MEDIA PENELITIAN DAN
PENGEMBANGAN KESEHATAN
Vol 35 No 1, Maret 2025

e-ISSN: 2338-3445
p-ISSN: 0853-9987

INTERPROFESSIONAL COLLABORATION PRACTICES IN THE MANAGEMENT OF PRE-ECLAMPSIA AND ECLAMPSIA: SCOPING REVIEW

Praktik Kolaborasi Interprofesional Dalam penatalaksanaan Pre Eklamsia Dan Eklamsia: Scoping Review

Muslimah Sigalingging[1], Sulistyaningsih Sulistyaningsih[1]
[1]Master of Midwifery, Faculty of Health Sciences, Universitas 'Aisyiyah Yogyakarta, Yogyakarta, Indonesia
*Email: muslimahsigalingging513@gmail.com

ABSTRAK

Preeklamsia dan eklampsia menyebabkan tingginya angka kematian dan kesakitan neonatal serta ibu. Secara global, kondisi ini diperkirakan menyumbang 14% kematian ibu. Penelitian ini bertujuan untuk menganalisis praktik kolaborasi antarprofesional dalam penanganan Preeklampsia dan eklampsia. Scooping review disusun menggunakan framework PRISMA-ScR dengan pencarian artikel menggunakan database PubMed, Ebsco, dan Science Direct, dan tahap selanjutnya adalah Critical Appraisal menggunakan The Joanna Brings Institute (JBI). berdasarkan pencarian artikel dari tiga database yaitu PubMed, ScienceDirect, dan EBSCO, dalam konteks ini, kriteria inklusi meliputi artikel akses terbuka, artikel berbahasa Inggris, dan artikel teks lengkap, sedangkan kriteria eksklusi meliputi buku dan makalah review serta penelitian dalam bentuk tesis. Hasil penelitian scoping review ini menunjukkan bahwa penatalaksanaan dalam penanganan preeklamsia dan eklampsia, serta hambatan dalam penerapan praktik kolaboratif interprofesional memerlukan peningkatan kompetensi tenaga kesehatan seperti bidan dan perawat serta membangun model kolaborasi untuk meningkatkan kerjasama tim yang baik dengan dokter spesialis kandungan sesuai peran dan tanggung jawabnya. Pelayanan kebidanan diberikan kepada pasien preeklampsia untuk menjamin kesinambungan pelayanan antenatal, persalinan, dan nifas. penatalaksanaan preeklampsia yang efisien memerlukan pendekatan kolaboratif dan multidisiplin.

Kata kunci*: praktek kolaborasi interprofesional, manajemen, pra eklampsia, eklampsia*

ABSTRACT

Preeclampsia and Eclampsia cause high rates of neonatal and maternal mortality and morbidity. Globally, this condition is estimated to contribute to 14% of maternal deaths. This study aims to analyze interprofessional collaboration practices in treating Preeclampsia and Eclampsia. The Scooping Review was prepared using the PRISMA-ScR framework with article searches using the PubMed, Ebsco, and Science Direct databases, and the next stage was Critical Appraisal using The Joanna Brings Institute (JBI). Based on article searches from three databases, PubMed, ScienceDirect, and EBSCO. In this context, inclusion criteria include open-access, English-language, and full-text articles. In contrast, exclusion criteria include books, review papers, and research in the form of a thesis. The results of this scoping review research showed that management in the treatment of Preeclampsia and Eclampsia, as well as obstacles in implementing collaborative interprofessional practices, require increasing the competency of health workers such as midwives and nurses as well as building a collaboration model to improve good teamwork with obstetricians by their roles and responsibilities. he answered. Midwifery services are provided to preeclampsia patients to ensure continuity of antenatal, delivery, and postpartum services. Efficient management of Preeclampsia requires a collaborative and multidisciplinary approach.

https://doi.org/10.34011/jmp2k.v35i1.2544

e-ISSN: 2338-3445
p-ISSN: 0853-9987

Keywords: interprofessional collaboration practice, management, pre-eclampsia, eclampsia

INTRODUCTION

Preeclampsia is uncontrolled high blood pressure in pregnant women and must be treated immediately. If not, preeclampsia can develop into eclampsia and have fatal complications for both the mother and the fetus [1]. According to WHO (2020), there were 934 cases of preeclampsia worldwide. There are 342,000 pregnant women experiencing preeclampsia. Preeclampsia is included in the three leading causes of complications during pregnancy and childbirth, the first being bleeding (30%), preeclampsia/eclampsia (25%), and infection (12%) [2].

