



Pregnancy loss among Muslim women: A narrative review

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ABSTRACT

Background: Diversity in spirituality, religion, and cultural norms among women leads to varying attitudes, grieving processes, and coping mechanisms after a pregnancy loss. Despite this, there is a limited understanding of grief, coping mechanisms, and mental health outcomes following pregnancy loss among Muslim women.

Objectives: This study aims to examine the impact of religion, spirituality, and faith communities on the psychological health of Muslim women during pregnancy loss.

Method: We systematically searched six databases with the key concepts, 'pregnancy loss' and 'Muslim women,' in PubMed, CINAHL, Embase, Web of Science, APA PsycINFO, and Academic Search. The search strategy was developed in line with the PCOT framework: Population – Muslim Women with "pregnancy loss," "miscarriage," "stillbirth, Context - "religion," faith, "spirituality," "faith communities," Outcome – "religious practices," perception, coping mechanism, "psychological health." Studies were screened, their quality appraised, and narratively sized in line with the review aim. The review protocol was registered at Open Science Framework (OSF): <https://doi.org/10.17605/OSF.IO/52QTA>.

Result: Findings from the reviewed articles addressed the following themes: (a) Overwhelming Grief and Loss, (b) social isolation and stigmatization, (c) impact on mental health, and (d) trust in divine destiny. Islamic beliefs were strongly featured in how Muslim women processed pregnancy loss. Concepts such as tawakkul and yaqeen (trusting and certainty) were used to interpret pregnancy loss, with many women acknowledging that their Islamic faith eased the sorrow of pregnancy loss, facilitated acceptance, and strengthened their Islamic belief system.

Conclusion: This review revealed that there is limited information on Muslim women's experience of pregnancy loss. Professionals helping Muslim women dealing with the grief of pregnancy loss need to be aware that spirituality and faith communities play a major role in shaping their coping mechanisms. Future studies on the development of culturally congruent bereavement care models and supportive interventions for Muslim women facing pregnancy loss.

What is already known

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Existing literature acknowledges the profound psychological impact of pregnancy loss on women across diverse backgrounds. Previous studies recognize the influence of spirituality and religion on coping mechanisms following pregnancy loss.

What this paper adds

This paper uncovers the specific experiences of Muslim women after pregnancy loss, shedding light on unique coping strategies and the role of Islamic beliefs.

It emphasizes the scarcity of information in existing literature regarding the nuanced grief experiences of Muslim women, calling for more targeted research and support systems in this domain.

The identified themes, such as trust in divine destiny and reliance on Islamic concepts, offer valuable insights for healthcare professionals, emphasizing the need for culturally sensitive support for Muslim women navigating the challenges of pregnancy loss.

1. Background

Globally, pregnancy loss and its associated outcomes are a significant public health concern. Pregnancy loss, including miscarriage, stillbirth, and other forms of fetal loss, can have profound emotional and psychological effects on individuals and their families. There are 13.9 stillbirths per 1000 total births, meaning that one baby is stillborn every 16 s, with nearly 2 million stillbirths per year (Hug et al., 2021). Pregnancy loss is a profoundly distressing experience that can have significant psychological impacts, including anxiety, stress, and symptoms of depression; this affects women and their families (Cuenca, 2023; Reardon and Craver, 2021; Mendes et al., 2023; Herbert et al., 2022). Religion, a fundamental aspect of human existence, has long played a significant role in providing solace, comfort, and guidance during times of hardship and adversity (Carey et al., 2016; Klos-Skrzypczak, 2023). Its impact on psychological health, specifically in the context of pregnancy loss, has gained increasing attention in recent years.

Women who experience pregnancy loss may undergo a range of emotions, including grief, anxiety, depression, and even symptoms of Post Traumatic Stress Disorder (PTSD), including nightmares, flashbacks, and re-experiencing feelings associated with the loss (Gold et al., 2016; Grauerholz et al., 2021; Sutan and Miskam, 2012). The emotional impact of pregnancy loss usually takes longer to heal than physical recovery does (Farren et al., 2018). The psychological impact of pregnancy loss is also influenced by religious and cultural issues, age, and the stage of pregnancy (Nynas et al., 2015; Crockett, Rogers and Binkley, 2021).

Religion has long been recognized as a vital aspect of human existence, providing frameworks, rituals, and support systems to help individuals cope with loss and navigate the grieving process. Previous studies have shown that religious and spiritual beliefs can enable some bereaved women to cope better with the devastating effects of pregnancy loss (Petts, 2018; Kalu, 2019; Crockett, Rogers, and Binkley, 2021; Glaz, 2023). Also, research has found that negative religious coping in response to life-altering events, such as loss, can aggravate distress and prolong the grieving process (Lee, Roberts, and Gibbons, 2013; Zajac and Boyatzis, 2023). Similarly, the absence of social support and symbolic sharing within a religious or spiritual community and the feeling of being psychologically abandoned by the God whom they believe can exacerbate feelings of distress and hinder the grieving process (Biancalani et al., 2022). Therefore, while religion and spirituality can provide comfort and support during times of hardship, it is important to recognize that certain religious beliefs and coping mechanisms may not always be universally positive and can have complex and varied effects on the grieving process.

Islamic religion offers a belief in an afterlife or higher power, making sense of loss, finding meaning, and providing a source of hope and resilience that the departed loved one has found peace and continues to exist in some form (Allahdadian and Irajpour, 2015). Religious practices, such as funeral rites, prayers, and communal mourning rituals, serve as essential mechanisms for individuals to express their grief and find solace within a supportive community (Hoy, 2021). Islam provides a comprehensive system of beliefs, practices, and teachings to help navigate pregnancy loss's emotional challenges (Mahmoodi et al., 2023).

Given the projected growth of the Muslim population, which is expected to reach 2.2 billion by 2030, accounting for 26.4 % of the global population (Von Grunebaum, 2016), and its anticipated 70 % increase between 2015 and 2060—a rate significantly outpacing the 32 % growth of the overall world population during the same period (Lugo et al., 2011; Abbasi-Shavazi and Jones, 2018). This demographic trend underscores the need to understand the unique cultural and religious contexts that influence the experiences of Muslim women, particularly in the realm of pregnancy loss.

Muslim women may face unique psychosocial impacts following perinatal loss due to cultural and religious factors, such as emphasis on pronatalism and a woman's role in reproduction (Sutan and Miskam, 2012; Omar et al., 2019). Many Muslim women feel a sense of responsibility or guilt following a miscarriage, which can be associated with a loss of self-esteem as they feel unable to fulfill their motherhood roles. (Allahdadian and Irajpour, 2015). Thus, the intersection of cultural, religious, and societal influences shapes the unique experiences of Muslim women during this difficult time.

Recent research has highlighted the importance of addressing the spiritual and religious dimensions of coping with pregnancy loss. Studies have shown that for many individuals, regardless of their religious background, spirituality can serve as a source of comfort, resilience, and meaning-making during times of grief and loss (Kain, 2021). A previous meta-synthesis exploring the relationship between pregnancy loss and spirituality on a broader scale provided valuable information but had some limitations due to its primary

focus on research conducted in high-income countries. Additionally, the discussion of the significant role that culture plays in shaping experiences of pregnancy loss and spirituality was substantially limited (Wright, 2020).

