

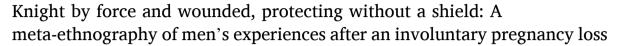
Contents lists available at ScienceDirect

Midwifery

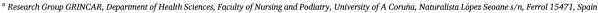
journal homepage: www.elsevier.com/locate/midw



Review Article







b Nurse. University Hospital Complex of A Coruña, Galician Health Service (SERGAS), As Xubias, 84, A Coruña 15006, Spain

ARTICLE INFO

Keywords:
Men
Miscarriage
"Nursing Care"
"Qualitative research"
Stillbirth

ABSTRACT

Objective: To synthesize the available body of qualitative research regarding the experiences of men after an involuntary pregnancy loss.

Design: Noblit and Hare's interpretive meta-ethnography of 13 original qualitative articles was carried out. Results: After reciprocal and refutational translations, the lines of argument synthesis were developed, together with the metaphor "Knight by force and wounded, protecting without a shield." This metaphor symbolizes the experience of men after an involuntary pregnancy loss. CERQual assessment showed that the results are a (highly) reasonable representation of the phenomenon of interest.

Conclusions: The men attempted to cope with the loss of fatherhood and suffering, while managing the lack of social recognition and social expectations of masculinity in terms of their behaviour and expression of suffering. They tended to be strong, although they did not always have the necessary support or knowledge.

Implications for practice: Comprehensive and individualized care that includes the man is required. This requires the theoretical-practical training of nurses and midwives, and the provision of tools that help the emotional management of emotionally demanding care.

Introduction

Involuntary pregnancy losses, which includes early miscarriages (the loss in which empty sac or sac with foetus but no foetal heart activity is confirmed less than 12 weeks), late miscarriages (the loss of the foetal heart > 12 weeks) (Farguharson and Stephenson, 2017) and stillbirths (death prior to the complete expulsion or extraction from its mother of a product of conception regardless of the length of pregnancy (WHO, 2004), are relatively common occurrences, although their exact prevalence is unknown (Heazell et al., 2019). It is estimated that 20 % to 30 % of pregnancies end in miscarriage, or approximately 23 million miscarriages worldwide per year. The global rate of stillbirths is 13.9 per 1000 total births, or approximately 2 million stillbirths per year. However, these statistics do not represent the totality of losses (Fernández-Basanta et al., 2022; Heazell et al., 2019; Hug et al., 2021; Lawn et al., 2016; Magnus et al., 2019; Quenby et al., 2021). Despite being commonly characterised by the multiple losses (loss of a projected child, aspects of themselves, stage of life, a dream and creation) (Dallay,

2013), the experience of pregnancy loss generates highly individualised responses, thus being difficult to predict their significance (Hutti et al., 2017). Some parents may feel guilt and shame, others might feel relief and hopeful about the future, and others still may feel ambivalent about pregnancy and loss (Fernández-Basanta et al., 2020a; Layne, 1990).

Outward expressions of suffering do not necessarily indicate what an individual is experiencing or what they need (Worden, 2018). How bereaved parents behave in public, their restrictions, the clothes they are expected to wear – all these variables are influenced by cultural, religious, or spiritual expectations (Leichtentritt and Mahat-Shamir, 2017). The social context also plays a key role in modulating suffering, encouraging men to maintain a stoic façade or to show themselves as strong and protective, thus disallowing them from expressing themselves emotionally. Consequently, men's suffering is not duly recognised and attended by health professionals (Fernández-Sola et al., 2020b). This is a relevant fact when we consider that the provision of care is important for the promotion of parents' immediate and long-term wellbeing (Ellis et al., 2016). Previous studies address the challenges

E-mail address: sara.fbasanta@udc.es (S. Fernández-Basanta).

https://doi.org/10.1016/j.midw.2023.103827

^{*} Corresponding author.

posed by this type of care to nurses and midwives, favouring care focused on the physical aspects of women to the detriment of men (Due et al., 2017; Fernández-Basanta et al., 2021, Fernández-Basanta et al., 2020a). Morover, research on the impacts of involuntary pregnant losses have focused mainly on women, giving little attention to the experiences of men (McCreight, 2004).

Involuntary pregnant losses impact both families and family relationships. Parents with previous children may present an overprotective behaviour, distance themselves from the children, and neglect parental obligations (Fernández-Sola et al., 2020b; Meaney et al., 2017). Moreover, as coping strategies may differ between genders, such losses may escalate tensions on the couple (Gopichandran et al., 2018; Nuzum et al., 2018). In many contexts, community nurses can be the link between suffering men and healthcare services and family-centred care. For these health professionals, deeper knowledge

allows them to provide support and tools to manage the emotional demands of this care. To make this knowledge available, a meta-ethnography was conducted to present a condensed knowledge of this phenomenon, and consequently has the potential to strengthen the use of evidence-based healthcare. Furthermore, this methodology favours the transfer of results to other contexts. The aim is a new, integrated and more comprehensive interpretation of findings that offers a deeper and broader understanding than the results of individual studies (Bondas et al., 2017).

Aim

This study sought to synthesise the qualitative research on the experiences of men following an involuntary pregnancy loss.

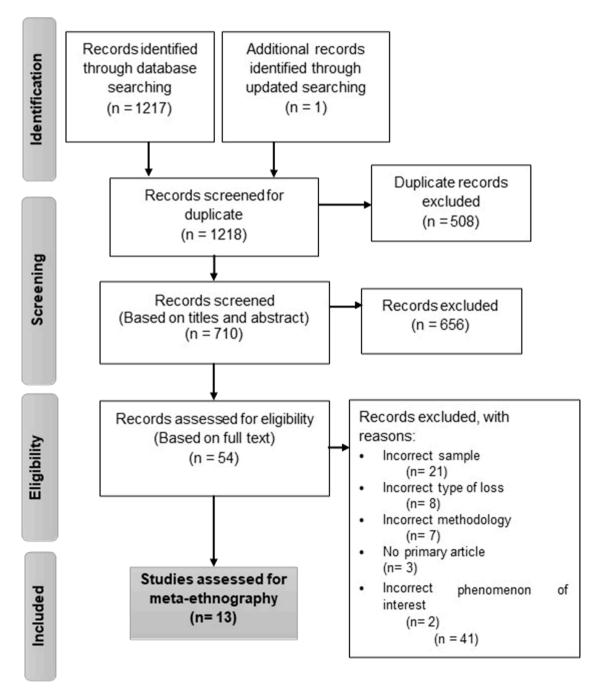


Fig. 1. PRISMA flowchart.

Methods

This study consists of a meta-ethnography synthesis (Noblit and Hare, 1988) conducted according with the following steps: (1) getting started, (2) deciding what is relevant to the initial interest, (3) reading the studies, (4) determining how the studies are related, (5) translating the studies into one another, (6) synthesizing translations, and (7) expressing the synthesis.

Search methods

In December 2020, the first author performed a comprehensive search in the five most representative Health Sciences databases, namely: PubMed, Scopus, CINAHL, PsycINFO, and Web of Sciences. The searched terms were determined based on Medical Subject Headings (MeSH), CINAHL descriptors, and free terms, combining different strings grouped into the following components: the phenomenon of interest (involuntary pregnancy loss), purpose of the study (experiences), sample (men), and type of research (qualitative research). To ensure a broad search, terms were combined using Boolean operators and truncations. A language filter was applied, including articles written in English, Spanish, and Portuguese (See Supplementary File 1).

Inclusion criteria consisted of qualitative or mixed-methods primary studies, whose objective was to investigate men's experience after involuntary pregnancy loss.

