Public Health Perspectives Journal 8 (1) 2024

Public Health Perspectives Journal

http://journal.unnes.ac.id/sju/index.php/phpj

The Effect of Health Promotion (With MCH Book) on Knowlegde, Attitude, Behavior of Utilizing MCH Books in Pregnant Women at UPTD Public Health Center of Pati Distric

Heriani Retnoningsih✉, **Ari Yuniastuti, Intan Zainafree**

Universitas Negeri Semarang, Indonesia

Article Info

Article History:
Recived
28 March 2024
Accepted
23 May 2024
Published
27 June 2024

Keywords:
MMR, MCH, Knowledge, Attitude, Behaviour, Pregnant Women

DOI:
https://doi.org/10.15294/phpj.v8i1.13248

Abstract

Health level is a measure of a country' welfare. The purpose of this study was to determine the impact of health promotion with maternal and child health (MCH) books on knowledge, attitudes and health behaviour of pregnant women at the UPTD Health Center of Pati Regency because high maternal mortality rate (MMR) indicates that maternal health is still poor. The type of research is Quasy-Experiment (pre-experimental designs). The research design used Pre test - Post test Control Group design. Sampling in this study was non-random sampling with purposive sampling type. Based on the population of pregnant women in 29 UPTD Health Centers in Pati regency, 2 Health Centers were determined to be objects of research, namely UPTD Kayen Health Center and UPTD Pati II Health Center. The results showed that frequency distribution of respondents' answers in the control group or Pati II Health Center showed that the pretest and posttest values in responents did not increase in the value of the knowledge variable of pregnant women. Meanwhile, the frequency distribution of the respondents showed the pretest and posttest in the experimental group or Kayen health Center respondents, where there was an increase in the value of the variable of knowledge of pregnant women which was getting better. The results of the Wilcolzon Signed Rank Test in the control group showed that the sig pretest and posttest values of the behavioral variables in the control group were > 0.05 so it can be concluded that there was no change in the behavior or pregnant women in the control group. The results of the Wilcoxon signed rank test in the intervention group showed that the sig pretest and posttest values of the behavioral variables of pregnant women in the experimental group were <0,05 so it can be concluded that there was a change in the behavior of pregnant women in the intervention group.

✉Correspondence Address:
Kampus UNNES Jl Kelud Utara III, Semarang, 50237, Indonesia
E-mail: herianiretnoningsih98@students.unnes.ac.id

p-ISSN 2528-5998
e-ISSN 2540-7945

INTRODUCTION

Health status is the welfare of a country, a high Maternal Mortality Rate (MMR) indicates that the health status of mothers is still poor. Maternal mortality is defined as death due to complications related to pregnancy, such as childbirth, that occurs while a woman is pregnant or within six weeks of the end of pregnancy. Severe bleeding, high blood pressure, pregnancy-related infections, complications from unsafe abortion, and pre-existing medical conditions that can be aggravated by pregnancy, such as HIV/AIDS and malaria are the main causes of these deaths. According to the latest WHO report, 287,000 maternal deaths occurred in 2020. This is slightly lower than the 309,000 maternal deaths in 2016. The global maternal mortality ratio (MMR) decreased by 34% from 339 deaths to 223 deaths per 100,000 live births from 2000 to 2020. This represents an average reduction of 2.1 percent per year (WHO, 2020). However, in 2020, the maternal mortality rate (MMR) was still far from what was expected. The target is to reduce the MMR to 183% per 100,000 people by 2024. According to WHO (2023), almost 95% of maternal deaths occur in low- and lower-middle-income countries.

