



The Experiences of Handling Postpartum Hemorrhage According To Various Perspectives: A Scoping Review

Indah Christiana¹, Sulistyaningsih^{1,2*}

¹ Magister of Midwifery, Faculty of Health Science, Universitas Aisyiyah Yogyakarta

² Center for Women, Family, and Disaster Studies, Universitas Aisyiyah Yogyakarta

ARTICLE INFO

Article history:

Received 21 January 2023

Accepted 1 April 2023

Published 10 June 2023

Keyword:

Experience
handling postpartum hemorrhage

ABSTRACT

One leading cause of maternal mortality and morbidity is postpartum hemorrhage (PPH). When postpartum hemorrhage is not appropriately treated, shock and loss of consciousness can occur due to a large amount of blood coming out. It causes impaired blood circulation throughout the body and can cause severe hypovolemia. If this happens, it could result in the mother not being saved. Reducing deaths from postpartum hemorrhage is a challenge that must be undertaken by mothers, families or partners, service providers, and health workers. Research Objectives: to review research results from the experience of postpartum hemorrhage management according to various perspectives. The scope of this review uses the PRISMA ScR framework with article searches using four databases, namely Pubmed, ScienceDirect, Wiley, and EBSCO. The data obtained was carried out Critical Appraisal Using The Joanna Briggs Institute (JBI). Based on the search for articles from the 3,032 that had been selected, eight articles met the inclusion criteria. This review found three main themes: knowledge of postpartum haemorrhage (PPH) and prevention and treatment of PPH. Early detection of at-risk women, regular ANC, empowering women and villagers, the importance of seeing a midwife at least once while pregnant, carrying out treatment, and referrals are important so that postpartum hemorrhage is handled immediately.

Kata kunci:

Pengalaman
Penanganan
Perdarahan Postpartum

*) corresponding author

Dr. Sulistyaningsih, S.KM., MH.Kes

Faculty of Health Science, Universitas
Aisyiyah Yogyakarta
Center for Women, Family, and Disaster
Studies, Universitas Aisyiyah Yogyakarta

Email:

sulistyaningsih@unisayogya.ac.id

DOI: 10.30604/jika.v8i2.2007

Copyright 2023 @author(s)

ABSTRAK

Perdarahan postpartum merupakan penyebab utama kematian dan kesakitan ibu. Perdarahan post partum yang tidak tertangani dengan baik dapat mengakibatkan syok dan menurunnya kesadaran, akibat banyaknya darah yang keluar. Hal ini menyebabkan gangguan sirkulasi darah ke seluruh tubuh dan dapat menyebabkan hipovolemia berat. Bila hal ini terjadi bisa mengakibatkan ibu tidak terselamatkan. Mengurangi kematian akibat perdarahan postpartum merupakan tantangan yang harus dilakukan baik ibu, keluarga atau pasangan, penyedia layanan dan tenaga kesehatan. Tujuan Penelitian: untuk mereview hasil penelitian dari pengalaman penanganan perdarahan postpartum menurut berbagai perspektif. Scoping review ini menggunakan framework PRISMA ScR dengan pencarian artikel menggunakan 4 database yaitu Pubmed, ScienceDirect, Wiley dan EBSCO. Data yang sudah didapatkan dilakukan Critical Appraisal Menggunakan The Joanna Briggs Institute (JBI). Berdasarkan pencarian artikel dari 3.032 yang telah diseleksi didapatkan sebanyak 8 artikel yang sesuai dengan kriteria inklusi. Dalam tinjauan ini ditemukan tiga tema utama yaitu pengetahuan perdarahan, pencegahan dan penanganan perdarahan postpartum. Penanganan perdarahan postpartum dilakukan mulai deteksi dini wanita beresiko, ANC secara teratur, melakukan pemberdayaan perempuan dan penduduk desa, pentingnya menemui bidan setidaknya sekali selama kehamilan, melakukan pengobatan serta rujukan.

This open access article is under the [CC-BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.



INTRODUCTION

Postpartum hemorrhage (PPH) is a significant maternal health problem and causes death. As many as 140,000 women die every year, or every 4 minutes, there is one death due to postpartum hemorrhage. In the world. (Wormer et al., 2022). Globally about 1-6% PPH epidemiology of all deliveries. The leading cause of maternal death is postpartum hemorrhage, which occurs 94% of the time during childbirth and is most common in low- and middle-income countries. The cause of PPH is 10-20% due to lacerations or incisions, 80-90% originating from the uterus, and <1% due to coagulopathy disorders (James et al., 2022). According to WHO 2015, there are 14 million (11.4%) mothers in the world who suffer from PPH, while in developing countries, every year, it reaches 60% in 100 thousand maternal deaths; due to poor management of the third stage of labor, mothers lose a lot of blood. In 2020 in Indonesia, there were 1,330 cases of maternal death caused by bleeding (*Profil-Kesehatan-Indonesia-Tahun-2020*, n.d.).

Pregnant women who experience complications in pregnancy will be more at risk of PPH. PPH occurs suddenly; in less than 1 hour, a mother will experience death. Three delays caused this condition of death: late in making decisions, late arrival at the referral site, and late receiving appropriate care at a health facility (Kemenkes RI, 2011).

Prevention efforts that can be done are active management of the third stage in every delivery are routinely carrying out antenatal care so that health workers can detect abnormalities early or consider risk factors during pregnancy. Preparing for appropriate delivery if the mother has a history of delivery with previous postpartum hemorrhage and has a rare blood type or bleeding disorder. Pregnant women must avoid risk factors that can trigger bleeding, such as anemia, preeclampsia, obsession, and high cholesterol levels (Vander Meulen et al., 2019).

The researcher's scoping review question is, "How does the experience of dealing with postpartum hemorrhage according to various perspectives?" based on the SPIDER framework mentioned above. Sample (S) is mothers with a history of postpartum hemorrhage, or health workers, traditional birth attendants, who had handled postpartum. Phenomenon of interest (P) is postpartum hemorrhage. Design is descriptive phenomenology. Evaluation is experiences. Research type is qualitative.

