A Qualitative Systematic Review of the Women's Experience in Managing Post-partum Haemorrhage

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ABSTRACT

Post-partum haemorrhage (PPH) refers to excessive bleeding after delivery following either a vaginal delivery or a caesarean section. There have been many types of research conducted on issues related to PPH but very few literature on the systematic review related to PPH using qualitative methods. In this study, a review was conducted to determine the best available evidence to explore and determine women's experiences of care following PPH. A total of eight papers were finally selected for review. Four criteria were selected for the review selection. First, the papers were published after 2011, second, the topic must be on the experience of PPH, third, the research design must be qualitative and lastly, the data collection method was a semi-structured interview method. In order to ensure a stringent, transparent review process, the Joanna Briggs Institute, JBI 2011 guidelines have been applied for this purpose. During data extraction, aggregation, and interpretation of the findings, five themes were identified in response to the review objectives. They are; implications of information deprivation across the care pathway; concerns about the baby and early mothering; professional collaboration and adequacy of care; fear of unknown outcomes and perceptions of coming close to death; and sensitivity to social isolation and perceived professional neglect. The review found that women's needs should be given adequate attention during PPH care including unhindered information flow and the ability to be in close contact with the babies and husbands. It is hoped that the evidence obtained from this review could subsequently be utilised to inform the design and development of support interventions in future practice and potentially contribute to the existing knowledge and enhance evidence-based decision-making in practice and policy. This review also develops knowledge and understanding of women's experience of care in relation to PPH.

KEYWORDS: Post-partum Haemorrhage; Qualitative Study; Systematic Review

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INTRODUCTION

Post-partum haemorrhage (PPH) can be described in lay terms as excessive bleeding after delivery (*Mousa et al., 2014).* Different organisations and researchers have categorised different types of PPH based on the amount of blood loss after the postpartum period, and whether it is from natural birth or one following a caesarean section. Some of these categorisations include primary and secondary PPH (Royal College of OG 2009; Sentürk et al. 2013; Shahid and Khan 2013), and minor and major PPH (Proctor 2015). Major PPH can be further subdivided into moderate, or severe haemorrhage (RCOG 2011; WHO 2012; Tailor 2015; Proctor 2015).

Despite extensive data searches, there was limited literature that was found to relate to women's experiences of care following PPH. Thus, this systematic review will synthesise the findings from primary qualitative studies that met the criteria on the basis of a systematic search strategy. The Cochrane Collaboration (2012) shows that systematic literature reviews are at the top of the hierarchy in conducting evidence-based practice for healthcare practitioners, because they are conducted using an organised approach (Cervantes et al., 2016). A valuable characteristic of a systematic review is its harmonisation of various findings that together develop the foundations for improved practice (Noble and Smith, 2015). In contrast to quantitative data analysis (meta-analysis), which seeks to synthesise the statistical findings of studies, qualitative systematic reviews focus on the contextual and interpretive meanings of findings (Bearman et al., 2012). Therefore, the present study would apply a systematic review approach to explore the experience of women in PPH care.

BACKGROUND OF STUDY

Women's lived experience of care in relation to PPH is a current trend within the sphere of midwifery, gynaecology and clinical practice as a whole. A report by the Royal College of Obstetricians and Gynaecologists RCOG (2011) stated that given the increased number of women dying as a result of PPH, there is a corresponding need for staff recruitment and training in order to keep pace with the demands of care. Similarly, a survey conducted by the Care Quality Commission (2013) reported that maternity care needs to be given utmost priority in order to minimise maternal mortality and morbidity indices. The need for prioritising maternity care has prompted synergy and collaboration among agencies and policymakers toward the handling of PPH (Oberg et al., 2014).

There are many causes of PPH. These include issues related to the female reproductive anatomy, issues during labour, multiple pregnancies, type of delivery, and the type of haemorrhage that occurred. Therefore, in order to explore women's experiences of care in relation to PPH, the following is the research question for this review: What is women's experience of care in relation to PPH in maternity units? The findings from the review in this study would help to contribute to the existing knowledge for enhanced evidence-based practice.