The notable dearth of literature necessitates a narrative review to explore the intersection of pregnancy loss and Islamic spirituality. This review includes articles about Muslim women's experiences worldwide, capturing the diverse Islamic thought and experience range. We explored what is known about the impact of religion, spirituality, and faith communities on the psychological health of Muslim women during pregnancy loss and identified potential areas for future research. By synthesizing and analyzing the available evidence, this review seeks to shed light on the unique intersection of religious and cultural factors that shape the experiences of Muslim women during this challenging period. The findings are intended to inform healthcare providers and community leaders on how to provide cultural and religious support to Muslim women experiencing pregnancy loss.

This narrative review sought to address the following research questions:

- a) What are the psychosocial experiences of Muslim women during pregnancy loss?
- b) What are the religious beliefs and practices of Muslim women after experiencing pregnancy loss?
- c) How do faith communities, religious leaders, and community support networks contribute to the psychological health of Muslim women during pregnancy loss?

2. Methods

A systematic review methodology was adopted for the study, employing the principles and methods provided by the Centre for Reviews and Dissemination guidelines and in line with the PRISMA extension for systematic reviews as outlined in Appendix I (Page et al., 2021). Also, a narrative synthesis approach was chosen to synthesize the diverse range of selected studies in a structured manner, following the European Social Research Council Guidance on the Conduct of Narrative Synthesis in Systematic Reviews (Popay et al., 2006). Given the aims of this narrative review, Pargament's Religious Coping framework was applied to synthesizing data (Pargament, 2001). This framework offered a structured approach to comprehending how these studies collectively shed light on the psychosocial, religious, and communal dimensions of the experiences of Muslim women following pregnancy loss. The review protocol was registered at Open Science Framework (OSF): <https://doi.org/10.17605/OSF.IO/52QTA>.

2.1. Eligibility criteria

The review question was developed using the PCOTS framework, where the population (P) was Muslim women in any country or sect of Islam; the context (C) was pregnancy loss; the outcome (O) was the impact of spirituality on pregnancy loss, psychosocial experiences, and perception of the loss; No limitation based on timing(T); and Settings (S) (Littlewood and Kloukos, 2019) (see Table 1).

Table 1
Inclusion/Exclusion Criteria by PCOTS.

Criteria	Inclusion	Exclusion
Participants	<ul style="list-style-type: none"> • Studies that included women who identify with the Muslim faith, irrespective of their ethnic background, immigration status, or place of origin – if there is an indication of their affiliation with Islam within the text (e.g., through terms like Islam, Muslim, or Mosque). • Studies that included participants other than Muslim women separated the analysis into Muslim women. • Studies conducted in the country of origin showed a 90% Muslim population. 	<ul style="list-style-type: none"> • Studies of women who do not identify as Muslims or situations where the study includes a mixed group for which it is not feasible to separate the results based on Muslim and non-Muslim distinctions
Context	<ul style="list-style-type: none"> • Pregnancy loss (stillbirth, spontaneous abortion) is defined as fetal death between 20 weeks of gestation and the time of birth 	<ul style="list-style-type: none"> • Studies focusing on the loss of a child due to trauma, homicide, congenital abnormalities
Outcome	<ul style="list-style-type: none"> • Impact of spirituality on pregnancy loss. • Psychosocial experiences • Perception of the loss 	
Study design	<ul style="list-style-type: none"> • Qualitative research, irrespective of its specific methodology (e.g., interpretive descriptive, phenomenology, grounded theory) or mixed-methods research incorporating qualitative elements. • Quantitative research that included open-ended questions. 	<ul style="list-style-type: none"> • Studies not relevant to the research questions. • Surveys that do not include an analysis of open-ended text comments, doctoral theses
Language	<ul style="list-style-type: none"> • English 	<ul style="list-style-type: none"> • Other language
Study Setting	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • N/A
Timing	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • N/A
Publication	<ul style="list-style-type: none"> • Primary studies are presented in peer-reviewed journal publications. 	<ul style="list-style-type: none"> • Non-peer-reviewed sources.

Abbreviations: NA = not applicable

2.2. Information sources

Following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines, a systematic literature search of six (6) online databases (PubMed, Cumulative Index to Nursing and Allied Health Literature (CINAHL), Embase, Web of Science, APA PsycINFO, Academic Search) was completed on 8/10–8/14/2023—the search strategy aimed to locate published primary studies. Appendix II offers a detailed list of searched databases and search strategies. In addition, the bibliography of included articles was hand-searched for references that met the inclusion criteria (see Fig. 1) (Haddaway et al., 2022).

3. Search strategy

The keywords in the titles and abstracts of sample papers and the index terms used to describe the papers were used to develop a complete search strategy with the assistance of an information specialist. The search strategy, including all identified keywords and index terms, was adapted for each included information source.

The search strategy was developed in line with the PCOTS framework: Population – Muslim Women with "pregnancy loss," "miscarriage," "stillbirth, Context - "religion," faith, "spirituality," "faith communities," Outcome – "religious practices," perception, coping mechanism, "psychological health." Boolean operators (AND, OR) were used to refine search results effectively. No filters were applied to the search terms.

These search terms and databases were selected to gather a comprehensive range of literature on the topic, encompassing studies on pregnancy loss and the influence of religion, spirituality, and community faith groups on psychological health. The Search String for each database for Muslim women coping with pregnancy loss was tailored to include relevant terms and variations(See Appendix II for the complete search strategy).

4. Selection of studies

Search results were exported to Covidence systematic software (Veritas Health Innovation, Melbourne, Australia). Subsequently, duplicates were removed using Covidence, and the remaining articles were independently screened by two reviewers (KA and MC) based on the titles, abstract, and author’s keywords. Full texts of all potentially relevant articles were retrieved and screened independently by two reviewers (KA and MC) per the eligibility criteria. Differences in screening were resolved through discussion between the two reviewers (KA and MC). We defined spontaneous abortion or miscarriage as the loss of pregnancy before the 20th week of gestation and stillbirth as the loss of pregnancy after the 24th week of gestation. Most of the studies used spontaneous abortion and stillbirth, and only one study used miscarriage.