The Maternal Mortality Rate (MMR) in developing countries is 20 times higher than in developed countries, one of which is Indonesia [3]. Based on data from the Directorate General of Public Health of the Indonesian Ministry of Health in 2021, there were 7,389 maternal deaths and 1,077 deaths due to hypertension in pregnancy. In 2022, there will be 84.6 cases of maternal death recorded for every 100,000 live births in Central Java. [4]. Mothers with preeclampsia have adverse effects on the fetus, including Fetal Growth Restriction (FGR), oligohydramnios, IUFD, premature birth, irregular fetal heartbeat, and low APGAR scores, and the majority receive treatment in the NICU. Preeclampsia has a high risk of premature birth, so the treatment carried out by obstetricians balances the need to achieve fetal maturation so that the pregnancy can continue to term [5].

Interprofessional Collaborative Practice represents health care as an active and ongoing partnership between professionals from various educational backgrounds with distinctive professional cultures and different organizations or sectors who work together to provide services for the benefit of health service users [6]. Interprofessional Collaboration (IPC) develops and maintains effective collaborative relationships between hospital health workers. The purpose of inter-professional collaboration is as a forum for achieving effective collaborative practices between professions. [7]. IPC is a strategy for improving service quality. It aims to address patient safety and human resource shortages and make the healthcare system more effective [8].

Competence and confidence in midwife care, namely providing timely and appropriate services based on sound knowledge and skills and depicting collaborative work between midwives to learn and support each other [9]. The emotional concern and empathy of each midwife illustrate satisfaction in achieving pre-eclampsia management results by operational standards, even though maternal death is a sad and traumatic thing. Midwives need opportunities for continuous professional development, appropriate infrastructure, resources, and tailored education to support pre-eclampsia care [10].

As many as 47% (midwives, obstetricians, and general practitioners) have excellent knowledge about the meaning and risk factors for preeclampsia. In comparison, 26% have less knowledge (31%) can classify preeclampsia well, 35% can treat it, and 19% cannot [11]. It is still found that health workers on duty in the obstetrics room (midwives, general practitioners, and nurses) do not know the dosage of magnesium sulfate, signs of magnesium toxicity, signs of HEELP syndrome, indications for labor in preeclamptic mothers, signs indicating the development of mild preeclampsia to severity and classification of preeclampsia [12].

The novelty of this research is that it is about interprofessional collaboration practices in managing preeclampsia and Eclampsia. Preeclampsia and Eclampsia are complications of pregnancy. One of the risk factors for preeclampsia and Eclampsia is age over 35 and primigravida. Therefore, midwives, in particular, must be careful in carrying out intensive antenatal supervision so that they can determine early the possibility of complications of hypertension in pregnancy in the form of preeclampsia/eclampsia [13].

https://doi.org/10.34011/jmp2k.v35i1.2544

e-ISSN: 2338-3445
p-ISSN: 0853-9987

There is a lack of interprofessional collaborative practice in the management of preeclampsia and eclampsia, so it is recommended that Eclampsia simulation be carried out in the laboratory and delivery room with interprofessional team members, including obstetricians, nurses, anesthesiologists, emergency and family medicine doctors, nurse practitioners, and physician assistants. Based on the problems above, the author wants to conduct a Scoping Review regarding Interprofessional Collaboration Practices in the Management of Preeclampsia and Eclampsia.

METHODS

This Scoping Review analyzes Interprofessional Collaboration Practices in Managing Preeclampsia and Eclampsia. The Scoping Review search focused on relevant literature on the Protocol used by PRISMA-ScR researchers. This Protocol contains 22 research items that were developed according to the guidelines published by EQUATOR (enhancing the quality and transparency of health research). A scoping review aims to expand knowledge or information about research activities related to the desired theme, map the literature to the targeted topic, and synthesize a study.

The method is to get to know scoping reviews to see the results broadly and in-depth. This framework aims to identify the scope of research as a feasible and scientifically proven method for conducting literature reviews. As stated by Arksey and O'Malley, the steps used in writing a scoping review start by identifying the questions of the scoping review and then identifying the inclusion and exclusion criteria for the selected articles. In this context, inclusion criteria include open-access articles, English-language articles, and full-text articles, while exclusion criteria include books, review papers, and research in the form of a thesis. We will continue filtering articles according to the target topic, mapping the data, and producing a report after compiling the data.

