
Determinants of Factors Affecting the Use of Maternal and Child Health Book in Early Detection of Pregnancy Risks and Child Growth

Teta Puji Rahayu¹(corresponding author), Tinuk Esti Handayani², Agung Suharto³

¹Department of Midwifery, Poltekkes Kemenkes Surabaya, Indonesia (tetapujirahayu@gmail.com)

²Department of Midwifery, Poltekkes Kemenkes Surabaya, Indonesia (tinukesti@gmail.com)

³Department of Midwifery, Poltekkes Kemenkes Surabaya, Indonesia (agungsuarto@gmail.com)

Submitted: January 22, 2019 -Revised: March 31, 2019 -Accepted: April 22, 2019 -Published: April 30, 2019

ABSTRACT

Introduction: Efforts to reduce MMR and IMR include increasing maternal knowledge. One of the government's efforts to improve maternal knowledge is by making a maternal and child health book that can be used as a practical guide to address various health problems, including maternal and child health. The purpose of this study was to analyze the relationship of maternal factors such as age, education, occupation, parity, knowledge, maternal attitudes, ownership of health insurance and family support that affect the use of maternal and child health book (MCH book). **Methods:** This type of research was cross sectional study, using a questionnaire. The research sample was 170 mothers who had toddlers in Magetan district, using cluster random sampling technique for the sub-district, while for the village, *posyandu*, and respondents were taken by simple random sampling. Data analysis using Chi square and multiple logistic regression. **Result:** There was no significant effect between age, education, occupation, parity, ownership of health insurance, maternal attitudes and family support for the behavior of the use of maternal and child health books. Knowledge had a significant effect on the behavior of using maternal and MCH book (p-value = 0.011). **Conclusion:** Knowledge plays a role in the behavior of using MCH book so that they can contribute to the reduction of maternal and infant mortality. It is necessary to examine further other factors that contribute to the use of MCH book such as maternal motivation, support from health workers, the influence of government policies, and the influence of cadre support with different research designs.

Keywords: Age, Education, Employment, Parity, Knowledge, Attitude, Health Insurance, Family Support

INTRODUCTION

Background

MCH book are used as practical guidelines to overcome various health problems, including the health of mothers and children under five. The use of maternal and child health books for more than 2 years in Magetan Regency has never been evaluated. The results of calculating the coverage of MCH books in Magetan Regency, the coverage of maternal and child health books in 2016 has reached 100% while the coverage of first visits of pregnant women (K1) is around 97.3%.⁽¹⁾ K1 coverage is still below the minimum service standard target of 100%, while maternal and child health book coverage has met. From these data it can be concluded that although all pregnant women have received maternal and child health books, but not all understand about maternal and child health books so that they do not carry out regular pregnancy checks to health workers, in the end complications or risks that occur in pregnancy and child development are not detected early.

Purpose

Analyze the determinants of factors that influence the utilization of MCH books in early detection of the risk of pregnancy and child growth in Magetan Regency in 2018.

METHODS

This type of research was a cross-sectional study, using questionnaires. The research sample were 170 mothers who had children under five in Magetan district, using cluster random sampling techniques for sub-districts, while for village, *posyandu*, and respondents taken by simple random sampling. Data analysis using Chi square and multiple logistic regression.

RESULTS

Most of the respondents in healthy reproductive age (68.8%), secondary education (48.8%), working (67.1%), multiparous (60%), good knowledge (86.5%), having a positive attitude (100%), having health insurance (72.9%), sufficient family support (64.1%), and utilizing MCH books (99.4%).

Table 1. Characteristics of Research Subjects (n = 170)

Variable	Frequency	Percentage
Age		
Unhealthy reproduction	53	31.2
Healthy reproduction	117	68.8
Education		
Basic	54	31.8
Middle	83	48.8
High	33	19.4
Work		
Work	114	67.1
Does not work	56	32.9
Parity		
Primipara	68	40
Multipara	102	60
Mother's knowledge		
Less	0	0
Enough	23	13.5
Well	147	86.5
Mother's attitude		
Negative	0	0
Positive	170	100
Health Insurance Ownership		
Do not have	46	27.1
Have	124	72.9
Family support		
Less	0	0
Enough	109	64.1
Well	61	35.9
Behavior of Utilization of maternal and child health books		
Not Utilizing	1	6
Make use of	169	99.4

Based on the results of the analysis, it was found that the majority of respondents in the healthy reproductive age of 117 respondents all used maternal and child health books. The majority of respondents had middle education (junior and senior high school), namely 83 respondents, 98.8% of them use MCH book. Most of the respondents worked as many as 114 respondents, 99.1% of them used MCH book. The majority of multipara respondents were as many as 102 respondents, 99% of them used MCH book. Most of the respondents had good knowledge, namely as many as 147 respondents, all of them used MCH book. All respondents had a positive attitude, namely as many as 170 respondents and 99.4% of them used MCH book. The majority of respondents had health insurance, namely 124 respondents, all of them used MCH book. Most of the respondent's family support was as many as 109 respondents, 99.1% of them used MCH book.