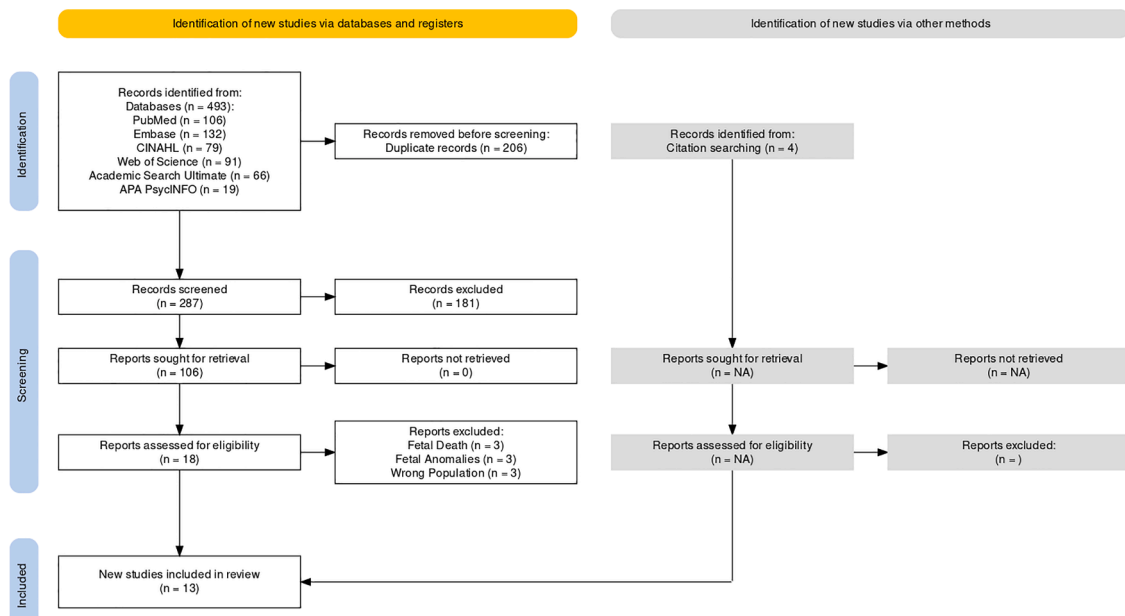


Fig. 1. PRISMA flow diagram indicating the screening process. (Haddaway et al., 2022). Haddaway, N.R. et al. (2022) 'PRISMA2020: An R package and Shiny app for producing PRISMA 2020-compliant flow diagrams, with interactivity for optimised digital transparency and Open Synthesis', *Campbell Systematic Reviews*, 18(2), p. e1230. Available at: <https://doi.org/10.1002/cl2.1230>.

5. Data extraction

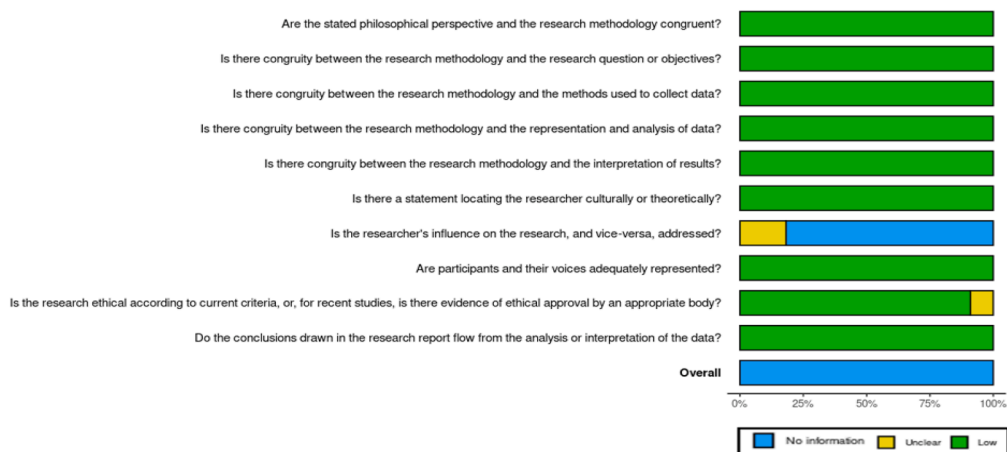
A data extraction form using an Excel spreadsheet was developed by two authors (KA&MC), considering the review aim and the eligibility criteria. The first aspect of information extracted was the study characteristics, such as the authors, study design, and study settings. The second aspect extracted was data related to the findings, such as religion, spirituality, faith communities, psychological

Table 2.1
JBI Qualitative Critical Appraisal.

Study	Risk of bias										Overall
	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	
Masik et al., 2022	+	+	+	+	+	+	?	+	+	+	
Omar et al., 2019	+	+	+	+	+	+	?	+	+	+	
Christou et al., 2023	+	+	+	+	+	+	?	+	+	+	
(Ibrahim et al., 2018)	+	+	+	+	+	+	?	+	+	+	
Cetinkaya & Simsek, 2023	+	+	+	+	+	+	?	+	+	+	
Asim et al., 2022	+	+	+	+	+	+	-	+	+	+	
Samutri et al., 2022)	+	+	+	+	+	+	?	+	+	+	
Sutan & Miskam, 2012	+	+	+	+	+	+	?	+	+	+	
(Tanacioğlu-ALowdin and Erdur-Baker, 2022)	+	+	+	+	+	+	-	+	-	+	
Allahdadian et al., 2015)	+	+	+	+	+	+	?	+	+	+	
(Osman et al., 2017)	+	+	+	+	+	+	?	+	+	+	

D1: Are the stated philosophical perspective and the research methodology congruent?
 D2: Is there congruity between the research methodology and the research question or objectives?
 D3: Is there congruity between the research methodology and the methods used to collect data?
 D4: Is there congruity between the research methodology and the representation and analysis of data?
 D5: Is there congruity between the research methodology and the interpretation of results?
 D6: Is there a statement locating the researcher culturally or theoretically?
 D7: Is the researcher's influence on the research, and vice-versa, addressed?
 D8: Are participants and their voices adequately represented?
 D9: Is the research ethical according to current criteria, or, for recent studies, is there evidence of ethical approval by an appropriate body?
 D10: Do the conclusions drawn in the research report flow from the analysis or interpretation of the data?

Judgement
 - Unclear
 - Low
 - No information
 - Not applicable



health outcomes, and the details of significant findings/author’s conclusion. Two reviewers (KA and MC) conducted the data extraction and resolved differences through discussion.

6. Critical appraisal of included studies

The quality of the included studies was assessed using Joanna Briggs Institute-JBI criteria (Joanna Briggs Institute and Joanna Briggs Institute, 2020; Lockwood et al., 2015) independently by two reviewers (KA and MC). We did not exclude articles based on quality; instead, quality was considered when reaching key conclusions. Since JBI does not provide a scoring guideline, we characterized studies as if they met at least half (average) of the quality criteria assessed based on the specific study design. Therefore, the terms ‘below-average quality’ and ‘above-average quality’ were used to refer to the study qualities in the results. Data were analyzed using narrative synthesis.