METHODS

The researcher used the PRISMA-ScR checklist protocol, with framework SPIDER (Sample, Phenomenon of Interest, Design, Evaluation, Research type). Sample: Mothers who have a history of postpartum hemorrhage, health workers/health workers and traditional birth attendants who have handled postpartum hemorrhage. Phenomenon of Interest: Post partum bleeding, Design uses descriptive, Phenomenology, Evaluation: experience and Research type: qualitative.

In selecting relevant articles, the researcher determined the inclusion and exclusion criteria. Inclusion criteria is original research article, published in 2012 – 2023, English research articles, full-text articles, documents/reports from WHO/other official organizations, research articles using qualitative research methods and relevant articles regarding experiences with postpartum hemorrhage. Exclusion criteria is opinion papers, article that discusses postpartum hemorrhage with congenital blood disorders. The search strategy aims to find published studies by clinical trials, peer review, and gray literature. The Author's databases are Pubmed, Ebsco, Wiley, and ScienceDirect. A database search was conducted from December 2022 to January 2023. In the search for articles, use keywords Women's OR Maternal OR Mothers OR Women AND Experience OR Perspective OR View OR Opinion AND Postpartum Haemorrhage OR Postpartum Bleeding OR Bleeding after Birth OR PPH AND Qualitative Study.

The reference management software used was Zotero, for selecting articles that allows to check for duplicates, choose titles and abstracts, and read the full text. The flowchart Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA) describes the findings of the number of articles and the filter process (Tricco et al., 2018) as Figure 1.

After filtering the data, Critical Appraisal was carried out to assess the quality of the article both from a methodological point of view and the extent to which the research discussed possible biases in design. Implementation and analysis used the Joana Briggs Checklist. 8 articles were carried out by Critical Appraisal using a qualitative research design. The following are the results of the Critical Appraisal conducted by researchers:

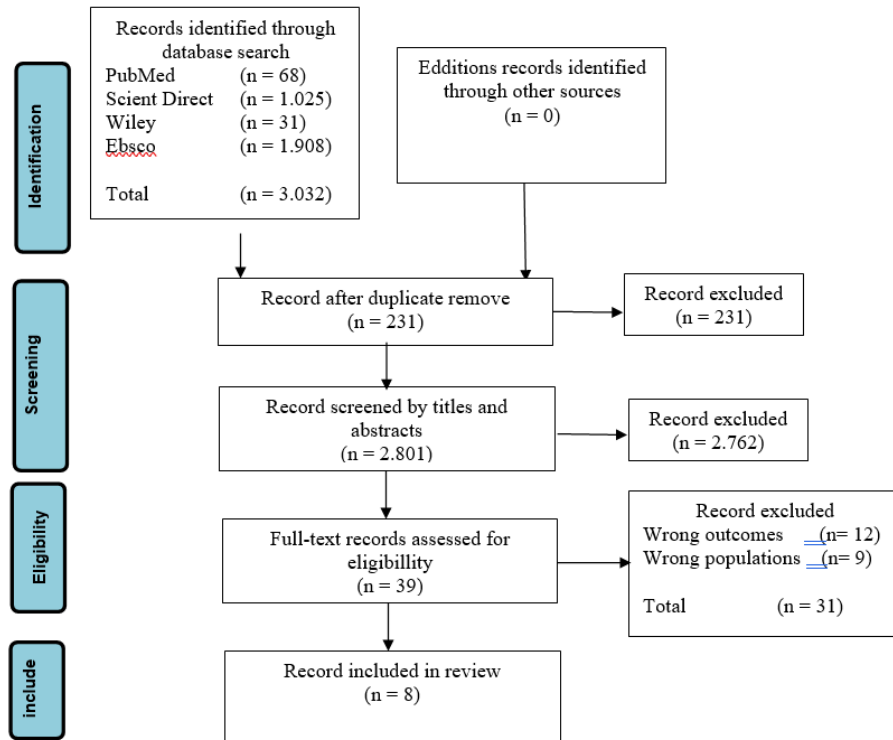


Figure 1. PRISMA ScR Flow Chart (Tricco et al. 2018)