METHOD

Search Strategy

In order to answer the review question in this study, a search strategy is needed to scrutinise and select potentially relevant studies. The European Network for Health Technology Assessment (2017) states that a search strategy is a process that enables the researcher to identify updated evidence that could be included in the systematic review.

Familiarity with wild cards and truncation helps the researcher to explore alternative spellings related to the review question (Thorne 2014; Desai et al., 2017). Risenberg and Justice (2014) confirm that the use of keywords coupled with the application of truncation for each database enhances coverage of the research area, thereby capturing potentially relevant literature searches from other databases.

However, while randomised control trials (RCTs) and other quantitative studies have a specific database that is peculiar to their demands, such a database does not exist for qualitative studies. Hence, reviewers must diversify the means of multiple data sources by greater depth of indexing of qualitative research in databases like CINAHL, and consult with subject librarians in order to answer the review question (McCreaddie 2010; Farrokh 2013).
Furthermore, owing to the large number of hits found, a PRISMA flow chart (Figure 1) is recommended to keep a record of all searches made (Moher et al., 2009). A PRISMA flow chart is a pictorial representation of the search process that preserves an audit trail, thereby enhancing the trustworthiness of the findings (Korhonen et al., 2013).

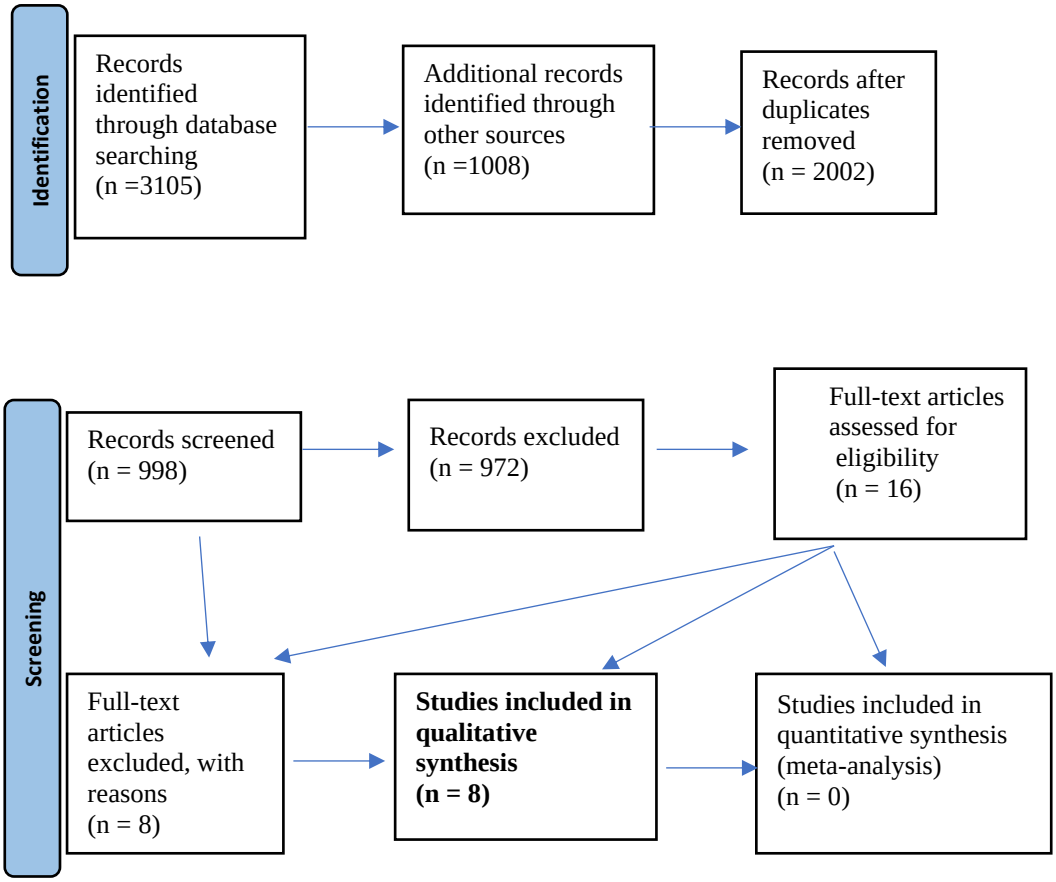

Figure: 1 Prisma flow chart

Data synthesis

To address the question in this review, the data presentation was based on the Joanna Briggs Institute, or JBI, 2017, with guidance from Popay et al. (2006). The latter has provided a framework for narrative synthesis that can be applied in a qualitative systematic review for rigorous and transparent data synthesis. JBI is an international organization based at the Faculty of Health Sciences at the University of Adelaide. The Institute focuses on promoting and supporting evidence-based healthcare by providing access to resources for professionals in nursing, midwifery, medicine, and allied health. The JBI checklist is an integral tool used to assess the quality and suitability of a study to be included in a systematic review, for a robust evidence-based finding.

In this review, the main aim is to synthesize from different literature a shred of combined and concentrated evidence related to a particular intervention, issue, or phenomenon. This framework is therefore relevant to this review, as it is intended to assess the methodological quality of studies to provide credible findings with a view to enhancing evidence-based practice (Polit and Beck 2017). Qualitative data synthesis attempts to bring together findings from different studies focusing on the same phenomena of interest, applying an interpretive approach to reach an evidence-based conclusion (Stevens and Von Dadelszen 2009; Lee et al., 2014). In light of this, the data synthesis for this review was carried out in a sequential pattern: findings from the included studies were pooled using the JBI QARI form, after which all the findings accompanied by illustrations were then presented, remaining cognisant of the review objective (Polit and Beck 2016; Nicole et al., 2017; JBI 2017). Findings were also grouped into categories based on the similarity of meanings (Khan et al., 2011; Pearson et al., 2014). Finally, the synthesised findings were developed in line with the grouped categories (Gough et al., 2012; JBI 2014; Nicole, et al., 2017). In this review, out of a total of 3105 citations found through the databases, sixteen (16) papers were refined and assessed for eligibility. Out of 16 full texts pares, eight (8) were excluded and eight (8) papers were found eligible and suitable for the present review.