7. Synthesis

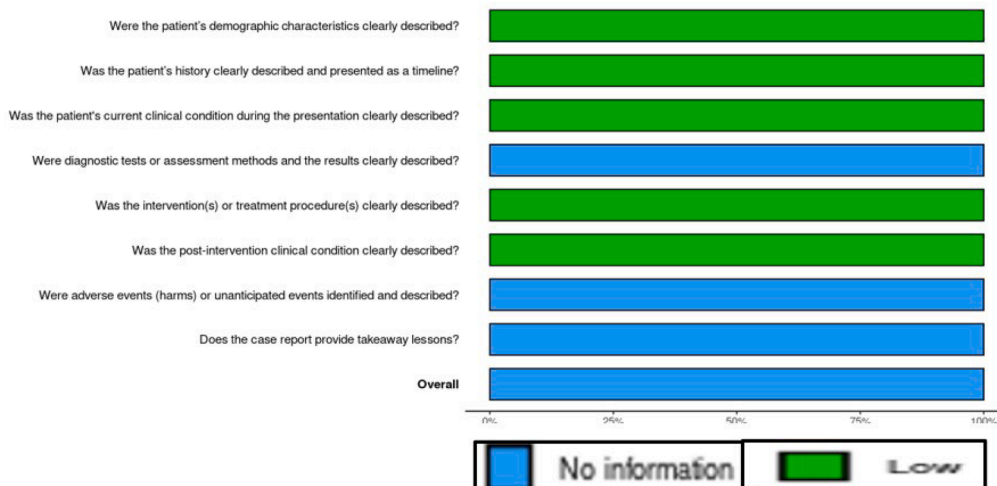
A narrative synthesis was undertaken to organize and synthesize the findings. Narrative synthesis has been recommended for reviews encompassing findings from multiple, heterogeneous studies when statistical meta-analysis or meta-ethnography alone are not viable options (Lisy and Porritt, 2016). Narrative synthesis is characterized by a textual approach to the synthesis process, relying on using words to summarize and explain findings. The approach involves a preliminary synthesis through an inductive thematic analysis of the individual study results. The thematic analysis comprises identifying, listing, tabulating, and counting themes according to the

Table 2.2
JBI critical appraisal checklist for case study.

Study	Risk of bias								Overall
	D1	D2	D3	D4	D5	D6	D7	D8	
(Mahmoodi, Akhavan and Virk, 2023)	+	+	+	○	+	+	○	?	○

D1: Were the patient’s demographic characteristics clearly described?
 D2: Was the patient’s history clearly described and presented as a timeline?
 D3: Was the patient’s current clinical condition during the presentation clearly described?
 D4: Were diagnostic tests or assessment methods and the results clearly described?
 D5: Was the intervention(s) or treatment procedure(s) clearly described?
 D6: Was the post-intervention clinical condition clearly described?
 D7: Were adverse events (harms) or unanticipated events identified and described?
 D8: Does the case report provide takeaway lessons?

Judgement
 + Low
 ? No information
 ○ Not applicable



review question(s) to enable the description of patterns across included studies and, notably, the exploration of relationships within and between studies.

The initial synthesis by thematic analysis was conducted by KA, with further analytical input from MC. This process entailed free coding of findings from the individual studies, constructing descriptive themes based on these codes, and synthesizing descriptive themes using Pargament’s Religious Coping Theory (Pargament, 2001). The theory suggests that religious coping can be either positive or negative and that the effectiveness of religious coping depends on the individual’s appraisal of the situation and the coping strategies used. The synthesis of findings suggests a dynamic interplay between positive and negative religious coping strategies among Muslim women facing pregnancy loss. The identified themes underscore the significance of faith and community in shaping psychological responses during this challenging period.

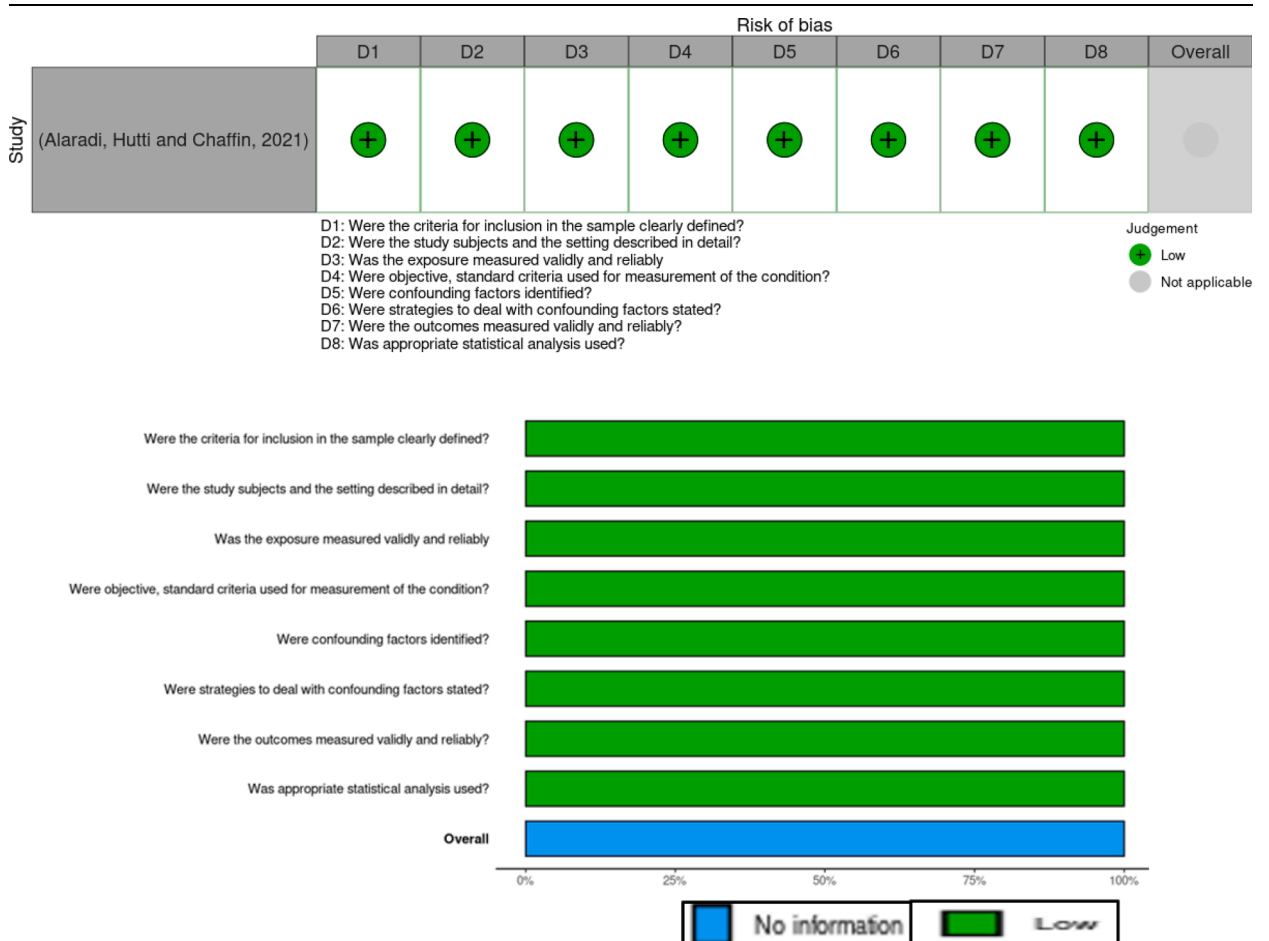
8. Results

After the initial search of the six primary databases, 493 articles were found (Fig. 1). Of these, 287 articles underwent title/abstract screening. Eighteen articles underwent full-text screening, of which nine(9) fully met the criteria. The update search resulted in 4 additional articles, making a total of 13 studies included in the review.