Table 3.
Data Charting

No	Title/Author/Year/Grade	Country	Aim	Study	Sample Size	Result
1	Excessive bleeding is a normal cleansing process: a qualitative study of postpartum hemorrhage among rural Uganda women/ Sam Ononge et al./ 2016/ A/ A1	Eastern Africa (Uganda)	To better understand women's and Traditional Birth Attendants' experiences with postpartum hemorrhage.	Qualitative with a phenomenological approach	<ol style="list-style-type: none"> 1. This research was conducted between April and June 2012. 2. Respondents were taken purposively 3. Six women who gave birth at home in the previous year 4. Nine midwives. 5. In-depth interviews do data collection 	Postpartum bleeding is a natural cleansing process that, if interrupted or inhibited, causes the mother's health may suffer. Respondents used a variety of indicators to identify PPH, including blood flow velocity, the volume of blood (equivalent to two fists), fainting, feeling dehydrated, fainting, or loss of consciousness soon after birth. Respondents appear to recognize PPH-at-risk women (those with multiple pregnancies, high parity, or protracted labor) correctly, but many do not understand all the causes. Respondents treated PPH with cold beverages, uterine massage, and traditional medicine.
2	Influencing factors for prevention of postpartum hemorrhage and early detection of childbearing women at risk in Northern Province of Rwanda: beneficiary and health worker perspective/ Olivia Bazirete et al/ 2020/ A/ A2	North Rwanda Province (Central Africa)	to explore the factors influencing PPH prevention, Beneficiaries and health workers in Northern Rwanda perceive early detection of at-risk pregnant women.	Explorative descriptive qualitative	<ol style="list-style-type: none"> 1. Semi-structured interviews were used to collect data from 11 women with PPH 6 months before the interview. 2. Discussions in focus groups were held with: <ol style="list-style-type: none"> a. Two focus groups consisting of female partners or close relatives b. Two focus groups consisting of community health officers (CHWs) responsible for maternal health c. Three focus groups consisting of healthcare providers 	The findings from this study indicated that women and their partners have poor PPH comprehension. Family members and CHWs believe that getting the mother to the medical facility on time is their responsibility in PPH prevention. As described by participants, Retained placenta and multiple parties are the leading causes of PPH. The main barriers to PPH prevention were low socioeconomic status and long wait times for health services.
3	Information-hungry and disempowered : A qualitative study of women and their partner'' experiences of severe postpartum haemorrhage/ Claire Snowdon, BA, MA, PhD et al/ 2012/ A/ A3	Great Britain (London)	to investigate the severity of postpartum hemorrhage (PPH), how women and their partners manage it, and how they view upcoming circumstances.	Qualitative Phenomenology	<ol style="list-style-type: none"> 1. 9 women who had severe PPH 2. 6 husbands 3. Semi-structured interviews were conducted 	This study showed severe PPH stress and emotions and added a partner's perspective to the literature. Although interviewees frequently desire to aid in understanding historical events, women and men have different experiences and information needs. The data strongly support the dominant theme of communication difficulties and two sub-themes, helplessness and lack of information. When dealing with an emergency, communication problems are understandable; however, they are frustrating and upsetting when dealing with postpartum and long-term care.
4	"It's like a bus, going downhill, without a driver": A qualitative study of how postpartum haemorrhage is experienced by women, their birth partners, and healthcare professionals/ Annette L. Briley/ 2020/ A/ A4	Great Britain	to offer a variety of perspectives on PPH and enhance future understanding and practice of care.	Qualitative	<ol style="list-style-type: none"> 1. Respondents consist of : <ol style="list-style-type: none"> a. 9 women who experienced PPH b. 4 husbands/ partners c. 9 people who work as health care professionals (HCP) 2. Data collection by interview was carried out 2 weeks after PPH 	PPH is seen as a 'crisis style emergency', instilling in HCPs a respectable fear that women and their partners are unaware of or are only familiar with. HCP risk communication and response depend on PPH knowledge. PPH risk is typically linked to measuring blood loss, which can be assessed with varying degrees of accuracy. Unquestionably,

No	Title/Author/Year/Grade	Country	Aim	Study	Sample Size	Result
					3. Data were analyzed using thematic analysis	partners and women trust HCP's management of PPH. Nonverbal cues are emphasized, with HCP body language revealing professional credentials.
5	Women and their birth partners' experiences following a primary postpartum haemorrhage : a qualitative study/ T. Dunning et al/ 2016/ A/ A5	Great Britain (London)	Describe the mothers and their partners' experiences with primary PPH	Qualitative	<ol style="list-style-type: none"> 1. Respondents consist of : <ol style="list-style-type: none"> a. The 11 women who had experienced PPH lasted 4 to 14 months postpartum b. 6 partners/husbands 2. Taking respondents purposively 3. Semi-structured interviews were carried out. 4. Framework analysis was used to examine the data. 	More than half of women and their birth partners do not know they have PPH and would rather have more information at the time of delivery or postpartum. According to the findings, birth partners also require more information, particularly if they are parted from their partner during PPP.
6	Barriers to effective management of primary postpartum hemorrhage following in hospital births in northwest Ethiopia: healthcare providers' views using a qualitative approach/ Tiruneh Bewket et al./ 2022/A/A6	East Africa (Ethiopia)	Examining the opinions and experiences of maternity health professionals concerning the difficulties in managing PPPH following a hospital delivery	Descriptive qualitative	<ol style="list-style-type: none"> 1. Between December 2018 and May 2019, the research was carried out at two hospitals considered to be of tertiary level. 2. 41 respondents provided maternal health services, including obstetricians, midwives, and managers of midwifery units. 3. Data collection methods include interviews, FGD, and open questionnaires. 	Participants reported several modifiable problems when managing primary postpartum hemorrhage, and due to limited resources, they were all connected to delays in receiving appropriate and high-quality care. 5 sub-themes were identified: 'workforce,' 'communication problems among healthcare providers,' 'systemic problems,' 'education, training, and resource issues,' and 'lack of identification and referral.
7	Focus group with Guatemalan Traditional midwives about postpartum hemorrhage/ Garcia, K et al/ 2012/A/A7	Central America (Guatemala)	To explore the knowledge, practice, and attitudes of traditional Guatemalan midwives regarding nursing interventions for managing postpartum hemorrhage (PPH)	Qualitative	<ol style="list-style-type: none"> 1. a 45-minute FGD with 13 traditional midwives was conducted in a remote middle-eastern Guatemalan rural health clinic with few resources. 	<p>The 45-minute conversation about midwives' knowledge, practice, and attitude toward PPH included 13 midwives.</p> <p>The focus group discussions yielded four major themes.</p> <p>First, midwives repeatedly denied having handled PPH, even when not asked. Second, the midwife believed in the local health care provider and reported that the patient would be transferred to the hospital. Thirdly, the midwife indicated that hospital transportation was problematic. Fourth, midwives identified education about the importance of prenatal care and seeking early delivery assistance as their most pressing need.</p>
8	Midwives' experiences of reducing maternal morbidity and mortality from postpartum hemorrhage (PPH) in Eastern Nigeria/ Felicity Agwu Kalu/ 2022/A/A8	West Africa (Eastern Nigeria)	To better practice and support midwives in rural maternity care settings, it is essential to understand their experiences.	Qualitative exploration	<ol style="list-style-type: none"> 1. Respondents were 15 practicing midwives 2. Purposive sampling 3. From November 2018 to February 2019, semi-structured interviews were conducted. 4. Content analysis was performed on verbatim transcripts. 	4 themes have been identified: 1. interventions to prevent PPH; 2. PPH management approach; 3. PPH prevention and management challenges; 4. how to assist midwives in addressing these issues in rural health care settings. Midwives employ various techniques to avoid potential PPH complications, including antenatal education, anemia diagnosis, and treatment. Knowing PPH to be a potentially fatal condition enables midwives to provide comprehensive and efficient

No	Title/Author/Year/Grade	Country	Aim	Study	Sample Size	Result
						management, occasionally involving a multidisciplinary team approach. But their efforts are hampered by insufficient funding and long wait times for medical attention. To raise their standards of care, the midwives also recognized the need for ongoing education and training.