While searching for scoping review articles, the author used three databases: PubMed, ScienceDirect, and Ebsco. The results found 1604 articles matching the keywords. One thousand six hundred four articles from different databases, namely PubMed 495, Ebsco 540, and ScienceDirect 569. Next, all articles were imported into Mendeley. Then, identified duplications from 36 articles. Articles were filtered based on title and abstract; there were 1523 irrelevant articles. The remaining 45 articles were accessed to check the full text and filtered according to the criteria. Finally, nine articles met and were included in the data charting, which was extracted and evaluated using critical appraisal. The review analysis process flows from identification to screening and selecting articles for review, as shown in Figure 1 below.

https://doi.org/10.34011/jmp2k.v35i1.2544

e-ISSN: 2338-3445
p-ISSN: 0853-9987

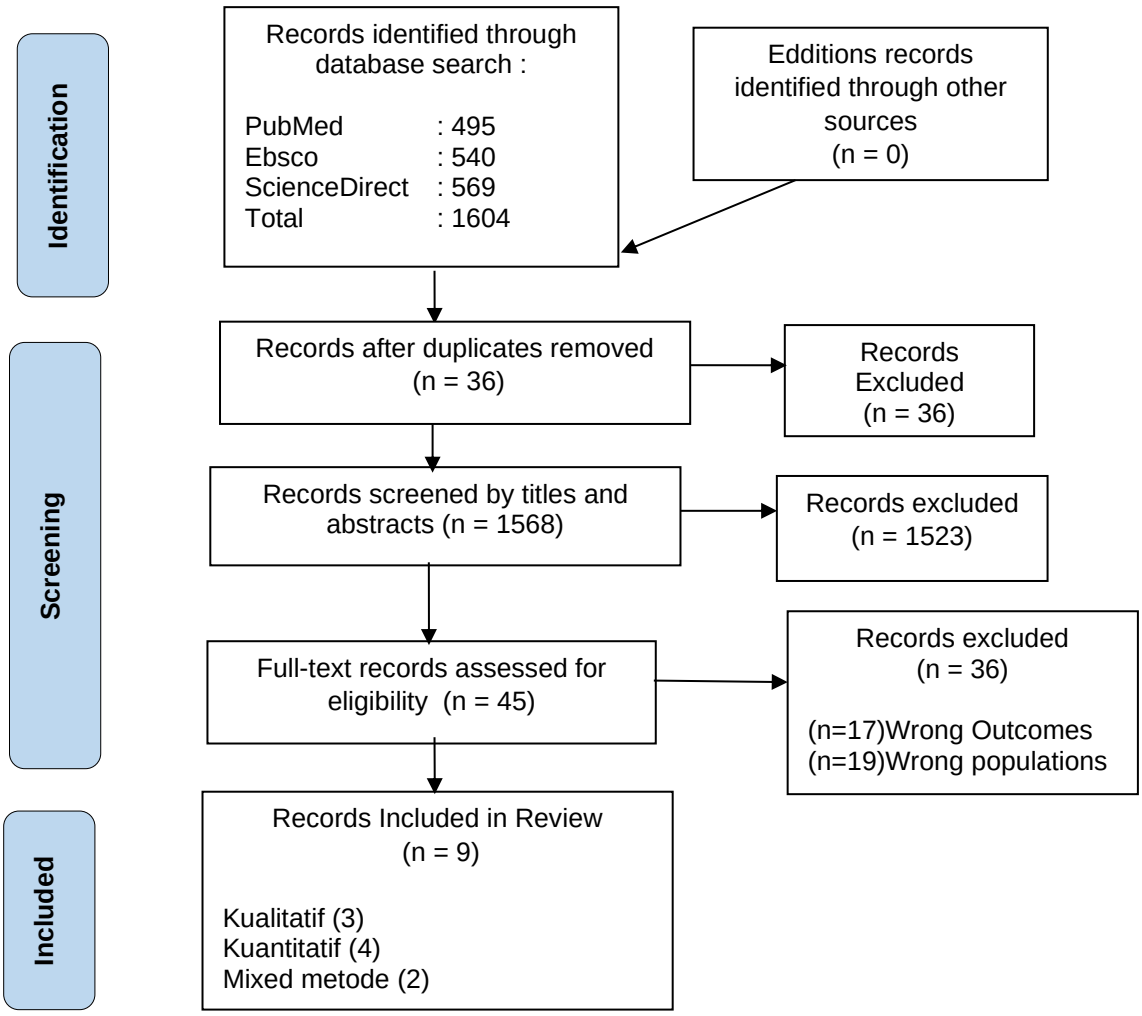

Figure 1. PRISMA -ScR Flow chart (Page et al., 2020)