Indonesia' maternal mortality ranking in the world in 2020 was ranked 52nd, based on the average maternal mortality based on the world fact book published by the CIA. South Sudan is in first place with 1,233 per 100 thousand people (CIA, 2020). The national medium-term development plan (RPJMN) for 2024 sets the maternal mortality rate (MMR) for Indonesia at 183 per 100,000 live births, down from 305 per 100,000 live births in 2012–2015, according to data from the Indonesian Demographic and Health Survey (SDKI) (Ministry of Health of the republic of Indonesia, 2023). The maternal mortality rate (MMR) in Central Java Province was 84,6 per 100,000 live births, according to data from the Central Java Health Office. This demonstrates that the SDG of 90% of 100,000 live births has not been reached by the Maternal Mortality Rate (MMR). The Central Statistics Agency (BPS) issued statistics in 2020 that shows the province of Central Java's maternal mortality rate (MMR) at 33rd place.

The maternal mortatily rate in Pati Regency ranks 26th in Central Java, according to data from the Central java health Office. In addition, the health profile figures for pati regency in 2021 showed an increase from 85 cases of MMR reported in 2020 to 132,7 cases of MMR reported in 2021 (Pati Health Office, 2022).

Various things can cause maternal death. According to McCarthy and Maine (2022), there are three variables that determine maternal death: contextual determinants, intermediate determinants, and proxy determinants. Proxy determinants include infection, preeclampsia or eclampsia, and bleeding. Intermediate determinants include maternal health status, reproductive conditions, and distance to health facilities, or utilization of health services.

Pregnancy complications, especially bleeding, have been associated with maternal death in several studies (Astuti et al., 2017; Diana et al., 2020; Nismawati & Julfiana, 2022; Prihesti et al., 2019; Respati, Sulistyowati, & Nababan, 2019); Yogi Pramatirta & Tyrani Rumanti, (2020). In addition research conducted by Pramatirta et al. (2019) found that preeclampsia, indicated by blood pressure above 140/90 mmHg, is the main cause of maternal death. According to Prihesti et al. (2019) dan Yogi Pramtirta & Tyrani Rumanti, (2020). The incidence of proxy determinants increases due to the role of intermediary determinants and contextual determinants (aswar et al. 2019; Royani et al. 2021) In addition, distant contextual factors such as education, attitudes, and behavior also affect a person health condition (Aswar et al. 2019; Mustfirowati, 2021; Sari et al, 2018). The Maternal and Child Health book (MCH) keeps track of maternal and child health and acts as a guide to help improve the quality of these services by identifying maternal and child health problems early on (Murniasih, 2023). It is important to take into consideration the fact that maternal and child health services in Indonesia are still widely used as growth and development monitors, largely because of the relatively low level of knowledge among mothers.

Knowledge of growth and development monitoring contributes greatly to reducing child mortality and morbidity rates (Hanum, 2018). In Indonesia, data related to the MCH book is

limited to the scope of the MCH book by the District or City Health Office, Community Health Centers and other health officials and there has been no evaluation to assess the use of the MCH book by mothers (Ministry of Health of the Republic of Indonesia, 2015).

If health workers and caders ensure that mothers and families understand the contents of the Maternal and Child Health (MCH) book and understand it gradually and apply it in everyday life, the use of the MCH book will be successful (Lutfiana, 2021). Knowlegde is the results of sensing something. Therefore, the field of knowledge or cognition plays an important role in determining a person's behavior or actions (Notoatmodjo, 2020)

Pregnant women have difficulties adopting healthy behaviors due to their mothers' inexperience of how to use the maternal and child health (MCH) book, which is still only thought to be used as a health record book by medical professionals (Oktarina, 2015). To reduce maternal mortality, efforts continue to be made by improving healthy behavior of pregnant women during the third trimester which includes accepting physical and psychological changes, pregnancy check-ups, safe and comfortable sexuality, dealing with minor discomfort, identifying danger signs, utrition, general hygiene, use of iron drugs and preparation for fetal birth.

The lack of awareness and attitudes among women regarding pregnancy danger indicators and other information regarding pregnancy, childbirth, and children under five years old continues to hinder the usage of Maternal and Child Health services. It is a common misconception among expectant mothers that the Maternal and Child Health (MCH) book serves just as a pregnancy record (Utami, 2022). Based on this background, it is important to conduct research on the influence of health promotion (with the MCH Book) on the knowledge, attitudes and health behavior of pregnant women at UPTD Health Center of Pati Regency.