Table 2. Distribution of Utilization of MCH Book based on Characteristics of Research Subjects

Characteristic	Utilization of MCH book				Total		x ²	p-value
	Not use		use		n	%		
	n	%	n	%				
Age								
Unhealthy reproduction	1	1.9	52	98.1	53	100	2.221	0.136
Healthy reproduction	0	0	117	100	117	100		
Education								
Basic	0	0	54	100	54	100	1.054	0.590
Middle class	1	1.2	82	98.8	83	100		
High	0	0	33	100	33	100		
Work								
Work	1	0.9	113	99.1	114	100	0.494	0.482
Does not work	0	0	56	100	56	100		
Parity								
Primipara	0	0	68	100	68	100	0.671	0.413
Multipara	1	1	101	99	102	100		
Mother's knowledge								
Less	0	0	0	0	0	0	6.429	0.011
Enough	1	4.3	22	95.7	23	100		
Well	0	0	147	100	147	100		
Mother's attitude								
Negative	0	0	0	0	0	0	-	-
Positive	1	0.6	169	99.4	170	100		
Health Insurance Ownership								
Do not have	1	2.2	45	97.8	46	100	2.712	0.100
Have	0	0	124	100	124	100		
Family support								
Less	0	0	0	0	0	0	0.563	0.453
Enough	1	0.9	108	99.1	109	100		
Well	0	0	61	100	61	100		

The results of multiple logistic regression analysis only have one variable that has a significant influence with the use of maternal and child health books, this variable is the knowledge of mothers with a determination coefficient or R squared is 0.337 which means that the use of maternal and child health books as much as 33.7% can be explained by knowledge factors, while 76.3% can be explained by other factors.

Table 3. The Results of Logistic Regression test

Variable	B	SE (β)	r ²	Sig
Knowledge	18.112	3315.06	0.337	0.44
Constants	-33.133	6630.12		

DISCUSSION

Age does not affect the use of maternal and child health book. This is likely because there are determinants of factors that are closer to the use of maternal and child health books, such as knowledge and attitudes. Age is one of the factors indirectly, so it is included in the far determinant that can affect the utilization of the maternal and child health book. There is no significant effect between education and utilization of maternal and child health book. Women who are more educated tend to pay more attention to their health and family health so that their health status will be higher as well. Higher educated women will be more careful in choosing and making decisions in maintaining their health.⁽²⁾ This is likely to occur because mothers who have low education can

improve their knowledge through increasingly sophisticated social and electronic media, so that anytime and anywhere can access the importance of using maternal and child health books for mothers and children.⁽³⁾

There is no significant effect between work and utilization of maternal and child health book. This is likely to occur because as long as the mother works she gets a lot of information about the importance of using maternal and child health books through social and electronic media so that the employment status does not affect the utilization of the maternal and child health book.⁽⁴⁾ There is no influence between parity and utilization of maternal and child health book. Pregnant women with primigravida parity may be trying to fully understand the functions and benefits of the maternal and child health handbook, because if the pregnant woman is convinced of the benefits of the maternal and child health book, she will choose to always carry the book during the examination, try to read and understand the contents of the book and keep it.⁽³⁾

There is no significant influence between the ownership of health insurance and the use of maternal and child health book. Ownership of health insurance does not affect the use of maternal and child health book, this is likely due to the dependence of the community on the existence of low health insurance, so that having or not having health insurance does not affect the utilization of the maternal and child health book. There is an influence of mother's knowledge on the utilization of maternal and child health book. Good knowledge of maternal and child health books can improve maternal compliance in the use of maternal and child health book, so the quality of the use of maternal and child health books also increases. Attitudes have a constant value so that statistical analysis cannot be done. Attitude, defined by Social Psychology as a positive or negative evaluation of reactions to objects, people, situations or other aspects, and allows us to predict and change people's behavior.⁽⁵⁾ There is no significant relationship between family support and utilization of maternal and child health books. The factor of family support is one of the factors outside the individual who determines whether the health action is supported or not. Source of reinforcement, of course depends on the purpose and type of program.^{(3),(6)}

CONCLUSION

Factors of age, education, employment, parity, ownership of health insurance, maternal attitudes, and family support did not have a meaningful relationship with the utilization of the maternal and child health book. Mothers who have good knowledge use maternal and child health books more. Mother's knowledge factor is the dominant factor associated with the utilization of maternal and child health books.

REFERENCES

1. Health Office of Magetan District. 2016 Magetan District Health Profile of Magetan District in 2016 (Profil Kesehatan Kabupaten Magetan Tahun 2016. Magetan: Health Office of Magetan District; 2016.
2. Notoatmodjo S. Health Behavior Science (Ilmu Perilaku Kesehatan). Jakarta: Rineka Cipta; 2010.
3. Farida N. Determinants of the Utilization of Maternal and Child Health Books by Pregnant Women in Wanakerta Health Center Karawang District in 2015. *The Southeast Asian Journal of Midwifery*. 2016;2(1):33-41.
4. Absari N. Relationship between Employment Status and Utilization of MCH Books in the Work Area of Bintuhan Health Center, Kaur Regency. Bengkulu: STIKes Tri Mandiri Sakti Bengkulu; 2016.
5. Wawan A, Dewi M. Theory and Measurement of Knowledge, Attitudes and Human Behavior. Yogyakarta: Nuha Medika; 2010.
6. Glanz K, Lewis FM, Rimer. Linking Theory, Research, and Practice In Health Behavior and Health Education: Theory, Research, and Practice, eds. San Francisco: Jossey-Bass; 2002.