Table 3.
Methodological Quality Assessment

No	Questions	A1	A2	A3	A4	A5	A6	A7	A8
1	Is there congruity between the stated philosophical perspective and the research methodology?	Y	Y	Y	Y	Y	Y	Y	Y
2	Is there congruity between the research methodology and the research question or objectives?	Y	Y	Y	Y	Y	Y	Y	Y
3	Is there congruity between the research methodology and the methods used to collect data?	Y	Y	Y	Y	Y	Y	Y	Y
4	Is there congruity between the research methodology and the representation and analysis of data?	Y	Y	Y	Y	Y	Y	Y	Y
5	Is there congruity between the research methodology and the interpretation of results?	Y	Y	Y	Y	Y	Y	Y	Y
6	Is there a statement locating the researcher culturally or theoretically?	Y	Y	Y	Y	Y	Y	Y	Y
7	Is the influence of the researcher on the research, and vice-versa, addressed?	Y	Y	Y	Y	Y	Y	Y	Y
8	Are participants, and their voices, adequately represented?	Y	Y	Y	Y	Y	Y	Y	Y
9	Is the research ethical according to current criteria or, for recent studies, and is there evidence of ethical approval by an appropriate body?	Y	Y	Y	Y	Y	Y	Y	Y
10	Do the conclusions drawn in the research report flow from the analysis or interpretation of the data?	Y	Y	Y	Y	Y	Y	Y	Y
	Total	10	10	10	10	10	10	10	10

RESULTS AND DISCUSSION

Selection of Sources of Evidence

Zotero was used to conduct a screening based on the results of keyword searches conducted in four databases through the SPIDER framework. A Prisma Flow Chart was used to describe the stages of article screening. Eight articles were obtained that were considered to meet the inclusion criteria and were appropriate assessments by conducting a Critical Appraisal using *The Joanna Briggs Institute (JBI)* (Peters et al., 2015).

Of the eight articles obtained, all used a qualitative research design, JBI critical appraisal tools were used to assess the quality of studies, and all studies deserved inclusion.

Characteristics Of Sources Of Evidence

Various characteristics of the eight articles have been selected, including characteristics based on continent, Country, design and research methods, and article grade.

a. Characteristics of Articles Based on Continent

Articles obtained from the selection results based on continents include 4 articles from the African continent, 3 from the European continent and 1 from the American continent.

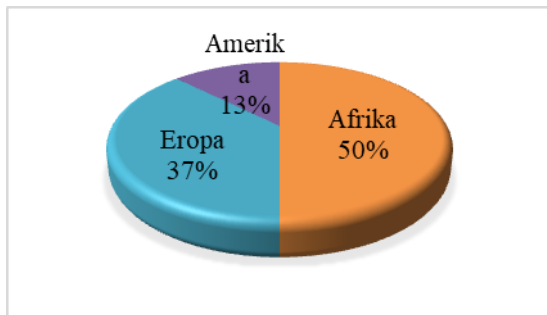


Diagram 2 Benua Characteristics of Articles Based on Continent

b. Characteristics of Articles based on Country

The articles obtained from the results of selection based on Country included 6 articles in developed countries and 2 articles from developing countries.

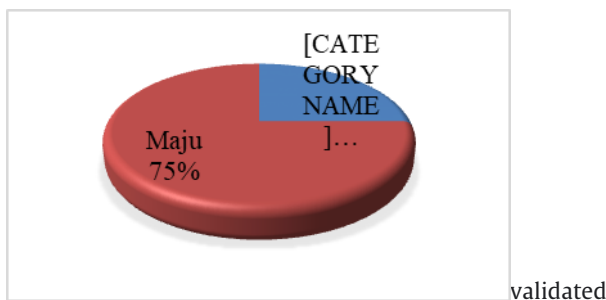


Diagram 3. Characteristics of Articles based on Country

Critical Appraisal Within Sources of Evidence

This review's scoping included eight articles that used qualitative studies. The critical appraisal results for eight articles were obtained, with the answer "YES" to all Joanna Briggs Critical Appraisal Tools (JBI) question items answered perfectly. Additionally, this article has the benefit of having its data sources, including samples, data collection techniques, sampling techniques, and instruments, so that the error rate can be kept to a minimum (Peters et al., 2015).

Result of Individual Sources of Evidence

The following are a few of the themes that emerged from the researcher's Scoping Review:

Table 5. Mapping theme

Theme	Sub Theme	Article	
PPH Knowledge	Definisi PPH	A1, A2, A4, A7	
	1. Deteksi dini wanita yang beresiko	A1, A2, A5	
		2. Antenatal Care	A4, A8
		3. Women empowerment	A2
Penanganan PPH	4. Educate the villagers	A7	
	1. Action and Treatment	A1, A2, A3, A8	
2. Referrals		A2, A6, A7, A8	

Synthesis of Evidence

Several articles were obtained based on the review results of 8 articles following the scoping review's purpose that discussed the theme of knowledge about PPH, prevention of PPH, and handling of PPH.

a. Knowledge of PPH

Article [1] is the first article that defines PPH. In article 1, it is explained that vaginal bleeding is a common occurrence after giving birth. Even cleaners consider it normal, and every woman hopes for blood loss. Excessive vaginal bleeding after delivery, Respondents frequently discuss measuring the rate or speed of blood flow, whether they should often change their pads, or the expulsion of blood clots (Ononge et al., 2016a). Article [2] defines postpartum hemorrhage as more than 500 ml of blood lost in the first hour following delivery., which fits the WHO-recommended definition. (Bazirete et al., 2020).In article (4), PPH is defined as when a woman loses 1000 ml or if she jerks, Her legs are covered in blood, and the towels and pads get wet (Briley et al., 2021). Article (8) defines PPH as a blood loss of 500 cc (Kimberly et al., 2012).