Assessment of methodological quality
All the qualitative papers selected for retrieval were assessed by two independent reviewers to avoid researcher bias, thereby enhancing the study's trustworthiness and rigour (Reynolds 2011). A standardised critical appraisal instrument, namely the JBI Qualitative Assessment and Review Instrument (JBI-QARI: Joanna Briggs Institute 2017), was used in this review. Bettany-Saltikov (2012) explains that the use of a standard critical appraisal tool enhances the rigour and reliability of a qualitative systematic review.

Ethical considerations
All eight articles selected for this review made statements regarding ethical issues, demonstrating respect for the dignity of the participants. Only one article showed no evidence related to informed consent. All the articles exhibited a clear explanation of the confidentiality of all the data collected in order to protect the rights of the respondents, thereby maintaining ethical standards (Polit and Beck, 2015).

Results/Thematic findings
The objectives of this review are to establish women's experiences of care in relation to PPH in the maternity unit and to collect new data to establish a base for new research within this context in the future. Five key themes have been identified across PPH experience:

(1) Implications of information deprivation across the care pathway
(2) Concerns about the baby and early mothering
(3) Professional collaboration and adequacy of care
(4) Fear of unknown outcomes and perceptions of coming close to death
(5) Sensitivity to social isolation and perceived professional neglect

These themes will now be discussed in the context of the review objective to preserve the audit trail (Popay 2006; Caldwell et al., 2012; Ryan, 2013). The approach of relating the themes with the objectives promotes rigour, thereby enhancing the validity and reliability of the findings of a systematic review (Thorne, 2014).

Theme 1: Implications of information deprivation across the care pathway
Evidence drawn from six studies identified implications of information deprivation across the care pathway (Elmir et al. 2012a, b; Snowdon et al. 2012a, b; Thompson et al. 2011; Cruz et al. 2013; Dunning et al. 2016). Despite the variation in the studies' design and country of research, these seven studies (Elmir et al. 2012a, b; Snowdon et al., 2012a, b; Thompson et al., 2011; Cruz et al., 2013; Dunning et al., 2016) indicated that women experiencing PPH are in need of information and explanation to engage them in their care. Four categories were generated from the findings: 1) perceived communication difficulties, 2) the importance of detailed explanation about care, 3) persistent complaints in relation to information deficit, and 4) a lot of services rendered but not understandable. Those listed categories were further grouped together to form synthesised findings (Gonzalez 2009; Polit and Beck 2010) and thus implications of information deprivation across the care pathway. This is appropriate for the aims of this review because studies with different methodological approaches can be mixed within a single synthesis of qualitative studies to provide evidence-based findings (Harding, 2013; Moule, 2015; Morag, 2017; JBI, 2017).

