

**Experiences of Pregnancy Loss in Low- and Low-Middle-Income Countries: A
Systematic Review and Meta-synthesis**

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Abstract

Pregnancy loss is an unexpected pregnancy outcome faced by parents around the world. The grieving process is complex and influenced by the type of care and support received. It has been estimated that approximately ninety-eight per cent of stillbirths occur in low-income countries. Despite this high prevalence, limited literature that addresses pregnancy loss in these countries exists. This study aimed to explore experiences of pregnancy loss in low- and low-middle-income countries. Employing a meta-synthesis design, 18 studies from 15 countries comprising 1152 participants who had experienced either a miscarriage or stillbirth were synthesised using a meta-aggregative approach. The meta-synthesis resulted in three findings that explored how parents experience and manage their grief after pregnancy loss, the explanations used to make sense of pregnancy loss, and the experiences of care and support following pregnancy loss. The results have implications for pregnant women living in low- and low-middle-income countries and women of reproductive age from these countries who may have re-located. Pregnant women from low- and low-middle-income countries seeking care in Australia may continue to be impacted by cultural beliefs. Therefore, Australian healthcare professionals should have knowledge about how cultural beliefs influence women's health behaviours.

Declaration

This report contains no material which has been accepted for the award of any other degree or diploma in any University, and, to the best of my knowledge, this report contains no materials previously published except where due reference is made.

I give permission for the digital version of my thesis to be made available on the web, via the University's digital research repository, the Library Search and also through web search engines, unless permission has been granted by the School to restrict access for a period of time.

Sharni Whitburn

September 2021

Statement of Contribution

In writing this thesis, my supervisor conceived the initial idea and aims of the research. I conducted a literature search on studies regarding pregnancy loss to further refine and develop the final research questions. My supervisor and I worked together to develop and register the study protocol. We then developed the initial search grid, which I refined and modified according to the indexing processes of each database to be searched. We then conducted the searches together to ensure all articles were collected and moved to the EndNote database. After I removed all duplicates, my supervisor and I co-screened a proportion of studies for inclusion. In addition, my supervisor, a student researcher and myself assessed a proportion of studies for quality. I conducted the data extraction and developed and organised the synthesis of findings, consulting with my supervisor when needed to refine my ideas further. I decided which extracts to include and then wrote up all aspects of the thesis.

Conference Presentations

The citation for the conference is listed below; for a copy of the submitted abstract please refer to Appendix E.

Whitburn, S. & Oxlad, M. (2021). Barriers to seeking care for pregnancy loss in low- and low-middle-income countries: Implications for the Australian healthcare system. The 2021 Australian Psychological Society National Health Psychology Conference: Building Health Resilience During Times of Change. November 2021.

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To my family, thank you for always keeping me grounded and reminding me of who I am. To my Mum and Dad, Mark and Lynda, thank you for having confidence in me when I do not always have confidence in myself and for being able to make me laugh at the end of a stressful day.

To the researchers who are working in low-income countries thank you for your dedication.

To the parents, who are brave enough to share their experiences thank you for contributing to this research. I hope that it makes a difference in your lives and can improve the care and support you receive.

Overview

Pregnancy loss is an unexpected pregnancy outcome faced by parents worldwide. The prevalence of pregnancy loss is highest in low-income countries where families lack access to prenatal health care. These families have their grief impacted by various cultural norms and rely on alternative explanations such as superstitions, especially in the absence of medical explanations. The experiences of care at healthcare facilities are further impeded by lack of resources and poor communication. However, the research that explores alternative explanations is limited, and the different experiences of care and support are under-reported. Thus, this thesis aims to explore pregnancy loss experiences in low- and low-middle-income countries to address the substantial gap in the literature.

Definitions and terminology

Defining pregnancy loss

Definitions of pregnancy loss vary around the world according to gestational age and birth weight. The World Health Organisation defines miscarriage as a loss before 28 weeks gestation and stillbirth as loss after 28 weeks gestation with a birth weight of at least 1000 grams or a body length of at least 35 centimetres (World Health Organisation, 2021). In Australia, miscarriage is a loss before 20 weeks, and stillbirth is a loss after 20 weeks with a birth weight of at least 400 grams (Australian Bureau of Statistics, 2018). Similarly, Canada and the United States of America define a miscarriage as a loss before 20 weeks and further define stillbirth as a loss after 20 weeks or with a birth weight of at least 500 grams (Joseph et al., 2021; Macdorman et al., 2015). In comparison, the gestational age varies from 16 to 26 weeks in definitions across Europe (Kelly et al., 2021; Lawn et al., 2010). This thesis uses the World Health Organisation definition as it is commonly used in the literature from low-income countries and will enable global comparisons (Aminu et al., 2014; Lawn et al., 2010).

The literature suggests that grief experienced by parents has little to do with gestational age, but can be complicated if they terminate the pregnancy due to foetal anomaly (Kersting et al., 2005; Lafarge et al., 2013; Maguire et al., 2015). The literature has suggested that this grief is influenced by a unique set of factors such as planning for the loss, deciding to terminate the pregnancy and uncertainty about the decision to terminate (Hanschmidt et al., 2018; Kersting et al., 2005; Lafarge et al., 2013; Maguire et al., 2015; Obst et al., 2021). Due to differences in grief experiences, this thesis excluded experiences of pregnancy loss resulting from induced termination due to foetal anomaly.

The use of the term baby

Parents have previously reported a desire to have their loss acknowledged as the loss of a baby. In the past, healthcare professionals used the term abortion even when the loss was spontaneous which caused feelings of distress because women associated the term abortion with induced termination (Moscrop, 2013). To adopt a more empathetic approach, healthcare professionals began using the term miscarriage (Moscrop, 2013). In some instances, parents feel the term miscarriage inadequately describes their experience of loss; rather, parents feel their loss is validated when described as losing a baby (Lee & Steer, 2020; Smith et al., 2020). Therefore, when this thesis refers to miscarriage and stillbirth, it will use the term baby(ies).

The use of the terms low-income and low-middle-income

A range of terminology exists to describe low-income countries. The World Health Organisation adopted the term 'least developed' to describe the economic status of countries. They assess a country's gross national income, human assets, and economic vulnerability to determine economic status (World Health Organisation, 2017). However, the term 'least developed' has been criticised as it does not recognise that some countries within the 'least developed' category have higher living standards than others (De Beukelaer, 2014; Neuwirth,

2017). Therefore, The World Bank categorises each country according to its gross national income per capita, where gross national income is measured using a country's economic growth, inflation, exchange rate and population (The World Bank, 2020). This approach has resulted in four distinct categories: low-income, lower-middle-income, upper-middle-income, and high-income. Low-income countries have a gross national income per capita of \$1,045 or less, whereas lower-middle-income countries have a gross national income per capita between \$1,046 to \$4,095 (The World Bank, 2020). The terms low- and low-middle-income will be used in this thesis as it has been argued that this is the most objective approach (Neuwirth, 2017).

Prevalence and causes of pregnancy loss

The prevalence of pregnancy loss is incredibly high, with estimates that one in four recognised pregnancies end in miscarriage, with the majority of these occurring during the first trimester (World Health Organisation, 2021). It has been further estimated that 2.6 million stillbirths occur worldwide, and 98% of these occur in low-income countries (Lawn et al., 2016). More specifically, 76% of these stillbirths occur in South Asia and Sub-Saharan Africa (Cousens et al., 2011). The rate of stillbirths is ten times higher in low-income countries compared to high-income countries (Goldenberg et al., 2016). Despite the prevalence being greater in low-income countries, most research occurs in high-income countries.

There is limited research on the causes of miscarriage in low-income countries; however, extensive research has been conducted on stillbirth. The stillbirths in low-income countries result from maternal diseases such as human immunodeficiency virus and syphilis, as well as diabetes and hypertensive disorders (Aminu et al., 2014; Reinebrant et al., 2018). Stillbirths are closely associated with diseases resulting from parasites such as malaria and toxoplasmosis (Aminu et al., 2014; Moore et al., 2017). In addition, prolonged or obstructed

labour can increase stillbirth risk, particularly among healthcare facilities that lack the resources to assist women facing complications during birth (Harrison et al., 2015).

Furthermore, domestic violence has been associated with adverse pregnancy outcomes in several low-income countries (Clarke et al., 2019; Pool et al., 2014; Silverman et al., 2007; Tenkorang, 2019).

Perspectives on experiences of grief

Socioecological model and grief

The socioecological model suggests that grief should be understood from a holistic perspective, with multiple levels and factors influencing parents' grief following pregnancy loss (Obst et al., 2021). At the individual level, age, religion, previous pregnancy losses, and the number of living children can influence the grief experienced (Obst et al., 2021). In particular, parents form attachment early in the pregnancy during ultrasounds and other scans that allow them to see and hear their baby, whereas some parents make a conscious effort not to become attached to the baby if they have experienced previous losses (Branjerdporn et al., 2021; Harpel & Barras, 2018). The interpersonal level describes relationship quality and support from family and friends, whereas the community level describes how cultural norms and beliefs influence displays of grief (Obst et al., 2021). Furthermore, at the public policy level, lack of resources can impact experiences, especially in healthcare facilities with overcrowded birthing suites and early discharge practices (Shakespeare et al., 2018).

Culture and grief

Various cultural norms and practices impact parents' grief. These norms determine which deaths are mourned and whether a person should be socially included or excluded for the duration of their mourning (Oyebode & Owens, 2013; Walter, 2010). In some cultures, the community does not acknowledge the baby who died as a living individual (Lang et al., 2011; Mulvihill & Walsh, 2014). This lack of acknowledgement downplays the significance

of parents' loss and makes them feel that their loss does not matter (Callister et al., 2006; Chaffey & Whyte, 2014). In other cultures, the baby is not considered human if it has not reached a certain gestational age (Blencowe et al., 2021; Kwesiga et al., 2020). These babies deaths are mourned in private with close neighbours; however, sometimes, the mother is excluded from the mourning rituals (Allahdadian & Irajpur, 2015; Kiguli et al., 2016). Some mourning rituals involve burning clothes and toys to maintain an attachment to the baby in the afterlife, as a result, continuing to provide for their baby helps parents manage feelings of guilt (Allahdadian & Irajpur, 2015; Alvarenga et al., 2021; Tseng et al., 2018). This thesis will further explore how culture impacts experiences and management of grief following pregnancy loss.

Explanations of pregnancy loss

Despite living in high-income countries, parents are rarely told the cause of their pregnancy loss. The impact of language used to explain pregnancy loss can have lasting effects on bereaved parents (Austin et al., 2021; Gold et al., 2017). The use of terms such as 'early pregnancy failure' and 'spontaneous abortion' can cause distress among parents (Clement et al., 2019). In addition, healthcare professionals use terms such as 'incompetent cervix' and 'inhospitable uterus' placing blame on the mother and causing feelings of guilt (Vimalesvaran et al., 2021). Past literature has shown that these terms are particularly prominent following miscarriage rather than stillbirth (Domogalla et al., 2020).

Parents in low-income countries have cultural beliefs to understand pregnancy loss that become particularly prevalent in the absence of medical explanations. Past literature has found that eating certain fruits such as papaya, jackfruit and pineapple are believed to cause miscarriages (Ahmad et al., 2019). In some tribes, pregnant women are only allowed to eat animals considered to possess weak spirits, such as small birds and fish but should not eat fish that attach themselves to coral because it is believed it can complicate the birth (Meyer-

Rochow, 2009). Furthermore, witchcraft is believed to cause pregnancy loss and, as a result, it is common practice for women to see traditional healers to protect themselves during their pregnancies (Noge et al., 2020; Pafs et al., 2016). Finally, in some instances, women are said to have evil spirits residing in their bodies that lead to pregnancy loss (Maputle et al., 2015; Shakespeare et al., 2018). This thesis will further explore explanations used to make sense of pregnancy loss in low- and low-middle-income countries.

Experiences of care and support

Experiences in the community

Parents often receive limited and varied social support following pregnancy loss, even in high-income countries (Baird et al., 2018; Obst et al., 2019; Riggs et al., 2021). They may be invited to a support group in their local area; however, such groups often offer general support rather than specific support for pregnancy loss and are usually located in metropolitan areas, which can be challenging to access for those living rurally. Thus, some parents must drive several hours to reach a brief one-hour support group (Domogalla et al., 2020; Mulvihill & Walsh, 2014). In addition to these support groups, parents have reported that their family and friends provide emotional and practical support (Mroz et al., 2021; Obst et al., 2021).

The limited literature in low-income countries suggests that parents receive little to no support from their wider community. In some cultures, beliefs surrounding gender mean that a woman's worth is based on her ability to bear children and; therefore, when she experiences pregnancy loss, she is rejected by the wider community for failing to fulfil her role as a mother (De Kok, 2019; Pollock et al., 2020). Additionally, it is common for men to leave their partner if she has experienced multiple losses; his parents encourage him to leave because the woman is said to bring shame to the family (Roberts et al., 2012).

Experiences in healthcare facilities

Parents' interactions with healthcare professionals can have a lasting impact on their experience of loss. Researchers report several reoccurring issues in high-income countries regarding parents' experiences with healthcare professionals, including poor patient-doctor communication, limited information about the cause of the loss and lack of empathy towards parents (Domogalla et al., 2020; Due et al., 2018; Obst et al., 2020). The hospital environment has also been described as inadequate, with some couples being left in the emergency department for hours before being attended to and some mothers being placed in maternity wards alongside other women with healthy newborn babies (Ellis et al., 2016; Panches et al., 2019). However, some hospitals have been praised for providing opportunities to engage in memory-making. Here, parents can see and hold their baby and make hand and footprints, which allows them to create memories and assist with their grief (Cacciatore et al., 2008; Ryninks et al., 2014).