METHOD

This type of research is *Quasy -Eksperiment (pre-experimental designs)*. This research design uses *Pretest—Posttest Control Group design*, the population of this study was all pregnant in 29 UPTD Health Centers of Pati Regency. Sampling in this study was *non-random sampling* with *purposive sampling type*.Based on the population of pregnant women in 29 UPTD Health Centers in Pati Regency, two health centers were determined as the objects of the research, namely the Kayen Health center UPTD and the Pati II Health Center UPTD, based on the ranking of maternal mortality rates from 29 Health Center UPTD, based on the ranking of maternal mortality rates from 29 Health Center UPTDs in Pati Regency with almost similar population and regional characteristics. Before conducting the research, a preliminary research was conducted at the Pati I Health Center. The sample size was 30 pregnant women who came for check-ups at the MCH (Maternal and Child Health) Polyclinic of the Pati I Health Center by distributing a questionnaire about the Maternal and Child Health Book. The results of the analiyzed questionnaire interviews were used to compile quantitative research instruments. The validation team was a senior midwife at Pati I Health Center, with 20 years of work experience. For health promotion media used is animated video which has been validated by the Semarang State University media validator team. At the video will be played during the intervention after the initial pretest in the intervention group, and shared everyday for a month in the Whats App (WA) and you tube groups that shared with pregnant women responds in the intervention group. After a month of intervention, a posttest was conducted using a questionnaire. Samping used inclusion criteria, namely pregnant women who have a maternal and Child Health (MCH) book, present at the time of data collection at the UPTD Puskesmas Kayen and UPTD Puskesmas Pati II, mothers who are willing to be respondents. Exclusion criteria are pregnant women who are psychologically/mental disturbed, do not have a personal cellphone, and are not willing to be respondents. The calculation of the sample size uses the comparative numerial resecarh sample size formula without pairs with two groups and one measurement. The number of samples is 29, to anticipate events where respondents experience drop out, the number of

samples is added by 10 %, so that the control group sample is UPTD Puskesmas Pati II and 32 samples of the experimental group (UPTD Puskesmas Kayen) so that the total sample is 64 people. Research permit letter from Semarang State University number B/3601/UN37.1.9/ KM.07/2024 for research permit at Kayen Health Center, number /3602/UN37.1.9/ KM.07/2024 for research permit at Pati 2 Health Center, number/3603/UN37.1.9/KM.07/2024 for research permit at Pati Regency Health Office, number/3604/UN37.1.9/KM.07/2024 for research permit at Pati 1 Health Center, and Ethical Eligibility Statement No.187/KEPK/ FK/KLE/2024. This Ethical Eligibility Statement is valid for the period from April 23, 2024 to April 23, 2025.

Univariate data analysis used in this study is the normality test using Shapiro-Wilk if sampel is ≤50 and using Kolmogorov-Smirnov if sampel is > 50. Bivariate analysis is used to determine changes isn knowlegde, attitudes and behavior in the use of MCH Books using the Independent Sample t Test if the distribution is normal and the Wilcoxon Signed Rank Test if the data is not normally distributed (Sopiyudin, 2020).

RESULTS AND DISCUSSIONS

Table 1. Frequency Distribution of Pati II and Kayen Health Center

Category	Pati II		Kayen	
Age	**N**	**%**	**N**	**%**
19-25	9	28.13	18	56.25
26-32	8	25	8	25
33-39	10	31.25	5	15.63
40-46	5	15.63	1	3.13
Education				
Elementary School	1	3.13	1	3.13
Junior High School	5	15.63	9	28.13
High School	19	59.38	20	62.5
College	7	21.88	2	6.25
Occupation				
Housewife	22	68.75	26	81.25
Self-employed	5	15.63	2	6.25
Private Employee	5	15.63	4	12.5
Pregnancy				
1st Pregnancy	9	28.13	17	53.13
2nd Pregnancy	12	37.50	11	34.38
3rd Pregnancy	10	31.25	1	3.13
4th Pregnancy	1	3.13	2	6.25
6th Pregnancy	0	0	1	3.13