Critical appraisal of individual sources of evidence

While searching for scoping review articles. The results found 1604 articles matching the keywords. One thousand five hundred sixty-six articles from different databases, including PubMed, 495 from Science Direct, and 569 from EBSCO 540. Next, all articles were imported into Mendeley, and duplications from 36 articles were made. Articles were filtered based on title and abstract; 1523 articles needed to be more relevant. The remaining 45 articles were accessed to check the full text and filtered according to the criteria. Finally, nine articles met the requirements for critical appraisal using the Joanna Briggs Institute (JBI) method. Of the nine articles, the articles were qualitative, four quantitative cross-sectional articles, and two mixed-method articles that adapted JBI to each study. The technique used in assessing each article is The Joanna Briggs Institute (JBI), according to the research method checklist, where there are quantitative articles with the JBI cross-sectional checklist containing eight questions. The JBI critical appraisal checklist for qualitative has ten questions, and the JBI critical appraisal checklist for mixed methods has five questions.

https://doi.org/10.34011/jmp2k.v35i1.2544

e-ISSN: 2338-3445
p-ISSN: 0853-9987

Synthesis results

In the search process, use the keywords "Health Professional AND Doctor OR midwife OR Nutritionists OR analysis "Practice OR "Collab* Intersectoral" AND "management practice" Preeclampsia AND eclampsia. Researchers used three databases, namely PubMed, ScienceDirect, and Ebsco. The results found 1604 articles matching the keywords. The remaining 45 articles were accessed to check the full text and filtered according to the criteria. Finally, nine articles met. The prism flow diagram is used to improve the quality of knowledge in a field while being the basis for reporting reviews from other researchers [14].

RESULT

Selection of sources of evidence

While searching for scoping review articles, researchers used three databases: PubMed, Science Direct, and Ebsco. The results found 1604 articles matching the keywords. One thousand five hundred sixty-six articles from different databases from PubMed 495 from Science Direct 569 from EBSCO 540. Next, all articles were imported into Mendeley, and duplications were identified from 36 articles. Articles were filtered based on title and abstract; 1523 articles needed to be more relevant. The remaining 45 articles were accessed to check the full text and filtered according to the criteria. And filtered according to the excluded criteria, 36 articles were excluded. Of these, 17 articles did not match the outcomes, and 19 did not match the relevant population regarding pregnant women. Finally, nine articles met the criteria.

Table 1. Charting data

No	Author, Year, Country, Title	Objective	Types of Research, Participants	Results
1	Bonnin *et al., 2020, New York,* Management of Pre-eclampsia and Eclampsia: A Simulation	To discover how to recognize (diagnose) and treat Preeclampsia and Eclampsia.	Quantitative (Cross-sectional), 60 Health professionals (obstetricians, nurses, anesthesiologists, emergency and family medicine physicians, nurse practitioners, and physician assistants)	All participants demonstrated familiarity with the diagnosis and management of Preeclampsia and emergent hypertension, as well as treating these conditions appropriately. Participants reported no confidence in managing Eclampsia.
2	Ansari *et al.,* 2019, Afghanistan, Quality of care in early detection and management of pre-eclampsia/eclampsia in health facilities in Afghanistan	To assess the quality of early detection and management of preeclampsia/eclampsia in health facilities and the perception of skilled personnel regarding their work environment.	Quantitative (Cross-sectional), The 30 participants were midwives and doctors.	There were (72.6%) midwives skilled in assisting childbirth who were interviewed and could identify severe preeclampsia correctly. Of the 29 cases of preeclampsia/eclampsia observed, 17 women (59%) received an initial dose of magnesium sulfate (MgSO4), and 12