8.1. Summary of included studies

Of the 13 included studies, one was a case study, one was a cross-sectional study, and the other 11 articles were qualitative studies. The studies included in our review span diverse geographical regions, providing valuable and diverse perspectives. These countries included the United States of America (USA), Thailand, Qatar, Afghanistan, United Arab Emirates (UAE), Turkey, Malaysia, Pakistan,

Table 2.3
JBI for Cross-sectional studies/surveys.



(McGuinness and Higgins, 2020).

Somali, Iran and Indonesia. Studies were conducted in distinct locations, which has significant implications for our findings. The quality appraisal of the included studies indicates that all studies were of above-average quality (Table 2.1-Table 2.3).

8.2. Study participant characteristics

A total of 284 families who experienced pregnancy loss participated in the included studies. The participants were 73.9 % ($n = 210$) female, 21.8 % ($n = 62$) male, and 4.8 % ($n = 12$) healthcare workers. Ages ranged from 20 to 45 years old, with 96 % of the papers including adult (20 years or older) participants, and 4 % did not provide age breakdowns (Table 3). All participants had experienced pregnancy loss across the spectrum of reproductive age and phases/trimesters of pregnancy. While some of the participants in the reviewed articles had reported varying levels of education, from high school to graduate, some did not include the participants' level of education.

Among reviewed studies, spontaneous abortions (Sutan and Miskam, 2012; Omar et al., 2019; Masik, Chatchawet and Chunuan, 2022; Samutri et al., 2022; Tanacioğlu-Aydın and Erdur-Baker, 2022; Cetinkaya and Simsek, 2023) were documented across different stages of pregnancies, with women experiencing recurrent miscarriages (Ibrahim et al., 2018). Additionally, some participants experienced two or more stillbirths. (Allahdadian et al., 2015; Osman et al., 2017; Ibrahim et al., 2018; Asim et al., 2022; Christou et al., 2023), although specific gestational details were not consistently available (Refer to Table 3).

Table 3
Characteristics of Included Studies.

Author	Study location	Study Design	Study sample	Pregnancy loss characteristics	Outcome
(Osman et al., 2017)	Somali	Qualitative	Ten women	Post Partum women within six months experienced a stillbirth at 28weeks	Balanced feelings of anxiety, fear, and worries for their health and life by accepting Allah's will and putting their trust in him.
(Masik et al., 2022)	Thailand	Qualitative	12 women were 26-40, with a mean of 32.9 years old	Muslim women with spontaneous abortion	Grieving within an Islamic Context
(Mahmoodi et al., 2023)	America	Case series	3women	A Case Series of Loss During Early, Middle, and Late Pregnancy.	Relinquishing control with faith in God
(Alaradi et al., 2021)	America	Cross-sectional survey design	male $n = 43$ female $n = 36$	Miscarriages, stillbirths, and neonatal death	Perception of perinatal bereavement care
(Sutan& Miskam, 2012)	Malaysia	In-depth interview	Sixteen mothers Between 23 and 37 years	Pregnancy loss	Confusion and difficulty to accept
(Omar et al., 2019)	Qatar	Qualitative approach	40 women of 33 years for those with a miscarriage	Miscarriage	Allah's decisions are always good. He knows His people and what is good for them and what is not.
(Christou et al., 2023)	Afghanistan	Qualitative	Women ($n = 21$), men ($n = 9$), female community elders ($n = 3$), community health workers (CHW) ($n = 5$) and midwives ($n = 4$)	Stillbirth	The belief that stillbirth was attributed to a higher power
(Ibrahim et al., 2018)	UAE	Qualitative	Twelve women within the age range of 25-42 years old.	Miscarriages	Acceptance of divine destiny and being thankful to God
(Cetinkaya & Simsek, 2023)	Turkey	Qualitative	21 women ages from 20 to 40years	Pregnancy loss before the 24thweek	Islamic beliefs play a central role in the lives of many Muslim women and may help those with perinatal loss to cope better with their grief.
(Asim et al., 2022)	Pakistan	Qualitative methodology	Eight women, aged 15-39years	Stillbirth	Experiencing multiple stillbirths had a devastating impact on women's mental and social wellbeing. The women who experienced multiple stillbirths were stigmatized as "child-killers" or cursed, adding to their psychological burden.
(Samutri et al., 2022)	Indonesian	Qualitative	Nine women from 23 to 43 years	Perinatal loss	Chronic sorrows are associated with perinatal loss, such as grief that feels diminished and the presence of another child serving as both a cure and a trigger of sorrow.
(Tanacioğlu-Aydın and Erdur-Baker, 2022)	Turkey	Qualitative	Ten couples	Pregnancy loss	Sociocultural factor impact grief experience.
(Allahdadian et al., 2015)	Iran	Qualitative	15 women from less than 30-40years	Stillbirth	Social Support to escape from loneliness

9. Quality appraisal

Table 2.1-2.3 summarizes the JBI critical appraisals. All thirteen studies had clear objective that integrated with their chosen methodologies (McGuinness and Higgins, 2020).

10. Findings

The 13 included studies were systematically synthesized and categorized using Pargament's Religious Coping Theory into the three domains: i) the psychosocial experiences of Muslim women following pregnancy loss, ii) religious beliefs and practices, and iii) Roles played by faith communities, religious leaders, and community support networks in the context of pregnancy loss. This guided the emergence of the corresponding eight themes (see Fig. 2).

10.1. Psychosocial experiences during pregnancy loss

Among the 13 articles reviewed, nine generated four key subthemes that shaped the psychosocial experiences of Muslim women during pregnancy loss. These include overwhelming grief and loss, social isolation and stigmatization, coping strategies, and emotional resilience, all of which collectively influence the impact on mental health. The overall psychosocial experiences were reported in addition to key themes from the studies (Fig. 3).

10.1.1. Overwhelming grief and loss

Five of the eleven reviewed studies ($n = 6$) among Malaysian, Turkey, Qatar, Somali, and Indonesian Muslim women included different emotional responses ranging from confusion to difficulty accepting the loss, to despair (Sutan and Miskam, 2012; Osman et al., 2017; Omar et al., 2019; Samutri et al., 2022; Cetinkaya and Simsek, 2023). Grief is characterized by a profound sense of deprivation and an overpowering sentiment of sorrow (Sutan and Miskam, 2012; Osman et al., 2017; Omar et al., 2019).

Some participants conveyed intense anguish, melancholy, and an intense yearning for the child they had anticipated welcoming into the world by saying, "I sobbed. I cried a lot. Then my grandmother told me that my baby would be disturbed by my tears (which means not sleeping in peace), and the angels would complain to my baby that I was crying. I stopped crying" (Cetinkaya and Simsek, 2023). Similarly, a Somali woman expressed, "I felt a lot of anxiety and fear, worry, but I accepted Allah's will and said: Allah who created the baby took his life. Allah placed the baby inside me, so I prayed to Allah to facilitate a safe delivery." (Osman et al., 2017). Similarly, this was evident from a study conducted in Turkey, where couples expressed, "If the creator tells you to exist, you exist; if the creator tells you not to exist, you don't. There is nothing you can do about it. You will accept it." (Tanacioğlu-Aydn and Erdur-Baker, 2022).

