

The Influence of Health Education on Increasing Pregnant Women's Knowledge About the Benefits of Mch Books During Pregnancy at Jambi City Puskesmas

Olga Lolonda¹, Kamariyah², Muthia Mutmainnah³, Indah Mawarti⁴, Suryadi Imran⁵

¹ FKIK Universitas Jambi and olgalolonda27@gmail.com

² FKIK Universitas Jambi and kamariyah.fkik@unja.ac.id

³ FKIK Universitas Jambi and muthia899@gmail.com

⁴ FKIK Universitas Jambi and indah_mawarti@unja.ac.id

⁵ FIKes Universitas Adiwangsa Jambi and suryadiimran72@gmail.com

ABSTRACT

Public understanding in Indonesia about the benefits of MCH books is still low, so there is a lack of knowledge among mothers to recognize the signs and dangers of pregnancy due to low resources resulting in bleeding, malnutrition, hypertension, infection, rupture of membranes, lack of fetal movement and other complications suffered by mothers before pregnancy. One of the government's efforts to overcome this problem is by issuing a maternal and child health guidebook so that it can be read and other programs such as outreach related to KIA books. This study aims to determine the effect of health education on increasing pregnant women's knowledge about the benefits of KIA books during pregnancy at the Kenali Besar Community Health Center, Jambi City. This research uses a quantitative method with an experimental questionnaire approach with a one group pre test and post test design. The number of samples in this study was 30 and the population was 868 people. Respondents were taken using a purposive sampling technique. The statistical test used the Wilcoxon test. The results were obtained from the pre test. 16.63 and post test 26.76 results show a p-value of 0.000 (>0.05). Based on these results, it can be concluded that there is a significant influence between the provision of health education about the benefits of MCH books during pregnancy.

Keywords: KIA Books, Pregnant Women, Maternal Knowledge, Health Education.

1. INTRODUCTION

Pregnancy is a process experienced by women in reproduction pregnancy is a union of spermatozoa and ovum and followed by nidation, pregnancy is an important period that requires the maximum level of attention and care [1]. Early detection of pregnancy determines whether there are complications in the delivery process or not, mistakes in ensuring optimal pregnancy have caused maternal and child deaths around pregnancy [2].

Maternal and child health (MCH) books are a resource to discuss how to maintain the health of mothers and children in a comprehensive and sustainable manner held by mothers and other family members, MCH books are useful for monitoring the health of mothers and children, immunisation is part of health efforts for parents and children, and the mention of diseases and child growth and development problems must also be complete and accurate. The first book used in Japan was Boshi techo (mother's book). In 1980, the Indonesian government collaborated with JICA (Japan International Cooperation Agency), in an intership programme, to conduct a trial use of the KIA book in Salatiga. The use of the KIA book became a national programme in 2006 as part of the government's initiative to reduce maternal and child mortality in Indonesia.

Indonesia's maternal mortality rate (MMR) still remains high at 305 deaths per 100,000 live births, now at 189 deaths per 100,000 live births, showing a significant reduction, even lower than the 2022 target of 205 deaths per 100,000 live births. This achievement must be maintained, and even

encouraged to be even better to achieve the target in 2024 of 183 deaths per 100,000 live births and >70 deaths per 100,000 live births in 2030 [3].

This study aims to see how the effect of health education on increasing pregnant women's knowledge about the benefits of the MCH book at the Jambi City Health Centre.

2. METHODS

This think about employments a quantitative strategy employing a pre-experimental plan (pre-experimental plan) with the plan of 'one gather pre-test test plan. This plan is outlined to be done from the starting some time recently a trial is conducted, utilized in treatment or mediation, and after that discover changes that happen some time recently or after treatment or mediation, but in this plan, you'll be able see that changes exist.

There are no controls for comparison between bunches. Bivariate examination by testing the researcher's speculation and deciding the Wilcoxon marked test. Information investigation was carried out utilizing the bivariate strategy to test the theory proposed by the researcher. In this consider, the Wilcoxon signed-rank test was utilized. The Wilcoxon marked test could be a non-parametric test reasonable for utilize when information does not satisfy the suspicion of ordinarieness. This test measures the contrast between two groups of matched grouping information or interval-scale information.