https://doi.org/10.34011/jmp2k.v35i1.2544

e-ISSN: 2338-3445
p-ISSN: 0853-9987

				women (41%) received the correct maintenance dose of MgSO4.
3	Rahmatiar *et al.,* 2023, Indonesia, The Barriers of Interprofessional Collaborative Practices of Healthcare Professionals in the Management of Hypertension in Pregnancy at Sewon Health Center 1 Bantul	To explore barriers to interprofessional collaborative practice of health professionals in managing hypertension in pregnancy.	Qualitative Research with a single holistic case study approach, 15 people, consisting of doctors, midwives, ATLM, nutritionists, pharmacists, and pregnant women with hypertension	Based on the results of the thematic analysis, three sub-themes were found: uncooperative patients, limited working hours of doctors, lack of knowledge of health workers, and limited antihypertensive drugs.
4	Raney *et al.,* 2019, India, Simulation-enhanced nurse mentoring to improve preeclampsia and eclampsia care: an education intervention study in Bihar, India	This study aims to provide simulation-enhanced nursing assistance to improve Preeclampsia and Eclampsia care.	Mixed method study (quantitative Research and, 94 nurses in primary health facilities	Simulation training has increased the use of evidence-based practices in simulated Preeclampsia/Eclampsia cases, potentially improving nurses' competency in diagnosing and managing complex maternal complications such as Preeclampsia/Eclampsia. However, knowledge gaps, resource limitations, and interpersonal barriers must be addressed to improve services.
5	Garti *et al.,* 2023, Australia, Midwives' experiences of providing pre-eclampsia care in a low- and middle-income country – A qualitative study	Aim for it explore and gain insight into midwives' experiences in preeclampsia care, including knowledge, skills, and psychological aspects, such as midwife resilience.	Qualitative study, Thirty-five participants were midwives.	To improve the quality of preeclampsia services, midwives must have the capacity; the system must urgently address barriers and prioritize the emotional well-being of midwives to work toward effective collaborative practice across professions as well as recommend expanded continuing professional development

https://doi.org/10.34011/jmp2k.v35i1.2544

e-ISSN: 2338-3445
p-ISSN: 0853-9987

				opportunities, appropriate infrastructure, resources, tailored public education, and review of pre-service education to support their participation in preeclampsia care to provide quality care to patients.
6	Adepoju *et al.,* 2021, Nigeria, The ability and safety of community-based health workers to safely initiate lifesaving therapies for pre-eclampsia in Ogun State, Nigeria: An analysis of 260 community treatments with MgSO4 and/or Methyldopa	To evaluate the ability of community-based health workers to identify cases of hypertension in pregnancy, safely administer methyldopa and magnesium sulfate, and make referrals if necessary.	Quantitative Research with analytical experiments, 170, namely community nurses and midwives	Nurses have additional qualifications as midwives. The most common reasons why community-based health workers are not trained are personnel logistics in health facilities, reluctance to take on extra responsibilities, and territorial protection among nurses and lower health cadres.
7	Sevene *et al.,* 2021, Mozambique, Feasibility of task-sharing with community health workers for the identification, emergency management, and referral of women with pre-eclampsia, in Mozambique	This study aims to describe the feasibility of dividing the tasks of initial screening and initiation of emergency obstetric care for preeclampsia/eclampsia from primary healthcare providers to community health workers in Mozambique and document the readiness of healthcare facilities to respond to referrals. Study mixed method	Study mixed method, (Maternal and child health nurses, midwives, homemakers, and traditional birth attendants) and other community members (pregnant women, partners, and husbands, mothers, and mothers-in-law), gynecologists, and obstetricians	Public health workers in Mozambique are trained to identify basic danger signs of pregnancy; however, they have not been trained to handle obstetric emergencies. In addition, obstacles in health facilities were also identified, including lack of equipment, lack of supervisors, and irregular availability of medicines.
8	Mwansa *et al.,* 2021, Zambia, Assessment of Knowledge and Readiness for the Diagnosis and Management of Preeclampsia among Healthcare Workers from	This study aimed to assess knowledge and preparedness for the diagnosis and management of Preeclampsia among health workers from selected health facilities in Lusaka, Zambia.	Quantitative with a cross-sectional study), 41 health workers, namely general practitioners, specialist doctors, and nurses	The research results show that there is a gap in knowledge among health workers, especially nurses, in carrying out initial preeclampsia assessments such as awareness checks by

https://doi.org/10.34011/jmp2k.v35i1.2544

e-ISSN: 2338-3445
p-ISSN: 0853-9987

	Selected Healthcare Facilities in Lusaka, Zambia			health workers. Most medicines are available but some equipment and infrastructure are lacking. In terms of the management of Preeclampsia/Eclampsia, appropriate dosage of magnesium sulfate and maintenance dosage are administered.
9	Garti et al., 2023a, Ghana, A Socioecological Description of The Influencing Factors to Midwives' Management of Preeclampsia in a Ghanaian Tertiary Hospital	I am exploring the perspectives of key stakeholders in a tertiary hospital in Ghana regarding facilitators and barriers influencing the delivery of preeclampsia care by midwives using a socioecological model.	Qualitative, The 42 participants comprised senior managers (n = 7) and hospital midwives.	There are two themes: 1) Facilitators of preeclampsia management and 2) Barriers to preeclampsia management. Facilitators were identified at three levels (individual, interpersonal, and organizational). They included midwives' knowledge of Preeclampsia, midwife self-efficacy, midwife expertise to improve preeclampsia care, collaborative practice, and strategies to improve the quality of preeclampsia care.