To summarise, some of the above studies were carried out in countries outside of the UK. However, their findings are applicable to the UK context because the studies were all carried out in Westernised countries with similar social and cultural attributes (Polit and Beck 2010; Harding 2013; McInnes et al., 2015).

Theme 2 - Concerns about baby and early mothering.
Elmir et al. (2012a) demonstrate that experiencing PPH and the consequent care in a hospital is traumatic and devastating due to the initial separation from the baby. Although the duration of separation depends on the severity of the PPH, women's inability to be with their babies is an issue for all PPH patients irrespective of the severity of haemorrhage (Thompson et al., 2011). The evidence drawn from six studies (Elmir et al., 2012a, b; Snowdon et al., 2012a; Thompson et al., 2011; Cruz et al. 2013; Dunning et al., 2016) shows that concern about the baby is a significant aspect of the women's experience in relation to the care of PPH. Groups of four interrelated categories were formed, in keeping with the JBI guidelines (Booth et al., 2011; Greenhalg, 2014; Bero, 2017), thereby, synthesising findings that culminated in the theme of concerns about babies and early mothering. Therefore, the integration of the identified findings, categories and synthesised findings contributed to the understanding of the experience of care of the baby during PPH care. Of interest, in congruence with the aims of

this review, semi-structured interviews were carried out in Elmir et al.'s (2012a) study to create an in-depth understanding of participants' experiences (Azarpazhooh et al., 2008). However, there is no explicit explanation of research ethics: hence, caution is required when considering the findings of this study. This was acknowledged in Elmir et al.'s (2012b) study, which provided the information necessary to fulfill ethical responsibility in research and respect human subjects as participants (Bryman, 2012; Aveyard, 2014; Grove, 2015).

Theme 3 - Professional collaboration and adequacy of care.
Evidence extracted from five studies (Snowdon et al., 2012a, b; Thompson et al., 2011; Hinton et al., 2014; Dunning et al., 2016) generated four categories. Although the studies differ in their qualitative methodological approach and country of research, the authors identified key concepts related to interprofessional collaboration. Therefore, the developed categories were integrated into a synthesised finding called professional collaboration and adequacy of care. However, in contrast to Hinton et al. (2014), dependability and trustworthiness were increased in Snowdon et al.'s (2012a) study due to the pilot testing of the interview before the main study, to maintain methodological rigour (Smith and Flower, 2009; Gonzalez, 2009; Bearman, 2012; Noble and Smith, 2015). Furthermore, in contrast to the Snowdon et al. (2012a) study, interviews were modified in Thompson et al.'s (2011) study in response to initial data analysis (Polit and Beck, 2010). This is considered appropriate in qualitative research because of the flexible nature of semi-structured interview guides (Aromatris et al., 2011; Greenhalgh, 2014; Moher et al., 2015).

To summarise, the integration of the findings of the reviewed studies is relevant to the objective of this review because it was evident that the collaboration and teamwork and the skills exhibited by the health care providers made the PPH care experience a positive one (Snowdon et al., 2012a; Snowdon et al., 2012b; Thompson et al., 2011; Hinton et al., 2014; Dunning et al., 2016). Transferability of the findings is possible in the UK context even though some studies were conducted in Australia because PPH guidelines in the UK are underpinned by similar literature and advocate collaborative responsibility (RCOG, 2011).

Theme 4 - Fear of unknown outcomes and perceptions of coming close to death.
Evidence drawn from five studies (Hinton et al., 2014; Elmir et al., 2012b; Snowdon et al., 2012b; Cruz et al., 2013; Dunning et al., 2016) generated two categories. Although these studies varied in methodological approach, their methodology was aligned throughout with the epistemological assumptions of the interpretive approach underpinning the concept of fear of unknown outcomes and perceptions of coming close to death during the occurrence of PPH.