b. PPH Prevention

1) Early detection of women at risk

In article (1), Despite being aware of several risk factors, respondents reported difficulty identifying which women are more likely to experience PPH. They associated a lot of bleeding with giving birth to more than five children; Retained placenta, pre-delivery bleeding, protracted labor, multiple pregnancies, and pregnancy anemia were additional risk factors mentioned. Retained placenta, pre-delivery bleeding, prolonged labor, multiple pregnancies, and

pregnancy anemia were other risk factors mentioned (Ononge et al., 2016a). (2) explained that the risk factors are listed as not using a method of family planning that prevents frequent pregnancies, a history of PPH, a retained placenta, and tearing or trauma to the genital organs. The woman's family members and medical professionals agreed that poverty and malnutrition put women at risk for PPH because a pregnant woman who eats poorly or does not eat a balanced diet may have postpartum haemorrhage. (Bazirete et al., 2020). Article (5) explains that women with complicated deliveries are at risk for PPH (Dunning et al., 2016).

2) Antenatal Care

Article (4) states the significance of antenatal care management for high-risk pregnant women; appropriate and effective interventions can be carried out before the due date to minimize complications in childbirth (Briley et al., 2021). In article (8), Antenatal care provides an opportunity to assess and promote the general well-being of the mother. Assessment, diagnosis, and identification of risk factors linked to the emergence of anemia during pregnancy can help prevent PPH (Kalu & Chukwurah, 2022).

3) Women Empowerment

Article (2) explains that one way to empower women is to educate women and their families to increase their knowledge (Bazirete et al., 2020)

4) Educate the Villagers

Article (7) explains Midwives say Before problems arise, villagers must understand the importance of seeing a midwife at least once during their pregnancy and before delivery. (Bazirete et al., 2020).

c. PPH Handling

1) Action and Treatment

Article (1) describes how to treat PPH and traditional birth attendants stop excessive bleeding with cold water or soda. (Ononge et al., 2016). Article (2) explains that when treating bleeding, massage the uterus, and if the bleeding persists, call the health promoter to place an infusion. When faced with labor complications, midwives have been instructed in other training programs to transfer patients with bleeding to the hospital. (Bazirete et al., 2020). Article (3) explains various strategies for handling PPH; one of them is "family facilitators," where family members or husbands live with their partners during the management of postpartum hemorrhage (Snowdon et al., 2012). Article (8) explains the treatment of bleeding using active management of stage III and oxytocin injection (Kalu & Chukwurah, 2022).

2) Referrals

Article (2) explains that midwives trust local health services to handle postpartum hemorrhage and say they will move mothers who experience bleeding to the hospital. (Bazirete et al., 2020). Article (6) describes the necessity of referring high-risk women from primary care facilities to tertiary referral hospitals, which can only happen with appropriate screening (Bewket et al., 2022). In article (7), Midwives said they trusted local healthcare providers and

would transfer bleeding mothers to local hospitals. Their role was to convince mothers to go to the hospital in an emergency. (Kimberly et al., 2012). In article (8), Access issues to maternity care centers cause women's treatment to be delayed. It includes transportation issues and late maternity home referrals to medical facilities. (Kalu & Chukwurah, 2022).

Summary of Evidence

Based on the eight selected articles, it was discovered that the articles were relevant to the scoping review's purpose, namely, discussing knowledge about PPH and prevention of PPH.

a. Knowledge of PPH

1) PPH Definition

In this discussion, several articles discuss the definition of PPH. Articles that discuss the definition of PPH include A1, A2. Postpartum haemorrhage includes all bleeding that occurs after the baby's birth, before, during, and after the expulsion of the placenta. Postpartum hemorrhage is the loss of more than 500 ml of blood in the first 24 hours after giving birth (Oxorn & Forte, 2010). Meanwhile, according to Dina Dewi et al. (2022) Postpartum hemorrhage is defined as bleeding of over 500 cc after vaginal delivery and over 1,000 ml for abdominal delivery.

Rural women view postpartum hemorrhage as a natural and cleansing process that, if stopped or inhibited, will harm the mother's health. Bleeding after delivery is normal; Every woman should anticipate bleeding. They think postpartum bleeding stops naturally and should not be prevented. Menstruation and postpartum bleeding are both regarded as natural cleansing processes. Some people believe that the blood pooled in a woman's body throughout her pregnancy should be allowed to drain away after she gives birth. By stopping the bleeding, some of the "bad" or "dirty" blood will remain in the uterus (womb) of the woman, and most of it results in complications. It is widely held that allowing the blood to flow freely will assist in restoring a woman's health and hygiene. (Ononge et al., 2016a).

People can recognize postpartum hemorrhage or heavy bleeding using straightforward techniques like visual inspection, pails, clothes, and pads. Respondents also showed knowledge of the physiological indicators of severe bleeding and shock, such as the woman's body turning blue, persistent bleeding, rapid flow, or spurting (Snowdon et al., 2012).

Respondents have several ways to define excessive vaginal bleeding after delivery; Respondents frequently discuss assessing the rate or velocity of blood flow, frequent pad changes, and the expulsion of blood clots. However, inexperienced first-time mothers may be unable to rely on this technique. A 20-year-old woman acknowledged her inability to determine whether her bleeding was excessive and stated that she would not know unless someone else informed her that she was losing a significant amount of blood. (Ononge et al., 2016)

Traditional birth attendants say a woman loses more blood than usual based on their extensive experience assisting women during childbirth. Loss of blood, "the equivalent of two fists," is a method traditional healers use to define PPH. However, Traditional birth attendants have also reported more accurate measurements of blood loss equal to 500 ml of blood by measuring blood in plastic mugs

after the baby and placenta have been delivered. The amount of blood in the plastic cup indicates that the woman suffers from PPH. In addition, Without an objective method, traditional birth attendants rely on symptoms such as dizziness, sweating, thirst, or fainting, which are essential signs of hypovolemia. However, this symptom appears only as a late symptom of PPH and is not limited to excessive bleeding (Ononge et al., 2016a)