Search outcomes

Database search returned 1217 articles, while manual searches identified through updated searching returned a single article. Of these, 508 were duplicates, and thus excluded from the analysis. After title and abstract screening, 656 records were excluded. The remaining 54 articles were read in-full, and 41 articles were excluded for not complying with inclusion criteria. The final sample consisted of 13 articles (Fig. 1). The first two authors performed the entire selection process, but all authors participated in meetings to reach consensus.

Quality appraisal

Each paper was critically appraised using the Critical Appraisal Skills Program (CASP) (Long et al., 2020) (Table 1). Two authors performed the evaluation independently, and the results were discussed with the research team. The main limitation of the studies was the lack of clarity about the association between researchers and participants.

Table 1
Quality assessment of included studies.

Abbreviations: \checkmark Yes – Unclear × No; Critical appraisal questions: (1) Was there a clear statement of the aims of the research? (2) Is the qualitative methodology appropriate? (3) Was the research design appropriate to address the aims of the research? (4) Was the recruitment strategy appropriate? (5) Were the data collected in a way that addressed the research issue? (6) Has the relationship between researcher and participants been adequately considered? (7) Have ethical issues been taken into consideration? (8) Was the data analysis sufficiently rigorous? (9) Is there a clear statement of findings? (10) How valuable is the research?

Data extraction and synthesis

Data was extracted by the first two authors, but periodic meetings were held with all authors to discuss disagreements points and reach a consensus, in order to triangulate the analytical process, giving rise to a comprehensive and integrated image based on the interpretive knowledge of all team members. All authors actively participated in the synthesis, whose first step consisted of a critical reading of included studies (Table 2).

Based on the most data-rich article (McCreight, 2004), first- (participants' quotations) and second-order concepts (authors' interpretations) (Schütz, 1962) were extracted from primary studies and tabulated. To interpret data and formulate new concepts, the concepts obtained intra- (from each study) and inter-study (from the comparison of concepts from various studies) were compared to find similarities and contrasts. Then, by drawing up translation tables, using analogous (concepts in one study can incorporate those of another) and refutational translations (concepts in different studies contradict one another) were made, where results of the studies were then incorporated into each other, allowing the development of third-order constructions (Schütz, 1962). The synthesis entailed an inductive process with reflective discussion, reaching a new understanding of the phenomenon based on four themes and overarching metaphor (Fig. 2).

The findings were assessed with the Confidence in the Evidence from Reviews of Qualitative research (CERQual) tool, which provides the level of confidence of the review findings (Table 3). This tool provides a guide to assess how much confidence to place in the results of systematic reviews of qualitative research, where an assessment of each individual review finding in terms of: (1) methodological limitations; (2) coherence (consistency across primary studies), (3) adequacy of data (the degree of richness and quantity of data supporting the review finding); (4) relevance (Lewin et al., 2015).

Results

Our study sample consisted of 13 articles addressing the experience of men who had suffered an involuntary pregnancy loss. These articles were published in Western countries between 1997 and 2020, with a total sample of 192 men. All were qualitative studies, and research designs were predominantly descriptive and exploratory approaches (Table 2).

The lines-of-argument synthesis was obtained after reciprocal and refutational translations, together with the metaphor "Knight by force and wounded, protecting without a shield," which symbolises men's experience after an involuntary pregnancy loss. Although socially

Table 2
Paper characteristics. (Characteristics of included studies).

Authors, (year), Location	Methods	Aim	Sample	Type of loss	Data collection method	Key findings
Bonnette and Broom (2012) Australia	Qualitative study	To explore men's experiences of stillbirth and how they experienced fathering and grief, in order to work towards a better conceptual understanding of this important contemporary site of bereavement.	12 men	Stillbirth	Interviews	The results reveal the complex ways in which these men identify as fathers to their unborn and stillborn child; how they develop dynamic and ongoing relationships with their child post-stillbirth; and the problematic of expressing grief in the context of 'the male role'.
Horstman et al. (2020) USA	Qualitative study	To investigate how cis-gender men in heterosexual marriages communicatively constructed the meaning of their wife's miscarriage through metaphors	45 men	Miscarriage (< 24 weeks of gestation)	Semi-structured interview	Analysis of interview data revealed two supra-themes—metaphors of miscarriage and metaphors of men's role as a husband. Metaphors of lost gift, cataclysm, death of a loved one, emptiness, and chaotic movement animated husbands' communicated sense-making about their wife's miscarriage. Men drew upon discourses of masculinity to make sense of their role as a husband in the miscarriage process as a rock, guard, repair man, and secondary character.
McCreight (2004) Ireland	Qualitative study	To describe the experiences of men whose partner had experienced pregnancy loss	14 men	Miscarriage and stillbirth (Involuntary losses during pregnancy)	Observation within pregnancy loss self- help groups and in- depth interviews	The present study shows that the perception that men have only a supportive role in pregnancy loss is unjustified, as it ignores the actual life-world experiences of the men, and the meanings they attach to their loss, in what may be a very personal emotional tragedy for them where they have limited support available. The study uncovered several recurring themes including self-blame; loss of identity; and the need to appear strong and hide feelings of grief and anger.
Miller et al. (2019) Australia	A qualitative descriptive approach	To address the gap in Australian literature by exploring miscarriage from a male partner perspective and men's needs for additional support.	10 men	Miscarriage (< 20 weeks of gestation)	Semi-structured telephone interviews	Most men described feeling significant grief following miscarriage and felt that there was little acknowledgement of their loss, both from healthcare providers and within their social networks. Feelings of sadness, devastation, powerlessness, fear, shock and a loss of identity were common. All men felt their primary role at the time of miscarriage was to support their partner. Most men did not want to burden their partner with their emotions or grief and struggled to find people within their social networks to talk to about their loss, leading to feelings of isolation. Overall participants felt there was inadequate support offered to men affected by miscarriage. Men wanted information, informed professionals to talk to and male-orientated support networks. A website was one mechanism suggested by men which could adequately contribute to information and support needs during this time. Men are often greatly affected by miscarriage and yet there is all too often little acknowledgement or support available to them at this time. Men affected by miscarriage want and need further support, including reputable, Australian based information and resources tailored their needs.

(continued on next page)

Table 2 (continued)