Dunning et al. (2016) demonstrated compliance with ethical principles by providing verbal and written information about the study to the potential participants and having intermediaries to recruit participants to avoid coercion and respect their dignity. Bryman (2012), Claydon (2015), Chanet et al. (2017), Cruz et al. (2013) and Hinton et al. (2014) should have stated whether the right to withdraw was communicated to participants and whether a debriefing session was offered in order to ensure the autonomy of the respondents (Nijhawan, 2013; Grove et al., 2015).

Nonetheless, these studies provide qualitative evidence in relation to the fear of unknown outcomes for the integration of experience within the context of PPH care (Hinton et al., 2014; Elmir et al., 2012b; Snowdon et al., 2012b; Cruz et al., 2013; Dunning et al., 2016). The evidence is also applicable to the UK context because the conclusions and key points of the studies summarise experiences of PPH cognisant with international guidelines (WHO, 2012).

Theme 5 - Sensitivity to social isolation and perceived professional neglect
Evidence drawn from five studies (Elmir et al., 2012a, b; Snowdon et al., 2012a; Cruz et al., 2013; Dunning et al., 2016) generated the four categories which were integrated into the theme of sensitivity to social isolation and perceived professional neglect. However, caution needs to be applied to the findings by Elmir et al.(2012b) due to their failure to state their sampling method to clarify participants' background (Erwin et al., 2011; Faber and Fonseca 2014; Noble and Smith 2015; Chanet et al., 2017). This was indicated in the study by Snowdon et al. (2012a) and thus enhanced its credibility and authenticity (Clovis, 2012; Bryman, 2012; Claydon, 2015; Chanet et al., 2017).

Cruz et al. (2013) provided lots of illustrations to support their findings thereby enhancing the credibility of their research (Faber and Fonseca, 2014; Grove et al., 2015). Whilst Dunning et al. (2016) state that a small sample size is a study limitation, it could be argued that this provided an avenue that allowed for rich data and an in-depth

understanding of participants' characteristics (Smith and Flower, 2009; Bero, 2017), which is noted to be a strength of qualitative research (Greenhalgh, 2014; Polit and Beck, 2016).

To summarise, these studies (Elmir et al., 2012a, b; Snowdon et al., 2012a; Cruz et al., 2013; Dunning et al., 2016) seeks to understand the experience of PHH care and assign meaning to the phenomenon of social isolation. It is to be noted that integration of the findings is applicable in the UK context because the studies are all published in the Journal of Midwifery and seek to address the needs of PPH patients (Dunning et al., 2016). Thus more studies within this context are recommended (Bryman, 2012; Boland et al., 2013).