Also, a Malaysian woman expressed fear of experiencing another loss with subsequent pregnancy: "It is still fresh in my mind how I carried my previous pregnancy and delivered a breathless dead baby. I am afraid it will happen again" (Sutan and Miskam, 2012). This sorrow often materializes in denial and emotional distress, thereby underscoring the profound emotional repercussions of pregnancy loss. One participant expressed her denial and distress as follows, "When I arrived at the emergency room, the doctor told me that he could



Fig. 2. A conceptual diagram of the relationship between domains of experience of pregnancy loss among Muslim women.



Fig. 3. Themes on the experience of pregnancy loss among Muslim women.

not observe my child's heartbeat. I was in shock and disbelief that I had lost my child. I doubted him and whether he made a wrong or inconsiderate diagnosis or if it was a threatened abortion like my previous hospital visit. I asked the doctor to wait longer. I did not want to have dilation and curettage and still hoped that the baby was still with me."(Masik, Chatchawet and Chunuan, 2022).

10.1.2. Social isolation and stigmatization

Five articles reviewed (n = 5) highlighted participants narrated experiences of enduring social isolation and stigmatization after the loss of a pregnancy (Sutan and Miskam, 2012; Omar et al., 2019; Asim et al., 2022; Cetinkaya and Simsek, 2023) For example, a Malay Muslim woman expressed this isolation as follows, "No one cares about my feelings. Oh God, please help me; I need someone to help me pass through this pain." (Sutan and Miskam, 2012).

Some participants felt deeply misunderstood by their communities and frequently encountered insensitivity or dismissiveness. A Qatari Muslim woman expressed "When you miscarry they start asking you; "why did this happened?" I myself don't know till now why it happened, but they think that I am hiding the reason, why do I have to hide anything?" Similarly (Asim et al., 2022) reported that a participant expressed this: "My relative called me "child-killer" and women usually forbid their children to visit my home because I am considered untouchable, which makes me feel guilty and very bad." Samutri et al. (2022) also reported a participant saying, "When I remember and share about it, I feel hurt, sad...". In addition, for some, the belief in reuniting with lost children in the afterlife provided a profound sense of comfort and optimism amidst the grief. This hope in the afterlife served as a source of solace and resilience (Tanacioğlu-Aydm and Erdur-Baker, 2022). The prevailing hesitancy to engage in open conversations about pregnancy loss within their immediate social circles significantly intensified their feelings of isolation.

Additionally (Tanacioğlu-Aydm and Erdur-Baker, 2022) reported that in Turkey, a participant expressed, "The second time this happened, people asked and commented a lot. They asked if we were under treatment or not and if we were impotent or not. You explain the same things again and again, and they ask you again as if you had never explained it to them before." This reflects the insensitive and intrusive nature of societal responses to their situation.

10.1.3. Coping strategies and emotional resilience

Though burdened by profound grief, mothers who had experienced pregnancy loss displayed remarkable resilience by adopting diverse coping mechanisms. Our review revealed a broader spectrum of adaptation mechanisms, including seeking support from loved ones, turning to religious practices, and actively memorializing their deceased babies. For example, an older Pakistani woman with more than two stillbirths shared that "I keep myself busy the whole day with household chores and working in the fields. I don't keep myself free, so I cannot think about my losses and get sad."(Asim et al., 2022).

10.1.4. Impact on mental health

Two of the reviewed articles revealed the significant impact of pregnancy loss on the mental health of Muslim women (Ibrahim et al. (2018); Christou et al. (2023)). Participants often experienced symptoms of anxiety, depression, and post-traumatic stress disorder (PTSD). In one reviewed study, a father expressed sorrow by saying, "I wished it were alive and lived with us at home. My heart wouldn't hurt because of what happened." Additionally, a mother had expressed the intensity of grief using this: "Now, I always cry for my baby, and I see it in my dreams every night that he/she is talking with me" (Christou et al., 2023). The emotional toll of pregnancy loss extended beyond the immediate event, highlighting the need for ongoing mental health support.

10.2. Religious beliefs and practices adopted by Muslim women after pregnancy loss

Six of the 13 studies reviewed were conducted across Afghanistan, Malaysia, the United Arab Emirates, Turkey, Qatar, and Thailand from 2012 to 2022, and they explored the religious beliefs and practices adopted by Muslim women following pregnancy loss. These practices included reciting from the Quran and accepting the loss as divine will, highlighting the role of faith in their coping mechanism (see Table 3). The following key theme emerged:

10.2.1. Trust in divine destiny

For many Muslims, faith in divine predestination (Qadr) provides a powerful source of comfort and meaning in navigating the profound grief of pregnancy loss. This is reflected in the words of an Afghan mother who expressed, "It was definitely in my destiny," expressing a sense of acceptance and finding solace in God's plan (Christou et al., 2023). Similarly, one participant from Turkey expressed, "Loss comes from Allah, and we cope with it by believing in destiny. Is it possible for us to change it? Therefore, I accept it unconditionally." (Cetinkaya and Simsek, 2023). These perspectives from diverse Muslim women illustrate how faith can offer acceptance and a framework for navigating the complexities of grief.

10.2.2. Religious practices as sources of comfort

Two of the reviewed studies ($n = 2$) completed among Turkish and Thai Muslim women, respectively, consistently reported that Islamic faith practices, including recitation of the Qur'an, observing Wudhu (ablution before praying), then worshipping for Allah's mercy, and praying some dua (supplication) and reading the Quran as a way of developing resilience. For instance, a Turkish Muslim woman expressed, "I usually pray and read the Quran. It brings me a sense of calmness, peace." (Cetinkaya and Simsek, 2023). Additionally, a Thai Muslim woman says, "Islamic teaching says to accept everything in our life because it is destined by Allah. No matter birth, aging, illness, and death, my husband and I must accept it. Allah will provide the best thing for us in the future according to his plan. Our faith in Allah must be absolute. He teaches us not to be attached to earthly things as they can be possessed and lost. When I was in distress, I made Wudu (bathing before praying) then worshipped for Allah's mercy and prayed some dua (supplication). I offered prayer and sacrifice to Allah, asking him to bless my lost child. These calmed me down." (Masik, Chatchawet and Chunuan, 2022). These findings indicate that pregnancy loss reinforced beliefs in Allah among Muslim women.

Multiple participants found comfort in religious practices, such as reciting verses from the Quran, reading religious texts, and engaging in prayers (dua) (Masik, Chatchawet and Chunuan, 2022; Cetinkaya and Simsek, 2023). These rituals offered peace and spiritual upliftment, allowing individuals to cope with their grief and strengthen their connection with their faith. A participant commented, "To deal with my grief, I pray and go to the Holy Shrine. Going to a shrine makes me relaxed because lots of females go there whose babies were born dead or they are sad. Then I get patience by looking at them and try to conceive again." These practices functioned as soothing and spiritually uplifting rituals that aided individuals in navigating their grief and establishing a connection with their faith.

Some participants shared beliefs about protection from the "evil eye" and spiritual ailments. They employed "ruqyah," the recitation of Quranic verses, and sought the assistance of religious figures for protection and healing. They utilize the Islamic spirituality of Tawakkul (trusting) and Yaqeen (certainty) to connect with God rather than avoidance (Mahmoodi, Akhavan and Virk, 2023).