Authors, (year), Location	Methods	Aim	Sample	Type of loss	Data collection method	Key findings
Miron and Chapman (1994) Canada	Grounded theory	To investigate men's experiences with the event of their partner's miscarriage	8 men	Miscarriage	Unstructured interviews	The core category identified by the men in this study was supporting. As men did not physically experience the miscarriage, they described their primary role as one of supporting their female partners. Four successive phases of supporting were identified: recognizing signs, confirming the news, working through it, and getting on with life. During each of the phases four concepts emerged from the data and indicated how these men went about supporting their partners: living the feelings, waiting, seeking help an accepting.
Murphy and Hunt (1997) UK	Phenomenology	To describe the experience of early miscarriage from a male perspective.	5 men	Early miscarriage (< 16 weeks of gestation)	In depth interviews	Miscarriage is a difficult and painful situation. In addition to coping with their own feelings, which may not be acknowledged, they have to cope with the feelings and grief of their partner. Effective intervention should be based on a n awareness of the effect that early miscarriage has on both partners. Midwives and other practitioners can make a difference to a couple's experience by increasing their understanding of their needs.
Obst and Due (2019) Australia	Qualitative study	To explore Australian men's experiences of both formal and informal supports received following a female partner's pregnancy loss.	8 men	Miscarriage and stillbirth	Semi-structured interviews	Thematic analysis returned six themes, categorised into three sections based on the aims of the study. Overall, findings indicated that fathers require emotional support following a loss, however these supports need to be flexible. Although some men may find support groups and individual counselling helpful, others may benefit from informal support options, such as having another trusted man to con-fide in, or the opportunity to 'give back' and help others. Additionally, while participants who accessed support services were largely satisfied, others were unaware of services, perceiving a lack of appropriate support options.
Puddifoot and Johnson (1997) UK	Phenomenology	To discuss normative aspects of behaviour, but rather to allow these men to give expression to their own perceptions and feelings, as a basis for making a beginning with regard to the generation of an explanatory framework for contextualising this experience	20 men	Miscarriage (< 24 weeks of gestation)	Semi-structured interviews	A complex set of thoughts, feelings and considerable confusion about appropriate behaviour is revealed, to the extent that such males might feel it necessary to deny their own feelings of grief in a double-bind situation.
Rodrigues and Hoga (2005) Brazil	Qualitative study (analysis of the narrative)	To understand the experience of men who have shared with their partners the process of miscarriage	9 men	Miscarriage	Individual interviews	The following descriptive categories emerged: experiencing the news of pregnancy; identifying the possible causes of the miscarriage; expressing feelings concerning the miscarriage experience; taking measures as a consequence of the miscarriage; weighing the experience.
Samuelsson et al. (2001) Switzerland	Phenomenology	To describe how fathers experienced losing a child as a result of intrauterine death.	11 men	Stillbirth (during weeks 32 to 42 of pregnancy)	Interviews	After being informed of the infant's death, most fathers first wanted their partners to have a caesarean section, but all later thought that it would be right for the child to be delivered vaginally. A strong feeling of frustration and helplessness came over them during and after the delivery. Several men found meaning and relief in their grief by supporting their partner. Tokens of remembrance from the child were invaluable, and fathers appreciated (continued on next page)

Table 2 (continued)

Authors, (year), Location	Methods	Aim	Sample	Type of loss	Data collection method	Key findings
						that the staff collected these items, even if the parents declined them. The perceived prerequisite for resuming their everyday lives consisted of the support they received from the hospital staff and precious memories of the child. The most important comfort in their grief was a good relationship with their partner. Some fathers missed having a man to talk to both at the time of the stillbirth and subsequently.
Story Chavez et al. (2019) USA	A passive phenomenological methodology	To understand the lived experience of 31 male participants whose partners had miscarried a child	31 men	Miscarriage (< 20 weeks of gestation)	Public blogs, chat rooms, and web forums, specifically subthreads on a popular forum website, Reddit	Researchers found four overarching themes including isolation, overwhelmed, protector, and coping. Results found that health professionals might overlook men when a woman experiences a miscarriage.
Wagner et al. (2018) USA	Phenomenology	To examine the lived experiences of fathers who have experienced miscarriage.	11 men	Miscarriage (< 24 weeks of gestation)	Face-to-face semi- structured interview	Six major themes emerged that depicted fathers shared experiences including (a) expectations of fatherhood, (b) conceptions of the pregnancy and personhood, (c) impact of the miscarriage setting, (d) immediate response to the event, (e) perceptions of support from others, and (f) overall experiences of disenfranchisement.
Worth (1997) Canada	An exploratory descriptive study	To identify and describe the reaction of fathers to a stillborn child.	8 men	Stillbirth	In depth interviews	Although the fathers exhibited grief reactions and behaviours such as shock, denial, anger, and acceptance, it was evident that taking on a fathering role was of central importance. The basic social process that the fathers experienced was becoming a father to the stillborn child. The fathers were trying to assume a fathering role while they were grieving the death of their child.

Abbreviations: United Kingdom (UK); United States of America (USA).

Knight by force and wounded, protecting without a shield

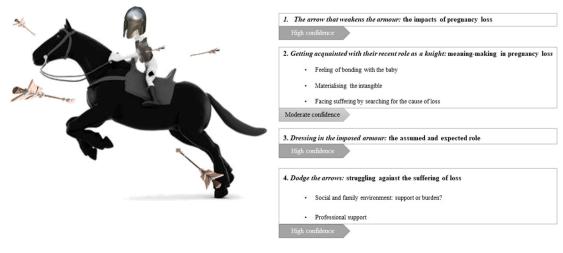


Fig. 2. The lines-of-argument synthesis Knight by force and wounded, protecting without a shield.

 Table 3

 Confidence in the evidence from reviews of qualitative research (CERQual) evidence profile.

Summary of review findings	Studies contributing to the review findings	Methodological limitations	Coherence	Relevance	Adequacy of data	Overall CERQual assessment of confidence	Explanation of decision		
The arrow that weakens the armour: the impacts of pregnancy loss		Horstman et al. (2020); McCreight (2004); Miller et al. (2019); Miron and Chapman (1994); Murphy and Hunt (1997); Puddifoot and Johnson (1997); Rodrigues and Hoga (2005), Samuelsson et al. (2001), Story Chavez et al. (2019), Wagner et al. (2018), Worth (1997)	Moderate concerns regarding methodological limitations, since there is a lack of clarity regarding the relationship of the researcher and the participants.	Minor concerns regarding coherence (data very consistent within and across studies)	No or very little concern about relevance (all articles include men who have experienced involuntary pregnancy loss. Only one study focuses exclusively on stillbirth).	Minor concerns about adequacy of data (four studies have sparse samples)	High confidence		Minor concerns about coherence, methodological, limitations and adequacy of data; Very minor concerns about relevance
Getting acquainted with their recent role as a knight: meaning- making in pregnancy loss	Feeling of bonding with the baby	Horstman et al. (2020); Murphy and Hunt (1997); Puddifoot and Johnson (1997); Rodrigues and Hoga (2005);	Moderate concerns regarding methodological limitations, since there is a lack of clarity regarding the relationship of the researcher and the participants.	Very minor concerns regarding coherence (data very consistent within and across studies)	Moderate concern about relevance (all articles focus on miscarriage).	Minor concerns about adequacy of data (two studies have sparse samples)	Moderate confidence	Moderate confidence	Moderate confidence in Feeling of bonding with the baby; High confidence in Materialize the intangible and Facing suffering by searching for the cause of loss
loss	Materialising the intangible	Bonnette and Broom (2012); Miller et al. (2019); Puddifoot and Johnson (1997), Samuelsson et al. (2001), Story Chavez et al. (2019), Worth (1997)	Moderate concerns regarding methodological limitations, since there is a lack of clarity regarding the relationship of the researcher and the participants.	Very minor concerns regarding coherence (data very consistent within and across studies)	No or very little concern about relevance (all articles include men who have experienced involuntary pregnancy loss. Only one study focuses exclusively on stillbirth).	Minor concerns about adequacy of data (two studies have sparse samples)	High confidence		
	Facing suffering by searching for the cause of loss	Miller et al. (2019); Miron and Chapman (1994); Murphy and Hunt (1997); Puddifoot and Johnson (1997); Rodrigues and Hoga (2005), Samuelsson et al. (2001), Story Chavez et al. (2019), Worth (1997)	Moderate concerns regarding methodological limitations, since there is a lack of clarity regarding the relationship of the researcher and the participants.	Very minor concerns regarding coherence (data very consistent within and across studies)	No or very little concern about relevance (all articles include men who have experienced involuntary pregnancy loss. Only one study focuses exclusively on stillbirth).	Minor concerns about adequacy of data (four studies have sparse samples)	High confidence		
Dressing in the imposed armour: the assumed and expected role	Bonnette and Broom (2012), Horstman et al. (2020); Miller et al. (2019); Miron and Chapman (1994); Murphy and Hunt (1997); Obst and Due (2019); Puddifoot and Johnson (1997);	Moderate concerns regarding methodological limitations, since there is a lack of clarity regarding the relationship of the researcher and the participants.	Very minor concerns regarding coherence (data very consistent within and across studies)	No or very little concern about relevance (all articles include men who have experienced involuntary pregnancy loss. Only two study	Moderate concerns about adequacy of data (five studies have sparse samples)	High confidence	Very minor concerns about coherence, no or very little concerns about relevance; moderate concerns regarding methodological, limitations and adequacy of data		(continued on next page)