Source: Primary research data (2024)

Table 2. Frequency Distribution Pretest and Posttest of Pati II Health Center

Category	Knowledge	Attitude	Behaviour
Pre test			
Good	0	7	1
Enough	21	25	31
Less	11	0	0
Post test			
Good	0	7	1
Enough	21	25	31
Less	11	0	0
Normality test			
Statistic	0.926	0.873	0.933
df	32	32	32
Sig	0.03	0.001	0.047

Source: Primary research data (2024)

Table 3. Frequency Distribution Pretest and Posttest of Kayen Health Center

Category	Knowledge	Attitude	Behaviour
Pre test			
Good	7	17	2
Enough	18	15	27
Less	7	0	3
Post test			
Good	32	17	32
Enough	0	15	0
Less	0	0	0
Normality test			
Statistic	0.926	0.873	0.933
df	32	32	32
Sig	0.03	0.001	0.047

Source: Primary research data (2024)

Table 4. Results of Wilcoxon Signed Rank Test Control Group

Category	Pati II		Kayen	
	Z	**p value**	**Z**	**p value**
Knowledge	<0.001	1.000	<-4.955	<0.001
Attitude	<0.001	1.000	< -4.702	<0.001
Behaviour	<0.001	1.000	< -4.967	<0.001

Source: Primary research data (2024)

Based on Table 4, it shows that the sig value of the pretest and posttest of the knowledge, attitude and behavior variables in the control group is > 0.05 so it can be concluded that there is no change in knowledge, attitude and behavior in the control group. The knowledge, attitude, and behavior variables in the experimental group had sig pretest and posttest values of less than 0.005, as indicated by Table 4.3 above. This suggests that there have been changes in the

experimental group's knowledge, attitudes, and behavior.

The Mann Whitney Test was utilized because the data was not normally distributed to compare the differences in knowledge, attitudes, and behavior between the experimental and control group groups when utilizing the MCH Book during the pretest and posttest. The results of the Mann Whitney Test can be seen in the following table 5.

Table 5. Mann Whitney Test Results

Category	Knowledge	Attitude	Behaviour
Mann-Whitney U	<0.001	64.000	<0.001
Wilcoxon W	528.000	592.000	528.000
Z	-7.366	-6.682	-7.376

Source: Primary research data (2024)

The mann Whitney test results between the control and experimental groups are displayed in Table 5. The knowledge, attitude, and behavior variables have a sig value of less than 0,005, indicating that there is a difference between the experimental group and the control group as well as between the control variables and the control group. Before and after the intervention, there are control and experimental variables.

The Influence of Health Promotion on Pregnant Women's Knowlegde regarding the Maternal and Child Health Book (MCH) at the Pati District Health Center UPTD

Pregnant women's knowledge in the control group did not change, according to the findings of the Wilcoxon Signed Rank Test, which revealed that the sig value of the pretest and posttest knowledge variables in the control group was more than 0.05. Nevertheless, the sig value of the pretest and posttest knowledge variables of the pregnant women in the experimental group was less than 0.05, indicating a change in knowledge, according to the results of the Wilcoxon Signed Rank Test in the intervention group. The intervention group consisted of expectant mothers.

These findings are supported by Sari's study from 2024, "Connection Knowledge to Attitude Mother Pregnant About Utilization Book of MCH," which found that knowledge of pregnant women's attitudes toward the use of MCH books had a p value of 0,09 with a 95% confidence level (p<0,05). This led to the conclusion that regular counseling is necessary because not all pregnant women are aware of or remember the advantages of MCH books.