This plan points to evaluate the impact of a given intercession even though there's no control gather to compare results with. In any case, this plan permits the analyst to watch any critical alter within the measured variable.

Wilcoxon Test Method Information Collection: Information were collected some time recently and after the intercession. Information Sorting: The difference between the pre- and post-intervention values were calculated and sorted. Theory Testing: The Wilcoxon test was utilized to decide on the off chance that there was a measurably noteworthy contrast between the two estimations.

3. RESULTS AND DISCUSSION

The demographic profile of the 170 respondents highlights key attributes such as age, gender, education, work experience, and departmental representation. The majority (63.0%) were aged between 25 and 34 years, indicating a workforce primarily composed of young professionals. Gender distribution was nearly equal, with 51.2% male and 48.8% female respondents, ensuring

Table 1. Frequency Distribution of Respondent Characteristics by Gestational Age, Education, Occupation, and Pregnancy Age at Puskesmas Kenali Besar, Jambi City (n = 30).

CHARACTERISTICS	F	%	n (30)
Age			
20-35 years (Fertile Age)	25	83,4	30
> 35 years (High Risk)	5	16,7	
Education			
Elementary School (SD)	2	6,7	30
Junior High School (SMP)	6	20,0	
Senior High School (SMA)	14	47,7	
Diploma III (DIII)	2	6,7	
SBachelor's Degree (S1)	6	20,0	
Occupation			
Housewife (IRT)	23	76,7	30
Honorary Employee	1	3,3	
Civil Servant (PNS)	2	6,7	

Private Sector 4 13,3

Gestational Age		
2nd Trimester (14-27 weeks)	24	79,9
3rd Trimester (28-41 weeks)	6	39,2

In conclusion, the majority of respondents fall within the fertile age range of 20 to 35 years. The most common educational attainment is senior high school (SMA), with 14 individuals (47. 7%). Among the respondents, housewives (IRT) represent the largest occupational group, totaling 23 individuals (76. 7%). Additionally, the highest number of respondents are in the second trimester of pregnancy, accounting for 24 individuals (79. 9%).

Table 2. Frequency Distribution of Knowledge Assessment Results from Pre-Test and Post-Test for Pregnant Women

Knowledge Level	Pre Test		Post Test		P-Value
	F	%	F	%	
Good	13	44,0	22	73,3	0,000
Satisfactory	12	40,0	7	23,3	
Poor	5	16,7	1	3,3	

From Table 2, it can be concluded that the majority of participants demonstrated a knowledge level categorized as 'good,' with a total of 22 individuals, representing 73. 3%.

Table 3. Differences in Knowledge Levels: Pre-Test and Post-Test Before and After Health Education

Variable	N	Mean	SD	Min-Max	CI		p-value
					Lower	Upper	
							.000
Pre Test	30	16,63	4,055	10-24	15,11	18,14	
Post Test	30	26,76	2,568	19-30	25,80	27,72	

From Table 3, it can be concluded that there is a significant difference in knowledge levels among pregnant women before and after receiving health education, with pre-test scores averaging 16. 63 and post-test scores averaging 26. 76. This indicates a notable improvement in knowledge following the educational intervention.

Table 4. Presents the results of the post-test knowledge levels among pregnant women at the Kenali Besar Community Health Center in Jambi City.

Variable	N	Mean Rank	Sum of Ranks	Sig
Post Test	30	15,50	465,00	P Value = 0,000

The results indicate a significant p-value.

Discussion

The results of the study indicate that prior to the health education intervention, there was a varied level of knowledge among the respondents, as reflected in the pre-test and post-test data.

Specifically, in the pre-test, the knowledge levels were categorized as follows: 13 individuals (44. 0%) demonstrated good knowledge, 12 individuals (40. 0%) showed adequate knowledge, and 5 individuals (16. 7%) had poor knowledge. In contrast, the post-test results revealed significant improvement; 22 individuals (73. 3%) were classified as having good knowledge, 7 individuals (23. 3%) as having adequate knowledge, and only 1 individual (3. 3%) as having poor knowledge. Therefore, it can be concluded that there was a significant enhancement in knowledge among pregnant women following the health education program, comparing pre-test and post-test results.