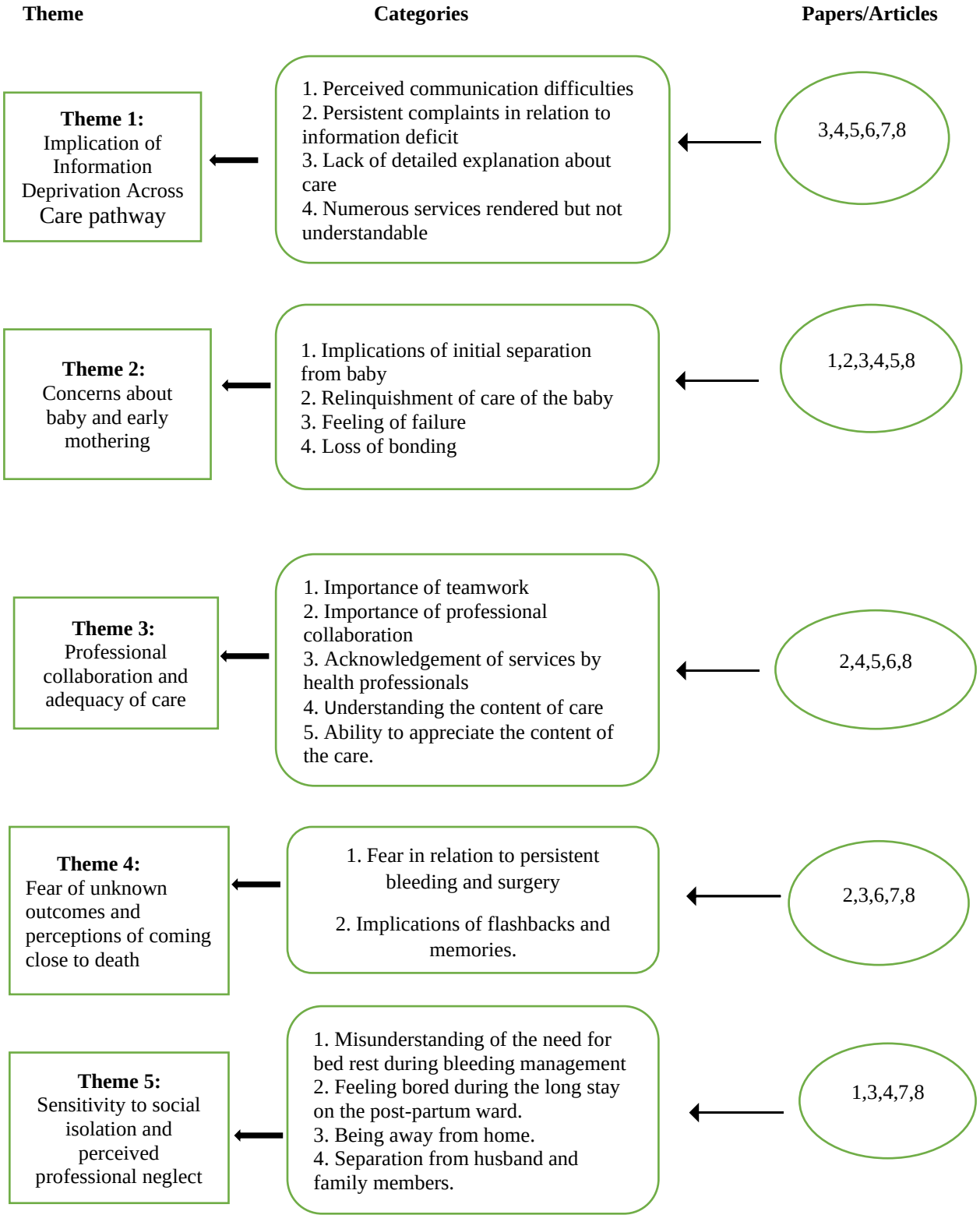

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Figure 2: Summary of the Themes from This Review

Figure 2 shows a summary of how the five themes were derived from this review. As discussed earlier, each theme had several categories generated from the eight articles that were chosen.

DISCUSSION

Markedly, Moore and Chandraharan (2010) and Miller (2017) have demonstrated that PPH has potential consequences for the physical, social and psychological aspects that dominate women's experience in the postpartum period. This viewpoint formed the main elements of the objective in this review and is substantiated by the findings extracted from the eight studies examined herein (Elmir et al., 2012a, b; Snowdon et al., 2012a, b; Thompson et al., 2011; Cruz. et al., 2013; Hinton et al., 2014; Dunning et al., 2016). The findings and themes will be explored in the discussion below to answer the review question (Polit and Beck, 2017). There are five (5) themes that were uncovered from this review as follows:

Theme 1: Implications of information deprivation across the care pathway.

The studies conducted by Elmir et al. (2012a, b), Snowdon et al. (2012a, b), Thompson et al. (2011), Cruz et al. (2013) and Dunning et al. (2016) found that women need more detailed information and explanation about the nature of PPH and the contents of care. This evidence is in line with the work of Sekhavat et al. (2009) and Halder et al. (2013), all of which highlight the importance of providing enough information during PPH care towards setting realistic recovery expectations. Similarly, other authors, including Gamble et al. (2009) and Sentilhes et al. (2011), recognised the importance of providing information and explanation for allaying fear and anxiety during the episode of PPH. This is congruent with the findings of a study by Rance et al. (2013) which illustrated that although it is not provided by some healthcare facilities, prenatal health information regarding PPH empowers women to have insight and prepare themselves for this potential occurrence.

Theme 2: Concerns about baby and early mothering.