The Influence of Health promotion on the attitudes of pregnant Women Towards the Maternal and Child health Book (MCH) at the UPTD Health Center, Pati Regency

Pregnant women in the control group had no change in their attitudes, according to the findings of the Wilcoxon Signed Rank Test, which revealed that the sig value of the pretest and posttest attitude variables in the control group was >0,05. The Wicolxon Signed Rank Test results for the intervention group indicated that the pretest and posttest attitude variables of the pregnant women in the experimental group had sig values less than 0.05, indicating a change in their attitudes.

These resultas are supported by research by Kirana Candra Sari (2021) entitled "The Influence of Video Media in Pregnant Women's Classes on Knowlegde, Attitudes and Behavior in Choosing a childbirth Assistance" showing that, compared to conventional media, videos in pregnant womens classes improve their perceptions of the place of delivery. The same results were also obtained in a study conducted by esti Yunitasari (2023) entitled"Pregnant Woman Awareness of Obstretic Dangers Signs in Developing Country: Systematic Review" stating that only a few people have awareness related to determinants, and the level of awareness related to determinants, and the level of awareness rangers from low to moderate . Improving the ANC program by immediately assessing obstretic danger signs and evaluating health seeking related to family support, namely husbands and parents, is a recommended approach by recording ANC visits and communicating to families using MCH books and mobile applications.

The Influence of health Promotion on the behavior of Pregnant Women Regarding the Maternal and Child Health Book (MCH) at UPTD Health Center Pati Regency

It may be concluded that there was no change in the behavior of pregnant women in the control group based on the findings of the Wilcoxon Signed Rank Test, which revealed that the sig value of the pretest and posttest behavioral variables in the control group>0.05. Given that the Wlicoxon Signed Rank Test findings for the intervention group revealed a sig value of less than 0.05 for the pretest and posttest behaviors of the pregnant women in the experimental group, it can be said that the behavior of the pregnant women in the intervention group changed.

.These results are supported by Kasih Misrini"s research (2024) entitled "Effectiveness of Using MCH Books Equipped with Videos on Knowlegde of Preparation and Early Signs of Labor in Primigravida at TPMD Sri Nugrahaningsih" showing that there are significant differences between the behavior of mothers and primigravida mothers before being given a counseling video and the behavior of mothers and primigravida mothers before being given a counselling video and the behavior of mothers after being given a counselling video.

This is in line with research by Rouyan Gai Tobe, et al., (2016) in Lohagora, Bangladesh on 3000 pregnant women. 500 pregnant women received MCH books and messages using mobile phones, showing an increase in maternal and newborn care compared to the group of mothers who only received MCH books. Home visits, with or without video edutainment, enhance men's knowledge and attitudes as well as mother and child health outcomes, claim Ansari et al. (2024). If the films are implemented as a regular service and home visitors have access to field assistance and training, they can be a beneficial part of home visits.

Policy makers, stakeholders, and health service providers responsible for maternal care should improve health education and promotion on physical activity to ensure pregnant women continue to exercise. (Asante et al., 2022).

CONCLUSION

Pregnant women's knowledge did not grow in value according to the respondents' pretest and posttest scores, according to the frequency distribution of their responses in the Pati II Health Center or control group. The experimental group or Kayen Health Center's pretest and posttest scores were displayed in the frequency distribution of respondents' answers in the intervention group, whereas the pregnant women's knowledge variable's value increased and improved.

It can be inferred that there was no change in the attitudes of pregnant women in the control group based on the findings of the Wilcoxon signed rank test, which revealed that the sig value of the pretest and posttest behavioral variables in the control group was>0,05.

It can be inferred that there was a change in the attitude of pregnant women in the intervention group based on the findings of the Wilcoxon signed Rank Test, which indicated that the pretest and posttest behavioral variables of the pregnant women in the experimental group had sig values less than 0.05. It can be inferred that there was a shift in the attitudes of pregnant women in the intervention group based on the findings of the Wilcoxon signed rank test, which indicated that the sig value of the pretest and posttest attitude variables of the pregnant women in the experimental group<0,05.

