e-ISSN : 2597-6052

MPPKI MEDIA PUBLIKASI PROMOSI KESEHATAN INDONESIA

Research Articles Open Access

The Influence of PMH Screening Training on Postpartum Mothers on the Knowledge, Attitude, and Practice of Midwives

Ana Pujianti Harahap[1]*, Mateus Sakundarno Adi[2], Ayun Sriatmi[3], Cahya Tri Purnami[4]
[1]Doctoral Program in Public Health, Universitas Diponegoro Semarang, Indonesia, Indonesia
[2]Departement of Epidemiology and Tropical Disease, Universitas Diponegoro Semarang, Indonesia
[3]Departement of Policy and Administration, Universitas Diponegoro Semarang, Indonesia
[4]Departement of Biostatistic and Demography, Universitas Diponegoro Semarang, Indonesia

***Corresponding Author**: E-mail: ana.pujiharahap@gmail.com

ARTICLE INFO

Manuscript Received: 01 Feb, 2025
Revised: 04 Mar, 2025
Accepted: 05 Mar, 2025
Date of Publication: 09 Apr, 2025
Volume: 8
Issue: 4
DOI: 10.56338/mppki.v8i4.6994

KEYWORDS

Knowledge;
Attitude;
Practice;
Perinatal Mental Health (PMH);
Screening

ABSTRACT

Introduction: Perinatal Mental Health (PMH) can impact both the mother and her baby, leading to a decrease in quality of life, premature delivery, reduced oxytocin levels, developmental disorders in the baby, and incidents of suicide. WHO recommends that PMH screening for postpartum mothers conducted by trained healthcare professionals can reduce the impact caused by PMH. The aim of this study is to analyze the effectiveness of training in improving the knowledge, attitudes, and practices of midwives regarding the implementation of Perinatal Mental Health (PMH) screening for postpartum mothers.
Methods: The research method used is quantitative with a quasi-experimental pre-posttest control group design to evaluate the knowledge, attitudes, and skills of midwives in conducting Perinatal Mental Health (PMH) screening for postpartum mothers. A total of 60 midwives were sampled and divided into 2 (two) groups, with 30 midwives in each group, the control group and the intervention group.
Results: The research results show that the training successfully significantly increased the midwives' knowledge (p-value 0.000). However, the training did not have a significant impact on attitude changes (p-value 0.137) and midwife practices (p-value 0.068).
Conclusion: The training provided successfully increased midwives' knowledge regarding perinatal mental health screening, but it has not yet significantly changed their attitudes and practices. This is likely due to the training duration being too short and the evaluation time being insufficient to support sustainable change.

Publisher: Fakultas Kesehatan Masyarakat Universitas Muhammadiyah Palu

INTRODUCTION

Perinatal Mental Health (PMH) is a mental health disorder that occurs during pregnancy and postpartum. PMH occurs at 22 weeks of pregnancy up to 1 year postpartum. According to the World Health Organization (WHO), 1 out of 5 women experience mental health issues during pregnancy and postpartum (1) PMH is more commonly found in postpartum mothers compared to pregnant mothers, with a ratio of 1:3. Generally, PMH begins with the occurrence of untreated postpartum blues. In women, around 30%-75% of mothers experience postpartum blues, and about 10-15% experience PMH (2),(3),(4). Other studies in 2021 showed that in Southeast Asia, mothers are at risk of experiencing PMH around 26-85%, while in Indonesia, it ranges from 50%-75% (5). Perinatal Mental Health (PMH) can impact both the mother and her baby, resulting in a decrease in quality of life, premature delivery, reduced oxytocin levels, developmental disorders in the baby, and incidents of suicide. Early screening can reduce the impact caused by PMH (6),(7),(8).

So far, postpartum mothers experiencing PMH have not been screened well. The study results show that postpartum mothers who are not well-screened do not receive adequate care (9). Many healthcare professionals are unable to recognize the signs and symptoms of PMH (10). From previous research, it was mentioned that one of the factors influencing screening is healthcare personnel. Factors related to healthcare workers include knowledge, attitudes, and practices in conducting screenings (11),(12). The existence of training has been proven effective in enhancing a person's knowledge, attitude, and skills. In theory, skills are the practical application of knowledge, supported by the desire or attitude to perform those skills.(13) WHO recommends that PMH screening for postpartum mothers conducted by trained healthcare professionals can reduce the impact caused by PMH. Trained healthcare workers are midwives, nurses, or doctors (1),(14),(15). Although many previous studies have researched PMH screening, there are still few that explore PMH screening training with a focus on anxiety and depression in postpartum mothers. The importance of effective training to improve midwives' knowledge, attitudes, and practices related to PMH has become the main focus of this research. After identifying the gaps in PMH screening for postpartum mothers from the above description, this study aims to analysed the effectiveness of training in improving midwives' knowledge, attitudes, and practices related to the implementation of Perinatal Mental Health (PMH) screening for postpartum mothers.