The studies conducted by Elmir et al. (2012a, b), Snowdon et al. (2012a), Thompson et al. (2011), Cruz et al. (2013) and Dunning et al. (2016) indicated that women receiving care in relation to PPH are deeply concerned about their early separation from their babies. These findings are consistent with Thompson *et al. (2010) and Mousa et al. (2014*), who found a link between separation between the mother and baby during the management of PPH and feelings of distress. Although the issues of mothers' concern about their babies, breastfeeding and early mothering are prominent in the findings of this review (Elmir et al., 2012a; Thompson et al., 2011), there are conflicting opinions. Whilst Snowdon et al. (2012a) and Hinton et al. (2014) view PPH and its care in the hospital as an obstacle to the onset of early mothering and commencement of breastfeeding (Elmir, et al., 2012b), Cruz et al. (2013) found that women were unable to breastfeed their babies, as they did not have sufficient physical strength during episodes of PPH.

Theme 3: Professional collaboration and adequacy of care.

Professional collaboration and adequacy of care was another theme identified during data extraction, and it is evident in the literature, although contradictory, that it has a link with the outcome of care (Snowdon et al., 2012a, b; Thompson et al., 2011; Hinton et al., 2014; Dunning et al., 2016). It was evident that professional collaboration and teamwork play an important role in achieving positive outcomes from care for PPH patients (Snowdon et al., 2012a, b; Thompson et al., 2011; Hinton et al., 2014; Dunning et al., 2016). This was coherent with findings by Gamble and Creedy (2009) and Gizzo et al. (2013), who contend that harmonious working relationships between midwives and other healthcare providers in the hospital contribute to the continuity of care of PPH, thereby meeting the physical and psychosocial demands of women and their partners. Teamwork among the hospital staff helps to promote patients' safety and well-being (Dunning et al., 2016). This is in line with findings reported by Fahy et al. (2015), who found a link between patients' satisfaction and teamwork approach in PPH care. Overall, the findings of Thompson et al. (2011), Hinton et al. (2014), and Dunning et al. (2016) are in congruence with the recommendations of the Royal College of Obstetricians and Gynecologists, (RCOG, 2011) that training of the midwifery and medical staff should be directed towards a teamwork approach to handle PPH effectively.

Theme 4: Fear of unknown outcomes and perceptions of coming close to death.

The studies by Hinton et al. (2014), Elmir et al. (2012b), Snowdon et al. (2012b), Cruz et al. (2013) and Dunning et al. (2016) identified that women developed fear when faced with episodes of excessive bleeding. Cruz et al. (2013) illustrated that fear is associated with unknown outcomes and with the approach of some staff (Hinton, et al., 2014; Cruz et al., 2013). The findings of Elmir et al. (2012b) and Snowdon et al. (2012b) emphasised the importance of strategies aims at allaying the fears of PPH patients. This result corresponds with that of Oberg et al. (2014) standpoint that there is a need for care plans to incorporate continuity of psychological and emotional intervention to minimise fear related to PPH. However, Dunning et al. (2016) demonstrated that the manner of

healthcare providers can sometimes contribute to the perception of PPH as a state of coming close to death. Hinton et al. (2014) opined that planning PPH care should integrate supportive interventions toward arresting bleeding to improve patient safety and at the same time minimise unnecessary fear due to bleeding. This corresponds with the recommendation of policy drivers, namely the Quality Assurance Agency for Higher Education (QAA, 2009) and the Nursing and Midwifery Council, NMC (2015), to ensure the safety and well-being of patients.

Theme 5: Sensitivity to social isolation and perceived professional neglect

Studies by Elmir et al. (2012b), Snowdon et al. (2012a) and Cruz et al. (2013) linked social isolation with severe distress during episodes of PPH care. Notably, Elmir et al. (2012b), Cruz et al. (2013), Hinton et al. (2014) and Dunning et al. (2016) illustrated that women's isolation from their husbands, babies, and other members of the family contributes to feelings of neglect, thereby developing frustration and psychological upset. This finding corresponds with the wider literature, specifically Stuart et al. (2013), whose qualitative study revealed that women's inability to interact with their loved ones during care for PPH is more devastating than the bleeding itself. To summarise, the process of data extraction and synthesis has culminated with evidence demonstrating that it is vital to understand the experiences of women in relation to PPH care for support intervention.