The literature on parents' experiences with healthcare professionals in low-income countries is limited. The existing literature has highlighted several additional challenges. Many families in these countries lack access to prenatal healthcare, which prevents the detection of complications (Chimatiro et al., 2018; Fagbamigbe & Idemudia, 2015; Jiwani et al., 2020). Such families may also have to travel several hours to reach a healthcare facility leading to delays in treatment; the women may not be allowed to travel alone to receive treatment; and they may not have the money to access treatment (Alaofe et al., 2020; Ahinkorah et al., 2021). In addition, medical explanations and post-mortem investigations are rarely offered, and healthcare professionals delay informing parents of their loss (Bedwell et al., 2021). These parents are rarely provided with opportunities to see and hold their baby, and, as a result, parents are left with few to no memories of their child (Kuti & Ilesanmi,

2010). This thesis will further explore the care and support offered to parents following pregnancy loss in low- and low-middle-income countries.

Current care guidelines

The body of literature on pregnancy loss has led to several guidelines for healthcare professionals. For example, in Australia, the Perinatal Society of Australia and New Zealand published forty-nine recommendations regarding stillbirth care (Perinatal Society of Australia and New Zealand, 2020). The key recommendations include: communicating empathetically with parents; sensitively breaking bad news; being respectful of parents' culture; being aware of parents' space and surroundings; communicating with healthcare professionals across sectors; supporting parents to make decisions; validating parenthood through memory-making; providing effective support to parents; and improving the response from healthcare facilities (Perinatal Society of Australia and New Zealand, 2020).

In Ireland, very specific guidelines relating to care following miscarriage and stillbirth exist (Royal College of Physicians of Ireland, 2013). They recommend that when miscarriage occurs, it should be discussed sensitively in a private room during which parents' options should be outlined and a care plan created. If the woman is admitted to hospital, she should be in a private room away from other pregnant women (Royal College of Physicians of Ireland, 2013). The Royal College of Physicians of Ireland (2013) further recommends that when parents experience stillbirth they should be provided with a room away from antenatal and postnatal wards, cared for by one midwife, and offered support from pastoral care services. At birth, parents should have the opportunity to cut the umbilical cord; have their baby delivered into the mother's arms; have mother and baby skin-to-skin contact enabled; and opportunity to take photographs (Royal College of Physicians of Ireland, 2013). While such guidelines are beneficial, currently, there are no guidelines for miscarriage or stillbirth for parents living in low- and low-middle-income countries.

Aims and research questions

Despite the extensive literature on pregnancy loss around the world, there is a paucity of research in low- and low-middle-income countries. The research from these countries is mostly quantitative which can provide an estimate of prevalence but does not provide an in-depth understanding of experiences. To address this limited research, this thesis aims to explore experiences of pregnancy loss in low- and low-middle-income countries through the following questions: (1) how do parents experience and manage their grief after pregnancy loss? (2) what are the explanations that are used to make sense of pregnancy loss? and (3) what are the experiences of care and support following pregnancy loss?

Method

Design

The findings from qualitative studies are increasingly recognised as providing valuable insight into the human experience. Findings from qualitative studies can be synthesised using several methods including meta-aggregation (Major & Savin-Baden, 2012). The meta-aggregative approach, employed here, adopts the characteristics of meta-analysis while being sensitive to the nature of qualitative studies (Porrit & Pearson, 2013). It synthesises findings from related but independent studies and is pragmatic in its approach because it does not attempt to re-interpret or re-assign meaning to the original findings (Hannes & Lockwood 2011; Lockwood et al., 2015). Rather, it aims to accurately report the original findings as intended by the authors of each included study (Hannes & Lockwood, 2011; Lockwood et al., 2015). A unique benefit of meta-aggregation is that it allows the synthesis of studies that utilise different methodologies (Munn et al., 2019; 2021).

The synthesised findings generated are reported in the form of generalisable statements or 'lines of action' that lead to evidence-based clinical practice (Munn et al., 2019; 2021). In addition, these lines of action can be used to develop and improve policies in a

range of settings (Munn et al., 2019; 2021). This thesis utilised the meta-aggregative approach to identify, critically appraise, analyse and synthesise experiences of pregnancy loss in low- and low-middle-income countries. This meta-synthesis was preregistered (CRD42021260873).

Search strategy

The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA; Page et al., 2021) guidelines were followed during the review process. The qualitative studies that reported pregnancy loss experiences in low- and low-middle-income countries were identified by searching six databases (CINAHL, EMBASE, PubMed, PsychINFO, Scopus and Sociological Abstracts). The search terms were adapted to the indexing system of each database and applied Boolean logic (Table 1; for full search grids see Appendix A). The terms included: ‘pregnancy loss’, ‘miscarriage’, ‘perinatal death’, ‘stillbirth’, ‘low-income’, ‘qualitative’ and any other variation of the selected words considered suitable. A specialised research librarian also reviewed the search terms to maximise accuracy.

The databases were searched from database inception until mid-April 2021 and identified references were exported and screened in EndNote. Alerts were then created to ensure that additional articles indexed or published after this date were assessed for possible inclusion. In addition, the reference lists of each article that met the inclusion criteria was manually searched for other eligible articles. Five authors were contacted for additional information regarding participant characteristics. However, only three authors responded, and none of them could provide the requested information.

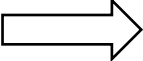
Eligibility criteria and study selection

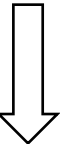
Studies were eligible for inclusion if they (i) investigated people’s experiences of pregnancy loss in low- and low-middle-income countries (ii) reported qualitative data (mixed method studies were eligible for inclusion if qualitative data was reported separately and in

detail) (iii) reported primary data (iv) were published in a peer-reviewed journal (v) were published in English. Studies were considered qualitative if they used qualitative data collection methods such as focus groups and interviews or used qualitative analysis methods such as thematic analysis and content analysis. Studies that reported quantitative data, did not report primary data, were not full articles, were not published in a peer-reviewed journal or were not published in English were excluded. Studies from healthcare professionals' perspectives were excluded unless they described parents' perspectives separately and in detail. In addition, studies that reported pregnancy loss experiences that were the result of induced termination of viable and non-viable pregnancies were excluded.

Table 1

Search Terms and Boolean (Logical) Operators used in the Database Searches

AND 

O R 	<i>Pregnancy Loss</i>	<i>Low-income Country</i>	<i>Qualitative</i>
	spontaneous abortion*	developing countr*	qualitative*
	stillbirth*	developing nation*	focus group*
	stillborn*	underdeveloped countr*	interview*
	fetal death*	under-developed countr*	thematic analys*
	foetal death*	underdeveloped nation*	content analys*
	fetus death*	under-developed nation*	lived experience*
	foetus death*	less developed countr*	personal experience*
	perinatal death*	less-developed countr*	interpretative
	peri natal death*	less developed nation*	phenomenolog* analys*
	perinatal loss*	less-developed nation*	ethnograph*
	peri natal loss*	third world countr*	case stud*
	perinatal mortalit*	third-world countr*	narrative*
	peri natal moralit*	third world nation*	
	ectopic pregnanc*	third-world nation*	
	miscarriage*	low income countr*	
	pregnancy loss*	low-income countr*	
		low income nation*	
		low-income nation*	

Note. Search terms included stated terms in both singular and plural forms.

The initial search resulted in 2254 studies (see Figure 1); 1083 duplicates were removed, leaving 1171 studies to be screened by title and abstract. When the inclusion and exclusion criteria was applied to these studies, 926 were excluded, leaving 245 studies. The author and the research supervisor co-screened a random sample of 117 studies (approximately ten percent of the identified studies) to reduce data-selection bias. Inter-rater agreement was high (94%, $K = .87$, $p < .05$), with any disagreements resolved by further discussion. The full text of 245 studies was assessed according to the inclusion and exclusion criteria; 228 studies were excluded, resulting in 17 studies being assessed for methodological reporting quality. One additional study identified from the alerts was also assessed for quality. No studies were excluded based on the assessment; therefore, a total of 18 studies were included in the current meta-synthesis.

Appraisal of reporting quality

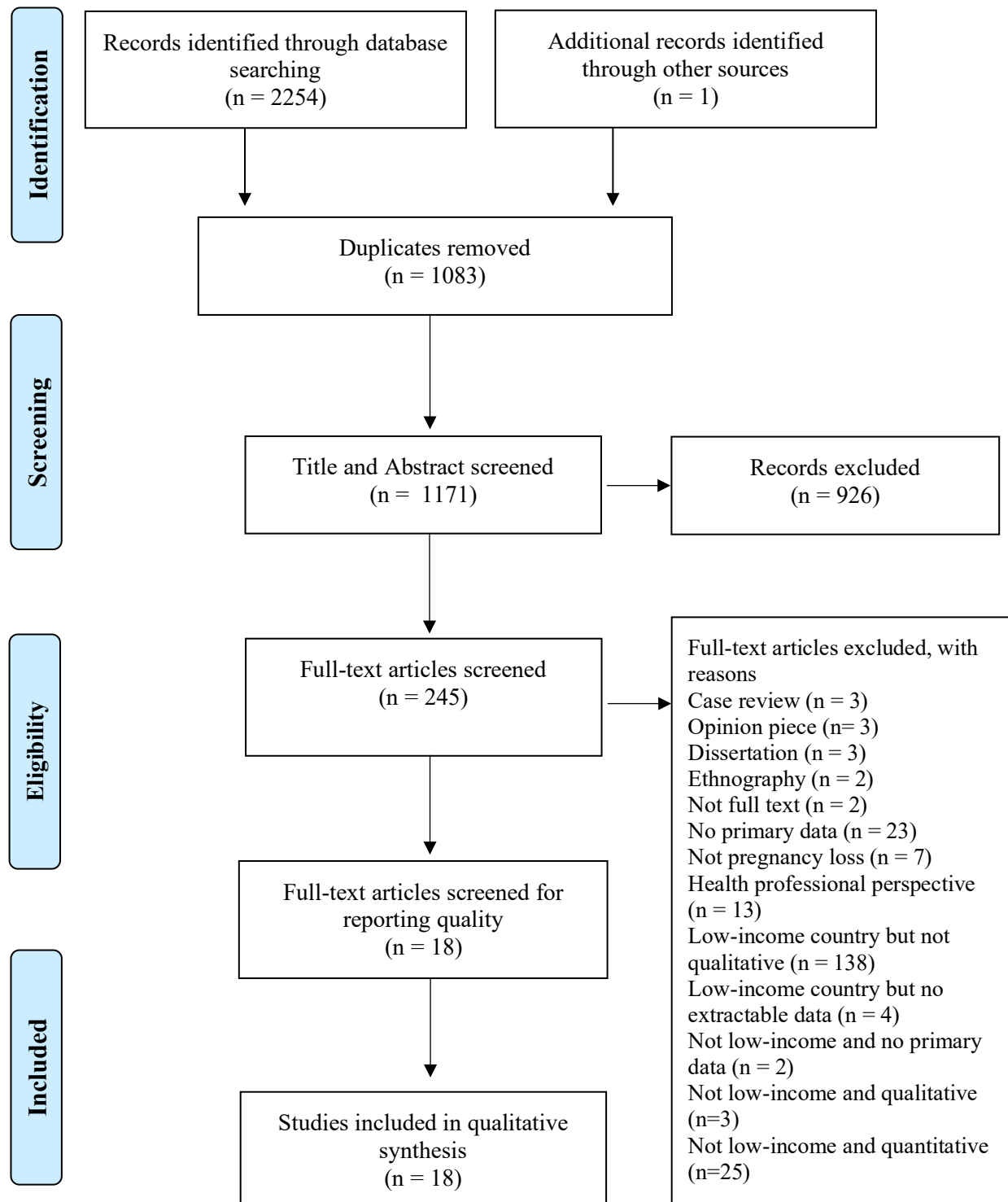
The quality of the included studies directly influences the quality of the meta-synthesis; thus, the quality reported in the original studies should be carefully assessed and evaluated (Korhonen et al., 2013). As the findings have immediate applicability to practice, they must be synthesised from high-quality studies (Lockwood et al., 2015). If the findings are derived from low-quality studies this can adversely impact the implementation of lines of action (Lockwood et al., 2015).

The researcher co-screened the reporting quality of a proportion of the eligible articles with another student researcher and the research supervisor, before then screening the remainder of the articles alone, using the Quallsyst Quality Assessment checklist (Kmet et al. 2004). The checklist consists of 10 items that can be answered with ‘yes’=2, ‘partial’=1 or ‘no’=0. The summary score for each article was calculated by taking its total score and dividing it by the possible score of 20. It has been suggested that a liberal cut-off score is .55/1.00, whereas a more conservative cut-off score is .75/1.00 (Kmet et al., 2004). To

ensure, synthesis of the highest quality research, the more conservative cut-off score for inclusion was used. It determined that all 18 articles satisfied the minimum cut-off and, as a result, all were included.

Figure 1

Prisma Flowchart of Study Selection Process (Page et al., 2021)



Data extraction and synthesis

The 21-item Enhancing Transparency in Reporting the Synthesis of Qualitative Research (ENTREQ) checklist (Tong et al., 2012; see Appendix D) was used in reporting this meta-synthesis. The data was extracted from eligible articles and recorded on a study specific data extraction sheet (Appendix B). The data extracted included details relating to sample demographics (i.e., age and gender), study location (i.e., country and communities), pregnancy loss characteristics (i.e., type of loss and number of losses), study characteristics (i.e., aims, design and method of recruitment) and verbatim reports of experiences of pregnancy loss.

