers in Indonesia who received early

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growth and development monitoring and early detection stimulation in 2021 was 57.6%, indicating that 23,216,123 toddlers aged 1-5 years were monitored for growth and development (Ministry of Health, 2021).

The age of children 3-5 years is the Golden Age which is a period when development occurs rapidly in all aspects of development. This development is related to processes in the body that include cells, tissues, organs and organ systems that develop according to their functions, the lack of basic fulfillment of toddlers will have an adverse impact on the growth and development of toddlers, because the role of a mother is very important to meet the basic needs of children, one of which is foster care. Developmental disorders must be prevented through detection assessments that will be carried out comprehensively (ngidoti Musonah, Lia Dian Ayunigrum, 2023).

The Indonesian government has designed several efforts to suppress the monitoring of growth and development of children under five, one of the efforts is the use of the KIA book to find out and monitor the health of mothers and children from pregnant women to children aged 5 years. This program has been introduced since 1994 as an international cooperation between Indonesia and Japan (JICA) (Yoon, 2023). MCH book is one of the tools to support maternal and child health services as a medium of communication, information and education (KIA) and effective and efficient recording to detect emergencies, as well as a source of information for maternal and child health (Ariani et al., 2023).

According to PERMENKES No 66 of 2014, monitoring of child development must be carried out with quality with adequate stimulation, early detection, and early intervention to improve children's health, nutrition, cognition, and psychology. (Ministry of Health, 2014). The use of the KIA book for mothers and children from pregnant women to children aged five is one of the initiatives designed by the Indonesian government to monitor the growth and development of children under five years old. The program started in 1994 through the international cooperation of Indonesia and Japan (JICA). (Yoon, 2023).

The KIA book supports maternal and child health services (Ariani et al., 2023). This health care is integrated in public and private health facilities by health workers and posyandu cadres to reduce under-five mortality, wasting, and improve the quality of life of under-fives. (Ministry of Health, 2022). Based on data from the Bengkulu City Health Office, under-five service activities are carried out in all Puskesmas where ages 0-59 months must receive services according to standards which include toddler health, namely providing vitamin A, measuring height and weight, and monitoring growth and development using the KIA book.

In 2023, the target number of children under the age of 0-59 months was 22,283. The number of toddlers who receive health services according to the standard is still around 74.41%. This toddler service is still far from the toddler service target of 100% served according to standard. Puskesmas Jembatan Kecil had 2,040 mothers under five, the most compared to the other two puskesmas, Puskesmas Sawah Lebar with 1,808 children under five and Kandang with 1,750 children under five (Bengkulu City Health Office, 2023). Initial research on 28 February 2024 at Puskesmas Jembatan Kecil showed that the distribution of KIA books and their utilization is still very low in Bengkulu City. Of the 10 mothers of children under five surveyed about the KIA book, most did not know the contents of the KIA book and had never read the KIA book. They only use the MCH book to bring to school. The number of toddlers 0-59 months who have a KIA book in the working area of Puskesmas Jembatan Kecil in 2023 was 1598 toddlers and 618 toddlers who attended Posyandu in 3 villages, namely Kelurahan Jembatan Kecil with 132 toddlers, Panorama 297 and Dusun Baru 190 toddlers.

Monitoring of growth and development in children under five years of age in Indonesia is carried out in stages starting from the family/community level using the KIA book development checklist. The results of developmental checks through the KIA book with incomplete interpretation, then followed up with an examination of growth and development by health workers through the activities of early detection and intervention of child growth and development (SDIDTK) at the Puskesmas. (Kementerian Kesehatan, 2022)

The title of the relationship between maternal knowledge and attitudes about maternal and child health books (KIA) with the behavior of bringing KIA books to posyandu activities in the gambirsari puskesmas area. The results of the study state that the better the mother's knowledge about the behavior of carrying the KIA book, the better the mother's attitude towards utilizing the KIA book, on the contrary, the lower the mother's knowledge about the behavior of carrying the KIA book, the less the mother's attitude about carrying the KIA book and utilizing it. (Wijayanti, Widyastuti and Hapsari, 2019)

Optimizing the use of KIA books by mothers of children under five through family and community empowerment. The KIA book is a home-base record to ensure the continuum of care (COC) for mothers and children, as well as a guide for families and health care providers to detect health problems, communication media, and education.(Kementerian Kesehatan, 2022)