METHOD

Research Type

Quasi-experimental research design with a pre-posttest control group design method to evaluate the knowledge, attitudes, and skills of midwives in conducting Perinatal Mental Health (PMH) screening for postpartum mothers. As many as 60 midwives were sampled and divided into 2 (two) groups, with 30 midwives in each group, the control group and the intervention group.

Population and Sample/Informants

The population in this study consists of all midwives at community health centers in the Mataram City area, with a sample of some midwives at community health centers in the Mataram City area who have worked in the postpartum ward. Sampling was conducted using the non-randomized purposive sampling technique. The inclusion criteria are active midwives who are willing to conduct PMH screening, and the exclusion criteria are midwives who are not willing to receive the intervention in the form of training. The determination of the sample size of midwives is calculated using the formula *Lameshow et al*.(16) The sample calculation resulted in 26 samples, with an additional 10% making it 30 samples per group and a total of 60 samples.

$$\frac{\left[Z1-\alpha/2\sqrt{2P(1-P)}+Z1-\beta\sqrt{P1(1-P1)+P2(1-P2)}\right]^2}{(P1-P2)^2}$$

Information

N	: The number of samples needed from 2 intervention groups
P	: Estimate of the proportion calculated from (P1+P2)/2
P1	: The proportion of the intervention effect being studied
P2	: Standard effect size
Z1-α/2	: The Z value at the significance level of 1.96 when α = 5%
Z1-β	: The probability of detecting a difference is 80%.

Research Location

The research location in the city of Mataram is the capital of the West Nusa Tenggara (NTB) Province, utilizing 8 Puskesmas areas, each consisting of 4 inpatient and outpatient Puskesmas. The research was conducted from April to July 2024.

Instrumentation or Tools

The quantitative component of this research uses a validated questionnaire to assess the characteristics, knowledge, and attitudes of midwives regarding PMH screening. The validity test uses the Product Moment with a calculated r value > table r value. Reliability testing using a Cronbach's Alpha value > 0.6. The knowledge component consists of 10 questions, with answers on a scale of 0-1, totaling 0-10. Knowledge questions consist of the definition of PMH, risk factors for PMH, the scope of PMH, the definition of Baby Blues, signs and symptoms of PMH, the definition of PMH screening, the purpose of PMH screening, the management of Baby Blues, and the management of anxiety, depression, and psychosis. The attitude component is measured using a Likert scale. Agree value 2, Disagree value 1, and Unsure value 0. Answers on a scale of 0-2 with a total score of 0-10. Attitude questions consist of important PMH to know, important PMH to do, PMH that does not have to follow the algorithm, PMH screening is sufficient for depression only, and not all postpartum mothers need to be screened. The midwife's skill components are measured using an observation sheet by validators at the community health center. The validator used is a healthcare worker in charge of the mental health program at the community health center. Answers on a scale of 1-4, with a total score of 1-16. The observation procedure in this study was conducted objectively using the same observation sheet for all midwives being observed. The observation sheet ensures that each midwife is evaluated based on the same indicators, thereby minimizing bias. Additionally, the screening data filled out by the midwives uses initials, so the observer does not know the identity of the midwife being observed. The use of this method maintains anonymity and helps improve the objectivity of the assessment.

Data Collection Procedures

Data collection was conducted through an online Google Form survey to assess characteristics, knowledge, and attitudes regarding PMH screening. Observation sheets are used to assess midwives' skills in conducting PMH screening. The research was conducted over a period of 4 months, from March to July 2024. Respondents were given consent forms to fill out the questionnaire. The Perinatal Mental Health (PMH) training in this study has met WHO standards with a duration of 3 days or 18 hours. WHO recommends training for 3 to 5 days with a duration of 18-20 hours (17). The training materials are presented in modules that include: postpartum maternal psychology (1.5 hours), mental health concepts (2 hours), perinatal mental health concepts (2 hours), perinatal mental health screening (2 hours), the role of midwives in maternal mental health (2 hours), current issues in perinatal mental health (1.5 hours), as well as two screening practice sessions (2 and 3 hours), and discussion (2 hours). The methods used include

interactive lectures, case simulations, and case-based learning. This approach is designed to be replicable and evaluable for further improvement.