Furthermore, as regards Islamic funeral services for pregnancy loss. A Turkish study discussed participants' expressions that they were confused regarding the proper time for burial or other religious ceremonies for the baby. "Maybe we did not think of it at that moment. We weren't sure if we could have taken it, and as it had not formed bodily yet, we didn't demand it. The hospital didn't offer it either." (Tanacioğlu-Aydin and Erdur-Baker, 2022). Hence, there is ambiguity and uncertainty among some Muslim communities about the religious status and entitlements of fetuses or infants who die before or shortly after birth.

10.3. Role of support networks during pregnancy loss

Three reviewed studies ($n = 4$) among Afghanistan, UAE, Iran, and Malaysia collectively discussed that after enduring the anguish of pregnancy loss, most participants desired support and affirmation from family, community, and medical teams. The following key findings emerged.

10.3.1. Longing for support and affirmation

Muslim women experiencing pregnancy loss expressed a profound longing for support and affirmation. This was evident in a study conducted in the UAE, (Ibrahim et al., 2018) One woman highlighted the desire for close support: "I wanted my husband not to leave me alone in those difficult circumstances." Similarly, Sutan & Miskam (2012) a Malaysian study found that a woman expressed, "No one cares about my feelings. Oh God, please help me; I need someone to help me pass through this pain." Additionally, an Iranian study found an Iranian woman saying, "I wish to see and talk to mothers who have had the same experience as me but have been able to overcome this situation.

Seeing them would make me hopeful.” (Allahdadian et al., 2015). Hence, this demonstrates the deep desire of Muslim women experiencing pregnancy loss to have emotional support, empathy, and a sense of community with others who have gone through similar experiences. The lack of such support was distressing for these women, highlighting the need for more comprehensive care and resources to address their psychosocial needs during this difficult time.

While religious communities offer a sense of belonging and comfort, the extent of support can vary. In Afghanistan, (Christou et al., 2023) observed healthcare workers offering sympathy and encouragement, acknowledging the limitations of their resources by saying, “People show their sympathy with the parents and encourage them and tell them, this one has gone, but you are young, and Allah may grant you with another baby; here in Afghanistan we have only sympathy and can do nothing with the parent.” This highlights the need for multi-faceted support systems that combine religious guidance, community engagement, and culturally sensitive healthcare interventions to address the diverse needs of women experiencing pregnancy loss effectively.

Muslim women frequently sought solace in commiserating with one another and offering mutual comfort within their religious communities; in the reviewed article among Afghanistan Muslims, one of the women said, “I shared my concerns with my husband and all the members of the family. Later, my husband and members of the family told me not to worry because I have a son, and Allah will bless you with another son. However, I had no patience....”(Christou et al., 2023). Similarly, an Iranian woman expressed, “When I returned home to my family and relatives came to visit me, I was calmer and did not feel guilty. My family’s sympathy helped me accept the incident.”(Allahdadian et al., 2015). These demonstrate how Muslim women seek solace and mutual comfort within their religious and familial communities following pregnancy loss. The support and empathy from loved ones can help them process their grief and loss. However, it also suggests that the support provided is not always fully adequate, as seen in the Afghan woman’s lack of patience, highlighting the need for more sensitive and understanding responses from the community.

10.3.2. Medical team’s support

In one of the reviewed articles ($n = 1$), participants highlighted the significance of knowledgeable and compassionate medical staff who not only address the physical aspects of pregnancy loss but also consider the emotional well-being of the mothers. For example, a participant expressed gratitude towards the medical staff who provided mothers with necessary information while considering their emotional state by expressing, “It is very good if the medical staff is very knowledgeable and skilled and informs the mother about this (abortion), taking into account her spirit. Some nurses and midwives support us a lot after abortion, and this is very considerable.”(Ibrahim et al., 2018). However, participant experience revealed that not all medical personnel were equally attuned to the emotional necessities of women confronting pregnancy loss (Sutan and Miskam, 2012). This is evident from a quote by an Iranian woman: “I was feeling so bad, and I was so upset that I forgot everything the doctor had taught me. I even lost the information brochures. I think it was the duty of the prenatal care provider to follow-up and ask why I had not referred for healthcare.” (Allahdadian et al., 2015).

11. Discussion

In this narrative review, we aimed to explore the experiences of Muslim women during pregnancy loss. This narrative review included thirteen studies that described the experience of pregnancy loss in of Muslim women in various countries. This identified three significant domains that include psychosocial experience, the role of religious and spiritual beliefs, and the role of faith communities, religious leaders, and community support networks of Muslim women following pregnancy loss. The domains are broad categories; each contains multiple and specific themes, which include Overwhelming grief and loss, Social isolation and stigmatization, Coping strategies and Emotional resilience, Impact on mental health, Trust in divine destiny, Religious practices as sources of comfort, Role of support networks during pregnancy loss. Our review aligns with Pargament religious coping theory, highlighting the role of religion in enhancing women’s ability to cope with pregnancy loss by providing essential social support (Pargament, 2001).

The reviewed studies highlight the adverse immediate and short-term psychosocial impact of pregnancy loss on mental health. The findings of the reviewed studies revealed a significant impact of pregnancy loss on Muslim women’s mental health, leading to symptoms of anxiety, intense sadness, grief, and longing for the child they lost. This aligns with other studies on the emotional impact of miscarriage and stillbirth (Farren et al., 2020). For example, Mendes et al. (2023) conducted studies among Portuguese women who had an early pregnancy loss and reported feelings of intense sadness, emptiness, and longing after pregnancy loss, irrespective of their cultural or religious background. This suggests that the emotional repercussions of pregnancy loss are a universal experience, transcending cultural and religious boundaries.

Regarding religious beliefs and practices after pregnancy loss, reviewed studies consistently reported that Muslim women predominantly resorted to their religious convictions, specifically their faith in divine predestination, to seek comfort and acknowledgment after losing a pregnancy. Some of the studies in this review found that prayers, including reciting parts of the Quran, saying a Dua, or decreasing grief and fear in Muslim women when experiencing perinatal loss (Masik, Chatchawet and Chunuan, 2022; Cetinkaya and Simsek, 2023; Mahmoodi, Akhavan and Virk, 2023). Believing in divine destiny (Qadr), trusting Allah’s plan, reciting the Quran, and increasing prayer played significant roles in navigating grief. Participants drew strength from their faith, ultimately leading to acceptance of their loss. Allahdadian & Irajpour (2015); Kalu (2019) reported that religious beliefs can give individuals a sense of meaning and purpose during challenging times, contributing to their emotional resilience. Moreso, the perception of stillbirth as divine will resonates with studies on the role of fatalism and acceptance in coping with adversity. Hayes & Clerk (2021) and Nuzum et al. (2021) suggest that a sense of fatalism can help individuals find meaning and acceptance under challenging circumstances. This finding implies that believing in a divine will can be a universal coping mechanism for Muslim women facing profound loss.