## MATERIAL AND METHODS

This study used a cross sectional method, with a population of 618 mothers who had toddlers aged 12 to 59 months at 3 Posyandu in the work area of Jembatan Kecil Health Center, Bengkulu City. A sample of 100 people was taken using the Slovin formula with a margin of error of 0.1. The sample proportion can be seen in table 1 below:

*Table 1: Research Sample*

	Name of Village	Number Toddlers	Proportional Sample Size	Final Sample Size
1	Jembatan Kecil	132	$(132:618) \times 100$	21
2	Panorama	297	$(297:618) \times 100$	48
3	Dusun Besar	190	$(190:618) \times 100$	31
	Jumlah	618		100

Furthermore, from these 3 Posyandu areas, sampling was carried out according to proportions which were then taken accidentally with the criteria: having a KIA book, having toddlers aged 12-59 months, mothers can read and write. The consideration of accidental sampling is due to the time of the study, the vast working area of the Puskesmas and the incomplete address listed in the Posyandu record book so it is not possible when visited to the house.

Primary data collection of this study used an instrument with 12 questions about the utilization of the KIA book, 12 multiple choice questions for maternal knowledge and statements of maternal attitudes towards toddler growth and development using a Likert scale. The questionnaire was first tested for Cronbach's Alpha 0.771 validity and reliability. Researchers protected the rights of respondents to make their own decisions and there was no coercion to participate in the study, by conducting informed consent, without writing names on the questionnaire and maintaining confidentiality. This research has obtained ethical clearance from KEPK Poltekkes Kemenkes Bengkulu with No.KEPK.BKL/521/06/2024. The research data were tested univariately and bivariately using Chi square.

## RESULT AND DISCUSSION

*Tabel 2 : Overview of KIA Book Utilization in Monitoring Toddler Growth and Development in the Working Area of Jembatan Kecil Health Center, Bengkulu City 2024*

Variable	Frequency (n=100)	Percentage (100%)
<b>Utilization of KIA book</b>		
Not utilized	33	30,0
Utilize	67	67,0
<b>Knowledge</b>		
Less	20	20,0
Good	80	70,0

<b>Attitude</b>		
Negative	43	43,0
Positive	57	57,0

Of the 100 mothers of toddlers surveyed, Table 2 shows that most mothers use the KIA book as much as 67.0 percent to monitor the development of toddlers in the working area of Jembatan Kecil Health Center, mothers of toddlers have good knowledge 80.0 percent and mothers of toddlers have a positive attitude 57.0 percent. Of the 100 respondents, 33 mothers of toddlers did not use the KIA book and 67 used it. The results show that most mothers of toddlers have used the KIA book well. During visits to health facilities, mothers can assess the utilization of the KIA book by reading it, understanding it, and applying it. (Ministry of Health RI, 2021). It is expected that by getting information from the KIA book, the mother's knowledge will increase about detecting deviations in growth and development of toddlers early on (Parwati, Wulandari and Budarsana, 2020).

Previous studies by Parwati, Wulandari, and Budarsana (2020) found that of the 124 people surveyed, 74.2% could use the KIA book well, 25% could use the KIA book moderately, and 0.8% could use the KIA book less. The results of research from 100 respondents, 20 mothers of toddlers lack knowledge and 80 mothers of toddlers have good knowledge in the Jembatan Kecil Health Center area. Knowledge is the result of someone learning about something (Notoatmodjo, 2016). The level of parental knowledge about the KIA book can be obtained from the KIA book held by the mother of a toddler. It is expected that mothers use the KIA book and increase knowledge about the importance of monitoring children's growth and development (Huru, 2023). Research by Luana et al., (2023), obtained the results of 90 respondents, almost all mothers of toddlers have good knowledge (57.8%) and sufficient knowledge (42.2%).

The results showed that out of 100 respondents, most mothers of toddlers were positive about using the KIA book to monitor their child's development, 43 mothers of toddlers were negative and 57 mothers of toddlers were positive. Researchers believe that most mothers under five have a positive attitude, some mothers under five who are negative because of certain factors. In this study, the attitude of mothers under five showed an acceptance reaction to the utilization of the KIA book. The information obtained about the importance of utilizing the KIA book encourages mothers to do good childcare. Syiviana's research (2021), resulted in 16 out of 25 mothers of toddlers being positive (64.0%) and 9 being negative (36.0%).