Summary of review findings	Studies contributing to the review findings	Methodological limitations	Coherence	Relevance	Adequacy of data	Overall CERQual assessment of confidence	Explanation of decision		
	Rodrigues and Hoga (2005), Samuelsson et al. (2001), Story Chavez et al. (2019), Wagner et al. (2018), Worth (1997)			focus exclusively on stillbirth).					
Dodge the arrows: struggling against the suffering of loss	Social and family environment: support or burden?	Bonnette and Broom (2012), Horstman et al. (2020); Miller et al. (2019); Murphy and Hunt (1997); Obst and Due (2019); Puddifoot and Johnson (1997), Samuelsson et al. (2001), Wagner et al. (2018), Worth (1997)	Moderate concerns regarding methodological limitations, since there is a lack of clarity regarding the relationship of the researcher and the participants.	Very minor concerns regarding coherence (data very consistent within and across studies)	No or very little concern about relevance (all articles include men who have experienced involuntary pregnancy loss. Only two study focus exclusively on stillbirth).	Minor concerns about adequacy of data (four studies have sparse samples)	High confidence	High confidence	High confidence in Socio-family environment, support or burden? and Professional support
	Professional support	McCreight (2004); Miller et al. (2019); Miron and Chapman (1994); Murphy and Hunt (1997); Obst and Due (2019); Puddifoot and Johnson (1997); Rodrigues and Hoga (2005); Samuelsson et al. (2001), Story Chavez et al. (2019), Wagner et al. (2018), Worth (1997)	Moderate concerns regarding methodological limitations, since there is a lack of clarity regarding the relationship of the researcher and the participants.	Very minor concerns regarding coherence (data very consistent within and across studies)	No or very little concern about relevance (all articles include men who have experienced involuntary pregnancy loss. Only one study focuses exclusively on stillbirth).	Moderate concerns about adequacy of data (five studies have sparse samples)	High confidence		

^{*}Definitions of levels of confidence from the CERQual evaluation (Lewin et al., 2015).

[•] High confidence: It is highly likely that the review finding is a reasonable representation of the phenomenon of interest.

[•] Moderate confidence: It is likely that the review finding is a reasonable representation of the phenomenon of interest.

[•] Low confidence: It is possible that the review finding is a reasonable representation of the phenomenon of interest.

[•]Very low confidence: It is not clear whether the review finding is a reasonable representation of the phenomenon of interest.

encouraged to be strong in supporting women, most men lack the support or knowledge to play this role of knight (Knight by force and wounded). With that, men are forced to repress their suffering and to deal with the lack of social recognition (protecting without a shield). The metaphor is based on four themes (Fig. 2), all of which show high confidence according to the CERQual assessment, except for one, classified as moderate confidence. This implies that the results are a (highly) reasonable representation of the phenomenon of interest (Table 3).

The arrow that weakens the armour: The impacts of pregnancy loss

Involuntary pregnancy loss impacted the lives of men and shattered parental expectations, gradually weakening their armour.

The news of the pregnancy loss came as a shock, especially when unexpected, leading to emotional chaos and difficulty in assimilating the loss (Horstman et al., 2020; McCreight, 2004; Miron and Chapman, 1994; Puddifoot and Johnson, 1997; Samuelsson et al., 2001; Story Chavez et al., 2019). Men who experienced pregnancy loss had their lives and vital perspectives altered, besides having to learn how to live with it (Miller et al., 2019). Parents commonly reported feelings of "empty arms," frustrated expectations, and lost future hopes (Horstman et al., 2020; McCreight, 2004; Murphy and Hunt, 1997; Samuelsson et al., 2001; Story Chavez et al., 2019; Worth, 1997).

"The first thing I did when I came in was go and close the door to his room. I just sat there, couldn't grasp it all. You feel empty coming home after the stillbirth; it really hits you then." (Samuelsson et al., 2001)

At times, they also experienced guilt feelings, denial, and did not know what to do in that situation (McCreight, 2004; Miller et al., 2019; Murphy and Hunt, 1997; Samuelsson et al., 2001; Story Chavez et al., 2019; Wagner et al., 2018). Some parents were diagnosed with depression or suffered psychological-emotional trauma due to the pregnancy loss (Puddifoot and Johnson, 1997; Rodrigues and Hoga, 2005; Samuelsson et al., 2001; Story Chavez et al., 2019). In some cases, men did not speak about their lived experience, and forgetting what happened was a great difficulty for all parents (Miller et al., 2019; Murphy and Hunt, 1997; Puddifoot and Johnson, 1997). These findings indicate a potential risk of suffering from anxiety or depression, thus highlighting the need for psychological support (Miller et al., 2019).

The reports indicate that seeing or partaking of their partners' sorrow was painful for men. While some men considered their partner's expression of suffering rather dramatic, others tried to be positive, but seeing the mother's suffering destroyed them (Puddifoot and Johnson, 1997; Story Chavez et al., 2019). In some cases, the suffering was shared and sustained in the duality of the couple, so that the loss brought both parents closer; the existence of previous children also contributed to this union (Rodrigues and Hoga, 2005; Samuelsson et al., 2001). After loss, some parents expressed their desire to try parenting again (Miller et al., 2019; Rodrigues and Hoga, 2005).

Some men understood loss as the robbing of an expected and desired fatherhood in which they had high expectations – an understanding that may not be recognised by the social environment. Such a conception was associated with a feeling of guilt for not fulfilling the alleged fatherhood roles (Horstman et al., 2020; McCreight, 2004; Miller et al., 2019; Story Chavez et al., 2019; Wagner et al., 2018; Worth, 1997).

Pregnancy loss was also dealt with as an experience that provided parents with learning and personal growth, affecting their perceptions of life and even allowing them to speak openly about death over time (Rodrigues and Hoga, 2005; Samuelsson et al., 2001; Story Chavez et al., 2019).

Getting acquainted with their recent role as a knight: meaning-making in pregnancy loss

The bonding established with the baby, the time spent with their children before bidding them farewell, and the search for an explanation that would make sense of what happened were important elements in the process of creating meaning. Moreover, keeping the memory of the baby alive represented an attempt to make sense of the reality and to be recognised by others.

Feeling of bonding with the baby

In many cases, the bonding and the degree to which they recognised their baby was associated with how men lived through and experienced pregnancy loss. However, the gestational age of the baby at the time of loss was unrelated with the level of suffering (Murphy and Hunt, 1997; Puddifoot and Johnson, 1997).

"The baby does become more real... Once you see the scan that all changes. It is no longer your imagination at work, but you have this real image of a little baby. You can see so much detail it is amazing, his little fingers and toes, his eyes, oh everything, it is magical, so awe-inspiring to see... It's then that you think yes, I am going to be a father [...]" (Puddifoot and Johnson, 1997)

While many men experienced loss as if the baby was a family member, others did not acknowledge the baby as their child, but still experienced bereavement as a consequence of the woman's suffering (Horstman et al., 2020; Puddifoot and Johnson, 1997; Rodrigues and Hoga, 2005).