In meta-synthesis, a finding is the original authors' interpretation of the results and is supported by an illustration in the form of a direct quotation or observation (Lockwood et al., 2015). The findings and quotations to support each experience of pregnancy loss described were extracted from each included study. The findings were then grouped into categories, and these categories were then grouped into synthesised findings (Korhonen et al., 2013; Lockwood et al., 2015). Recommendations were later proposed relating to the healthcare provided following pregnancy loss in low- and low-middle-income countries.

Reflexivity

Researchers should consider how their motivations and experiences may influence data collection and interpretation (Tracy, 2010). The researcher's position as an outsider or insider within a certain community or context can influence data collection; thus, it is important for researchers to describe their relationship with participants (Dodgson, 2019; Palaganas et al., 2017). Even when engaging in meta-synthesis it is crucial to employ reflexivity because the researcher may influence the interpretation of data. This thesis was undertaken by a young white woman living in a high-income country with no experiences of

pregnancy loss. The researcher frequently reflected upon her position and discussed with the research supervisor how this may impact her interpretation of the data.

Results

Study characteristics

Table 2 provides details of the key characteristics of the 18 included studies. The studies were published between 2003 and 2021 and originated from low- and low-middle-income countries. Most studies were conducted in Africa, and some studies used samples from multiple countries. The countries most represented were Uganda ($N_{studies} = 4$) and Afghanistan ($N_{studies} = 3$). There were two studies each from Ethiopia, Ghana, Kenya and Malawi. Single studies were from Bangladesh, Gambia, Guinea-Bissau, India, Mozambique, Somaliland, South Sudan, Tanzania and the Democratic Republic of Congo. Qualitative data were predominantly collected via interviews ($N_{studies} = 16$; of these, four included focus groups, one included observation, and one included questionnaires and case studies). Two studies collected data solely through focus groups. Most data were analysed using thematic analysis ($N_{studies} = 11$) and content analysis ($N_{studies} = 4$); however, researchers also used phenomenological analysis ($N_{studies} = 2$) and framework analysis ($N_{studies} = 1$).

Participant characteristics

The sample comprised 1152 individuals, 1016 women and 136 men, aged 15-63 years, who had experienced pregnancy loss ($N_{studies} = 16$; See Table 3). Where relationship status was reported, most participants were married or partnered ($N_{studies} = 14$). One hundred and twenty-seven participants experienced a miscarriage, 345 experienced a stillbirth, 95 experienced more than one loss ($N_{studies} = 4$) and 9 experienced more than one type of loss ($N_{studies} = 1$). The time since loss ranged between less than one month to 24 months.

Table 2*Characteristics of Included Studies* (N_{studies} = 18)

Lead Author (Year)	Country	Sample Size ^a	Recruitment Source	Data Collection	Data Analysis ^b	Quality
Adhiambo Onyango (2011)	South Sudan	26	Nurse in gynaecology unit.	Interviews	Content analysis	.90
Ayebare (2021)	Kenya and Uganda	134 ^c	Midwives and a village health team.	Interviews	Thematic analysis	.90
Bakari (2021)	Ghana	100	Public health nurses, community health nurses and opinion leaders.	Interviews and focus groups	Thematic analysis	.90
Chapman (2003)	Mozambique	83	Recruited from every tenth compound and snowball sampling.	Interviews, focus groups, questionnaires and case studies	Thematic analysis	.80
Christou (2019)	Afghanistan	38 ^d	Contacted through medical records then by community health workers.	Interviews	Thematic analysis	1.0
Christou (2020)	Afghanistan	38	Contacted through medical records then by community health workers.	Interviews	Thematic analysis	.90
Christou (2021)	Afghanistan	38	Contacted through medical records then by community health workers.	Interviews	Thematic analysis	.90

Deitch (2019)	Democratic Republic of Congo	50	Identified by post abortion care registers and then contacted by a health worker.	Mixed methods - systematic register review and interviews	Thematic content analysis	.90
Haws (2010)	Tanzania	50	Female community informant contacted participants who had recorded reproductive events in a previous study.	Interviews	Thematic analysis	1.0
Jammeh (2011)	Gambia	20	Prior to discharge from hospital participants were recruited.	Interviews	Content analysis	.80
Kiguli (2015)	Uganda	29	Identified through hospital maternity ward register and community leaders.	Interviews and observations	Content analysis	.85
Kopp (2018)	Malawi	46	Identified participants from post-natal wards.	Interviews and focus groups	Content analysis	.90
Kwesiga (2021)	Guinea-Bissau, Ethiopia, Uganda, Bangladesh and Ghana	172 ^c	Cross-sectional population-based survey.	Mixed methods - survey and focus groups.	Thematic analysis	.95
Mills (2021)	Kenya and Uganda	134	Health workers invited participants who had attended one of five facilities.	Interviews	Phenomenological analysis	.90
Osman (2016)	Somaliland	10	Traditional birth attendants invited participants across eight villages.	Interviews	Phenomenological analysis	.80

Roberts (2012)	India	33	Hospital staff referred women and snowball sampling.	Interviews and focus groups	Thematic analysis	.90
Simwaka (2014)	Malawi	20	Contacted through perinatal loss records and primary health care workers.	Interviews	Thematic analysis	.90
Sisay (2014)	Ethiopia	207	Recruited participants in each Maternal and Newborn Health in Ethiopia Partnership project site.	Focus groups	Framework analysis	.90

Note: ^a Where studies used mixed methods only the sample size for the qualitative data are reported; ^b The data analysis was recorded as described by the authors of the original study; ^c The total sample for this study was 195 participants but only 134 participants who were parents were included in our sample size; ^d The total sample for this study was 55 participants but only 38 participants who were parents or elders were included in our sample. ^e The total sample for this study was 254 participants but only 172 participants who were parents were included in our sample size.

Table 3*Characteristics of Participants in Included Studies* ($N_{\text{studies}} = 16$)

<i>Variable</i>	$N_{\text{studies}} = 16^a$	$N_{\text{participants}} = 1152$	<i>Mean</i>	<i>Range</i>
Age	16	1152	24.08	15-63
Gender				
Female	16	1016		
Male	5	136		
Relationship				
Married	12	606		
Unmarried	2	14		
Partnered	2	14		
Single	3	73		
Widowed	1	2		
Not specified	8	443		
Residence				
Urban	4	187		
Rural	6	413		
Not specified	10	552		
Ethnicity				
Ashante	1	23		
Bosoga	2	32		
Makonde	1	28		
Tajik	1	19		
Other	4	231		
Not specified	10	819		
Type of loss				
Miscarriage	6	127		
Stillbirth	12	345		
Other	7	101		
No loss	1	71		
Not specified	3	508		
Time since loss				
1-6 months	6	165		
6-12 months	3	174		
>12 months	3	77		
Not specified	6	736		
More than one previous loss	4	95		
Not specified	12	1057		
More than one type of loss	1	9		
Not specified	15	1143		

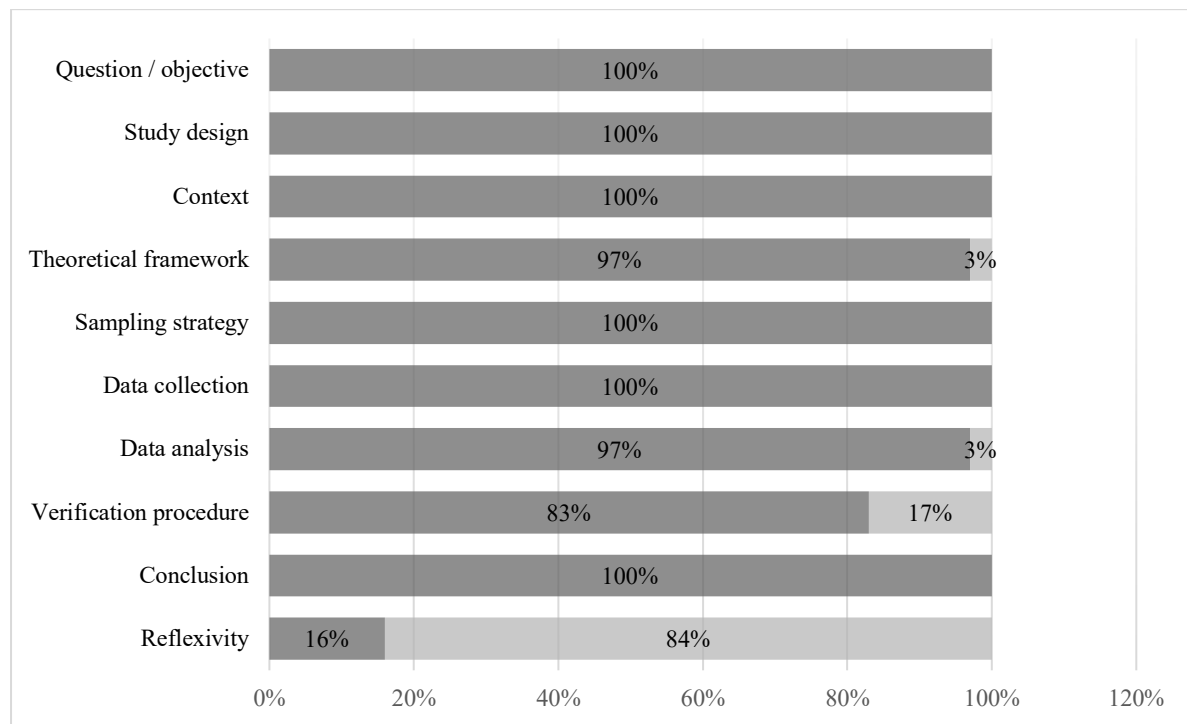
Note. ^athe data is from 16 of the 18 studies as 3 of the studies reported from the same sample.

Reporting quality of included studies

The reporting quality of the included studies, as assessed using the Quallsyst Quality Checklist (Kmet et al., 2004), is illustrated in Figure 2 (for full assessment see Appendix C). The 18 included studies were of high quality, possessing scores from .80 to 1.0 and fulfilling at least 6 of the 10 criteria. All studies specified their research question/objective, design, context, sampling strategy, data collection methods and reached appropriate conclusions from their findings (*Items 1-3, 5, 6, and 9*: 100% fulfilled). In addition, most researchers connected the study to a theoretical framework or wider body of literature and sufficiently explained their method of data analysis (*Items 4 and 7*; 97% fulfilled). Also, most studies described the use of verification procedures (*Item 8*; 83% fulfilled). However, few researchers commented on reflexivity (*Item 10*; 16% fulfilled).

Figure 2

Reported Quality of the Included Studies



Synthesised findings

Overview

The synthesis resulted in three findings (See Table 4): (1) parents feel an initial sense of shock and sadness and experience blame and rejection, with cultural norms and superstitions influencing disclosure of pregnancy loss, burial practices and mourning, with parents using mementos and faith as a means to manage their loss; (2) individuals use terminology unique to the local language to refer to pregnancy loss and can attribute the loss to medical causes, however, in some instances, alternative explanations can arise due to cultural beliefs and insufficient medical explanation; and (3) parents can recognise danger signs during pregnancy, but barriers such as reliance on traditional medicines prevent access to care and when care is received parents contend with limited resources and poor communication.

Experiences and management of grief after pregnancy loss

This synthesised finding was derived from thirteen studies that resulted in six categories: parents feel an initial sense of shock followed by sadness after receiving news of their loss; mothers experience blame and rejection from the community due to societal expectations; cultural norms and superstitions influence disclosure of pregnancy loss; pregnancy loss is not valued or mourned the same as other losses; parents use mementos such as photographs as a way of memory-making; and, faith in their religion allows parents to accept their loss.

Parents feel an initial sense of shock followed by sadness after receiving news of the loss. Parents experienced a sense of shock followed by an intense sadness that altered their lives (Adhiambo Onyango & Mott, 2011; Mills et al., 2021; Osman et al., 2016; Roberts et al., 2012; Simwaka et al., 2014). Despite the high prevalence of pregnancy loss in low- and low-middle-income countries, women expected the birth of a healthy baby. When women

Table 4

Synthesised Findings and Categories of Experiences of Pregnancy Loss in Low- and Low-Middle-Income Countries

Experiences and management of grief after pregnancy loss: Parents feel an initial sense of shock and sadness and experience blame and rejection, with cultural norms and superstitions influencing disclosure of pregnancy loss, burial practices and mourning, with parents using mementos and faith as a means to manage their loss.

- Parents feel an initial sense of shock followed by sadness after receiving news of their loss.
- Mothers experience blame and rejection from the community due to societal expectations.
- Cultural norms and superstitions influence disclosure of pregnancy loss.
- Pregnancy loss is not valued or mourned the same as other losses.
- Parents use mementos such as photographs as a way of memory-making.
- Faith in their religion allows parents to accept their loss.

Explanations used to make sense of pregnancy loss: Individuals use terminology unique to the local language to refer to pregnancy loss and can attribute the loss to medical causes, however, in some instances, alternative explanations can arise due to cultural beliefs and insufficient medical explanation.

- Individuals use specific terminology to refer to pregnancy loss.
 - Pregnancy loss is explained by medical causes such as diseases and physical factors.
 - Alternative explanations can arise due to cultural beliefs and insufficient medical explanation.
 - Family curses stem from ruptures in kin relationships and financial issues.
 - Evil spirits are attached to the mother through sorcery.
-

Experiences of care and support following pregnancy loss: Parents can recognise danger signs during pregnancy, but barriers such as reliance on traditional medicines prevent access to care and when care is received parents contend with limited resources and poor communication.