PPH is typically diagnosed based on visual estimation of blood loss in the first hour after delivery, which is greater than 500 ml., which fits the WHO recommended definition. (Bazirete et al., 2020)

Patients identified a lack of communication between clients and their partners before, during, and after PPH events as the most significant barrier to high-quality PPH care, as reported by Woiski et al. In addition, healthcare providers cited an absence of clear guidelines, a lack of knowledge, and poor team communication as impediments. Therefore, to improve the quality of care provided to women for the prevention of PPH, an in-depth analysis from various perspectives that identifies the factors that influence the delivery of quality PPH care will provide the information necessary to implement strategies to improve care. (Bazirete et al., 2020)

b. PPH Prevention

1) Early detection of at-risk women

Participants described various antepartum and intrapartum risk factors as PPH risk factors. Healthcare providers mention that "knowing pregnant women with a predisposition to PPH" will prevent PPH. The absence of a family planning method, a history of PPH, a retained placenta, and damage to the genital organs are listed as risk factors. The woman's family members and medical professionals agreed that poverty and malnutrition put women at risk for PPH because if a pregnant woman doesn't eat a balanced diet while she is pregnant, she might have postpartum hemorrhage when she gives birth. (Bazirete et al., 2020)

Even though they knew the risk factors, respondents expressed difficulty predicting which women were more likely to experience PPH. They claimed that having more than five children made the uterus "tired," which they claimed was the cause of the excessive bleeding. Other risk factors include placenta retention, bleeding prior to delivery, prolonged labor, multiple pregnancies, and anemia during pregnancy. Additionally, they claimed that birth canal injuries in pregnant women made them more likely to experience their first bleeding. Traditional birth attendants say they send high-risk pregnant women to the hospital if they have any of the above problems. It is interesting that none of the respondents cited excessive bleeding as being caused by the uterus failing to contract (uterine atony) after delivery. Modern contraception has been linked to an increased risk of excessive blood loss. Respondents believed contraceptive methods that cause amenorrhea (the cessation of menstruation) could cause excessive bleeding after delivery, possibly due to the accumulation of blood before pregnancy. Some argue that because other contraceptive methods prolong menstrual bleeding in non-pregnant women, women who use contraception before giving birth are more likely to develop PPH. (Ononge et al., 2016a)

2) Antenatal Care

Antenatal care allows for the assessment, diagnosis, and detection of risk factors associated with the development of anaemia during pregnancy, as well as the promotion of general maternal well-being and the prevention of PPH. Pregnant women are encouraged to perform an initial examination and determine PPH risk factors, such as anemia. Complete blood count tests are performed to evaluate and track hemoglobin levels and correct pregnancy anemia to prevent major bleeding complications. To prevent folic acid deficiency, supplementing with folic acid is also advised during pregnancy. Taking folic acid and iron supplements together prevents iron deficiency during pregnancy. It is also explained to women that taking folic acid during the first trimester of pregnancy can prevent certain congenital disabilities, such as those that affect the neural tube. Midwives stressed that PPH is not always predictable and that women should try to keep their haemoglobin levels at their best during the antenatal period to handle PPH better if it happens. Prenatal visits offer health education opportunities to support pregnant women's health and wellbeing. The significance of a healthy diet and the advantages of giving birth in a medical facility was discussed. Women are also advised on preparing for labour and delivery. To actively manage the third stage of labor and prevent PPH, midwives educate mothers (Kalu & Chukwurah, 2022).

3) Women Empowerment

Midwives empower women by educating them and their families to increase their knowledge about PPH prevention. Midwives provide education about abnormal signs such as fever, headache and bleeding during pregnancy and the puerperium, urging expectant mothers to use healthcare facilities for antenatal consultations and to give birth (Bazirete et al., 2020)

4) Educate the Villagers

Midwives reported that they required assistance in educating villagers, particularly men, about the importance of PPH prevention. The midwife emphasized to the villagers the significance of seeing a doctor or a midwife at least once during their pregnancies and before giving birth to prevent complications. Due to their close ties to the community, they recommended that local authorities, such as the head of the village administration, receive PPH training. As a result of the high turnover rate in the healthcare industry, healthcare providers and CHWs have expressed a desire for ongoing training on PPH. They stated that new employees may be unaware of the most recent PPH prevention protocols. Healthcare professionals in antenatal clinics claim that when they are knowledgeable about PPH and its risk factors, they can better instruct and assist mothers in learning about the symptoms and signs of PPH and the appropriate steps to take. The CHW expressed a desire for adequate training in procedures such as assisting with home births to provide care if a woman gives birth in the community before reaching a health facility (Bazirete et al., 2020).

The Ministry of Health promotes the presence of companion midwives as one of its mechanisms, intending to have one volunteer health worker (AMW) in each village. Most AMWs are local women who have completed secondary school on their own time and for free, and the Ministry of Health selected and trained them to provide

antenatal care, routine deliveries, and postnatal care. AMW's main responsibility is to provide preventive care, which includes educating mothers about healthy pregnancy and pregnancy and encouraging births with trained birth attendants (Kyu Kyu Tan, 2017).

Educating the villagers is hoped that all residents or local officials, such as village heads, staff, volunteer workers and midwife assistants, will identify pregnant women at risk of postpartum haemorrhage. So it is easier to make referrals to more adequate services to prevent postpartum bleeding.

c. Handling PPH

1) Action and Treatment

Several countries still use traditional methods for PPH treatment and prevention. In Bangladesh India, Prevention depends on placating the supernatural or spiritual forces that are blamed. "If a pregnant woman violates the rules and is outside in the morning, evening, or during the day, evil spirits attack her, resulting in heavy bleeding." PPH prevention in Madagascar, Africa, also entails mechanical methods that acknowledge the necessity of compression. After birthing the placenta, the woman's abdomen is massaged, the abdomen is tied with cloth, and it is recommended to sleep on her stomach until the bleeding stops (Soo Down, 2019).