Materialising the intangible

In advanced pregnancy loss, seeing and holding the baby were important aspects for fathers to acknowledge both their child and their fatherhood, as well as the memories of the baby's existence (Bonnette and Broom, 2012; Samuelsson et al., 2001; Worth, 1997). While some men were shocked or scared with the idea of seeing their babies, others were curious – which turned out to be a meaningful experience for them (Bonnette and Broom, 2012; Puddifoot and Johnson, 1997; Samuelsson et al., 2001; Story Chavez et al., 2019). Those who did not want to see their baby ended up regretting the decision later, as stated by a man interviewed in the study conducted by Worth (1997):

"I regret not having held my baby and that's the hardest thing, because I can't change that... It will never be closed because of the decision we made. We didn't finish it the right way. I never saw the baby. It was like the baby is there, but there's no memory in there of an image, no cry, nothing so that it is still one."

In involuntary pregnancy losses, some men could feel the need to celebrate the memory of their babies through rituals, ceremonies, visiting the grave, or keeping tokens (Bonnette and Broom, 2012; Miller et al., 2019; Samuelsson et al., 2001; Story Chavez et al., 2019; Worth, 1997). However, participants felt that no one prepared them to see their babies, nor were they informed about the possibility of conducting a christening or a funeral. In some cases, parents had no opportunity to bury the babies and were unprepared for the funeral experience, lacking knowledge on the administrative procedures related to their babies' death (McCreight, 2004; Worth, 1997).

Facing suffering by searching for the cause of loss

Many men felt the need to find a cause for involuntary pregnancy loss. The most common meanings attributed to the event refer to biological explanations, the rationalisation and the relativisation of the loss, and the idea that it was something beyond their control (Miller et al., 2019; Miron and Chapman, 1994; Murphy and Hunt, 1997; Samuelsson et al., 2001; Story Chavez et al., 2019; Worth, 1997). Some even blamed the mother or the responsible doctor (Miron and Chapman, 1994; Puddifoot and Johnson, 1997), such as this man from the study conducted by Puddifoot and Johnson (1997):

"Well, she must have done something... 'cos there has been nowt like this on my side of the family... And she did keep going to the club and who knows what they do on their Friday nights out? So she must have done some- thing to cause it, but who knows."

In turn, some participants avoided the process of making sense of the loss, endeavouring to forget the event and focusing on the positive aspects of their lives, trying to keep their families together and never

allowing themselves to fall apart (Miller et al., 2019; Miron and Chapman, 1994; Murphy and Hunt, 1997; Samuelsson et al., 2001). Others shared their experience by talking to healthcare professionals or peers, or even by writing (Miller et al., 2019; Story Chavez et al., 2019; Worth, 1997).

Dressing in the imposed armour: The assumed and expected role

Men who experienced pregnancy loss often tried to deal with suffering while managing how to remain "strong," thus conforming with traditional social expectations towards the masculine gender. Such a struggle generated the stereotyped bravado (Bonnette and Broom, 2012; Horstman et al., 2020; Obst and Due, 2019; Puddifoot and Johnson, 1997). Twenty-five years ago, expressing emotions was considered "not masculine," with some men even experiencing public rejection by demonstrating vulnerability (Puddifoot and Johnson, 1997); today, the idea of weakness could be more closely associated with the female gender (Story Chavez et al., 2019).

Most men considered mother's suffering more legitimate than theirs, so that they tended to censor their own emotions to protect women, in an attempt to diminish their suffering or draw their attention away from the pain – an action reinforced by the women (Bonnette and Broom, 2012; Horstman et al., 2020; Miller et al., 2019; Miron and Chapman, 1994; Murphy and Hunt, 1997; Puddifoot and Johnson, 1997; Story Chavez et al., 2019; Wagner et al., 2018). However, some men reported not knowing how to support the woman, feeling afraid of being a burden to their partners (Horstman et al., 2020; Miller et al., 2019; Obst and Due, 2019; Wagner et al., 2018).

Maintaining a stoic façade comprised a barrier to seeking support, and staying strong to their partners while men themselves were feeling sad was a common dilemma (Bonnette and Broom, 2012; Horstman et al., 2020; McCreight, 2004; Miller et al., 2019; Miron and Chapman, 1994; Obst and Due, 2019; Rodrigues and Hoga, 2005; Story Chavez et al., 2019; Worth, 1997).

"I didn't realize how much I needed to talk through things and process stuff until after (the miscarriage). I was so busy making sure she was okay and putting on that I am strong and can be the rock. I can be that person for her because she is going through all this stuff. I'm going through it emotionally, but I am there to support her. I experience the pregnancy through her and it's my job to support her. A lot of my emotional needs got put off because my job was to support her and do those things. I really didn't think a lot about myself until a little further along." (Horstman et al., 2020)

Men assumed a state denial to convince themselves that the loss had not happened. To experience the loss privately, some parents chose to isolate or distance themselves from their partners, while others tried to draw their attention away from the event (Miller et al., 2019; Murphy and Hunt, 1997; Puddifoot and Johnson, 1997; Story Chavez et al., 2019; Worth, 1997). Although the experience of pregnancy loss has impacts on both parents, men may not be understood or recognized by others – especially by other men (Bonnette and Broom, 2012; Horstman et al., 2020; Miller et al., 2019; Obst and Due, 2019; Puddifoot and Johnson, 1997).

Dodge the arrows: Struggling against the suffering of loss

The search for support and healthcare was an important means to deal with suffering, symbolically helping men to avoid the arrows – even though sometimes they ended up being wounded by them.

Social and family environment: Support or burden?

Men were the ones who shared the news of the involuntary pregnancy loss in their environment, and some verified the lingering taboo around this topic, for people often did not know what to say and avoided talking about it (Horstman et al., 2020; Worth, 1997). In some cases, the social network of the couple showed concern only for the woman (Miller

et al., 2019; Obst and Due, 2019; Puddifoot and Johnson, 1997). Most men felt supported, but highlighted that their social and family environment was not understanding as to their feelings and did not seem to mind their child or the loss experience (Miller et al., 2019; Obst and Due, 2019; Samuelsson et al., 2001; Worth, 1997). With that, men reported wishing they had someone to talk to, preferably another man (Bonnette and Broom, 2012; Horstman et al., 2020; Miller et al., 2019; Murphy and Hunt, 1997; Obst and Due, 2019; Puddifoot and Johnson, 1997; Story Chavez et al., 2019; Worth, 1997).

"My immediate family is overseas... they knew what's going on and I think they... I didn't feel they fully connect to... the emotional rollercoaster we were going through." (Miller et al., 2019)

Such a nonrecognition was also present within the conjugal sphere, with women not providing enough support for men, which led to escalating tensions between the couple (Miller et al., 2019; Obst and Due, 2019; Wagner et al., 2018). Although disappointed with certain people, men appreciated the presence and disposition of others (Wagner et al., 2018; Worth, 1997). They also reported receiving several comments indicating the need for moving on, turning the page, or planning another pregnancy – which were not considered any helpful (Miller et al., 2019; Wagner et al., 2018).

While some men felt supported within their workplace, others found company pregnancy loss policies inadequate, besides experiencing a lack of support. In general, participants reported no sensitivity on the part of their companies, which were not understanding with their losses (Obst and Due, 2019; Puddifoot and Johnson, 1997; Wagner et al., 2018).