- Parents can recognise danger signs during the pregnancy but rely on traditional medicines.
 - Multiple barriers prevent women from receiving appropriate, timely care.
 - Women's lack of autonomy.
 - Economic barriers.
 - Physical barriers.
 - Limited resources affect the experiences of care received.
 - Poor patient-doctor communication.
-

experienced pregnancy loss, they described a sense of shock followed by an intense sadness that manifested itself into physical pain, with one woman describing, *“I realised it was dead. My heart was broken into two pieces”* (Osman et al., 2016, p. 109). In comparison, feelings of frustration arose in women whose babies died during a traumatic labour (Mills et al., 2021; Simwaka et al., 2014). These women spoke of the challenges of pregnancy and pain of birth as serving no purpose, with one woman explaining, *“Getting pregnant, carrying the pregnancy all those months and going through caesarean pain and the baby dies, have I not suffered in vain?”* (Mills et al., 2021, p. 103). These intense feelings of sadness altered women’s lives as their transition to motherhood was disrupted (Osman et al., 2016; Roberts et al., 2012). They avoided places where they expected to see children because the sight of other children brought painful memories and thoughts of what could have been. A woman described her experience, *“If I see my elder sister’s kids I think about my babies, how old they would be, how they would look...the pain, I try to forget”* (Roberts et al., 2012, p. 191). Men also reported sadness; however, they described an external pressure to hide their feelings (Kiguli et al., 2015; Mills et al., 2021). They saw that their role as a husband was to support their partner and take care of practicalities such as the burial. One man expressed, *“I was traumatised by the sight of her condition, but I had to pull myself together as a man, and confront the situation”* (Mills et al., 2021, p. 104).

Mothers experience blame and rejection from the community due to societal expectations. Women were blamed for their pregnancy loss which led to rejection from their husbands and the wider community (Adhiambo Onyango & Mott, 2011; Christou et al., 2019; Sisay et al., 2014). There were views that it was a woman’s duty to give birth to a healthy baby, and when unable to fulfil this duty, she was blamed. One woman referred to her husband when she said, *“He thinks it’s my fault that I did not come to the hospital in time. If I*

knew my body was paining, I should have come to the hospital in good time... ” (Adhiambo Onyango & Mott, 2011, p. 381). In some instances, women described symptoms that replicated a terminated pregnancy and, as a result, were blamed by their husbands for inducing the pregnancy loss (Deitch et al., 2019; Haws et al., 2010). One woman explained, *“I was very sick, as if it wasn’t bad luck, it appeared like an abortion. I bled a lot and on the last day a lot of pus came out. My husband thought I went to the hospital to get an abortion”* (Haws et al., 2010, p. 1769). In villages, it was common for women to experience rejection following a pregnancy loss, with multiple losses leading to divorce (Adhiambo Onyango & Mott, 2011; Kiguli et al., 2015; Sisay et al., 2014). A young woman referred to her husband when she said, *“I am worried because he called me today. He said he is coming and if he finds his pregnancy is out, he does not want me. He wants me to go back to my home”* (Adhiambo Onyango & Mott, 2011, p. 382). The experience of rejection was further illustrated in the same study by another woman whose parents-in-law told her to return to her family of origin. Without providing a child, the in-laws believed she no longer belonged in their family saying, *“You are eating our food for nothing and you do not even have a child...go to your family”* (Adhiambo Onyango & Mott, 2011, p.382).

Cultural norms and superstitions influence disclosure of pregnancy loss. Women hid pregnancies because disclosing the pregnancy could leave the unborn baby vulnerable to witchcraft, causing a miscarriage (Kwesiga et al., 2021). One woman explained that, *“...it’s not good to tell everyone about the pregnancy. When you tell one about your pregnancy...they can take your footstep soil and bewitch you and you get a miscarriage”* (Kwesiga et al., 2021, p. 6). Similarly, parents often did not disclose their pregnancy loss as it was not always culturally appropriate (Haws et al., 2010; Kiguli et al., 2015). Individuals feared being perceived as selfish when speaking about their loss, with one woman explaining, *“If you tell someone that you have a certain problem, they will ask why you are so special, do*

you think that problem hasn't happened to others? Especially such a common problem"

(Haws et al., 2010, p. 1768).

In comparison, some individuals felt able to disclose their pregnancy loss to those they trusted (Haws et al., 2010). These were people they had built a connection with over time, with one woman expressing, *"I could talk about it with someone I have sat with for a few hours, those are people you can talk to about your issues. You can't just tell a person on the street"* (Haws et al., 2010, p. 1768). Furthermore, it is noteworthy that there were some countries, such as Afghanistan, where parents expressed a desire to discuss their experiences of loss openly (Christou et al., 2019; Sisay et al., 2014). Many of these parents recognised that discussion could lead to prevention, with one father stating, *"They should not feel shame because this is not a shameful issue. Which one is better, to feel shame and lose the baby, or they should talk and protect from losing the baby"* (Christou et al., 2019, p. 7).

Pregnancy loss is not valued or mourned the same as other losses. Gestational age determined whether pregnancy loss was valued and recognised by the wider community (Ayebare et al., 2021; Christou et al., 2019; Kwesiga et al., 2021; Sisay et al., 2014). Miscarriages were valued less than neonatal deaths, with one woman explaining, *"It could be that a miscarriage didn't even last for three or four months compared to the one I will carry for nine months, care and breastfeed. So I will value him or her more than the miscarriage"* (Kwesiga et al., 2021, p. 7). In some cultures, miscarriages were not recognised as human deaths and, as a result, were not mourned (Ayebare et al., 2021; Kwesiga et al., 2021; Sisay et al., 2014). These babies were not considered human because they had not cried with a mother noting, *"If it's a stillbirth they don't take it as a person, they do that only for a child who has at least cried after coming out of the womb. One who has cried is a human while the stillbirth isn't regarded as a human since they haven't heard its cry"* (Ayebare et al., 2021, p. 5). In Afghanistan and India, it was commonly reported that the community mourned the death of a

baby boy more than the death of a baby girl (Christou et al., 2019; Roberts et al., 2012).

However, parents expressed that the sex of their baby did not influence their grief, with one father explaining, *“Unfortunately, it is still a problem in our village. People differentiate between a baby boy and a baby girl. They feel more upset for the boy, but less upset for the girl...There is no difference between them for the mother. They are both blessings of Allah and there is no difference between them for us”* (Christou et al., 2019, p. 9).

Burial practices were also determined by gestational age, with miscarriages and stillbirths ineligible for funerals (Ayebare et al., 2021; Christou et al., 2019; Kiguli et al., 2015; Sisay et al., 2014). A father articulated, *“...if she cried or moved then we must give it the bath and perform the funeral. When the Mullah of the mosque comes to the graveyard then people come together and perform the funeral, but if there is miscarriage or stillbirth, they are not eligible to perform the funeral”* (Christou et al., 2019, p. 5).

Parents use mementos such as photographs as a way of memory-making.

Mothers and fathers expressed a desire to see and hold their babies after their pregnancy loss (Christou et al., 2019; Christou et al., 2021; Osman et al., 2016). Seeing their baby enabled parents to remember their child and assisted with their grief, with one mother recalling, *“I requested that the midwife hand over the baby to me, and I saw the beautiful hair of the baby and I cried. The memory now lifts me up”* (Osman et al., 2016, p. 110). Parents who chose not to see their baby later expressed regret because they felt they had no memories of their child. One father held his baby but did not look at her, he expressed, *“For a few days it was coming to my mind, ‘I should have seen her face at least once’”* (Christou et al., 2021, p. 6). In some instances, parents were denied the opportunity to see and hold their baby (Christou et al., 2019; Mills et al., 2021; Osman et al., 2016). The birth attendants or elders often assumed the mother was too upset or unwell, with one elder recalling, *“...We say the mother shouldn’t see it, because she might go into a critical condition as many have gone in such a situation*

...We have experienced such things, because our hairs have turned white in such things” (Christou et al., 2019, p. 7). Mothers denied time with their babies described the importance of mementos (Christou et al., 2021). One mother described, *“My cousin took its picture. I sometimes look at it and become so sad; I told my husband that day to print this picture in large size and bring it to me”* (Christou et al., 2021, p.7).

Faith in their religions allowed parents to accept their loss. Keeping faith allowed parents to come to terms with their loss and manage their grief (Ayebare et al., 2021; Mills et al., 2021; Osman et al., 2016; Simwaka et al., 2014). Despite practising different religions, most parents reported receiving comfort from their faith. One woman described how her faith allowed her to remain calm when she realised she had lost her baby. She explained, *“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., 2016, p. 109). Faith allowed parents to not only accept their loss but hope for more children in the future (Mills et al., 2021; Osman et al., 2016). Parents believed that they would be able to conceive more children, with one woman reporting, *“I cope by reminding myself that I already lost another baby and even if I lost this one again, I should not worry, I will still be able to deliver another baby, and God will give me more children if I want”* (Mills et al., 2021, p. 106). Some women experienced extreme adversity following their pregnancy loss but continued to keep their faith despite this. One woman explained, *“Some of them were very understanding, others were suspecting that I was bewitched and others started saying I was HIV positive. All in all, I have kept my faith in the Lord”* (Mills et al., 2021, p. 106). Churches provided parents with emotional and physical support such as financial aid (Deitch et al., 2019). One couple described how the church’s donation allowed them to pay their hospital bill. The woman said, *“...the Church noticed that we were unable*

to pay the bill; my husband asked them to lend us the money...The Church made a contribution of \$30; we stayed with a debt of \$20” (Deitch et al., 2019, p. 292).

Explanations used to make sense of pregnancy loss

This synthesised finding was derived from twelve studies that resulted in three categories: individuals use specific terminology to refer to pregnancy loss; pregnancy loss is explained by medical causes such as diseases and physical factors and; alternative explanations can arise due to cultural beliefs and insufficient medical explanation. The third category contained two sub-categories: family curses stem from ruptures in kin relationships and financial issues, and evil spirits are attached to the mother through sorcery.

Individuals use specific terminology to refer to pregnancy loss. Parents often defined pregnancy loss based on their baby’s appearance (Christou et al., 2019; Haws et al., 2010; Kiguli et al., 2015; Kwesiga et al., 2021). One father defined stillbirth, *“What we know is that a baby comes out dead, doesn’t cry and doesn’t breathe. That shows us that the baby is a stillbirth”* (Kiguli et al., 2015, p. 3). Another father described the physical characteristics of the baby, *“The baby had died 40 days or 30 days earlier from delivery, while you push her head, it was soft, the skin of the baby was scratched, but the body of the baby was complete”* (Christou et al., 2019, p. 5).

Terminology specific to the local language was also used to describe miscarriage and stillbirth (Kiguli et al., 2015; Kwesiga et al., 2021). However, this terminology often had negative connotations relating to the value of the baby. In Uganda, miscarriage and stillbirth were referred to as ‘empunha’, which means useless, or ‘ekintu’, which means thing (Kwesiga et al., 2021, p. 7). One grandmother elaborated, *“Ekintu does not make any movements when inside the uterus and ...comes out without a skin due to the infection by the mother as this is transmitted to the baby”* (Kiguli et al., 2015, p. 3). In Bangladesh, the terminology more accurately described a medical diagnosis of miscarriage and stillbirth.

Miscarriage was referred to as ‘nosto hoye geche’, which means the foetus was terminated unintentionally, and stillbirth was referred to as ‘mora bacha hoiche’, which means the baby was born dead (Kwesiga et al., 2021, p. 7).

Explained by medical causes such as diseases and physical factors. Diseases such as syphilis were prevalent throughout low- and low-middle-income countries, and many participants identified this as the cause of their pregnancy loss (Christou et al., 2020; Jammeh et al., 2011; Kiguli et al., 2015). One father attributed the cause of stillbirth to syphilis as well as excessive heat in the womb, *“We know this disease [syphilis] can kill the baby in the womb. What I know is that they die before coming out, when syphilis is at its advance stage. It can even come out with spots on their bodies. At the end, it also causes too much heat in the body...”* (Kiguli et al., 2015, p. 3). High blood pressure was another medical condition commonly understood as a cause of pregnancy loss (Christou et al., 2020). Women described high blood pressure but were unable to name their condition as pre-eclampsia. One woman described her experience, *“I was nine months pregnant when suddenly my blood pressure went high and I had bleeding... Then I visited the hospital and the doctor did an ultrasound. She said that my baby is lost”* she went on to explain, *“I always had normal blood pressure and I have delivered other children too...”* (Christou et al., 2020, p. 548). In comparison, there were some instances where the cause of death was attributed to strenuous labour (Christou et al., 2020; Jammeh et al., 2011). One woman explained, *“...I think I have done heavy work and I might have lifted a heavy sack which caused it’s death. I had severe pain and bleeding”* (Christou et al., 2020, p. 548).

Alternative explanations can arise due to cultural beliefs and insufficient medical explanation: Family curses stem from ruptures in kin relationships and financial issues. Many cultures attributed pregnancy loss to phenomena such as family curses (Adhiambo Onyango & Mott, 2011; Chapman, 2003; Simwaka et al., 2014). This notion was prevalent in

cultures where parents had an insufficient medical explanation for their loss. One woman believed, *“Someone who is my mother’s relation did not want me to give a normal birth; she wanted me to die during delivery”* (Simwaka et al., 2014, p. 9). Family curses arise when a bride’s husband does not pay the bride’s father (Adhiambo Onyango & Mott, 2011). These curses are said to result in pregnancy loss, with one woman explaining, *“Since I got married to my husband, I gave birth to four children and the husband has not paid anything... Now that my father is annoyed and the tradition says that whenever your father is annoyed...that may have contributed to the [abortion] problem”* (Adhiambo Onyango & Mott, 2011, p. 380). The same article also highlighted that family curses may arise when the father refuses to accept the husband’s payment. The father may refuse payment if he does not approve of the husband or the husband’s tribe. One woman recalled, *“...actually from the death of my first-born, my father had cursed that his daughter should not be married by a Dinka”* (Adhiambo Onyango & Mott, 2011, p. 380).