Implications for Practice and Research

After the process of data extraction and critical discussion of findings, there is clear evidence that there are gaps in the current knowledge of women's experiences of care related to PPH and practice. The studies conducted by Elmir et al. (2012a, b) and Snowdon et al. (2012a) confirmed that PPH is a complex phenomenon: as such, care needs to be diversified to apply multiple approaches to improve women's general well-being and quality of life. To be able to provide such high-quality and multifaceted care, Snowdon et al. (2012b), Cruz et al. (2013) and Hinton et al. (2014) provided guidelines on how midwifery staff and other health care providers can be equipped and develop an understanding of women's experience in relation to PPH care. The findings of this review contribute to the existing knowledge in that regard.

The implications for practice reflect the need for capacity-building and intellectual development of health providers to equip them with the impetus necessary to understand women's experiences of care in relation to PPH for improved future practice. It is therefore suggested that further detailed qualitative research is needed for more evidence to inform future practice and policy.

Limitations of this Systematic Review

In any systematic review research, it is the responsibility of the reviewer to acknowledge the limitations to demonstrate transparent justification of all decisions taken **(**Charmaz, 2014; Aromataris and Riitano, 2014). Therefore, the following limitation was identified in this review; the first limitation of this review is associated with limited access to the telephone or internet leading to unrepresentative samples (LoBiondo-Wood et al., 2014; Lockwood et al., 2015). Secondly, although small sample sizes are appropriate in qualitative studies (Polit and Beck, 2010; Boland et al., 2013), there is no evidence that data saturation was achieved in five of the studies reviewed**.**

CONCLUSION AND RECOMMENDATIONS

This review provides valuable insight into women's experiences of care in relation to PPH. Throughout this systematic review, the reviewer has maintained a transparent strategy, with regular consultation with a subject librarian and a second reviewer to avoid interpretation error (Greenhalgh, 2014; Grove et al., 2015) and ensure that the conclusions reached represent the best available evidence (Polit and Beck, 2014). Therefore, cohesive with the review aim, the intention is that the findings discussed in this review can potentially contribute to existing knowledge toward enhanced evidence-based decisions in practice and policy (Aromataris and Pearson, 2014; Bellefontaine and Lee, 2014). This review has identified issues that women experience during episodes of PPH that needs to be considered while planning their care. It has highlighted findings from available qualitative studies that have explored the experiences of women undergoing PPH management (Elmir et al., 2012a; Snowdon et al., 2012a; Cruz et al., 2013; Dunning et al., 2016). Therefore, this review is an important step forward in identifying the need to keep women informed about their care, provide them with opportunities for early contact with their babies and allow regular contact with their husbands as a measure to reduce emotional burden during the trying time of PPH (Elmir et al., 2012a, b; Snowdon et al., 2012a; Cruz et al., 2013; Hinton et al., 2014; Dunning et al., 2016). Further research is therefore needed to understand the physical, social and psychological consequences of PPH for more evidence to inform future practice and policy.

From this review, there are several recommendations for practice and future research. They are:

1. The need for a rigorous information strategy and unhindered communication with the woman during the care of PPH (Cruz et al., 2013; Oberg et al., 2014).
2. There should be flexible visiting for husbands or partners so that women are not left alone during the episode of PPH (Cruz et al. 2013; Hinton et al., 2014).
3. Early contact with the baby and more breastfeeding support is needed during PPH management (Elmir et al., 2012a; Week et al., 2015; Power et al., 2016).
4. A full review of more qualitative, quantitative and mixed research is needed in order to develop the topic and consequently expand the evidence base (Bero, 2017).

In general, more research is needed in the future to address the possibility of antenatal teaching of PPH to pregnant women, along with more collaborative and inter-professional cooperation which takes into account the physical, social and psychological context of PPH (Aromataris and Riitano, 2014; Bellefontaine and Lee, 2014).

TRANSPARENCY STATEMENT

The lead author affirms that this manuscript is an honest, accurate, and transparent account of the study being reported; that no important aspects of the study have been omitted; and that all the authors contributed towards the successful completion of the study.

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CONFLICT OF INTEREST

All the authors hereby declare that they have no conflict of interest in this study.

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