Data Analysis

Data were analyzed using the Wilcoxson test because the data were not normal, aiming to analyze data from 2 paired groups. The normality test of the data used the Shapiro Wilk test. To determine the difference between the control and intervention groups in different groups, the Mann-Whitney test is used. Descriptive statistics were used to encompass the demographic characteristics of the respondents. The software for quantitative data analysis uses SPSS.

Ethical Approval

Esta investigación fue aprobada por el Comité de Ética de Investigación de la Facultad de Salud Pública de la Universitas Diponegoro, Semarang, antes de llevar a cabo el estudio (No 571/EA/KEPK-FKM/2023).

RESULTS

Respondent Characteristics

The research results show that the average age of midwives in the intervention group is older, at ±34.60 years (SD 7.26), compared to the control group, which is ±31.50 years (SD 3.20). Only 10% in the intervention group and 3.3% in the control group have completed professional education, with an average work experience of less than 10 years, namely ±9.60 years in the intervention group and ±7.30 years in the control group.

Table 1. Respondent Characteristics

Variable	Mean (±SD) Intervention (n=30)	Control (n=30)
Midwife Respondents		
Age(years)	34.60±7,26	31.50±3.20
Max	51	39
Min	22	25
Length of Service	9.60±9.00	7.30±5.61
Max	32	32
Min	1	2
Education	**F (%)**	**F (%)**
Non-Professional	27(90)	29 (96.7)
Profession	3 (10)	1 (3.3)

Source: Primary Data

Midwives' Knowledge about Postpartum Mental Health Screening

An average score increase was obtained, namely before the intervention 7.40 (SD 0.77) and after the intervention 8.50 (SD 1.04) with a Wilcoxon test result p value 0.001 CI (76.30-83.32). In the control group, there was a decrease in the average score from 6.70 (SD 0.70) to 6.67 (SD 1.34) with a p value of 0.873 CI (61.45-68.31). The results of the Mann-Whitney test for the Post Test group show a significant difference between the control and intervention groups in the intervention group with a p value of 0.000. In the pre-test group, there was a difference in knowledge between the control and intervention groups, with a p-value of 0.001 as shown in the following table 2:

Table 2. Midwives' Knowledge about PMH Skinning

Group	**Pre Tes**		**Post Tes**		**Δ**	**Wilcoxon Test**
	Mean±SD	**Min-Mak**	**Mean±SD**	**Min-Mak**		***P value* (CI)**
Intervention	7.40±0.77	6-9	8.50±1.04	6-10	1.10	0.001 (76.30-83.32)
Control	6.70±0.70	5-8	6.67±1.34	4-9	-0.03	0.873 (61.45-68.31)
Mann-Whitney Test	*p value* 0.001 CI (65.28-70.91)		*P value* 0.000 CI (71.98-81.21)			

Source: Primary Data

Midwives' Attitudes Towards PMH Screening in Postpartum Mothers

From the research results on the intervention group, it was observed that there was a decrease in the average attitude after the intervention, from 8.63 (SD 1.12) to 8.47 (0.86) with a Wilcoxon test p-value of (0.419) CI (8.29-8.80). The average score of the control group decreased from 7.97 (SD 1.72) to 7.50 (2.16) with a p value of (0.480) CI (7.23-8.23). The Mann-Whitney test results show that there is no statistically significant difference in midwives' attitudes either in the pre-test or post-test. The pre-test group p value > 0.05 is 0.193 and the post-test is 0.137, as shown in table 3.