Alternative explanations can arise due to cultural beliefs and insufficient medical explanation: Evil spirits are attached to the mother through sorcery. Pregnancy loss was said to be caused by witchcraft and sorcery usually conducted by angry family members or jealous co-wives (Ayebare et al., 2021; Chapman, 2003; Sisay et al., 2014). In some instances, this witchcraft summoned evil spirits that either possessed the pregnant woman or were present at the place of birth, causing a pregnancy loss (Ayebare et al., 2021; Chapman, 2003). A young girl accused her aunt of sending an evil spirit to cause complications in her pregnancy, *“My mother’s sister sent this spirit. She has a crazy daughter and a crazy son. She has hate. The spirit told me that it does not want me to give birth”* (Chapman, 2003, p. 367). Women who had multiple pregnancy losses were further described as a bad omen with one father explaining, *“...and you believe that maybe your wife is a bad omen or you have been bewitched”* (Ayebare et al., 2021, p. 7).

In Ghana, pregnancy loss was viewed as the result of a spiritual disease named Asram (Bakari et al., 2021). This disease was thought to be transmitted by herbalists who want women to come to them for treatment. These women feared that, *“The herbalist will intentionally be plot[ing] against a pregnant [woman], so the moment the pregnant woman even greets the herbalist, she will attack the baby in the womb with the asram”* (Bakari et al., 2021, p. 6). The same study further illustrated how exposing parts of the body, such as behind the knee, left women vulnerable to contracting Asram. One woman explained, *“If a pregnant woman dresses in such a way that exposes some vital parts of her body, if a herbalist who treats asram sees such a woman, they can easily [transfer] the asram through that vital part to the baby in the womb”* (Bakari et al., 2021, p. 8).

Experiences of care and support following pregnancy loss

This synthesised finding was derived from thirteen studies that resulted in four categories: parents can recognise danger signs during pregnancy but rely on traditional medicines; multiple barriers prevent women from receiving appropriate, timely care; limited resources affect the experiences of care received; and, poor patient-doctor communication. The second category resulted in three sub-categories: women’s lack of autonomy, economic barriers, and physical barriers.

Parents can recognise danger signs during pregnancy but rely on alternative medicines. Parents can recognise complications during pregnancy but rely on alternative

treatment (Bakari et al., 2021; Chapman, 2003; Jammeh et al., 2011; Sisay et al., 2014).

Bleeding was an indication to parents that the pregnancy was in danger and that they should seek care. One father recalled, *“...She [referring to his wife] started bleeding in the night...but we thought everything will be alright even though I know that bleeding in pregnancy is dangerous...while waiting for sunrise...we gave her holly water...but this does not help. After the local remedies failed...we thought the best thing to do was to take her to*

the hospital” (Jammeh et al., 2011, p. 4). It was common among parents to seek care from traditional healers before attending a hospital (Bakari et al., 2021; Jammeh et al., 2011). Traditional healers used herbs and holly water to treat pregnancy complications. However, in some instances, the decision to use herbal medicines was fatal. One mother referred to her daughter when she said, *“She was not feeling well the day she went into labour since the early hours of the morning...but I felt it was too early to go to the hospital so I prepared local medicine for her...We remained home until very late in the evening when she started fitting...and the baby died in the womb”* (Jammeh et al., 2011, p.4).

In comparison, communities that believed evil spirits were the cause of death engaged in practices to ward off these spirits (Sisay et al., 2014). One woman articulated, *“I myself had a stillbirth and they gave me a magical writing in a parchment to be used like a necklace during my next pregnancy. Then, when I gave birth, they took it from my neck and put it around the neck of the newborn before I made eye contact with the child. The child survived”* (Sisay et al., 2014, p. 115). Women were aware that they could seek treatment at a hospital; however, this was not the norm in most communities (Bakari et al., 2021; Sisay et al., 2014). One woman explained, *“For me I think maybe you might find a cure in the hospital too, but I have mostly witness the traditional medicine more at times for the treatment”* (Bakari et al., 2021, p. 7).

Multiple barriers prevent women from seeking appropriate, timely care:

women’s lack of autonomy. Women lacked autonomy in many cultures, which hindered their ability to make decisions about their pregnancy (Christou et al., 2020; Jammeh et al., 2011; Kopp et al., 2018; Roberts et al., 2012). Husbands and the mothers-in-law, often perceived as ‘experts’, made the decisions. Mothers-in-law, wedded to traditional views and practices, often prohibited their daughters-in-law from seeking care at a hospital, believing it to be unnecessary. One mother-in-law explained, *“I hadn’t gone to the hospital in my time,*

but still I had healthy children; therefore, I won't let her visit the hospital" (Christou et al., 2020, p. 548). Mothers-in-law, who have more power in the family hierarchy, believed that their daughters-in-law must follow their orders due to the daughters-in-law being of lower standing in the family (Christou et al., 2020; Jammeh et al., 2011; Roberts et al., 2012). One mother-in-law explained, *"She came here after marriage, now she should live here and she should die here. Always should be here [living with husband and his family], her husband her only focus"* (Roberts et al., 2012, p. 194). As a result, women often experienced feelings of powerlessness due to being excluded from decision making about their pregnancies (Christou et al., 2020). Women recognised that they were experiencing complications, but when expressed, their concerns fell on deaf ears, and no action could be taken. One woman described, *"I was so worried, but if someone [referring to her husband] doesn't accept what I say, then what can I do?"* (Christou et al., 2020, p. 548).

Multiple barriers prevent women from seeking appropriate, timely care:

economic barriers. Parents could not afford medical care, which often contributed to pregnancy loss (Adhiambo Onyango & Mott, 2011; Christou et al., 2020; Jammeh et al., 2011). Their economic situation often meant that women could not afford treatment for diseases, resulting in serious complications during their pregnancy and accusations of blame. One woman communicated, *"He told me I am the one who caused this problem because I did not go for treatment for syphilis...I told him yesterday that I did not have money"* (Adhiambo Onyango & Mott, 2011, p. 381). A common economic barrier described by fathers was being able to afford transportation to the hospital (Christou et al., 2020; Jammeh et al., 2011). These fathers often spent hours collecting money from supportive neighbours. One father explained, *"When the decision was reached to take her [his wife] to the hospital...I did not have any money on me...I had to borrow some money from a neighbour that night which was not enough...it took me two hours to raise this amount...and to beg the taxi driver to assist*

and accept the money in order to save wife's life" (Jammeh et al., 2011, p. 5). Some fathers had to sell their livestock to afford care which had lasting impacts; financially recovery would take years. One woman stated, *"He [her husband] gave us the little money he had on him...to raise more money he initially sold his goat and later on his sheep...We are farmers so we barely have enough for the family to upkeep not to mention about emergency funds"* (Jammeh et al., 2011, p. 5).

Multiple barriers prevent women from seeking appropriate, timely care:

physical barriers. Physical barriers such as distance to healthcare facilities prevented women from seeking care (Christou et al., 2020; Jammeh et al., 2011). Displacement occurred in many countries due to war and conflict. As a result, pregnant women who were displaced encountered challenges finding care. One woman recalled, *"I had a nine-month pregnancy but there was a battle in our village and I was in Kunduz. We left the house and escaped and came toward Kabul...We had travelled some distance then I got sick, my mother-in-law said that she needed to find a hospital...Then my father-in-law took me to one of our relatives' houses and I delivered the baby there, but it was dead"* (Christou et al. 2020. p. 549). Parents living in rural villages had to use multiple modes of transport, which caused a delay in receiving care (Jammeh et al., 2011). In some instances, parents spent an entire day travelling to healthcare facilities, which was physically and emotionally exhausting and appeared to contribute to adverse outcomes. One mother described her experience, *"We left home late in the evening with a donkey cart in order to get to the main high way...this is the only means of transport we have. It was moving very slowly because the road condition was very bad...and...the place was getting dark. We reached the main high way after three hours...all this time I was bleeding with severe abdominal pains. Luckily...shortly after reaching the high way one private car gave us a lift to the hospital...but the baby was not born alive"* (Jammeh et al., 2011, p. 4).

Limited resources affect the experience of care received. Low- and low-middle-income countries often had limited resources which impacted the quality of care parents received (Christou et al., 2020; Christou et al., 2021; Simwaka et al., 2014). There was limited space in healthcare facilities, so mothers who had experienced pregnancy loss shared a ward with mothers who had given birth to live babies. Watching other mothers breastfeed and care for their healthy newborns intensified the grieving experience (Christou et al., 2021; Mills et al., 2021). One mother shared her experience, “...then after that delivery and the incident of losing my child I was being put in the same room with other women holding their baby. I felt very bad because I too wanted to hold mine and feel like them” (Mills et al., 2021, p. 106).

Not only were resources limited, but staff were not always adequately trained. Healthcare workers had poorly functioning equipment or struggled to use equipment such as ultrasounds, delaying the detection of pregnancy loss (Christou et al., 2020). A father explained, “...because sometimes the machine of the ultrasound may not work well, or sometimes the doctor is not able to point out the problem. That is why it is better to do the ultrasound with other doctors as well” (Christou et al., 2020, p. 551).

Also, women often felt that they were not a priority once their babies had died (Mills et al., 2021). Rather, women expressed being made to feel like a burden, with one woman being told by a healthcare worker, “What do you want us to help you with? Your thing has already died, for us we save those who are still alive, if your baby is still alive, we could have saved him. So, on that note, help yourself because we also have no way of saving you” (Mills et al., 2021, p. 105). In stark contrast, healthcare workers in the Democratic Republic of Congo greeted women who attended a health facility with kindness (Deitch et al., 2019). Such kindness helped women navigate their grief and mourn their child in a safe space where they felt understood. A woman recalled her experience with a healthcare worker, “[The

provider] told me that I will be restored, I will be cured and not to have bitterness about miscarrying, I will still be able to have another pregnancy. But he told me with how much I have suffered, I deserve care so that my health will recover so I can get pregnant again” (Deitch et al., 2019, p. 291).

Poor patient-doctor communication. Healthcare providers delayed informing parents of their pregnancy loss because they feared it would negatively affect the mother’s health (Christou et al., 2019; Christou et al., 2021; Mills et al., 2021). As a result, parents were kept in the dark for hours before being informed that their baby had died. One woman recalled how she found out that her baby had died when her ultrasound scan was explained to medical students. She remembered, *“She told them, ‘when this happens, I hear when the placenta detaches from the baby!’ Something like that ‘the baby suffocates, if the baby is not getting oxygen, so this has led to the death, so the baby has died’.* *She did not tell me direct, but she told them, and I was listening, yes. So I realised that my baby was no more”* (Mills et al., 2021, p. 105).

When parents were informed of their baby’s death, they usually were not given an explanation (Christou et al., 2021; Simwaka et al., 2014). One mother recalled, *“After the child was born, my mother said it was a boy. I was just given this much information, and no one came out [to tell us] then. When they came out after one hour and we asked, they said the child had died we have no idea why”* (Christou et al., 2021, p. 5). Parents who were given a reason for their pregnancy loss felt that they could move forward (Deitch et al., 2019). These parents reported that healthcare workers had taken the time to sit with them and explain the cause of death. One woman said, *“Yes, we have discussed enough with him. He consoled me by helping me to understand what happened: it happened, better to hope for the next pregnancy and I should forget the past, and like this for 3 days, he comforted me until I was healed”* (Deitch et al., 2019, p. 291). When the cause was unknown or not communicated,

nurses comforted parents by reassuring them that it was God's will (Christou et al., 2021; Simwaka et al., 2014). Women felt that these nurses helped them look forward to the future, with one woman articulating, "*She said I should not worry too much because that is how God planned it, He gives and takes away so maybe God will give me another gift at a later time*" (Simwaka et al., 2014, p. 10).

Discussion

Overview

Pregnancy loss is an unexpected pregnancy outcome faced by parents worldwide. This study aimed to explore the experiences of pregnancy loss in low- and low-middle-income countries. Results from the included studies resulted in three synthesised findings relating to (1) parents' experiences and management of grief after pregnancy loss, (2) the explanations used to make sense of pregnancy loss, and (3) the experiences of care and support following pregnancy loss. The strengths and limitations of the current study are carefully evaluated, and directions for future research are suggested. In addition, recommendations for healthcare professionals caring for pregnant women in and from low- and low-middle-income countries are provided.

Summary of Findings

Experiences and management of grief after pregnancy loss

The current meta-synthesis summarised how men and women experienced and managed grief following pregnancy loss. Parents reported feeling an initial sense of shock followed by sadness, described as painful. These feelings were consistent with previous systematic reviews where grief manifested itself into emotional symptoms such as depression and anxiety and physical symptoms such as chronic pain and fatigue (Burden et al., 2016; Shakespeare et al., 2018). The current synthesis also explored women's experiences of blame and rejection resulting from societal expectations. This finding builds upon existing literature that has explored the concept of accountability following pregnancy loss. The literature has

demonstrated how a woman's perceived role as a child-bearer frames her as accountable for the loss leading to rejection from the wider community (De Kok, 2019; Pollock et al., 2020). A unique finding in this meta-synthesis was that cultural norms and superstitions influenced pregnancy and pregnancy loss disclosure. Several women reported that disclosing their pregnancy to others left their unborn child vulnerable to witchcraft and when a pregnancy loss occurred, often it was not considered culturally appropriate to discuss.