Once the Wilcoxon test is made, the value p was 0. 001 TI $p < 0. 05$. This indicates that H_0 was repressed, which means that there is a meaningful difference between the level of knowledge before and after education. This search for a search for [4]. The statistics of the paired knowledge (prepost) tests of test tests received the value p 0. 000 indicates that there is a meaningful difference between knowledge before the mch's book Socialization and after socialization of the book. MC conclusion society effectively knowledge of pregnant knowledge in the book's book. The book socialization offers the pregnant women so pregnant women can get knowledge, info and aware and the mothers and kids and children (MCH) [4], [5].

This study is affected by the attendance of media or education in healthcare to which the health messages may clearly be clearly, and the destination community can also receive the message clearly and accurately. With additional equipment, people can better understand the facts of health that are considered complicated for what they can value health value for life. In accordance with the notoedojo theory where more senses were used to obtain something more the meaning / knowledge gained to facilitate understanding. The brochure media is written in the media printed in the form of folded liners that are conceived with the illustrations and use a simple and easy language. The ground supports only appear and less specific, design used some goals that stretch agent wants, so this brochure support is not only limited [6].

The results of the study indicate a notable increase in knowledge following the health education intervention. In the post-test, 22 participants (73. 3%) demonstrated good knowledge, while 7 participants (23. 3%) showed sufficient knowledge, and only 1 participant (3. 3%) had limited knowledge. In contrast, the pre-test results revealed that 13 individuals (44. 0%) possessed good knowledge, 12 individuals (40. 0%) displayed sufficient knowledge, and 5 individuals (16. 7%) exhibited less knowledge.

The results indicate a significant impact of health education on the knowledge of pregnant women regarding the benefits of the Maternal and Child Health (MCH) book during pregnancy, as evidenced by a p -value of 0. 000. This finding demonstrates a notable improvement in knowledge levels when comparing pre-test and post-test results.

Research conducted by [4] indicates a significant improvement in knowledge among pregnant women following the socialisation of the Maternal and Child Health (MCH) Book. The paired sample test results revealed a p -value of 0.000, demonstrating a notable difference in knowledge levels before and after the socialisation process. The findings suggest that the MCH Book socialisation is an effective method for enhancing pregnant women's understanding of maternal and child health. This initiative provides a valuable learning experience, enabling pregnant women to acquire essential knowledge, information, and insights into the MCH Book's contents [1], [4].

Health education is vital for health promotion initiatives that seek to improve maternal knowledge and skills. The results of this study are in line with the research conducted by [7], which showed a marked increase in knowledge following the distribution of the Maternal and Child Health (MCH) Book. Statistical analysis indicated a difference of 11.337 in the knowledge levels of pregnant women before and after the MCH Book's socialization. This substantial improvement in respondents' understanding, accompanied by a p -value of 0.000, underscores the effectiveness of the intervention [7]–[9].

CONCLUSION

In conclusion, the knowledge and understanding of pregnant women regarding the benefits of the MCH book during pregnancy are significantly shaped by the health education provided by healthcare workers, particularly at the Kenali Besar Community Health Centre in Jambi City.

ACKNOWLEDGEMENTS

The author would like to express his deep gratitude to I would like to express my deepest gratitude to the Dean of the Faculty of Medicine, the Head of the Department and the Head of the Nursing Science Study Programme and most importantly to my beloved family, my father and mother, my siblings and my friends who have provided moral and material support.