Table 3. Midwives' Attitudes towards the Implementation of PMH Skinning

Group	**Pre Tes**		**Post Tes**		**Δ**	**Wilcoxon test**
	Mean±SD	**Min-Mak**	**Mean±SD**	**Min-Mak**		***P value* (CI)**
Intervention	8.63±1,12	6-10	8.47±0,86	7-10	-0.16	0.419 (8.29-8.80)
Control	7.97±1,72	4-10	7.50±2,16	3-10	-0.47	0.480 (7.23-8.23)
Mann-Whitney Test	*p value* 0.193 CI (7.91-8.68)		*P value* 0.137 CI (7.54-8.42)			

Source: Primary Data

Midwife Practices in Conducting PMH Screening for Postpartum Mothers

The research results in the intervention group showed an increase in the mean from 9.20 (SD 2.26) to 12.30 (SD 1.87), with the Wilcoxon test showing a p-value of (0.001) CI (10.08-11.41). The average score of the control group showed an increase in the screening model practice value by 1.57, from 9.10 (SD 2.09) to 10.67 (SD 3.02) with a p value of (0.002) CI (9.18-10.57). The Mann-Whitney test results indicate that there is no difference in midwife practice between the control and intervention groups, both in the pre-test and post-test groups. The p-value results were 0.862 for the pre-test group and 0.068 for the post- test group. This is shown in the following table 4:

Table 4. Midwife Practices in Implementing PMH Skinning

Group	**Pre Tes**		**Post Tes**		**Δ**	**Wilcoxon Test**
	Mean±SD	**Min-Mak**	**Mean±SD**	**Min-Mak**		
Intervensi	9.20±2,26	5-13	12.30±1.87	8-16	3.1	0.001 (10.08-11.41)
Kontrol	9.10±2,09	5-12	10.67±3.02	5-16	1.57	0.002 (9.18-10.57)
Mann-Whitney test	*p value* 0.862 CI (8.59-9.70)		*p value* 0.068 CI (10.80-12.16)			

Source: Primary Data

The Relationship Between Training and the Knowledge, Attitudes, and Practices of Midwives

Based on the results of the biserial correlation test, it shows that training has a significant relationship with the increase in midwives' knowledge, with a biserial correlation of 0.489 and a p-value of 0.001, indicating a statistically significant moderate relationship. Additionally, the training also affects the midwives' attitudes, although the impact is weaker, with a biserial correlation of 0.257 and a p-value of 0.005, which is also significant. However, the influence of training on midwives' practices is very weak, with a biserial correlation of 0.163 and a p-value of 0.075, indicating that this relationship is not statistically significant.

Table 5. The Relationship Between Training and the Knowledge, Attitudes, and Practices of Midwives

Variable Independent	Variabel Dependent	Korelasi Biserial (r_bis)	*p value*
Training	Knowledge	0.489	0.001
	Attitudes	0.257	0.005
	Practices	0.163	0.075

Source: Primary Data

DISCUSSION

Interpretation of Key Findings

The findings of this study reveal that overall, the midwife training intervention on the implementation of PMH screening for postpartum mothers successfully improved the midwives' knowledge, but did not significantly impact changes in the midwives' attitudes and practices in conducting PMH screening. The Wilcoxon test results on midwives' knowledge showed a p-value of (0.001) with a biserial correlation test result (r_bis = 0.489, p = 0.001). However, the training did not have a significant impact on the changes in midwives' attitudes and practices in conducting PMH screening. The Wilcoxon test showed that the attitudes (p = 0.137) and practices (p = 0.068) of midwives did not experience significant changes, while the biserial correlation results indicated that the training only had a weak influence on attitudes (r_bis = 0.257, p = 0.005) and a very weak influence on practices (r_bis = 0.163, p = 0.075). These results may be due to several other factors such as personal motivation, previous practice habits, or the support received by midwives in applying new skills in daily practice (18),(19). Support is needed in the form of local policies and health management systems (20). In this case, a more intensive, sustainable approach and health education interventions for midwives can help improve their competence in carrying out their duties, especially when conducting PMH screening for postpartum mothers (21),(22).

The increase in midwives' knowledge without changes in attitude and practice can be explained through the *Theory of Planned Behavior* (TPB) and the *Diffusion of Innovations Model* (DOI). TPB shows that behavioral change is influenced by attitudes, social norms, and perceptions of ease in implementing it. Meanwhile, DOI emphasizes that innovations must appear beneficial, align with working conditions, and be easy to implement. Systemic barriers, such as lack of managerial support and unsupportive social norms, may be the reason why midwives' practices do not change despite their increased knowledge. Additional support, such as policies and examples of success, is needed to encourage change (23),(24).