Previous quantitative studies have found that parents are rarely provided with opportunities to create mementoes; in one study, none of the participants could hold, take pictures of or name their baby (Kuti & Ilesanmi, 2011). The current meta-synthesis provided further insight into these experiences highlighting that parents were not provided with these opportunities because elders and healthcare staff assumed it would be too distressing, particularly when the mother had experienced traumatic labour or was in a critical condition. Women in critical condition following their pregnancy loss reported drawing strength from their faith. In addition, parents often described how their faith allowed them to navigate their grief and hope for future children. This finding was consistent with previous systematic reviews that have reported that religious activities are used to reduce stress during pregnancy and as a means of managing grief following pregnancy loss (Burden et al., 2016; Guardino & Schetter, 2014).

Explanations used to make sense of pregnancy loss

A new finding that arose from the current meta-synthesis was the terminology used to refer to pregnancy loss. The terminology often reflected the unborn baby's perceived value, which varied across communities according to their cultural beliefs. In addition, parents attributed the cause of pregnancy loss to syphilis and high blood pressure, with some parents reporting that the cause was due to strenuous labour. This finding was consistent with a past systematic review that found diabetes, hypertensive disorders and syphilis were the most

common maternal conditions associated with stillbirth in low-income countries (Aminu et al., 2014). However, previous literature has suggested that while pregnancy loss is a medical occurrence, it also reflects cultural beliefs (Crockett et al., 2021).

The current meta-synthesis further explored this concept and provided insight into the cultural beliefs that shape understandings of pregnancy loss. Parents attributed pregnancy loss to phenomena such as family curses that stemmed from ruptures in kinship relationships. They also attributed pregnancy loss to evil spirits which were said to be sent by angry family members and jealous co-wives. This finding was consistent with previous systematic reviews and meta-syntheses that have explored how spiritual beliefs are used in the absence of medical explanations, increasing the stigma surrounding pregnancy loss (Finlayson & Downe, 2013; Shakespeare et al., 2018).

Experiences of care and support following pregnancy loss

The current meta-synthesis described how parents recognised complications during pregnancy but relied on traditional medicines and healers. Past literature has further explained how women perceive pregnancy as a healthy natural state and; hence, see medical interventions such as ultrasounds and heart monitoring as unnecessary (Ahmad et al., 2019; Finlayson & Downe, 2013). Previous literature has also highlighted how, in some cultures, family hierarchies impact decision-making (Bohren et al., 2014; Finlayson & Downe, 2013). This impact was seen in the current meta-synthesis, where mothers-in-law were positioned as the primary decision-maker during a woman's pregnancy. They valued traditional medicine over modern medicine and prevented their daughters-in-law from seeking care at a hospital.

Economic and physical barriers further prevented parents from seeking appropriate, timely care. Parents often could not afford emergency transportation and, as a result, had to use multiple modes of transport to reach a healthcare facility, increasing the chances of pregnancy loss. These barriers were consistent with previous literature from low-income

countries, which have outlined how healthcare facilities are poorly located, making it difficult for parents to access care (Alaofe et al., 2020; Kyei-Nimakoh et al., 2017). The most common modes of transport are public transport; however, access is intermittent in rural areas (Bohren et al., 2014; Kyei-Nimakoh et al., 2017). The current meta-synthesis explored how limited resources and inadequately trained staff impacted the quality of care parents received. Healthcare providers delayed informing parents of their pregnancy loss and rarely explained the loss. Previous systematic reviews have described how lack of resources leads to overcrowded birthing suites and, as a result, healthcare staff are slow to respond to the needs of their patients, leading to unattended births (Ameyaw et al., 2020; Bohren et al., 2014). Literature has also shown that due to a lack of post-mortem investigations, the cause of stillbirths is usually unknown, leaving parents without any explanation (Aminu, 2014; Bedwell et al., 2021).

Methodological considerations

The current meta-synthesis adhered to rigorous research and reporting methodology, including following PRISMA guidelines (Page et al., 2021), assessing the reporting quality of eligible articles using the Quallsyst checklist (Kmet et al., 2004) and using the ENTREQ checklist (Tong et al., 2012) to guide reporting of the findings. The researcher co-screened a proportion of eligible studies with the research supervisor and a proportion of the reporting quality of eligible studies with another student researcher and the research supervisor. This ensured the inclusion of relevant, high-quality studies as only studies above the most conservative quality cut-off score were included. To the author's knowledge, this is the first meta-synthesis to explore pregnancy loss experiences in low- and low-middle-income countries. The meta-synthesis further explored the care and support received at healthcare facilities; thus, these findings produced recommendations that can aid evidence-based practice. The design allowed the aggregation of studies from multiple countries worldwide,

with the sample derived from fifteen countries from Sub-Saharan Africa and South Asia, increasing the generalisability of the findings. The high number of participants also increased the trustworthiness of the results.

The aggregation of studies from multiple countries meant that cultural norms impacted the data. These norms influence the disclosure of personal matters, which could have prevented some participants from revealing their pregnancy loss experiences. For example, in some cultures, such matters can only be spoken about in the third person, meaning participants who referred to their friends' experiences may have been detailing their own accounts. As a result, insightful extracts, not recognised as firsthand accounts, may have been excluded.

Furthermore, participants in the current meta-synthesis reported that they could only disclose pregnancy loss experiences if they had an existing trusting relationship with the disclosure recipient. Therefore, it is important to consider whether the interviewers from the included studies had built sufficient rapport with their participants before interviewing them as this may have influenced their responses. Also, whether interviewers were members of the community may have influenced data collection. For example, some participants may have been more forthcoming had someone they trusted from their community been the interviewer. Conversely, other participants may have been less likely to open up to a community member to avoid sharing sensitive information that could lead to community rejection.

The researcher's perspective as a young, white female living in a high-income country may have influenced data interpretation. Not living in a low-income country and having no experience of pregnancy loss meant that the researcher had no shared experiences to draw from. However, this may have also allowed the researcher to have an open, objective approach during data interpretation. The researcher also mitigated the risk of bias through self-reflection and discussion with the research supervisor.

In addition, the current meta-synthesis only included studies published in English in peer-reviewed journals. However, such refined searches are deemed suitable for meta-synthesis (Booth, 2016). Finally, while the findings were derived from several low- and low-middle-income countries, the recommendations suggested may not be culturally appropriate for all low- and low-middle-income countries.

Future directions

Research needs to be conducted in countries from Oceania such as the Philippines, Solomon Islands and Vanuatu because it is likely that parents in these countries have separate and unique experiences of pregnancy loss compared to parents in the current synthesis. In addition, the current synthesis included several countries that have experienced conflict; however, only one participant reported how this influenced her pregnancy loss experience. Research in countries affected by conflict, such as Iraq, Syria, and Yemen would be beneficial because displacement can adversely impact experiences of pregnancy and pregnancy loss (Gibson-Helm et al., 2015; Keasley et al., 2017; Levey et al., 2018). Furthermore, while previous literature has reported the impact of domestic violence on pregnancy outcomes (Clarke et al., 2019; Pool et al., 2014; Silverman et al., 2007; Tenkorang, 2019; Tirunch et al., 2018), few women in the current meta-synthesis mentioned domestic violence. Minimal reporting in the current studies may have occurred due to women's husbands or mothers-in-law being present during most home interviews. Therefore, future research should create safe spaces for women to discuss their experiences of violence and should refer women to appropriate aid when these experiences are shared.

Implications of the findings

Table 5 summarises recommendations for healthcare professionals caring for pregnant women in and from low- and low-middle-income countries.

Table 5

Implications of Findings for Clinical Practice in Low- and Low-Middle-Income Countries and Australia

Clinical Recommendations For Low- and Low-Middle-Income Countries

Education and awareness

- Healthcare professionals should raise awareness of pregnancy loss among community members and educate them about medical explanations of pregnancy loss.
- Healthcare professionals should collaborate with community leaders and elders to improve education and understanding of pregnancy loss within the community.
- Healthcare professionals should collaborate with traditional healers to ensure alternative treatments and medicines being used within the community are safe.
- Healthcare professionals should teach women to recognise danger signs during pregnancy and encourage them to access care at a health facility as soon as possible.
- Midwives should assist parents in developing a pregnancy plan so that they are prepared in the event of a pregnancy complication.
- Midwives should regularly monitor pregnant women especially those with pre-existing health conditions to ensure they are being treated.

Care and support after pregnancy loss

- Where possible, better access to emergency transportation should exist in the event of a pregnancy complication, especially for those living in rural villages.
- Healthcare professionals should acknowledge parents who have experienced a pregnancy loss as parents and treat them with respect and kindness.
- Healthcare professionals should offer parents the opportunity to hold their baby, facilitate skin to skin contact and participate in memory-making practices.
- Hospitals should improve discharge practices so mothers have an appropriate amount of time to grieve and can be provided with information about their loss.
- Healthcare professionals should acknowledge parents' religious and spiritual beliefs and be respectful of such beliefs when providing care.

Clinical Recommendations for Australia

Education and awareness

- Healthcare professionals should seek to understand cultural beliefs surrounding pregnancy loss held by parents from low- and low-middle-income countries.
- Healthcare professionals should respect cultural beliefs while also educating parents about pregnancy and pregnancy loss in a sensitive manner.
- Healthcare professionals should recognise existing family hierarchies and, when appropriate, should involve other family members during education and care.
- Healthcare professionals should educate women about danger signs during pregnancy and encourage them to seek care as soon as possible.
- Midwives should assist parents in developing a pregnancy plan so that the parents are prepared in the event of a pregnancy complication.
- Healthcare professionals should connect pregnant women from low- and low-middle-income countries with one another as a form of support.

Care and support after pregnancy loss

- Healthcare professionals should, when known, take the time to carefully and accurately explain the cause of the pregnancy loss to parents and their families.
 - Healthcare professionals should acknowledge the religious beliefs and practices surrounding pregnancy loss for parents from low- and low-middle-income countries.
 - In the case of stillbirth, healthcare professionals should offer parents to hold their baby, facilitate skin to skin contact and engage in memory-making practices.
 - Healthcare professionals should respect parents' alternative ways of mourning and understand that gestational age influences burial practices in some cultures.
 - Parents should be provided with access to support services and support groups, preferably with culturally similar peers.
-

Implications for low- and low-middle-income countries

The socioecological model uses a holistic approach to understand several factors contributing to the grieving experience (Obst et al., 2020; 2021). These factors should be considered when developing recommendations for evidence-based practice. Interpersonal, community, and public policy factors should be carefully considered because they directly impact the individual experience (Chung et al., 2018; Maleku & Pillai, 2016). Interpersonal and community factors can increase understandings and improve health behaviour; thus, directly impacting the individual experience of pregnancy loss (Chung et al., 2018; Maleku & Pillai, 2016).

The researcher acknowledges that women should be empowered to have bodily autonomy and be responsible for decisions regarding their pregnancy. However, it is important to recognise that women in some countries, including some low-income countries, are abused, divorced, disowned and rejected for acting against their husbands and families (Adhiambo Onyango & Mott, 2011; Roberts et al., 2012; Sisay et al., 2014). Thus, women's safety must come first, and so it may be safer to accomplish change by working with community leaders and elders.

Previous literature has reported that elders are responsible for passing down knowledge and are perceived as credible sources of information to counsel and support community members (Busija et al., 2020; Flicker et al., 2015; Varcoe et al., 2010). Therefore, researchers and clinicians should consult with elders on the cultural and spiritual beliefs that influence understandings of pregnancy loss. Elders can then collaborate with healthcare professionals on educating families about the medical causes of pregnancy loss while respecting existing beliefs.

The education should aim to reduce decision delays because past literature has shown that decision delays lasting more than an hour increase the risk of maternal and perinatal

deaths (Chavane et al., 2018; Hirose et al., 2012). Therefore, improving awareness about pregnancy complications and the importance of seeking prompt care is essential. Awareness should be raised among the mothers and mothers-in-law of pregnant women as they are the primary decision-makers in most low-income countries. Furthermore, healthcare professionals need further medical training in pregnancy loss and bereavement care. With such training, these professionals are well-placed to assist parents as they live in affected communities and share similar cultural beliefs.

Implications for Australia

The results of this meta-synthesis also have implications for Australian healthcare professionals caring for pregnant women from low- and low-middle-income countries. In 2020, approximately 509,600 people migrated to Australia (Australian Bureau of Statistics, 2021). More specifically, 67,912 people came from South-East Asia, while 17,462 came from Sub-Saharan Africa (Australian Bureau of Statistics, 2021). Therefore, healthcare professionals must use practices and policies to ensure quality care while respecting parents' cultural norms and beliefs.

The Perinatal Society of Australia and New Zealand (2020) developed guidelines for healthcare professionals to improve parents' quality of care after pregnancy loss. Several of their guidelines apply to parents in high- and low-income countries. For example, avoiding cultural stereotypes or cultural-based assumptions; recognising parents' cultural or spiritual needs; offering contact with support services; determining whether parents need an interpreter; and being aware of histories of trauma and loss (Perinatal Society of Australia and New Zealand, 2020). These guidelines acknowledge that parents may need an interpreter but do not recognise that parents from low-income countries have the lowest literacy rates in the world; South Sudan, Afghanistan, Burkina Faso and Niger have literacy rates below 45% (The World Bank, 2020). Thus, healthcare professionals must communicate pregnancy loss

in alternative ways such as using non-medical language; supplementing written information with verbal information; using pictures and videos to improve patients understanding; and creating an environment where patients feel comfortable asking questions (Dennison Himmelfarb & Hughes, 2011; Schwartzberg et al., 2007).