Pregnant women in the control group did not behave differently, according to the findings of the Wilcoxon Signed Rank Test, which revealed that the sig value of the pretest and posttest behavioral variables in the control group was more than 0.05. It may be inferred from the Wilcoxon Signed Rank Test results that the pretest and posttest behavioral variables in the experimental group had sig values less than 0.05, indicating a change in the behavior of the pregnant women in the intervention group.

From the results of this study, suggestions for Health agencies, namely the Pati regency Health Office, especially the Health Services Sector and the Public Health Sector in order to

promote health can utilize video media as an alternative health promotion media for the KIA Book to improve knowledge, attitudes and behavior of pregnant women in utilizing the KIA Book. For further researchers who will conduct research on the influence of health promotion through the use of other media on the knowledge, attitudes and behavior of mothers in utilizing the KIA Book. For pregnant women in the Pati Regency area, it is advisable to routinely read read the contents, benefits, functions, objectives and activities that use the KIA book. It is hoped that pregnant women can orevent IMR (infant Mortality Rate) and MMR (Maternal Mortality Rate) according to contents of the KIA book. During pregnancy, pregnant women undero health checks even without complaints.

ACKNOWLEGDEMENTS

In accordance with the publication of the Journal of Public health Perpectives, on this occasion I would like to thank you for your efforts and membership as a reviwer.

Your assistance has enabled me to meet the scheduled time and maintain the journal's observation standards.

I greatly appreciate your dedication as the number of manuscipts increases each year.

Review:

1. Prof. Dr. Ari Yuniastuti, M. Kes
2. Dr. dr. Intan Zainafree, MH. Kes

REFERENCES

Ambarita, Elparida. (2021). Faktor-Faktor Yang Memengaruhi Pemanfaatan Buku Kesehatan Ibu Dan Anak (MCH) Oleh Ibu Hamil Yang Mempunyai Balita Di Puskesmas Saitnihuta Kabupaten Humbang Hasundutan Tahun 2021. *Journal of Healthcare Technology and Medicine*. Vol 7 No 2, hlm. 1-11

Asante, D. O., Osei, F., Abdul-Samed, F., & Nanevie, V. D. (2022). Knowledge and participation in exercise and physical activity among pregnant women in Ho, Ghana. *Frontiers in Public Health, 10*. https://doi.org/10.3389/fpubh.2022.927191

Azwar, S. (2015). *Metode Penelitian* . Yogyakarta : Pustaka Belaja

Bonita, Nely. (2020). Pengaruh Pengetahuan, Sikap, dan Perilaku Bidan dalam Pemanfaatan Buku MCH Selama Periode Antenatal terhadap Deteksi Dini Ibu Hamil Berisiko Tinggi (Studi Kasus di Kecamatan Solokan Jeruk dan Paseh Kabupaten Bandung). *JMKI: Jurnal Manajemen Kesehatan Indonesia*. Vol 8 No 2.

Chalise, P., Manandhar. P., Infanti, J.J., Campbell, J., Hendrikesen, L., Joshi, S.K., Koju, R., Pun, K. D., Rishal, P., Simpson, M. R. E., Skovlund, E. Skovlund, E., Swahnberg. K, Schei, B., and Lukasse. M. 2023. Addresing Domestic Violence in Antenatal Care Environments in Nepal (ADVANCE)-study protocol for randomized controlled trial evaluating a video intervention on domestic violence among pregnant women. BMC Public Health. https://doi/10.1186/s12889-023-(2023)

Dewie, A. . (2021). Pengetahuan Dan Sikap Tentang Tanda Bahaya Kehamilan Berhubungan Dengan Pemanfaatan Buku MCH. *Jambi Medical Journal : Jurnal Kedokteran Dan Kesehatan*, 9(2), 138-146

Fanumbi, Juliana Retno Palupi Yonni Siwi, Andariningsih, & Tutik Nushah. (2023). The Effectiveness Of Use Of The Maternal And Child Health (MCH) Books On Knowledge About Pregnancy Care For Pregnant Women At The Eva Klurak Candi Sidoarjo Maternity Home . *Journal of Health Science Community,* 4(2), 76–83.