Professional support

Men reported a lack of support and information from healthcare professionals, provoking feelings of helplessness (Murphy and Hunt, 1997; Rodrigues and Hoga, 2005; Story Chavez et al., 2019; Worth, 1997). Yet, medical settings were perceived as more controlled and less traumatic than domestic settings (Wagner et al., 2018). Some men felt ignored, marginalised, and even blamed by healthcare professionals (McCreight, 2004; Miron and Chapman, 1994; Obst and Due, 2019), who were described as insensitive, indifferent, and abrupt, showing no concern, sensitivity, and empathy towards men (Miron and Chapman, 1994; Murphy and Hunt, 1997; Puddifoot and Johnson, 1997; Story Chavez et al., 2019; Wagner et al., 2018).

"I haven't grieved yet, I can't because I'm still so angry with the hospital staff. If even one of the hospital staff had said, 'Connor, I'm sorry, you know you're a Dad and you feel pain as well', it would have helped, but I was constantly pushed aside." (McCreight, 2004)

Participants also reported that healthcare professionals employed a technical language that hampered understanding, indicating a clinical approach and callousness to their emotions (Miller et al., 2019; Murphy and Hunt, 1997; Samuelsson et al., 2001). Moreover, men felt overwhelmed by consultations – which were mostly aimed at women (Miller et al., 2019; Miron and Chapman, 1994; Murphy and Hunt, 1997; Obst and Due, 2019). They also verified the provision of different treatments according to the type of loss, with less support being offered for miscarriages when compared with pregnancy losses at more advanced stages (Obst and Due, 2019).

Men highlighted the empathy, recognition of their suffering, and the affection shown by nurses and midwives, the hospital chaplain, and the staff of clinics specialised *in vitro* fertilisation or premature pregnancies (Miller et al., 2019; Obst and Due, 2019; Samuelsson et al., 2001; Wagner et al., 2018). However, hospitals offered no care or follow-up to men, which led them to rely on formal and informal services to clarify their doubts, such as the internet, groups, therapies, and psychological counselling (McCreight, 2004; Miller et al., 2019; Miron and Chapman, 1994; Obst and Due, 2019; Samuelsson et al., 2001).

Discussion

The metaphor "Knight by force and wounded, protecting without a shield" (Fig. 2) represents men's experiences after an involuntary pregnancy loss. With the news of the loss and the social expectations imposed on them, men felt impelled to be strong for their families. However, they often lack the necessary knowledge or support to play this role, which provoked feelings of helplessness. While dealing with these struggles, men had to cope with their own suffering due to the loss of expected paternity and future hopes, which oftentimes was not acknowledged by others.

Defined as an ontological concept, suffering implies moving away from something and, through reconciliation, recreating the wholeness of the body, soul, and spirit. Suffering is a unique, isolated total experience and is not synonymous with pain (Eriksson et al., 2006). Despite differences as to the origin of this experience, our findings indicate that involuntary pregnancy loss caused the suffering of men. According to the Caritative Caring Theory (Eriksson, 1994), suffering can be related to illness, care, and life. We verified that the circumstances causing suffering were pregnancy loss itself, the dismantling of a life project, and the exposure to women's suffering. Besides the lack of care and social recognition, men were also subjected to a gender-related social constraint, which establishes socially acceptable expressions and behaviours according to the type of loss.

The father–foetus bonding is a feeling of love on the part of the father for the foetus, the fantasised image of the baby. Becoming a parent implies a reflective process, a journey subject to many vicissitudes and, therefore, the transformation of identity. However, such a journey runs into several obstacles established by cultural norms in building an intimate relationship. Due to the growing insufficiency of inherited and traditional models, becoming a parent today requires new psychological and relational skills (Habib and Lancaster, 2006; Henderson et al., 2007; Magaraggia, 2013). Traditionally, an ideal partner was that able to offer emotional and financial support and stability to their pregnant wives. Being a father was associated with being a provider for the couple, the home, and the baby – functions related to the socially established notion of parental duty, whose conformation was deemed as the premise of being "responsible" (Laguado-Barrera et al., 2019).

Our results reflect the key role of gender in the construction of the bond with the baby and in the expression of suffering. The literature on the theme shows that affect intensity is lower amongst men who comply with traditional masculine norms than amongst those who do not (Jakupcak et al., 2003; Oransky and Marecek, 2009; Petts et al., 2018). Society proposes a model that guides beliefs and behaviour, so that diverse social transactions, structures, and contexts trigger different gender manifestations. When it comes to men, the denial of weakness or vulnerability; the appearance of emotional and physical control, as well as of strength; and the dismissal of any need for help are demonstrations of masculinity (Courtenay, 2000). These conceptions may contribute to how men make meaning of their losses, such as by rationalising or simply avoiding it. This finding is aligned with other meta-ethnography synthesis (Fernández-Basanta et al., 2019), which reported rationalisation, avoidance, and distraction as common coping strategies amongst men.

Thus, men who had suffered pregnancy loss may experience a double commitment: showing themselves as strong for their female partners while still being emotionally expressive (Cacciatore et al., 2013). Our findings indicate that men felt the need to be strong for their partners – thus conforming to gender expectations – while managing their own suffering, which posed a dilemma between being socially recognised as a man and experiencing their suffering as fathers. Men also considered women's suffering as more legitimate than theirs. Such a tendency of focusing on the female expression of suffering to the detriment of that of the men is made evident through the scarce number of studies addressing the experience of and care provision to men. Reports of carelessness, invisibilisation, and invalidation of men's experience were

common in the investigated studies. As men are considered to suffer less than women with pregnancy loss, the social environment tends to deem men solely as the players of supportive role for their female partners (Cacciatore et al., 2013). Such perceptions often lead to minimal support provision and diminished understanding of the means through which men experience pregnancy loss.

According to the literature, rather than a binary construction of allowed *versus* rejected losses, social expectations about pain are hierarchical. Thus, it postulates the existence of normative hierarchies that legitimise some losses more than others – constituting a trigger for rights deprivation. Moreover, the concerns of truly hurt people may go beyond the simply recognition of their loss, entailing whether their loss is recognized by enough and by the right people (Robson and Walter, 2013).

The process of making meaning out of loss requires the reconciliation with suffering, which demands the confirmation of it, as well as time and space. This process implies a change through which a new wholeness emerges from the life lost in suffering (Eriksson et al., 2006). However, many participants described feeling a lack of social recognition in dealing with pregnancy loss, being ignored and marginalised when compared with women (Due et al., 2017). The lack of care provision on the part of healthcare professionals - in, for example, not taking men seriously, blaming them, or subjecting them to an exercise of power may have contributed to the failure in developing such a reconciliation with suffering. As a result, men repressed their emotions and built a wall around themselves to be able to deal with the suffering arising from the loss. Previous literature indicates the difficulties of healthcare professionals in approaching parents experiencing this situation. Nurses and midwives caring for involuntary pregnancy loss expressed difficulties as to the non-supportive organisational culture, lack of knowledge and preparation, and emotionally demanding care. Due to the fear of intensifying parents suffering or the possible personal cost to healthcare professionals themselves, the care provided ends up being task-based and indifferent (Fernández-Basanta et al., 2021, Fernández-Basanta et al., 2020a).

Strengths and limitations

Our meta-ethnography was conducted according to the original approach developed by (Noblit and Hare, 1988) and the eMERGe reporting guidelines (France et al., 2019) (See Supplementary File 2). The quality of primary studies was evaluated with the CASP tool (Critical Appraisal Skills, 2018) and results with the CERQual tool (Lewin et al., 2015) (Table 3), thus providing the confidence levels of this meta-ethnography findings. The design and comprehensive search strategy adopted, with no time limit and open to three languages, enabled the inclusion of studies developed in different contexts and time ranges, which allowed us to delve into the subject. Moreover, team sessions including authors with different backgrounds were held throughout the research process, enriching discussions.