The guidelines also do not recognise the importance of family hierarchies in some cultures. Women are sometimes positioned lower in family hierarchies and have less contribution in decisions and thus, healthcare professionals should encourage parents to collaborate on decisions regarding pregnancy (Christou et al., 2020; Jammeh et al., 2011; Roberts et al., 2012). Furthermore, the guidelines do not recognise that many women from culturally and linguistically diverse backgrounds value traditional medicine over modern medicine and that due to the importance of these beliefs, they will continue to influence their health behaviours (Shewamene et al., 2020; Van Andel & Westers, 2010). Therefore, healthcare professionals should be aware of these alternative treatments and ensure they are safe. In addition, they should acknowledge the value of these treatments while educating women about the value of modern medicine.

Conclusion

This meta-synthesis explored experiences of pregnancy loss in low- and low-middle-income countries. The findings were derived from 18 studies from 15 countries. The findings addressed the experiences and management of grief after pregnancy loss, the explanations used to make sense of pregnancy loss, and the experiences of care and support following pregnancy loss. In order to improve the care and support provided to these families we must utilise socioecological approaches that are sensitive to cultural norms and beliefs. In addition, further research must be conducted in under-reported low-income countries that may be influenced by a unique set of cultural norms and values. The recommendations that evolve

from these studies must ensure the care provided to parents is culturally sensitive and appropriate.

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*Denotes studies included in the current meta-synthesis

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Appendix A: Complete Search Grids for Electronic Database Searches

PubMed	Pregnancy Loss AND →	Low-Income Countries AND →	Qualitative Research
	<p>"abortion, spontaneous" [mh] OR spontaneous abortion*[tiab] OR "stillbirth"[mh] OR stillbirth*[tiab] OR still birth*[tiab] OR stillborn*[tiab] OR still born*[tiab] OR "fetal death"[mh] OR fetal death*[tiab] OR foetal death*[tiab] OR fetus death*[tiab] OR foetus death*[tiab] OR "perinatal death"[mh] OR perinatal death*[tiab] OR peri natal death*[tiab] OR peri-natal death*[tiab] OR perinatal loss*[tiab] OR peri natal loss*[tiab] OR peri-natal loss*[tiab] OR "perinatal mortality"[mh] OR perinatal mortalit*[tiab] OR peri natal moralit*[tiab] OR peri-natal mortalit*[tiab] OR "pregnancy, ectopic"[mh] OR ectopic pregnanc*[tiab] OR miscarriage*[tiab] OR pregnancy loss*[tiab]</p>	<p>"developing countries"[mh] OR developing countr*[tiab] OR developing nation*[tiab] OR underdeveloped countr*[tiab] OR under- developed countr*[tiab] OR underdeveloped nation*[tiab] OR under-developed nation*[tiab] OR less developed countr* [tiab] OR less-developed countr*[tiab] OR less developed nation*[tiab] OR less- developed nation*[tiab] OR third world countr*[tiab] OR third-world countr*[tiab] OR third world nation*[tiab] OR third-world nation*[tiab] OR low income countr*[tiab] OR low-income countr*[tiab] OR low income nation*[tiab] OR low-income nation*[tiab] OR Afghanistan [tiab] OR Burkina Faso [tiab] OR Burundi [tiab] OR Central African Republic [tiab] OR Chad [tiab] OR Congo [tiab] OR Eritrea [tiab] OR Ethiopia [tiab] OR Gambia [tiab] OR Guinea [tiab] OR Guinea- Bissau [tiab] OR Haiti [tiab] OR Liberia [tiab] OR Madagascar [tiab] OR Malawi [tiab] OR Mali [tiab] OR Mozambique [tiab] OR Niger [tiab] OR Rwanda [tiab] OR Sierra Leone [tiab] OR Somalia [tiab] OR South Sudan [tiab] OR Sudan [tiab] OR Syrian Arab Republic [tiab] OR Tajikistan [tiab] OR Togo [tiab] OR Uganda [tiab] OR Yemen [tiab]</p>	<p>"qualitative research"[mh:noexp] OR qualitative*[tw] OR "focus groups"[mh] OR focus group*[tw] OR interview*[tw] OR thematic analys*[tw] OR content analys*[tw] OR experience*[tw] OR perspective*[tw] OR interpretative phenomenolog*[tw] OR ethnograph*[tw] OR case stud*[tw] OR narrative*[tw]</p>
PsychInfo	Pregnancy Loss AND →	Low-Income Countries AND →	Qualitative Research

	<p>spontaneous abortion.sh OR spontaneous abortion*.ti,ab OR stillbirth*.ti,ab OR still birth*.ti,ab OR stillborn*.ti,ab OR still born*.ti,ab OR fetal death*.ti,ab OR foetal death*.ti,ab OR fetus death*.ti,ab OR foetus death*.ti,ab OR perinatal death*.ti,ab OR peri natal death*.ti,ab OR peri-natal death*.ti,ab OR perinatal loss*.ti,ab OR peri natal loss*.ti,ab OR peri- natal loss*.ti,ab OR perinatal mortalit*.ti,ab OR peri natal mortalit*.ti,ab OR peri-natal mortalit*.ti,ab OR ectopic pregnanc*.ti,ab OR miscarriage*.ti,ab OR pregnancy loss*.ti,ab</p>	<p>developing countries.sh OR developing countr*.ti,ab OR developing nation*.ti,ab OR underdeveloped countr*.ti,ab OR under- developed countr*.ti,ab OR underdeveloped nation*.ti,ab OR under-developed nation*.ti,ab OR less developed countr*.ti,ab OR less-developed countr*.ti,ab OR less developed nation*.ti,ab OR less-developed nation*.ti,ab OR third world countr*.ti,ab OR third-world countr*.ti,ab OR third world nation*.ti,ab OR third-world nation*.ti,ab OR low income countr*.ti,ab OR low-income countr*.ti,ab OR low income nation*.ti,ab OR low-income nation*.ti,ab OR Afghanistan.ti,ab OR Burkina Faso.ti,ab OR Burundi.ti,ab OR Central African Republic.ti,ab OR Chad.ti,ab OR Congo.ti,ab OR Eritrea.ti,ab OR Ethiopia.ti,ab OR Gambia.ti,ab OR Guinea.ti,ab OR Guine- Bissau.ti,ab OR Haiti.ti,ab OR Liberia.ti,ab OR Madagascar.ti,ab OR Malawi.ti,ab OR Mali.ti,ab OR Mozambique.ti,ab OR Niger.ti,ab OR Rawanda.ti,ab OR Sierra Leone.ti,ab OR Somalia.ti,ab OR South Sudan.ti,ab OR Sudan.ti,ab OR Syrian Arab Republic.ti,ab OR Tajikistan.ti,ab OR Togo.ti,ab OR Uganda.ti,ab OR Yemen.ti,ab</p>	<p>qualitative methods.sh OR qualitative*.tw OR focus group.sh OR focus group*.tw OR interviews.sh OR interview*.tw OR thematic analysis.sh OR thematic analys*.tw OR content analysis.sh OR content analys*.tw OR experience*.tw OR perspective*.tw OR interpretative phenomenological analysis.sh OR interpretative phenomenolog*.tw OR ethnography.sh OR ethnograph*.tw OR case stud*.tw OR narratives.sh OR narrative*.tw</p>
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Embase	Pregnancy Loss AND →	Low-Income Countries →	Qualitative Research
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	<p>"spontaneous abortion"/de OR "spontaneous abortion*":ti,ab OR "stillbirth"/de OR "stillbirth*":ti,ab OR "still birth*":ti,ab OR "stillborn*":ti,ab OR "still born*":ti,ab OR "fetus death"/de OR "fetus death*":ti,ab OR "foetus death*":ti,ab OR "fetal death*":ti,ab OR "foetal death*":ti,ab OR "perinatal death"/de OR "perinatal death*":ti,ab OR "peri natal death*":ti,ab OR "peri-natal death*":ti,ab OR "perinatal loss*":ti,ab OR "peri natal loss*":ti,ab OR "peri-natal loss*":ti,ab OR "perinatal mortalit*":ti,ab OR "peri natal mortalit*":ti,ab OR "peri-natal mortalit*":ti,ab OR "ectopic pregnancy"/de OR "ectopic pregnanc*":ti,ab OR "miscarriage*":ti,ab OR "pregnancy loss*":ti,ab</p>	<p>"developing country"/de OR "developing countr*":ti,ab OR "developing nation*":ti,ab OR "underdeveloped countr*":ti,ab OR "under-developed countr*":ti,ab OR "underdeveloped nation*":ti,ab OR "under-developed countr*":ti,ab OR "less developed nation*":ti,ab OR "less-developed countr*":ti,ab OR "less developed nation*":ti,ab OR "less-developed nation*":ti,ab OR "third world countr*":ti,ab OR "third-world countr*":ti,ab OR "third world nation*":ti,ab OR "third-world nation*":ti,ab OR "low income countr*":ti,ab OR "low-income countr*":ti,ab OR "low income nation*":ti,ab OR "low-income nation*":ti,ab OR "Afghanistan":ti,ab OR "Burkina Faso":ti,ab OR "Burundi ":ti,ab OR "Central African Republic ":ti,ab OR "Chad":ti,ab OR "Congo":ti,ab OR "Eritrea":ti,ab OR "Ethiopia":ti,ab OR "Gambia":ti,ab OR "Guinea":ti,ab OR "Guinea-Bissau":ti,ab OR "Haiti":ti,ab OR "Liberia":ti,ab OR "Madagascar":ti,ab OR "Malawi":ti,ab OR "Mali":ti,ab OR "Mozambique":ti,ab OR "Niger":ti,ab OR "Rwanda":ti,ab OR "Sierra Leone":ti,ab OR "Somalia":ti,ab OR "South Sudan":ti,ab OR "Sudan":ti,ab OR "Syrian Arab Republic":ti,ab OR "Tajikistan":ti,ab</p>	<p>"qualitative research"/de OR "qualitative*":ti,ab OR "focus group*":ti,ab OR "interview"/de OR "interview*":ti,ab OR "thematic analysis"/de OR "thematic analys*":ti,ab OR "content analysis"/de OR "content analys*":ti,ab OR "personal experience"/de OR "personal experience*":ti,ab OR "experience*":ti,ab OR "perspective*":ti,ab OR "interpretative phenomenolog*":ti,ab OR "ethnography"/de OR "ethnograph*":ti,ab OR "case study"/de OR "case stud*":ti,ab OR "narrative"/de OR "narrative*":ti,ab</p>
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		OR "Togo":ti,ab OR "Uganda":ti,ab OR "Yemen":ti,ab	
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CINAHL	Pregnancy Loss AND →	Low-Income Countries AND →	Qualitative Research
	MH "abortion, spontaneous" OR TI "spontaneous abortion*" OR AB "spontaneous abortion*" OR TI "stillbirth*" OR AB "stillbirth*" OR TI "still birth*" OR AB "still birth*" OR TI "stillborn*" OR AB "stillborn*" OR TI "still born*" OR AB "still born*" OR TI "fetal death*" OR AB "fetal death*" OR TI "foetal death*" OR AB "foetal death*" OR TI "fetus death*" OR AB "fetus death*" OR TI "foetus death*" OR MH "perinatal death" OR TI "perinatal death*" OR AB "perinatal death*" OR TI "peri natal death*" OR AB "peri natal death*" OR TI "peri-natal death*" OR AB "peri-natal death*" OR TI "perinatal loss*" OR AB "perinatal loss*" OR TI "peri natal loss*" OR AB "peri natal loss*" OR TI "peri-natal loss*" OR AB "peri-natal loss*" OR TI "perinatal mortalit*" OR AB	MH "developing countries" OR TI "developing countr*" OR AB "developing countr*" OR TI "developing nation*" OR AB "developing nation*" OR TI "underdeveloped countr*" OR AB "underdeveloped countr*" OR TI "under-developed countr*" OR AB "under-developed countr*" OR TI "underdeveloped nation*" OR AB "underdeveloped nation*" OR TI "under-developed nation*" OR AB "under-developed nation*" OR TI "less developed countr*" OR AB "less developed countr*" OR TI "less-developed countr*" OR AB "less developed countr*" OR TI "less developed nation*" OR AB "less developed nation*" OR TI "less-developed nation*" OR AB "less-developed nation*" OR TI "third world countr*" OR AB "third world countr*" OR TI "third-world countr*" OR AB "third world nation*" OR AB "third world nation*" OR TI "third-world nation*" OR AB "third-world nation*" OR TI "low income countr*" OR AB "low income countr*" OR TI "low-income countr*" OR AB "low-	MH "qualitative studies" OR TX "qualitative" OR MH "focus groups" OR TX "focus group*" OR MH "interviews" OR TX "interview*" OR MH "thematic analysis" OR TX "thematic analys*" OR MH "content analysis" OR TX "content analys*" OR MH "life experiences" OR TX "life experience*" OR TX "experience*" OR TX "perspective*" OR TX "interpretative phenomenolog*" OR TX "ethnograph*" OR MH "case studies" OR TX "case stud*" OR MH "narratives" OR TX "narrative*"