Many traditional birth attendants claimed to have stopped excessive bleeding with cold water or soda. They think it treats and prevents PPH. They assert that this procedure has been used for a while and has proven effective. Also, drinking warm water is believed to stop bleeding because it increases blood flow and vaginal bleeding. Traditional birth attendants in Madagascar use herbs and teas with uterotonic properties to treat postpartum haemorrhage.

Most traditional birth attendants (TBA) have reported that they no longer use traditional medicine to either stop or reduce excessive bleeding in their patients. They stated that mothers who give birth at home and experience excessive bleeding after birth are referred to health facilities. Curiously, the three TBA had ergometrine medication in their house, which they could give to the woman once she had given birth. (Ononge et al., 2016a)

PPH is considered an obstetric emergency by midwives and requires immediate recognition, diagnosis, and treatment to stop the bleeding and prevent the condition from worsening. Participants said PPH guidelines and policies help them diagnose and treat PPH quickly and effectively. To reduce the risk of PPH, midwives take various precautions when managing all phases of labor. By protecting the perineum during labor, using fewer episiotomies, and promptly suturing the perineum, efforts were made to lower the risk of bleeding from perineal trauma. The midwife's clinical expertise and years of experience are important factors in the successful management of the various stages of labor. Additionally, skilled midwives can manually remove the placenta while wearing sterile gloves (Kalu & Chukwurah, 2022b)

Medical professionals administer oxytocin injections to manage the third stage of labor and prevent PPH actively. However, its efficacy is questionable since most healthcare facilities lack refrigeration storage in the delivery unit for oxytocin requiring transport and storage between 2 °C and 8 °C, regardless of labeling. Oxytocin, a vital medication for preventing PPH, was shown by Smith et al. to require proper storage and a consistent drug supply. It suggests improved

service/clinical provider coordination as well as improved medication and maternal health supply chain management. Regular training is advised by Bartlett et al. to encourage active management of the third stage of labor and optimize the timing of uterotonics (Kalu & Chukwurah, 2022b)

Midwives find cases of postpartum hemorrhage; what they do is massage the uterus, if the bleeding persists, call the health promoter to install an infusion. When faced with labor issues, midwives have been instructed in other training programs to transfer bleeding patients to hospitals, but it is unknown whether this practice is used.

As the woman approaches her anticipated due date, Community Health Officers (CHW) claim their responsibility is to inform her of risk factors and "take her to a health facility" to receive care from a qualified midwife. CHW stated that their primary goal is to prevent PPH when mothers give birth at home or in the community. If the mother is giving birth at home or en route to a health facility, the duty shifting policy permits CHWs to administer Misoprostol to prevent PPH. "... when a woman gives birth at home or before getting to the hospital, we give her Misoprostol, which stops bleeding, and then we take her to the doctor, who tells her to get enough rest. We are used to advising women, and the training we receive helps them (Bazirete et al., 2020)

Active management of the third stage, including administering uterotonic drugs following delivery, regulating umbilical cord traction, and uterine massage are the most effective intervention for preventing postpartum hemorrhage. The current best practice for preventing postpartum hemorrhage is actively managing the third stage with oxytocin injection as the uterotonic of choice. However, in remote areas, there are resource constraints and skilled providers for cold storage and administering injections, thereby hindering the distribution and use of oxytocin. Misoprostol is a uterotonic medication that can be taken orally and is often recommended in places with limited access to oxytocin. Misoprostol has been used and proven effective when administered orally by public health professionals to prevent postpartum hemorrhage in several countries because it does not need to be kept in cold storage. (Kyu Kyu, 2017).

2) Referrals

In handling postpartum haemorrhage, midwives trust local health services and will transfer mothers who experience bleeding to the hospital. The problem that midwives often face when making referrals is transportation. In some countries, the transportation is complicated; for example, in Guatemala, they have to make referrals by using a canoe to the hospital. Another consideration in making referrals is the cost factor, where renting a canoe costs a lot (Kimberly et al., 2012b). The socioeconomic status of the family has a negative impact on PPH prevention, especially poverty, that low-income families experience challenges because they cannot afford to go to health facilities, in which case the risk of PPH would be higher (Bazirete et al., 2020)

Midwives face significant obstacles concerning PPH prevention and treatment in rural and community clinical settings. Access to maternity care and a lack of resources to manage PPH hinder providing effective PPH care. Access issues to maternity care facilities cause women's treatment to be delayed. It includes problems with transportation and sending patients from the maternity home to medical facilities too late) (Kalu & Chukwurah, 2022)

Volunteer health workers (AMW) said postpartum hemorrhage was unexpected and scary. They were most

worried about serious fear and death because of insufficient resources. The only action AMWs are trained and can provide timely referrals to the nearest hospital. Limited care at second-level health centers in rural areas where facilities for managing postpartum haemorrhage are lacking. Therefore, it would seem that the only option for further treatment of postpartum hemorrhage is to have the patient transferred to a tertiary care hospital. (Kyu Kyu et al, 2017).

Referral of obstetric patients from traditional birth attendants seems to cause concern among all mothers. Many examples of patients being transferred to health facilities with considerable delays are given. Traditional birth attendants are reluctant to make timely referrals and lack basic skills in the dukun (Jongchum Jan Beltman, 2013).

In making referrals, many problems often occur, including not being on time. Referrals are made by midwives, traditional healers, and patients. Inadequate patient self-referral promptly or a delay in seeking care (first phase delay) is also an important reason for increased morbidity and mortality rates. Apart from not being on time, the problem that often arises is the attitude of the service provider. Arrogant attitude by healthcare providers toward patients is common. Due to the inefficient use of ambulances, slow assessment of emergency cases by doctors, and slow emergency procedure preparation by hospital staff, the transportation system is not operating as intended. The ongoing scarcity of human resources plays a significant role in the management of postpartum hemorrhage (Jongchum Jan Beltman, 2013).

It is crucial to share information throughout the health system, from community to district hospitals, to ensure continuity of care and appropriate follow-up for women. When there are women in labor or with other obstetric problems in the community, Even though there are occasional delays in the delivery of the ambulances, female helpers (CHW) use their cell phones to contact the medical staff at the health facilities to send ambulance using the "Quick SMS" system. Women need accurate PPH information during pregnancy, labor, and the puerperium to decide when to seek follow-up care. (Bazirete et al., 2020).