Characteristics of sources of evidence

A systematic search found nine suitable and quality articles published in the last five years, 2018-2023. Then, data charting will be done in detail, and the points in each related article, each country, objectives, type of Research, data collection, themes, and samples, as well as research results or findings from Research conducted, will be classified. The nine articles have several relevant characteristics, including characteristics based on country and research methods.

Article Characteristics by Country

Figure 2 explains the characteristics of articles from several developing countries, including Afghanistan (1), Africa (3), Indonesia (1), India (1) and Nigeria (1). Meanwhile, developed countries are New York (1) and Australia (1).

https://doi.org/10.34011/jmp2k.v35i1.2544

e-ISSN: 2338-3445
p-ISSN: 0853-9987

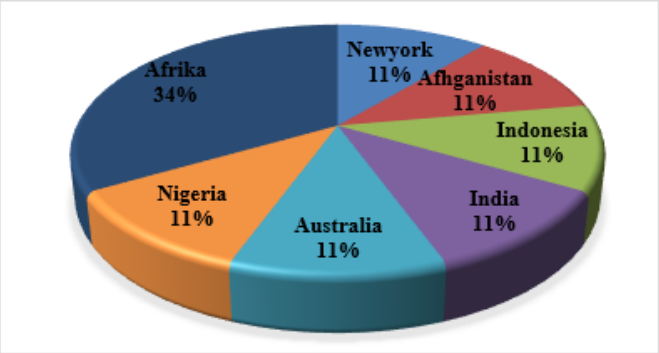

Figure 2. Country Characteristics

Article Characteristics Based on Research Type

Figure 3. explains the characteristics of articles based on the type of research data, namely (3) Qualitative research articles, (4) Quantitative research articles, and (2) mixed methods.

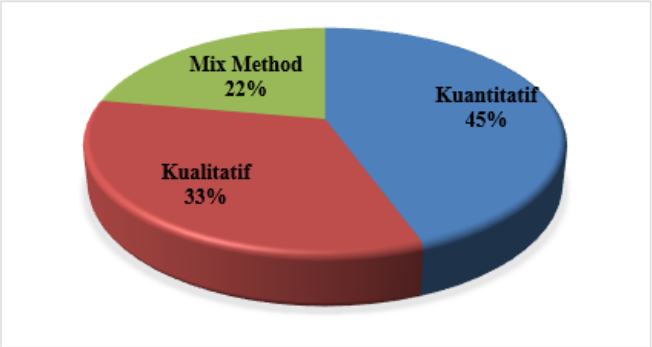

Figure 3. Characteristics of Research Types

Critical appraisal within sources of evidence

In assessing the quality of articles, the author uses a checklist from Joanna Brings Critical Appraisal Tools (JBI). Each article received a perfect score; this can be seen from the critical appraisal results, where the answer to each question was "YES". This can be seen in the table below.

DISCUSSION

Midwives carry out collaborative practices with obstetricians in the gaps in their knowledge and monitor each other for emergencies, even every time a new midwife is hired; the collaboration involves combining senior midwives with junior midwives to teach the management of preeclampsia and eclampsia patients. Midwives in the community must be able to make appropriate decisions regarding treatment and referral of women with preeclampsia [15]. Proactive steps as part of the hospital's response to preeclampsia management include clear clinical protocols, Midwives capable of carrying out a referral process with the referring team Midwives, and educational support programs to increase women's understanding of pregnancy-related complications [16].

Collaborative practice can treat seizures in mothers with eclampsia. However, the inability to properly treat eclampsia indicates the need for further training in the treatment of complications. Midwives' competence in handling cases of pre-eclampsia and eclampsia is inefficient, and they do not record the results of observations while providing magnesium sulfate therapy for seizure prophylaxis. Collaboration between obstetricians

https://doi.org/10.34011/jmp2k.v35i1.2544

e-ISSN: 2338-3445
p-ISSN: 0853-9987

and midwives in providing MgSO4 therapy, antihypertensive drugs, and timely delivery; however, some midwives do not consider this vital, so it can be detrimental to the patient's condition [17].