	<p>"perinatal mortalit*" OR TI "peri natal mortalit*" OR AB "peri natal mortalit*" OR TI "peri-natal mortalit*" OR AB "peri-natal mortalit*" OR MH</p> <p>"pregnancy,ectopic" OR TI "ectopic pregnanc*" OR AB "ectopic pregnanc*" OR TI "miscarriage*" OR AB "miscarriage*" OR TI</p> <p>"pregnancy loss*" OR AB "pregnancy loss*"</p>	<p>income countr*" OR TI "low income nation*" OR AB "low income nation*" OR TI "low-income nation*" OR AB "low-income nation*" OR TI "Afghanistan" OR AB "Afghanistan" OR TI "Burkina Faso" OR AB "Burkina Faso" OR TI "Burundi" OR AB "Burundi" OR TI "Central African Republic" OR AB "Central African Republic" OR TI "Chad" OR AB "Chad" OR TI "Congo" OR AB "Congo" OR TI "Eritrea" OR AB "Eritrea" OR TI "Ethiopia" OR AB "Ethiopia" OR TI "Gambia" OR AB "Gambia" OR TI "Guinea" OR AB "Guinea" OR TI "Guinea-Bissau" OR AB "Guinea-Bissau" OR TI "Haiti" OR AB "Haiti" OR TI "Liberia" OR AB "Liberia" OR TI "Madagascar" OR AB "Madagascar" OR TI "Malawi" OR AB "Malawi" OR TI "Mali" OR AB "Mali" OR TI "Mozambique" OR AB "Mozambique" OR TI "Niger" OR AB "Niger" OR TI "Rwanda" OR AB "Rwanda" OR TI "Sierra Leone" OR AB "Sierra Leone" OR TI "Somalia" OR AB "Somalia" OR TI "South Sudan" OR AB "South Sudan" OR TI "Sudan" OR AB "Sudan" OR TI "Syrian Arab Republic" OR AB "Syrian Arab Republic" OR TI "Tajikistan" OR AB "Tajikistan" OR TI "Togo" OR AB "Togo" OR TI "Uganda" OR AB "Uganda" OR TI "Yemen" OR AB "Yemen"</p>	
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Scopus	Pregnancy Loss AND →	Low-Income Countries AND →	Qualitative Research
	TITLE-ABS("spontaneous abortion" OR "stillbirth*" OR "still birth*" OR "stillborn*" OR "fetal death*" OR "foetal death*" OR "fetus death*" OR "foetus death*" OR "perinatal death*" OR "peri natal death*" OR "peri-natal death*" OR "perinatal loss*" OR "peri natal loss*" OR "peri-natal loss*" OR "perinatal mortalit*" OR "peri natal mortalit*" OR "peri-natal mortalit*" OR "ectopic pregnanc*" OR "miscarriage*" OR "pregnancy loss*")	TITLE-ABS("developing countr*" OR "developing nation*" OR "underdeveloped countr*" OR "under-developed countr*" OR "underdeveloped nation*" OR "under-developed nation*" OR "less developed countr*" OR "less-developed countr*" OR "less developed nation*" OR "less-developed nation*" OR "third world countr*" OR "third-world countr*" OR "third world nation*" OR "third-world nation*" OR "low income countr*" OR "low-income countr*" OR "low income nation*" OR "low-income nation*" OR "Afghanistan" OR "Burkina Faso" OR "Burundi" OR "Central African Republic" OR "Chad" OR "Congo" OR "Eritrea" OR "Ethiopia" OR "Gambia" OR "Guinea" OR "Guinea-Bissau" OR "Haiti" OR "Liberia" OR "Madagascar" OR "Malawi" OR "Mali" OR "Mozambique" OR "Niger" OR "Rwanda" OR "Sierra Leone" OR "Somalia" OR "South Sudan" OR "Sudan" OR "Syrian Arab Republic" OR "Tajikistan" OR "Togo" OR "Uganda" OR "Yemen")	TITLE-ABS-KEY ("qualitative research" OR "qualitative*" OR "focus group*" OR "interview*" OR "thematic analys*" OR "content analys*" OR "experience*" OR "perspective*" OR "interpretative phenomenolog*" OR "ethnograph*" OR "case stud*" OR "narrative*")

Sociological abstracts	Pregnancy Loss AND →	Low-Income Countries AND →	Qualitative Research
	TIAB("spontaneous abortion" OR "stillbirth*" OR "still birth" OR "stillborn*" OR "still born*" OR "fetal death*" OR "foetal death*" OR "fetus death*" OR "foetus death" OR "perinatal death*" OR "peri natal death*" OR "peri-natal death*" OR "perinatal loss*" OR "peri natal loss*" OR "peri-natal loss*" OR "perinatal mortalit*" OR "peri natal mortalit*" OR "peri-natal mortalit*" OR "ectopic pregnanc*" OR "miscarriage*" OR "pregnancy loss*")	TIAB("developing countr*" OR "developing nation*" OR "underdeveloped countr*" OR "under-developed countr*" OR "underdeveloped nation*" OR "under-developed nation*" OR "less developed countr*" OR less-developed countr*" OR "less developed nation*" OR "less-developed nation*" OR "third world countr*" OR "third-world countr*" OR "third world nation*" OR third-world nation*" OR "low income countr*" OR "low-income countr*" OR "low income nation*" OR "low-income nation*" OR "Afghanistan" OR "Burkina Faso" OR "Burundi" OR "Central African Republic" OR "Chad" OR "Congo" OR "Eritrea" OR "Ethiopia" OR "Gambia" OR "Guinea" OR "Guinea-Bissau" OR "Haiti" OR "Liberia" OR "Madagascar" OR "Malawi" OR "Mali" OR "Mozambique" OR "Niger" OR "Rwanda" OR "Sierra Leone" OR "Somalia" OR "South Sudan" OR "Sudan" OR "Syrian Arab Republic" OR "Tajikistan" OR "Togo" OR "Uganda" OR "Yemen")	TIAB("qualitative research" OR "qualitative*" OR "focus group*" OR "interview*" OR "thematic analys*" OR "content analys*" OR "experience*" OR "perspective*" OR "interpretative phenomenolog*" OR "ethnograph*" OR "case stud*" OR "narrative*")

Appendix B: Data Extraction Sheet

Title:		
Author and year:		
Reference:		
Study Design		
Type of study:		
Study question:		
Method of data collection:		
Method of data analysis:		
Study country:	Sample size:	
Gender Male: Female: Other: Not specified:	Age Mean: Range:	
Relationship Married: Partnered: Single: Separated: Other: Not specified:	Ethnicity Ethnicity: Other: Not specified:	Residence Urban: Rural: Not specified:
Type of pregnancy loss Miscarriage: Stillbirth: Other: No losses: Not specified:	Time since pregnancy loss < 1 month: 1-6 months: 7-12 months: > 12 months: Not specified:	
Number of pregnancy losses:	More than one type of loss:	
Findings and Outcomes		
Themes	Extracts	Page no.

Appendix C: Detailed Evaluation of Reporting Quality of Included Studies (N_{studies} = 18)

Lead Author (Year)	Question/ Objective	Study Design	Context	Theoretical Framework	Sampling Strategy	Data Collection	Data Analysis	Verification Procedure	Conclusion	Reflexivity	Score
Adhiambo Onyango (2011)	●	●	●	●	●	●	●	●	●	○	.90
Ayebare (2021)	●	●	●	●	●	●	●	●	●	○	.90
Bakari (2021)	●	●	●	●	●	●	●	●	●	○	.90
Chapman (2003)	●	●	●	●	●	●	◐	○	●	◐	.80
Christou (2019)	●	●	●	●	●	●	●	●	●	●	1.0
Christou (2020)	●	●	●	●	●	●	●	●	●	○	.90
Christou (2021)	●	●	●	●	●	●	●	●	●	○	.90
Deitch (2019)	●	●	●	●	●	●	●	●	●	○	.90
Haws (2010)	●	●	●	●	●	●	●	●	●	●	1.0
Jammeh (2011)	●	●	●	●	●	●	●	○	●	○	.80
Kiguli (2015)	●	●	●	◐	●	●	●	●	●	○	.85
Kopp (2018)	●	●	●	●	●	●	●	●	●	○	.90
Kwesiga (2021)	●	●	●	●	●	●	●	●	●	◐	.95
Mills (2021)	●	●	●	●	●	●	●	●	●	○	.90
Osman (2016)	●	●	●	●	●	●	●	○	●	○	.80

Roberts (2012)	●	●	●	●	●	●	●	●	●	○	.90
Simwaka (2014)	●	●	●	●	●	●	●	●	●	○	.90
Sisay (2014)	●	●	●	●	●	●	●	●	●	○	.90

Note: ● = *yes*, ◐ = *partial*, ○ = *no*

Appendix D: Enhancing Transparency in Reporting Synthesis of Qualitative Research (ENTREQ) Checklist

No	Item	Guide and description	Page no.
1	Aim	State the research question the synthesis addresses	18
2	Synthesis methodology	Identify the synthesis methodology or theoretical framework which underpins the synthesis, describe the rationale for choice of methodology (<i>e.g. meta-ethnography, thematic synthesis, critical interpretive synthesis, grounded theory, realist synthesis, meta-aggregation, meta-study, framework synthesis</i>).	18
3	Approach to searching	Indicate whether the search was pre-planned (<i>comprehensive search strategies to seek all available studies</i>) or iterative (<i>to seek all available concepts until the theoretical saturation is achieved</i>)	19
4	Inclusion criteria	Specify the inclusion/exclusion criteria (<i>e.g. in terms of population, language, year limits, type of publication, study type</i>).	19
5	Data sources	Describe the information sources used (<i>e.g. electronic databases (MEDLINE, EMBASE, CINAHL, PsycINFO, Econlit), grey literature databases (digital thesis, policy reports), relevant organisational websites, experts, information specialists, generic web searches (Google Scholar) hand searching, reference lists</i>) and when the searches conducted; provide the rationale for using the data sources.	19
6	Electronic search strategy	Describe the literature search (<i>e.g. provide electronic search strategies with population terms, clinical or health topic terms, experiential or social phenomena related terms, filters for qualitative research and search limits</i>).	19
7	Study screening methods	Describe the process of study screening and sifting (<i>e.g. title, abstract and full text review, number of independent reviewers who screened studies</i>).	21, 22
8	Study characteristics	Present the characteristics of the included studies (<i>e.g. year of publication, country, population, number of participants, data collection, methodology, analysis, research questions</i>).	24, 25
9	Study selection results	Identify the number of studies screened and provide reasons for study exclusion (<i>e.g. for comprehensive searching, provide number of studies screened and reasons for exclusion indicated in a figure/flowchart; for iterative searching describe reasons for study exclusion and inclusion based on modifications to the research question and/or contribution to theory development</i>).	21, 22
10	Rationale for appraisal	Describe the rationale and approach used to appraise the included studies or selected findings (<i>e.g. assessment of conduct (validity and robustness), assessment of reporting (transparency), assessment of content and utility of the findings</i>).	21

11	Appraisal items	State the tools, frameworks and criteria used to appraise the studies or selected findings (<i>e.g. Existing tools: CASP, QARI, COREQ, May and Pope; reviewer developed tools; describe the domains assessed: research team, study design, data analysis and interpretations, reporting</i>).	21
12	Appraisal process	Indicate whether the appraisal was conducted independently by more than one reviewer and if consensus was required.	21
13	Appraisal results	Present results of the quality assessment and indicate which articles, if any, were weighted/excluded based on the assessment and give the rationale.	29
14	Data extraction	Indicate which sections of the primary studies were analysed and how were the data extracted from the primary studies? (<i>e.g. all text under the headings "results/conclusion" were extracted electronically and entered into a computer software</i>).	23
15	Software	State the computer software used, if any.	19
16	Number of reviewers	Identify who was involved in coding and analysis.	21
17	Coding	Describe the process for coding of data (<i>e.g. line by line coding to search for concepts</i>).	23
18	Study comparison	Describe how were comparisons made within and across studies (<i>e.g. subsequent studies were coded into pre-existing concepts, and new concepts were created when deemed necessary</i>).	NA
19	Derivation of themes	Explain whether the process of deriving themes or constructs was inductive or deductive.	30, 31
20	Quotations	Provide quotations from the primary studies to illustrate themes/constructs, and identify whether the quotations were participants quotations of the author's interpretation.	30
21	Synthesis output	Present rich, compelling and useful results that go beyond a summary of the primary studies (<i>e.g. new interpretation, models of evidence, conceptual models, analytical framework, development of a new theory or construct</i>).	30

Tong, A., Flemming, K., McInnes, E., Oliver, S., & Craig, J. (2012). Enhancing transparency in reporting the synthesis of qualitative research: ENTREQ. *BMC Medical Research Methodology*, 12(1), 181–181.

Appendix E: Conference Presentation Abstract

Barriers to seeking care for pregnancy loss in low- and low-middle-income countries:

Implications for the Australian healthcare system

Background. Pregnancy loss is an unexpected pregnancy outcome faced by parents around the world. The grieving process is complex and influenced by the type of care and support received. Despite the large body of literature on pregnancy loss, there is limited literature that addresses low-income countries. *Aim.* This study aims to explore experiences of pregnancy loss in low- and low-middle-income countries. *Design.* Using a meta-synthesis design a total of eighteen studies were collected from fifteen countries. *Results.* Parents can recognise complications during pregnancy; however, cultural, physical and economic barriers prevent them from seeking appropriate, timely care. Cultural barriers such as women's lack of autonomy can leave women feeling powerless as they are not included in the decision-making process regarding the care they receive during pregnancy. Physical barriers mean that parents must use multiple modes of transport to reach a healthcare facility. This experience is made more difficult when parents cannot afford emergency transport services. The delay in treatment results in further complications and in some instances pregnancy loss.

Conclusion. Pregnant women from low- and low-middle-income countries who are seeking care in Australia may also be impacted by cultural barriers. Therefore, Australian health professionals should have knowledge about how cultural barriers may influence women's health behaviours.