LIMITATION OF THE STUDY

The limitation in compiling this scoping review is that the number of articles reviewed is limited to qualitative research exploring the experiences of mothers, traditional birth attendants and health workers in treating postpartum haemorrhage.

CONCLUSIONS AND SUGGESTIONS

Postpartum hemorrhage is characterized by more than 500 cc of bleeding following vaginal delivery and more than 1,000 ml following abdominal delivery. Prevention is carried out by early detection of women at risk, including women who have experienced bleeding before, twin pregnancies, high parity, and anemia. Regular ANC should be performed to monitor general maternal health, promote it, and prevent PPH through evaluation, diagnosis, and identification of risk factors. Empowering women and midwives advised villagers to see a midwife at least once during pregnancy and before delivery to avoid complications. Action, treatment, and referrals are essential to handle postpartum haemorrhage

immediately. In making referrals, there are obstacles, including transportation, costs and delays in making decisions.

Midwives in carrying out midwifery services, if they find a mother with a high risk of PPH, refer her to the nearest hospital. Take action, treatment, and immediate referral if you find a case of postpartum haemorrhage.

ETHICAL CONSIDERATIONS

Funding Statement

Other organizations did not fund this review and manuscript preparation.

Conflict of Interest Statement

Authors declare that there are no conflict of interest in this research.

REFERENCES

- Bazirete, O., Nzayirambaho, M., Umubyeyi, A., Uwimana, M. C., & Evans, M. (2020). Influencing factors for prevention of postpartum hemorrhage and early detection of childbearing women at risk in Northern Province of Rwanda: beneficiary and health worker perspectives. *BMC Pregnancy and Childbirth*, 20(1). <https://doi.org/10.1186/s12884-020-03389-7>
- Bewket, T., Ensieh, F., Virginia, P., & Gayle, M. L. (2022). Barriers to effective management of primary postpartum haemorrhage following in-hospital births in northwest Ethiopia: healthcare providers' views using a qualitative approach. *BMC Pregnancy and Childbirth*, 22(1). <https://doi.org/10.1186/s12884-022-05071-6>
- Briley, A. L., Silverio, S. A., Singh, C., Sandall, J., & Bewley, S. (2021). "It's like a bus, going downhill, without a driver": A qualitative study of how postpartum haemorrhage is experienced by women, their birth partners, and healthcare professionals. *Women and Birth*, 34(6), e599–e607. <https://doi.org/10.1016/j.wombi.2020.12.002>
- Dunning, T., Harris, J. M., & Sandall, J. (2016). Women and their birth partners' experiences following a primary postpartum haemorrhage: A qualitative study. *BMC Pregnancy and Childbirth*, 16(1). <https://doi.org/10.1186/s12884-016-0870-7>
- James, A. H., Federspiel, J. J., & Ahmadzia, H. K. (2022). Disparities in obstetric hemorrhage outcomes. *Research and Practice in Thrombosis and Haemostasis*, 6(1). <https://doi.org/10.1002/rth2.12656>
- Kalu, F. A., & Chukwurah, J. N. (2022a). Midwives' experiences of reducing maternal morbidity and mortality from postpartum haemorrhage (PPH) in Eastern Nigeria. *BMC Pregnancy and Childbirth*, 22(1). <https://doi.org/10.1186/s12884-022-04804-x>
- Kimberly, G., Morrison, B., & Kilanowski, J. (2012b). Focus Group with Guatemalan Traditional Midwives about Postpartum Hemorrhage. *Online Journal of Cultural Competence in Nursing and Healthcare*, 2(2), 1–10. <https://doi.org/10.9730/ojcnh.org/v2n2a1>
- Ononge, S., Okello, E. S., & Mirembe, F. (2016a). Excessive bleeding is a normal cleansing process: A qualitative study of

- postpartum haemorrhage among rural Uganda women. *BMC Pregnancy and Childbirth*, 16(1).
<https://doi.org/10.1186/s12884-016-1014-9>
- Peters, M. D. J., Godfrey, C. M., Khalil, H., McInerney, P., Parker, D., & Soares, C. B. (2015). Guidance for conducting systematic scoping reviews. *International Journal of Evidence-Based Healthcare*, 13(3), 141–146.
<https://doi.org/10.1097/XEB.0000000000000050>
- Profil-Kesehatan-Indonesia-Tahun-2020*. (n.d.).
- Snowdon, C., Elbourne, D., Forsey, M., & Alfirevic, Z. (2012). Information-hungry and disempowered: A qualitative study of women and their partners' experiences of severe postpartum haemorrhage. *Midwifery*, 28(6), 791–799.
<https://doi.org/10.1016/j.midw.2011.12.012>
- Tricco, A. C., Lillie, E., Zarin, W., O'Brien, K. K., Colquhoun, H., Levac, D., Moher, D., Peters, M. D. J., Horsley, T., Weeks, L., Hempel, S., Akl, E. A., Chang, C., McGowan, J., Stewart, L., Hartling, L., Aldcroft, A., Wilson, M. G., Garrity, C., ... Straus, S. E. (2018). PRISMA extension for scoping reviews (PRISMA-ScR): Checklist and explanation. In *Annals of Internal Medicine* (Vol. 169, Issue 7, pp. 467–473). American College of Physicians. <https://doi.org/10.7326/M18-0850>
- VanderMeulen, H., Petrucci, J., Floros, G., Meffe, F., Dainty, K. N., & Sholzberg, M. (2019). The experience of postpartum bleeding in women with inherited bleeding disorders. *Research and Practice in Thrombosis and Haemostasis*, 3(4), 733–740.
<https://doi.org/10.1002/rth2.12246>
- Wormer, K. C., Jamil, R. T., & Bryant, S. B. (2022). Acute Postpartum Hemorrhage. *StatPearls*.
<https://www.ncbi.nlm.nih.gov/books/NBK499988/>