Preeclampsia is a hypertensive crisis in pregnancy. Possible side effects include impaired liver function, disseminated intravascular coagulopathy, seizures (eclampsia), stroke, and death. Therefore, healthcare providers (specialist doctors and emergency room nurses) must understand how to diagnose and treat conditions before and after an emergency [18]. Doctors can help provide the proper medication for mothers experiencing preeclampsia. There is now strong evidence that, for women with preeclampsia, magnesium sulfate more than halves the risk of eclampsia (number needed to treat 100, 95% confidence interval is 50 to 100) and may reduce the risk of maternal death [19].

The conditions of preeclampsia and eclampsia require fast and appropriate referral services to avoid worse consequences, namely maternal death. Referral services are delayed due to late decision-making, late reaching health service facilities, and late receiving adequate service at the referral hospital [1]. Pregnant women should be screened regularly during pregnancy for preeclampsia, and mothers at high risk should be referred early for specialist care. Awareness of these signs and symptoms is essential at all levels of maternity care and for women [2]. When pre-eclampsia develops, immediate referral for assessment and monitoring will help ensure that women receive appropriate treatment. Therefore, it should be available to pregnant women, doctors, and policymakers to enable them to make more informed decisions regarding care during pregnancy and delivery. [20]. Limitations in compiling this scoping review were that several articles specifically mentioned research samples and a small number of articles related to collaborative practices in treating pre-eclampsia and eclampsia.

CONCLUSION

Midwives carry out collaborative practices with obstetricians within the gaps in their knowledge and monitor each other for emergencies, where collaborative practices can treat seizures in mothers with eclampsia. However, the inability to properly treat eclampsia indicates the need for further training in the treatment of complications. Efficient management of preeclampsia requires a collaborative, multidisciplinary approach. Midwives work in a team midwifery model and report close collaboration with obstetricians. There is a need for special simulation training for midwives, analysts, general practitioners, specialist doctors, and nutritionists to improve the quality of treatment of preeclampsia and eclampsia and strengthen efficient team collaboration.

REFERENCES

[1] A. S. Scholz *et al.*, “Observational database study on preeclampsia and postpartum medical care up to 7.5 years after birth,” *Sci Rep*, vol. 12, no. 1, Dec. 2022, doi: 10.1038/s41598-022-25596-2.

[2] C. Ndwiga, T. Abuya, C. Okondo, S. Akinyi, A. Wickramanayake, and C. E. Warren, “Effect of mentorship and a mHealth application in updating provider skills and knowledge in maternal and newborn care in two informal settlements of Nairobi,” *BMC Womens Health*, vol. 23, no. 1, Dec. 2023, doi: 10.1186/s12905-023-02740-2.

[3] F. M. Ekawati, S. Licqurish, J. Gunn, S. Brennecke, and P. Lau, “Hypertensive disorders of pregnancy (HDP) management pathways: results of a Delphi survey to contextualize international recommendations for Indonesian primary care settings,” *BMC Pregnancy Childbirth*, vol. 21, no. 1, Dec. 2021, doi: 10.1186/s12884-021-03735-3.

https://doi.org/10.34011/jmp2k.v35i1.2544

e-ISSN: 2338-3445
p-ISSN: 0853-9987

[4] J. Wallace *et al.*, "Assessment of interprofessional collaboration at free-standing birth centers: Does collaboration influence outcomes?," *J Interprof Educ Pract*, vol. 25, no. 3, 2021, doi: 10.1016/j.xjep.2021.100479.

[5] A. Helmy, M. mostafa, and R. Ali, "Clinical Audit For immediate Nursing Intervention During Obstetrical Emergency," *Assiut Scientific Nursing Journal*, vol. 10, no. 28, pp. 10–20, 2022, doi: 10.21608/asnj.2022.112520.1286.

[6] B. Hüner *et al.*, "Reducing preventable adverse events in obstetrics by improving interprofessional communication skills – Results of an intervention study," *BMC Pregnancy Childbirth*, vol. 23, no. 1, 2023, doi: 10.1186/s12884-022-05304-8.

[7] E. Schot, L. Tummers, and M. Noordegraaf, "Working on working together. A systematic review on how healthcare professionals contribute to interprofessional collaboration," *J Interprof Care*, vol. 34, no. 3, pp. 332–342, 2020, doi: 10.1080/13561820.2019.1636007.