This meta-ethnography synthesises the experiences of men after an involuntary pregnancy loss, which is a little explored topic in the literature. During the research, we verified a series of information and emotional gaps. The type of loss comprises a limitation, as most studies focus on miscarriages. On the other hand, the fact of incorporating pregnancy losses at different gestational moments could be seen as a limitation. However, previous literature (Fernández-Basanta et al., 2022; Riggs et al., 2021) reinforces this incorporation, since such losses involve more than a pregnancy loss (Dallay, 2013). The inclusion of losses in different weeks of gestation and with different associated factors provides a broad view of these experiences.

Conclusion

The metaphor "Knights by force and wounded, protecting without a shield" represents men's experiences after an involuntary pregnancy

loss. While trying to cope with loss of fatherhood and suffering, men had to deal with lack of social acknowledgement and manage their behaviour and emotional expressions as to conform with social expectation of virility. Despite the lack of knowledge and support, men tended to be strong.

Our results indicate the need for including men in the care of involuntary pregnancy losses, providing comprehensive and individualised care for both parents. Thus, this group requires involvement in care since pregnancy, follow-up during the process, and spaces that allow them to express their experiences and be heard. Moreover, care should not be limited to the acute moment of loss or to the hospital setting, and both gender and cultural expectations must be considered in care provision. Healthcare professionals - especially nurses and midwives, being the professionals of reference in care for these situations must provide support and receive theoretical-practical training and the necessary tools for managing emotionally demanding care, including communication amongst other aspects. We highlight the need for further research exploring the experience of men in different contexts and of healthcare professionals regarding the care of men after involuntary pregnancy loss, which would contribute to a better understanding of the phenomenon.

Ethical statement

Not applicable with this methodology.

Funding resources

The authors disclosed receipt of the following financial support for the manuscript edition: Xunta de Galicia (Competitive Reference Group ED431C-2018/38), Spain. Funding for open access charge: Universidade da Coruña/CISUG.

CRediT authorship contribution statement

Sara Fernández-Basanta: Conceptualization, Resources, Investigation, Supervision, Writing – original draft, Visualization, Writing – review & editing, Data curation, Formal analysis, Methodology. Rita Rodríguez-Pérez: Conceptualization, Visualization, Investigation, Formal analysis, Writing – review & editing, Methodology. Carmen Coronado: Conceptualization, Supervision, Resources, Investigation, Data curation, Visualization, Writing – review & editing, Formal analysis, Methodology. María-Jesús Movilla-Fernández: Conceptualization, Supervision, Visualization, Data curation, Investigation, Writing – review & editing, Resources, Formal analysis, Methodology.

Declaration of Competing Interest

The authors have no conflicts of interest to disclose.

Supplementary materials

Supplementary material associated with this article can be found, in the online version, at doi:10.1016/j.midw.2023.103827.

References

- Bondas, T., Hall, E., Wikberg, A., Liamputtong, P., 2017. Metasynthesis in health care research. Research Methods in Health. Oxford University Press, pp. 325–342.
- Bonnette, S., Broom, A., 2012. On grief, fathering and the male role in men's accounts of stillbirth. J. Sociol. 48 (3), 248–265. https://doi.org/10.1177/1440783311413485.
- Cacciatore, J., Erlandsson, K., Rådestad, I., 2013. Fatherhood and suffering: a qualitative exploration of Swedish men's experiences of care after the death of a baby. Int. J. Nurs. Stud. 50 (5), 664–670. https://doi.org/10.1016/j.ijnurstu.2012.10.014.
- Courtenay, W.H., 2000. Constructions of masculinity and their influence on men's well-being; a theory of gender and health. Soc. Sci. Med. 50 (10), 1385–1401.
- Dallay, É.G., 2013. Perinatal grieving of a stillbirth baby. Ann. Méd. Psychol. Rev. Psychiatr. 171 (3), 182–188. https://doi.org/10.1016/j.amp.2013.01.017.

Due, C., Chiarolli, S., Riggs, D.W., 2017. The impact of pregnancy loss on men's health and wellbeing: a systematic review. BMC Pregnancy Childbirth 17 (1), 1–13.