Comparison with Previous Studies

The findings of this study are in line with studies in India and Australia, which also show that training can enhance midwives' knowledge in conducting mental health screenings for postpartum mothers. However, there are differences in the impact of training on midwives' attitudes and practices. In India, in addition to increasing knowledge, training also successfully improved the attitudes and practices of midwives. One of the factors underlying this difference in results is the sample size and the duration of the evaluation used. The study in India involved 60 respondents per group, with an evaluation period lasting 3 to 6 months. On the other hand, the study in Australia used 40 respondents in the pre and post-test groups, with the provision of online health education. Differences in sample size and implementation methods are likely to affect the training's effectiveness on midwives' attitude and practice changes in perinatal mental health screening (21),(25). The provision of continuous training interventions is essential for midwives to ensure they can continually update their knowledge in line with the latest developments in the field of mental health, particularly for postpartum mothers (22). Other findings indicate that although midwives

already possess adequate knowledge after training, there has been no change in attitude and practice. This may be due to midwives tending to have limited time to serve patients, focusing only on priority tasks, and lacking self-confidence (18),(26). Lack of self-confidence can occur due to the relatively short period of attitude and practice formation of midwives through training (27).

Limitations and Cautions

Although the researchers made significant contributions to understanding the knowledge, attitudes, and practices of midwives in conducting PMH screening for postpartum mothers, there are several research limitations that must be acknowledged. First, this study has a relatively short intervention duration, which may limit understanding or attitudes over a long period. WHO recommends that in providing health training related to PMH to postpartum mothers, it should be at least for a minimum of 3 days (17),(15). In the research, a minimal threshold is still used in providing interventions. The two validators who observed the midwives' practice in conducting PMH screening at the community health center are still limited. The unavailability of psychiatrists at the community health center led the researchers to use trained nurses or general practitioners to validate the midwives' practices. Future research should involve psychiatrists in validating the midwives' PMH screening results for postpartum mothers. If the midwife's screening results are invalid, it will affect the intervention provided. Findings from a study in Spain indicate that invalid screening results can have a negative impact on the treatment provided (28). This is supported by the WHO, which states that decisions made from the results of valid screening tools can provide more efficient and effective handling (29). Third, this study uses non-random purposive sampling, which risks causing selection bias and limits the generalization of results. Although chosen for practical reasons, this approach is less representative of the broader population. Furthermore, the sample size calculation does not take into account important confounding factors, such as previous training experience, institutional policies, and midwives' workload, which can affect the results. The use of alternative strategies, such as stratified or cluster sampling, can enhance the validity of the research.

Recommendations for Future Research

The recommendation given for further research is to analysed the provision of interventions, specifically the training provided, to achieve a greater impact. The impact provided is not only on changes in knowledge but also on the attitudes and practices of midwives. This is expected to provide an appropriate service model in conducting PMH screening for postpartum mothers. This recommendation is in accordance with Dominiek's research. (2019) which recommends testing midwife-led interventions for women with perinatal mental health issues, and developing and evaluating an integrated perinatal mental health service model (19). To improve midwives' attitudes and practices in perinatal mental health screening, in addition to training, additional interventions are needed such as continuous mentoring, counselling modules, planned referral outreach, and work stress management programs. Mentoring has been proven to improve attitudes in service (30).

CONCLUSION

Although the training intervention successfully significantly increased midwives' knowledge about PMH screening (p-value 0.000), the training did not have a significant impact on changes in attitudes (p-value 0.137) and practices (p-value 0.068) of midwives. This indicates that the increase in knowledge has not yet significantly changed the attitudes and practices of midwives. The presence of other factors can cause this to happen. Other factors may include personal motivation, previous practice habits, and the lack of policy support and adequate health management systems, which can affect the success of PMH screening implementation in daily practice. Therefore, a more intensive and sustainable approach, along with policy and managerial support, is needed to enhance midwives' competence in conducting PMH screening for postpartum mothers.

AUTHOR'S CONTRIBUTION STATEMENT

In this research, Ana Pujianti Harahap is responsible for conceptualization, methodology development, data analysis, and writing the original draft. Mateus Sakundarno Adi managed data collection, ensured the quality and accuracy of the data, and coordinated with the research participants. Ayun Sriatmi plays a role in writing, reviewing,

and editing the manuscript to ensure clarity and compliance with publication guidelines. Ana Pujianti Harahap together with Cahya Tri Purnami managed the funding and resource management needed for this research. All authors contributed to the revision and final approval of the manuscript and are responsible for the overall integrity of the research.