[8] E. Sevene *et al.*, "Feasibility of task-sharing with community health workers for the identification, emergency management and referral of women with pre-eclampsia, in Mozambique," *Reprod Health*, vol. 18, no. 1, 2021, doi: 10.1186/s12978-021-01192-x.

[9] F. M. Ekawati, O. Emilia, J. Gunn, S. Licqurish, and P. Lau, "Challenging the status quo: results of an acceptability and feasibility study of hypertensive disorders of pregnancy (HDP) management pathways in Indonesian primary care," *BMC Pregnancy Childbirth*, vol. 21, no. 1, 2021, doi: 10.1186/s12884-021-03970-8.

[10] K. Adu-Bonsaffoh, E. Tamma, A. U. Nwameme, and J. L. Browne, "Health professionals' perspectives on clinical challenges in managing hypertensive disorders of pregnancy and recommendations for improving care: A multi-center qualitative study," *Front Glob Womens Health*, vol. 3, Nov. 2022, doi: 10.3389/fgwh.2022.968914.

[11] P. Mwansa, E. O. Daniel, U. Akpan, and H. Mwansa, "Assessment of Knowledge and Readiness for the Diagnosis and Management of Preeclampsia among Healthcare Workers from Selected Healthcare Facilities in Lusaka, Zambia," *International Journal of Innovative Research in Medical Science*, vol. 6, no. 06, pp. 366–371, 2021, doi: 10.23958/ijirms/vol06-i06/1145.

[12] S. M. Westberg, C. Pereira, R. Rosdahl, A. Do, J. Y. Moon, and T. Melnik, "Management of hypertension in pregnancy: a descriptive report of two clinic practices," *Hypertens Pregnancy*, vol. 39, no. 1, pp. 43–47, Jan. 2020, doi: 10.1080/10641955.2019.1697702.

[13] M. E. Andersson, C. Rubertsson, and S. R. Hansson, "The experience of provided information and care during pregnancy and postpartum when diagnosed with preeclampsia: A qualitative study," *Eur J Midwifery*, vol. 5, pp. 1–9, 2021, doi: 10.18332/EJM/139488.

[14] J. H. Raney *et al.*, "Simulation-enhanced nurse mentoring to improve preeclampsia and eclampsia care: An education intervention study in Bihar, India," *BMC Pregnancy Childbirth*, vol. 19, no. 1, Jan. 2019, doi: 10.1186/s12884-019-2186-x.

[15] A. A. Adepoju *et al.*, "The ability and safety of community-based health workers to safely initiate lifesaving therapies for pre-eclampsia in Ogun State, Nigeria: An analysis of 260 community treatments with MgSO4 and/or methyldopa," *Pregnancy Hypertens*, vol. 25, pp. 179–184, 2021, doi: 10.1016/j.preghy.2021.05.005.

[16] A. H. White, S. A. Crowther, and S. H. Lee, "Supporting rural midwifery practice using a mobile health (mHealth) intervention: A qualitative descriptive study," *Rural Remote Health*, vol. 19, no. 3, 2019, doi: 10.22605/RRH5294.

[17] M. Akmal, O. Sabrida, S. Wahyuni, K. Khairan, and G. Gholib, "Optimising Maternal and Fetal Health: The Crucial Role of Midwives in Early Detection and Intervention of Pre-eclampsia," *Path of Science*, vol. 9, no. 5, pp. 4009–4018, 2023, doi: 10.22178/pos.92-5.

https://doi.org/10.34011/jmp2k.v35i1.2544

e-ISSN: 2338-3445
p-ISSN: 0853-9987

[18] Y. Warella, S. Patria Jati, and M. Dwidiyanti, "The Effectiveness Of Collaborative Leadership On Improving Interprofessional Collaboration Practice In The Comprehensive Emergency Obstetric And Neonatal Services," vol. 29, no. 5, 2020, doi: 10.26911/the7thicph-FP.04.05.

[19] I. Garti, M. Gray, A. Bromley, and B. Tan, "A socioecological description of the influencing factors to midwives' management of preeclampsia in a Ghanaian tertiary hospital," *PLoS One*, vol. 18, no. 9, 2023, doi: 10.1371/journal.pone.0291036.

[20] E. Arntzen, R. Jøsendal, H. L. Sandsæter, and J. Horn, "Postpartum follow-up of women with preeclampsia: facilitators and barriers — A qualitative study," *BMC Pregnancy Childbirth*, vol. 23, no. 1. 2023, doi: 10.1186/s12884-023-06146-8.

https://doi.org/10.34011/jmp2k.v35i1.2544