Reviewed studies revealed that Muslim women perform Islamic acts of worship, such as performing wudu(ablution), saying a Dua (prayers), and reciting parts of the Quran immediately after the loss to reduce stress, pain, and fear. Interventions that rely upon

individuals' existing values and coping mechanisms, such as faith practices, may be effective public health interventions to reduce anxiety and complicated grief and depression across numerous religious groups (Azizi et al., 2021; Simonovich et al., 2022). Faith emerged as a significant source of comfort and strength for many, offering solace, acceptance, and reinforcement of their belief system. However, individual journeys through grief vary, and some women might require additional support beyond faith-based practices. The review highlighted the resilience of these women as they navigated this challenging time.

Based on this review, some confusion may exist regarding Islamic funeral rituals based on pregnancy loss gestation age, and the proper time for burial or other religious ceremonies for the baby. This is evident in a study conducted on the Islamic rituals of infant death, where some women expressed a lack of recognition given to their fetuses, which contributes to a challenge to customary practices surrounding burial as a Muslim (Shaw, 2014). Sometimes, the grounds for not providing a religious burial may be more tied to local customs and practices firmly rooted in Islamic texts and teachings. Hence, there is a need for more education and clarity around the range of Islamic perspectives and rulings on the religious status of fetuses and infants who die to ensure families receive appropriate support and rituals during these difficult times.

Despite the challenging experience of pregnancy loss, Muslim women exhibited strength by seeking support from their families and communities, engaging in religious rituals, and finding ways to commemorate the memory of their lost child. Ultimately, these strategies highlight the remarkable resilience of mothers navigating the profound grief of experienced pregnancy loss, showcasing their capacity to find meaning and strength even in the darkest of times (Surzykiewicz et al., 2022). This resonates with other studies on coping mechanisms following pregnancy loss. For instance, a study by (Alqassim et al., 2022) and (Bellhouse et al., 2018) found that partners emerged as the anchor of a woman's support network, offering a safe space for unburdening. In contrast, a study by Freedle & Oliveira(2023) reported that engaging in face-to-face prosocial activities, like volunteering, was linked to higher post-traumatic growth among grieving mothers. These findings suggest that social support, including support from faith communities, religious leaders, medical staff, and peer relationships, can play a crucial role in helping women navigate the emotional hurdles of pregnancy loss and promote their well-being.

Social isolation and stigmatization also emerged as a significant challenge, indicating that Muslim women often feel misunderstood and face insensitivity or dismissiveness from their communities. The lack of open conversations about pregnancy loss within their social circles exacerbates their feelings of isolation. This finding is consistent with the findings from a qualitative study (Bellhouse, Temple-Smith, and Bilardi, 2018), which found that women who experienced miscarriage often described people in their social networks as making insensitive comments regarding their miscarriage or pregnancy. Similarly, the World Health Organization (WHO) also highlights women's stigma and shame after baby loss, which can lead to isolation and disconnection, even from their partners and close family (Zucker, 2023). Similarly, Attum et al. (2023) also noted the need for cultural competence in caring for Muslim women and families. Hence, there is a need to create an awareness, supportive, and empathetic environment for these women to share their experiences and find solace.

Healthcare providers stand in a unique position to identify the earliest signs of emotional distress after experiencing pregnancy loss and intervene promptly. This allows them to offer personalized and holistic support, addressing women's physical and mental health concerns alongside their emotional needs. By connecting them to grief counseling, mental health resources, and support groups, healthcare providers provide essential links to additional services, ensuring women receive the comprehensive care they need to navigate this difficult time.

With pregnancy loss rarely being discussed among the Muslim community and other religious groups, healthcare providers can encourage patients and their families to use spiritual practices during periods of stress or difficulty. Integrating multi-level cultural faith-based bereavement practices would allow clinicians and healthcare organization members to provide adequate support.

12. Clinical implication

- Nurses and midwives need to discuss and plan holistic bereavement care in the context of religion and spirituality.
- Clinicians require training to deliver culturally sensitive spiritual, psychological, and bereavement care to promote healing after pregnancy loss. This may involve education on related religious concepts like tawakkul (trust in God) and yaqeen (conviction), which are integral to Islamic spirituality.
- Hospitals and healthcare systems should have formal guidelines and Standard Operating Procedures for perinatal bereavement care that respect religious beliefs and practices. This includes allowing rituals like burial preparation, funeral prayer, etc.
- Peer support groups of Muslim women who have experienced pregnancy loss can provide an invaluable source of comfort and validation. Clinicians should help connect grieving women to such community resources.
- Mental health professionals need specialized skills to address religious/spiritual struggles and existential questions that may arise from pregnancy loss. They should be prepared to make appropriate referrals if needed.

13. Limitations

There are potential limitations to the proposed study that warrant discussion. Firstly, the search was restricted to English language publications only, excluding potentially relevant findings published in other languages spoken in Muslim communities such as Arabic, Turkish, Urdu, etc. Secondly, the review included a heterogeneous mix of qualitative evidence from multiple cultural contexts. While this provides a multifaceted understanding, it restricts definitive conclusions regarding the role of specific religious beliefs and practices. Additionally, the experiences of pregnancy loss and coping mechanisms are highly complex and personalized and can be challenging to measure and synthesize data. The reported findings should be interpreted in the context of the limited number of

studies.

Despite these limitations, this review has several notable strengths. It synthesizes evidence across multiple cultural contexts to provide a cross-sectional understanding of how Islamic beliefs and practices shape Muslim women's experiences of pregnancy loss globally. The narrative synthesis approach enabled rich insights into the psychosocial, spiritual, and communal factors influencing coping and grieving processes. Studies employing diverse qualitative methodologies also allowed for an in-depth exploration of personal meanings, interpretations, and emotions associated with this profoundly difficult experience from the perspective of those directly affected.

14. Conclusions

Findings from this review indicate that Muslim women rely on their faith and spirituality to deal with pregnancy loss. Spiritual care of bereaved women requires a unique skill set of religious, spiritual, and cultural needs. This review revealed that professionals helping Muslim women deal with the grief of pregnancy loss must be aware that they are at risk of negative coping from spiritual disequilibrium and existential crises. The review further bridges a significant gap through furthering our understanding of the role of religion and spirituality in this understudied area of women's reproductive health, particularly among minority populations. The findings can inform the development of culturally congruent bereavement care models and supportive interventions for Muslim women facing pregnancy loss. Hence, healthcare practitioners must be compassionate, supportive, and knowledgeable of the healthcare needs of Muslim women following pregnancy loss. Findings reveal a need for culturally sensitive and comprehensive support systems, including medical teams, faith communities, and community support networks, to assist Muslim women in navigating the emotional challenges and finding solace in their faith and community. Additionally, this review sets the groundwork for further development of novel interventions and model of care that support women who experience pregnancy loss and promote healing.

CRedit authorship contribution statement

Khadijat K. Adeleye: Writing – review & editing, Writing – original draft, Visualization, Validation, Methodology, Conceptualization. **Oluwabunmi Ogungbe:** Writing – review & editing, Writing – original draft, Conceptualization. **Muhammad Chutiya:** Writing – review & editing, Writing – original draft, Methodology, Conceptualization. **Favorite Iradukunda:** Writing – review & editing, Writing – original draft, Supervision, Methodology, Conceptualization.

Declaration of competing interest

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