*Tabel 3 : Relationship between KIA Book Utilization and Maternal Knowledge in Monitoring Toddler Growth and Development in the Working Area of Jembatan Kecil Health Center, Bengkulu City 2024.*

<b>Knowledge</b>	<b>P valu</b>	<b>OR (CI 95%)</b>
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Utilization of KIA book							e	
	Less		Good		Total			
	n	%	N	%	n	%		
Not Utilized	20	60,6	13	39,4	33	100,0	0.000	0,394 (0,258-0,601)
Utilize	0	0,0	67	100,0	67	100,0		
Total	20	20,0	80	80,0	100	100,0		

Table 3 shows that of the 20 mothers of toddlers who did not use the KIA book, 60.6 percent had poor knowledge and of the 67 mothers who used the KIA book, 100.0 percent had good knowledge. Indicating mothers do not utilize the KIA book because of poor knowledge is 0.394 times the risk in monitoring toddler growth. The test result of P value = 0.000 ( $p < 0.005$ ) shows the relationship between the use of KIA book and maternal knowledge in the growth of toddlers in the Working Area of Jembatan Kecil Health Center, Bengkulu City in 2024.

The results of the study obtained good knowledge of mothers of toddlers as much as 100.0%. This study found a significant relationship between the use of KIA books and maternal knowledge in monitoring toddler growth with a p value = 0.000 and OR 0.394 (95% CI 0.258-0.601). Knowledge, according to Notoatmodjo (2016), is the result after someone senses something. The results of research by Luana et al. (2023) obtained the result of P = 0.019, indicating that there is a relationship between maternal knowledge about the KIA book and utilization behavior.

The results of Syiviana's research (2021) found that the knowledge of mothers of toddlers is less and well related to the utilization of the MCH book in monitoring the development of toddlers, although 20 mothers of toddlers have less knowledge (60.6%).

*Tabel 4 : Relationship between KIA Book Utilization and Mother's Attitude in Monitoring Toddler Growth and Development in the Working Area of Jembatan Kecil Health Center, Bengkulu City 2024*

City 2024							P -value	(OR CI95%)
Utilization of KIA book	Sikap				Jumlah			
	Negative		Positive					
	n	%	N	%	n	%		
Not Utilized	21	63,6	12	36,4	33	100,0	0,000	3,580 (1,494-8,574)
Utilize	22	23,8	45	67,2	67	100,0		

Total	43	43,0	57	57,0	100	100,0
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According to Table 4, out of 21 mothers of toddlers not utilizing the KIA book, 63.6% were negative and out of 45 mothers of toddlers utilizing the KIA book, 67.2% were positive. Indicating that mothers do not utilize the KIA book because they are negative as much as 3.580 times. The results of the P value test = 0.000 ( $p < 0.05$ ) indicate that there is a relationship between the use of the KIA book and maternal knowledge in monitoring the growth of toddlers in the Working Area of Jembatan Kecil Health Center, Bengkulu City in 2024.

The analysis test uses chi square with the results of  $P = 0.000$  and OR 3.580 (95% CI 1.494-8.574), indicating that mothers of toddlers who use KIA books have a 3.580 times greater chance than mothers who do not use KIA books. Attitude, according to A. Wawan and Dewi M. (2023) is a feeling accompanied by a certain tendency to act. The process of attitude formation occurs through continuous social contact between people in their environment. Nur Khotimaah's research (2020), on the relationship between attitudes and the utilization of the KIA book at the Kawali Health Center, Ciamis Regency, found that there was a relationship between attitudes and the utilization of the MCH book, with the results of  $P = 0.000$  (Luana et al., 2020).

## CONCLUSION

Based on the results of the study, it can be concluded that there is a relationship between the utilization of the KIA book and the mother's attitude in monitoring the growth and development of toddlers in the work area of the Jembatan Kecil Health Center, namely the KIA book is used well by 67.0 percent of mothers of toddlers, and mothers of toddlers have good knowledge as much as 80.0 percent and mothers of toddlers have a positive attitude as much as 57.0 percent.

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