REFERENCES





- [1] N. Ainiyah, M. Hakimi, and A. Anjarwati, "The use of Maternal and Child Health (MCH) handbook improves healthy behavior of pregnant women," *Maj. Obstet. Ginekol.*, vol. 25, p. 59, Mar. 2018, doi: 10.20473/mog.V25I22017.59-62.
- [2] C. H. Kurniati, "PEMBERDAYAAN IBU HAMIL DAN KADER KESEHATAN DALAM PEMANFAATAN BUKU KIA UNTUK DETEKSI DINI PENYULIT PERSALINAN," *Community Serv. Soc. Work Bull.*, vol. 1, no. 2, pp. 45–52, 2022.
- [3] N. Melani and A. Nurwahyuni, "Analisis Faktor yang Berhubungan dengan Demand Atas Pemanfaatan Penolong Persalinan di Provinsi Banten: Analisis Data Susenas 2019," *J. Inov. Penelit.*, vol. 2, no. 10, pp. 3175–3184, 2022, doi: 10.47492/jip.v2i10.1311.
- [4] D. Simatupang and E. L. Silalahi, "Pengaruh Sosialisasi Buku KIA Terhadap Pengetahuan Ibu Hamil Tentang Buku KIA," *Malahayati Nurs. J.*, vol. 4, no. 5, pp. 1078–1088, 2022.
- [5] Septiana, "Pengaruh Pendidikan Kesehatan Terhadap Tingkat Pengetahuan Remaja Tentang Kesehatan Reproduksi di SMP Islam Ruhama Ciputat," *Skripsi Univ. Islam Negeri Syarif Hidayatullah*, p. 35, 2019, [Online]. Available: <http://repository.uinjkt.ac.id/dspace/bitstream/123456789/25662/1/Septiana-fkik.pdf>
- [6] S. Notoatmodjo, "Promosi kesehatan dan perilaku kesehatan," *Jakarta: rineka cipta*, vol. 193, 2012.
- [7] S. Sumardino and S. Sunarto, "Promosi Kesehatan Dengan Buku Kia Terhadap Peningkatan Pengetahuan Ibu Hamil Dan Ante Natal Care Di Puskesmas Ceper Klaten Tahun 2011," *J. Keperawatan Glob.*, vol. 1, no. 1, 2016.
- [8] M. Meinarisa, "Pengaruh Pendidikan Kesehatan Menstrual Hygiene (PMH) Terhadap Sikap Remaja Putri dalam Menjaga Kebersihan Diri Selama Menstruasi," *J. Endur.*, vol. 4, no. 1, p. 141, 2019.
- [9] S. Mulyani and M. Mutmainnah, "Intervensi Paket Modul dan Audiovisual pada Peningkatan Pengetahuan dan Hard Skill Mahasiswa pada Mata Kuliah Keperawatan Maternitas," vol. 6, pp. 173–180, Dec. 2022, doi: 10.22437/jiituj.v6i2.18280.

BIOGRAPHIES OF AUTHORS



Olga Lolonda began to continue her education and was accepted at the Faculty of Medicine and Health Sciences, Jambi University in the Nursing Study Program. path of Independent Selection for State Universities (SMMPTN) in 2020. The author studied at the University of Jambi for approximately four years and graduated in 2024, and now the author continues her nursing Ners professional education at Jambi University in 2024, the author has an interest in conducting research in the field of community nursing.

Email: olgalolonda27@gmail.com

	<p>Kameariyah studied Bachelor of Nursing at the HI Jambi College of Health Sciences and graduated in 2006. Then the author continued her education in the homicide profession at the same place and graduated in 2007. Then in 2014 the author completed a master's program in homicide at Andalas University.</p> <p>Email: kamariyah.fkik@unja.ac.id</p>
	<p>Muthia Mutmainnah took her bachelor's degree in nursing at the University of Indonesia graduating in 1999 then the author continued her master's education at the same place at the University of Indonesia in 2006 and the author continued her nursing profession at the University of Indonesia in 2007 then continued her doctoral degree at the same university in 2019.</p> <p>Email: muthia899@gmail.com</p>
	<p>Indah Mawarti studied Bachelor of Nursing at the Mother's Hope College of Health Sciences (Stikes) and graduated in 2006. Then the author continued her professional education as a nurse at the same place and graduated in 2008. Then in 2014 the author completed her master's degree in nursing at Andalas University.</p> <p>Email: indah_mawarti@unja.ac.id</p>
	<p>Suryadi Imran, He completed his undergraduate education at Gadjah Mada University in 2003 as a professional nurse, then continued his Masters in Nursing Management, graduating in 2012. and is currently studying for a doctoral degree at Philipines Women's University. Works as a lecturer at two universities, Jambi University, and Adiwangsa Jambi University, apart from that he is active as an emergency training instructor and has published 3 books, namely a leadership management book, a health statistics book, and an anatomy and physiology book.</p> <p>suryadiimran72@gmail.com</p>