Jeniawaty, Sherly . (2023). Pregnant Mother Assistance in Utilizing the Maternal and Child Health Book (MCH) in the Tanah Kali Kedinding Kenjeran Surabaya Public Health Center Area. *COMMUNITY EMPOWERMENT IN HEALTH (CEH).* Volume 1 Number 1. page 17-21.

Kemenkes RI. (2016). *Buku Saku Kesehatan Ibu di Fasilitas Kesehatan Dasar Dan Rujukan*. Jakarta.

Kemenkes. (2019). *Peraturan Menteri Kesehatan RI No 43 tahun 2019 tentang Puskesmas*. Kementrian Kesehatan Republik

Indonesia.

Kemenkes. (2020). *Buku MCH Revisi 2020 Lengkap*. Kementrian Kesehatan Republik Indonesia.

Kesehatan Ibu dan Anak pada Ibu. *Jurnal Kesehatan Masyarakat Nasional* Vol. 8, No. 8, 353-358

libportal.jica.go.jp. (2020). *Buku Kesehatan Ibu dan Anak*. https://libportal.jica.go.jp/library/Archive/Indonesia/10.pdf, diakses 28 Februari 2024

Luana, Debora Octo. (2023). Parents Knowledge and Attitude About the Maternal and Child Health Handbook Towards the Behavior of Utilising the MCH-Handbook. *Sari Pediatri*. Vol 25 No 2. hlm. 75-79

Luthfiana, Muhammad Fadhil (2021) Implementasi Hukum Program Promosi Kesehatan oleh Bidan sebagai Upaya Penurunan Angka Kematian Ibu (MMR) dan Angka Kematian Bayi (AKB) (Studi di Kecamatan Salawu, Kabupaten Tasikmalaya). *Skripsi thesis*, Universitas Jenderal Soedirman

Maryam, Siti. (2019). Analisis Pengetahuan Dan Sikap Ibu Hamil Tentang Buku Kesehatan Ibu Dan Anak (MCH). *Kebidanan*, 9(1), 1-6

Munna, A. I. (2020). Hubungan Tingkat Pengetahuan Dengan Perilaku Ibu Hamil Trimester Iii Dalam Pemanfaatan Buku Kesehatan Ibu Dan Anak (MCH) Di Puskesmas Tlogosari Kulon Kota Semarang. *LINK*. 16 (2). 74-82.

Murniasih, Elvi. (2023). Efektivitas Pemberian Edukasi Terhadap Tingkat Pengetahuan Ibu Hamil Dalam Penggunaan Buku Kesehatan Ibu Dan Anak (MCH) Di Puskesmas Sei Pancur. *MAJALAH ILMIAH WARTA DHARMAWANGSA*. Vol 17 No 1.

Nies, A. M., & McEween, M. (2013). *Keperawatan Kesehatan Komunitas dan Keluarga*. Jakarta: Elsevier.

Notoatmodjo, S. (2020). *Promosi Kesehatan dan Perilaku Kesehatan*. Jakarta: Rineka Cipta.

Nursalam. (2015). *Metodologi ilmu keperawatan, edisi 4*, Jakarta: Salemba Medika

Sari, E. M. (2023). Efektivitas Pelaksanaan Pendampingan Penggunaan Buku Kesehatan Ibu Dan Anak (MCH) Terhadap Prilaku Ibu Hamil Dalam Pelayanan Kesehatan Wilayah Kerja Puskesmas Medan Tuntungan 2023. *BEST JOURNAL*. 6 (1). 155-161

Sari , Y. O., & Wulandatika , D. (2023). Connection Knowledge to Attitude Mother Pregnant About Utilization Book of "MCH". *Jurnal EduHealth*, 14(04), 573–577.