CONFLICTS OF INTEREST

The authors state that although this research was funded by the Indonesian Education Scholarship, there was no conflict of interest affecting the design, analysis, or results of the research. All processes were carried out independently.

SOURCE OF FUNDING STATEMENTS

This research is financially supported by the Indonesian Education Scholarship 2022 through grants/contracts from the Education Fund Management Institution (LPDP). The funders had no role or influence in the research design, data collection, analysis, interpretation of results, writing, or decision to publish this manuscript. The entire research process was conducted independently to maintain scientific integrity.

ACKNOWLEDGMENTS

The author expresses gratitude to BPPT (Higher Education Financing Management Agency), Puslapdik of the Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia, as well as LPDP (Education Fund Management Institution), Ministry of Finance of the Republic of Indonesia, for their financial support in the publication of this journal. The contributions of these institutions are invaluable in supporting the implementation of this research. However, these institutions were not involved in the design, analysis, or interpretation of the research results, and therefore do not qualify to be included as authors.

BIBLIOGRAPHY

1. WHO. Guide for integration of perinatal mental health in maternal and child health services. 2022. 66 p.
2. O'Hara MW, Wisner KL. Perinatal mental illness: Definition, description and aetiology. Best Pract Res Clin Obstet Gynaecol. 2014;28(1):3–12.
3. Kemenkes RI. Bagan Tata Laksana Kasus Terpadu Pelayanan Pasca Persalinan. Jakarta; 2019. 1–21 p.
4. Kemenkes RI. Asuhan Kebidanan Nifas dan Menyusui. 2018.
5. Ali Mustofa, Ainun Nandya Hapsari, Alya Nabila, Ajeng Kalishyah Putri, Nursyta AM, Era Catur Prsetya. Faktor Resiko Depresi Pasca Persalinan Negara Asia Tenggara. Medica Arter [Internet]. 2021;3 No 2. Available from: https://jurnal.unimus.ac.id/index.php/MedArt/article/view/8470/pdf
6. Simcock G, Kildea S, Kruske S, Laplante DP, Elgbeili G, King S. Disaster in pregnancy: Midwifery continuity positively impacts infant neurodevelopment, QF2011 study. BMC Pregnancy Childbirth. 2018;18(1):1–9.
7. Sadat Z, Abedzadeh Kalahroudi M, Kafaei Atrian M, Karimian Z, Sooki Z. The impact of postpartum depression on quality of life in women after child's birth. Iran Red Crescent Med J. 2014;16(2).
8. Daehn D, Rudolf S, Pawils S, Renneberg B. Perinatal mental health literacy: knowledge, attitudes, and help-seeking among perinatal women and the public – a systematic review. BMC Pregnancy Childbirth [Internet]. 2022;22(1):1–22. Available from: https://doi.org/10.1186/s12884-022-04865-y
9. Cantwell R. Mental disorder in pregnancy and the early postpartum. Anaesthesia. 2021;76(S4):76–83.
10. Cena L, Palumbo G, Mirabella F, Gigantesco A, Stefana A, Trainini A, et al. Perspectives on Early Screening and Prompt Intervention to Identify and Treat Maternal Perinatal Mental Health. Protocol for a Prospective Multicenter Study in Italy. Front Psychol. 2020;11(March):1–13.
11. Gimeno Garca AZ. Factors influencing colorectal cancer screening participation. Gastroenterol Res Pract. 2012;2012.
12. Nithianandan N, Gibson-Helm M, McBride J, Binny A, Gray KM, East C, et al. Factors affecting implementation of perinatal mental health screening in women of refugee background. Implement Sci [Internet]. 2016;11(1):1–12. Available from: http://dx.doi.org/10.1186/s13012-016-0515-2
13. Soekidjo Notoatmodjo. Promosi Kesehatan dan Perilaku Kesehatan. Jakarta: PT Rineka Cipta; 2014. 243 p.