- Ellis, A., Chebsey, C., Storey, C., Bradley, S., Jackson, S., Flenady, V., Siassakos, D., 2016. Systematic review to understand and improve care after stillbirth: a review of parents' and healthcare professionals' experiences. BMC Pregnancy Childbirth 16 (1). https://doi.org/10.1186/s12884-016-0806-2.
- Eriksson, K., 1994. Theories of Caring as Health. Caring As Healing: Renewal through Hope. National League for Nursing Press, New York, pp. 3–20.
- Eriksson, K., Charles, I., Joan, E., Karl, A., Translation, E., 2006. The Suffering Human Being. Nordic Studies Press.
- Farquharson, R.G., Stephenson, M.D., 2017. Early Pregnancy. Cambridge University Press
- Fernández-Basanta, S., Coronado, C., Bondas, T., Movilla-Fernández, M.-J., 2021. Primary healthcare midwives' experiences of caring for parents who have suffered an involuntary pregnancy loss: a phenomenological hermeneutic study. Midwifery 92, 102863.
- Fernández-Basanta, S., Coronado, C., Movilla-Fernández, M.J., 2019. Multicultural coping experiences of parents following perinatal loss: a meta-ethnographic synthesis. J. Adv. Nurs. https://doi.org/10.1111/jan.14211.
- Fernández-Basanta, S., Coronado, C., Movilla-Fernández, M.J., 2022. Double-layer masking of suffering after pregnancy loss: a grounded theory study from a male perspective. J. Midwifery Women Health 67 (4), 470–477.
- Fernández-Basanta, S., Movilla-Fernández, M.-J., Coronado, C., Llorente-García, H., Bondas, T., 2020a. Involuntary pregnancy loss and nursing care: a metaethnography. Int. J. Environ. Res. Public Health 17 (5), 1486.
- Fernández-Sola, C., Camacho-Ávila, M., Hernández-Padilla, J.M., Fernández-Medina, I. M., Jiménez-López, F.R., Hernández-Sánchez, E., Granero-Molina, J., 2020b. Impact of perinatal death on the social and family context of the parents. Int. J. Environ. Res. Public Health 17 (10), 3421.
- France, E.F., Cunningham, M., Ring, N., Uny, I., Duncan, E.A., Jepson, R.G., Booth, A., 2019. Improving reporting of meta-ethnography: the eMERGe reporting guidance. BMC Med. Res. Methodol. 19 (1), 25.
- Gopichandran, V., Subramaniam, S., Kalsingh, M.J., 2018. Psycho-social impact of stillbirths on women and their families in Tamil Nadu, India - a qualitative study. BMC Pregnancy Childbirth 18 (1), 109. https://doi.org/10.1186/s12884-018-1742-0.
- Habib, C., Lancaster, S., 2006. The transition to fatherhood: identity and bonding in early pregnancy. Father. Harriman 4 (3), 235.
- Heazell, A.E., Wojcieszek, A., Graham, N., Stephens, L., 2019. Care in pregnancies after stillbirth and perinatal death. Int. J. Birth Parent Educ. 6 (2), 23–28.
- Henderson, S., Holland, J., McGrellis, S., Sharpe, S., Thomson, R., 2007. Inventing Adulthoods: A Biographical Approach to Youth Transitions. Sage.
- Horstman, H.K., Holman, A., McBride, M.C., 2020. Men's use of metaphors to make sense of their spouse's miscarriage: expanding the communicated sense-making model. Health Commun. 35 (5), 538–547.
- Hug, L., You, D., Blencowe, H., Mishra, A., Wang, Z., Fix, M.J., Suzuki, E., 2021. Global, regional, and national estimates and trends in stillbirths from 2000 to 2019: a systematic assessment. Lancet North Am. Ed. 398 (10302), 772–785.
- Hutti, M.H., Myers, J., Hall, L.A., Polivka, B.J., White, S., Hill, J., Grisanti, M.M, 2017.
 Predicting grief intensity after recent perinatal loss. J. Psychosom. Res. 101, 128–134.
- Jakupcak, M., Salters, K., Gratz, K.L., Roemer, L., 2003. Masculinity and emotionality: an investigation of men's primary and secondary emotional responding. Sex Roles 49 (3), 111–120.
- Laguado-Barrera, T., Lafaurie-Villamil, M.M., Vargas-Escobar, L.M., 2019. Experiencias de participación de los hombres en el cuidado de su pareja gestante. Duazary 16 (1), 79-92.
- Lawn J.E., Blencowe H., Waiswa P., Amouzou A., Mathers C., Hogan D., Cousens S. (2016). Stillbirths: rates, risk factors, and acceleration towards 2030. Lancet North Am. Ed., 387(10018), 587–603. 10.1016/S0140-6736(15)00837-5.
- Layne, L.L., 1990. Motherhood lost: cultural dimensions of miscarriage. Women Health 16 (3-4), 69-98.
- Leichtentritt, R.D., Mahat-Shamir, M., 2017. Mothers' continuing bond with the baby: the case of feticide. Qual. Health Res. 27 (5), 665–676.
- Lewin, S., Glenton, C., Munthe-Kaas, H., Carlsen, B., Colvin, C.J., Gülmezoglu, M., Rashidian, A., 2015. Using qualitative evidence in decision making for health and social interventions: an approach to assess confidence in findings from qualitative evidence syntheses (GRADE-CERQual). PLoS Med. 12 (10), e1001895.
- Long, H.A., French, D.P., Brooks, J.M., 2020. Optimising the value of the critical appraisal skills programme (CASP) tool for quality appraisal in qualitative evidence synthesis. Res. Methods Med. Health Sci. 1 (1), 31–42.
- Magaraggia, S., 2013. Tensions between fatherhood and the social construction of masculinity in Italy. Curr. Sociol. 61 (1), 76–92.
- Magnus, M.C., Wilcox, A.J., Morken, N.H., Weinberg, C.R., Håberg, S.E., 2019. Role of maternal age and pregnancy history in risk of miscarriage: prospective register based study. BMJ 364, 1869.
- McCreight, B.S., 2004. A grief ignored: narratives of pregnancy loss from a male perspective. Sociol. Health Illn. 26 (3), 326–350. https://doi.org/10.1111/j.1467-9566.2004.00393.x.
- Meaney, S., Everard, C.M., Gallagher, S., O'Donoghue, K, 2017. Parents' concerns about future pregnancy after stillbirth: a qualitative study. Health Expect. 20 (4), 555–562. https://doi.org/10.1111/hex.12480.
- Miller, E.J., Temple-Smith, M.J., Bilardi, J.E., 2019. There was just no-one there to acknowledge that it happened to me as well': a qualitative study of male partner's experience of miscarriage. PLoS One 14 (5), e0217395.

- Miron, J., Chapman, J.S., 1994. Supporting: men's experiences with the event of their partners' miscarriage. Can. J. Nurs. Res. 26 (2), 61–72.
- Murphy, F.A., Hunt, S.C., 1997. Family issues. early pregnancy loss: men have feelings too. Br. J. Midwifery 5 (2), 87–90.
- Noblit G.W., & Hare R.D. (1988). Meta-ethnography: Synthesizing Qualitative Studies (Vol. 11). sage.
- Nuzum, D., Meaney, S., O'Donoghue, K, 2018. The impact of stillbirth on bereaved parents: a qualitative study. PLoS One 13 (1), e0191635. https://doi.org/10.1371/ journal.pone.0191635.
- Obst, K.L., Due, C., 2019. Australian men's experiences of support following pregnancy loss: a qualitative study. Midwifery 70, 1–6. https://doi.org/10.1016/j.midw 2018 11 013
- Oransky, M., Marecek, J., 2009. I'm not going to be a girl" masculinity and emotions in boys' friendships and peer groups. J. Adolesc. Res. 24 (2), 218–241.
- WHO, 2004. ICD-10: International Statistical Classification of Diseases and related health problems. In: Alphabetical index, 3. World Health Organization.
- Petts, R.J., Shafer, K.M., Essig, L., 2018. Does adherence to masculine norms shape fathering behavior? J. Marriage Fam. 80 (3), 704–720.
- Puddifoot, J.E., Johnson, M.P., 1997. The legitimacy of grieving: the partner's experience at miscarriage. Soc. Sci. Med. 45 (6), 837–845. https://doi.org/10.1016/ s0277-9536(96)00424-8.
- Quenby, S., Gallos, I.D., Dhillon-Smith, R.K., Podesek, M., Stephenson, M.D., Fisher, J., Coomarasamy, A., 2021. Miscarriage matters: the epidemiological, physical, psychological, and economic costs of early pregnancy loss. Lancet North Am. Ed. 397 (10285), 1658–1667. https://doi.org/10.1016/S0140-6736(21)00682-6.

- Riggs, D.W., Due, C., Tape, N., 2021. Australian heterosexual men's experiences of pregnancy loss: the relationships between grief, psychological distress, stigma, helpseeking, and support. OMEGA J. Death Dying 82 (3), 409–423.
- Robson, P., Walter, T., 2013. Hierarchies of loss: a critique of disenfranchised grief. OMEGA J. Death Dying 66 (2), 97–119.
- Rodrigues, M.M.D.L., Hoga, L.A.K., 2005. Men and miscarriage: narratives of shared experiences [Homens e abortamento espontaneo: narrativas das experiencias compartilhadas]. Rev. Esc. Enferm. USP 39 (3), 258–267.
- Samuelson, M., Rådestad, I., Segesten, K., 2001. A waste of life: fathers' experience of losing a child before birth. Birth 28 (2), 124–130. https://doi.org/10.1046/j.1523-536x.2001.00124.x.
- Schütz, A., 1962. Collected Papers, 1. The Hague: Martinus Nijhoff.
- Story Chavez, M., Handley, V., Lucero Jones, R., Eddy, B., Poll, V., 2019. Men's experiences of miscarriage: a passive phenomenological analysis of online data [Article] J. Loss Trauma 24 (7), 664–677. https://doi.org/10.1080/23802359.2019.1611230.
- Wagner, N.J., Vaughn, C.T., Tuazon, V.E., 2018. Fathers' lived experiences of miscarriage [Article] Fam. J. 26 (2), 193–199. https://doi.org/10.1177/ 1066480718770154.
- Worden, J.W., 2018. Grief Counseling and Grief therapy: A handbook For the Mental Health Practitioner. Springer Publishing Company.
- Worth, N.J., 1997. Becoming a father to a stillborn child. Clin. Nurs. Res. 6 (1), 71–89. https://doi.org/10.1177/105477389700600107.
- Critical Appraisal Skills Programme. (2018). CASP checklist: 10 questions to help you make sense of a qualitative research.