Sastroasmoro, Sudigdo (2014). Dasar-Dasar *Metodologi Penelitian Klinis*. Jakarta: Sagung Seto.

Sella, Hafriyan. (2022). Peningkatan Perilaku Ibu Hamil Terhadap Pemanfaatan Buku MCH dengan Metode Promkes Di Puskesmas Sangkalan Tahun 2020. *JURMAKEMAS Jurnal Mahasiswa Kesehatan Masyarakat*. Vol 2 No 2, hlm, 61-82

Simatupang, Doni. (2022). Pengaruh Sosialisasi Buku MCH Terhadap Pengetahuan Ibu Hamil Menggunakan Buku MCH. *Manuju: Malahayati Nursing Journal*. Vol 4 No 5

Sopiyudin, Dahlan (2020). Statistika untuk Kedokteran dan Kesehatan , Deskriptif, Bivariat, dan Multivariat Dilengkapi Aplikasi dengan menggunakan SPSS. Jakarta: Salemba Medika

Sugiyono (2017). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung: Alphabet.

Sumardino. (2018). Promosi Kesehatan Dengan Buku MCH Terhadap Peningkatan Pengetahuan Ibu Hamil Dan Ante Natal Care Di Puskesmas Ceper Klaten. *Jurnal Keperawatan Global*, Volume 1, No1, hlm 01-54

Suryanti. (2023). Hubungan Karakteristik Ibu Hamil dengan Pengetahuan dan Perilaku dalam Pemanfaatan Buku MCH Saat Antenatal Care. *Ahmar Metastasis Health Journal*, 3(3), 172–176.

Swarjana, I Ketut Swarjana. (2015). *Metode Penelitian Kesehatan (Edisi Revisi)*. Yogyakarta: Andi, Anggota IKAPI.

Tobe, R. G., Haque, S. E., Ikegami, K., & Mori, R. (2018). Mobile-health tool to improve

maternal and neonatal health care in Bangladesh: A cluster randomized controlled trial. *BMC Pregnancy and Childbirth,* 18(1), 1–7. https://doi.org/10.1186/s12884-018-1714-4

Utami, S. (2019). The Effect of Health Promotion Based on the Health Promotion Model with a Peer Group Approach Regarding the Utilization of Maternal and Child Health Handbook. *Indian Journal of Public Health Research & Development*. 10 (10). 1987

Wahyuni. (2021). Effect of Behavior on the Utilization of MCH Books in Pregnant Women at the Lawe Sumur Public Public Health Center, Lawe Sumur Sub District, Aceh Tenggara District. *Jurnal Kesehatan LLDikti Wilayah 1 (JUKES),* 1(1), 1–8.

Wignarajah, S. (2022). The Maternal and Child Health (MCH) Handbook and its Influence on Health Behaviors: A Literature Review. *European Journal of Environment and Public Health*. 6 (1). 1-10

World Health Organization. (2020). *The World Health Report*.

Yulastini, Fitria. (2022). Pengetahuan, Sikap, dan Perilaku Ibu Hamil tentang Pemanfaatan Buku Kesehatan Ibu Dan Anak (MCH) di Puskesmas Pengadang. *JKQH : Jurnal Kesehatan Qamarul Huda*. Vol 10 Yunita, S. (2023). Pengaruh Promosi Kesehatan Tentang Perilaku Hidup Bersih dan Sehat(PHBS) Rumah Tangga Terhadap Tingkat Pengetahuan Masyarakat di Wilayah Puskesmas Kereng Bangkirai Palangka Raya. Jurnal Surya Medika (JSM), 9 (1), 195-203

Ziegler, M., et al. (2019). The impact of urban density on health outcomes: A systematic review. *Journal of Urban Health*, 96(3), 327-348. h, 96(3), 327-348.