14. Maria T, Lykeridou Katerina, DimitraMetallinou. The Value of Simulation-Based Training in Midwifery. J Nurs Midwifery [Internet]. 2023;5(3):40–3. Available from: file:///C:/Users/USER/Downloads/EASJNM_53_40-43_FT_Np0mp5t.pdf
15. World Health Organization. mhGAP training manuals for the mhGAP Intervention Guide for mental, neurological and substance use disorders in non-specialized health settingsversion 2.0. Who/Msd/Mer/176. 2017;0:1–656.
16. S.K.Lwanga, S.Lameshow. Sample Size Determination In Health Studies. WHO. WHO; 2002. 175–182 p.
17. mhGAP Humanitarian Intervention Guide (mhGAP-HIG) training of health-care providers [Internet]. Available from: https://www.who.int/publications/i/item/9789240045361
18. Baker N, Gillman L, Kirstie Coxon. Assessing mental health during pregnancy: An exploratory qualitative study of midwives' perceptions. Midwifery J [Internet]. 2020;86. Available from: https://pubmed.ncbi.nlm.nih.gov/32276157/
19. Maralyn Foureur. The role and competence of midwives in supporting women with mental health concerns during the perinatal period: A scoping review. Health Soc Care Community [Internet]. 2019;27(4):389–405. Available from: https://onlinelibrary.wiley.com/doi/full/10.1111/hsc.12740
20. Agnes Higgins, Carmel Downes, Mark Monahan, Aillish Gill. Barriers to midwives and nurses addressing mental health issues with women: The Mind Mothers study. J Clin Nurs. 2018;27(9–10):1872–83.
21. Vijayalakshmi Poreddi Sailaxmi Gandhi Ramachandra, Desai SGG, Chandra2 PS. Evaluation of a manual-based training program in changing auxiliary nurse midwives (ANMs) knowledge, attitudes, and skills related to maternal mental health. Indian J Psychiatry [Internet]. 2023; Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10358814/
22. Marine Dubreucq, Corinne Dupont, Mijke P. Lambregtse-Van den Berg, Wichor M. Bramer, Catherine Massoubre, Julien Dubreucq. A systematic review of midwives' training needs in perinatal mental health and related interventions. Front Psychiatry [Internet]. 2023;15–2024. Available from: https://www.frontiersin.org/journals/psychiatry/articles/10.3389/fpsyt.2024.1345738/full
23. Dearing JW, Cox JG. Diffusion of innovations theory, principles, and practice. Health Aff. 2018;37(2):183–90.
24. Jeong SM, Shin DW, Cho J. Rates of underuse of statins among cancer survivors versus controls: NHANES 2011–2016. J Cancer Surviv. 2020;14(4):434–43.
25. Lois M, Martinez L, Machado, De ST, Eden A, Stoodley C, et al. Evaluation of a pilot online education program to develop midwives' knowledge, skill and confidence in perinatal mental health in rural South Australia. Women and Birth [Internet]. 2024;37(2):355–61. Available from: https://www.sciencedirect.com/science/article/pii/S1871519223003086
26. Rohani Rohani, Cesa Septiana Pratiwi. Midwives' Role in Managing Pregnant Women with Mental Health Issues and Disorders in Developing Countries: A Rapid Review. Poltekita J Ilmu Kesehat [Internet]. 2024;17. Available from: https://jurnal.poltekkespalu.ac.id/index.php/JIK/article/view/3570
27. McCauley K, Muir-Cochrane SEE, Lyneham J. Midwives and assessment of perinatal mental health. Psychiatr Ment Heal Nurs [Internet]. 2011;18 (9). Available from: https://pubmed.ncbi.nlm.nih.gov/21985681/
28. Rodriguez maria F, Motrico E, Meguez C, Caves C, Susaribera C, Duque A, et al. Perinatal Depression in the Spanish Context: Consensus Report from the General Council of Psychology of Spain. J Empir Psychol [Internet]. 2023;34:51–6. Available from: https://journals.copmadrid.org/clysa/art/clysa2023a15
29. Anna Sagan, David McDaid, Selina Rajan, Jill Farrington, Martin McKee. Screening [Internet]. Sagan A, McKee M, Farrington J, editors. WHO Regional Office for Europe; 2020. 24 p. Available from: https://www.ncbi.nlm.nih.gov/books/NBK559794/pdf/Bookshelf_NBK559794.pdf
30. Rizkianti, Anissa Novianti, Suparmi. Efektivitas Program Pendampingan Ibu Hamil terhadap Peningkatan Sikap Ibu tentang Kesehatan Ibu dan Bayi Baru Lahir di Tujuh Kabupaten/Kota di Indonesia. Media Penelit dan Pengembangan, Kementrian Kesehat Indones [Internet]. 2022;87–98. Available from: https://repository.badankebijakan.kemkes.go.id/id/eprint/5247/1/Jurnal 1 - Maret 2022 - fullpages.pdf