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Healthcare professionals' experiences of perinatal loss: A systematic review

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Abstract

Healthcare professionals' psychological involvement in perinatal loss is a largely overlooked subject by healthcare systems, scientific research and prevention policies. A systematic scientific review has been carried out about emotional experiences, attributed meanings and needs conveyed by healthcare professionals in relation to perinatal loss. We identified 213 studies between 1985 and 2015, 20 of which were included in the present study for qualitative analysis. Our results point out the need for a targeted vocational training in perinatal loss, enabling healthcare professionals to achieve a proper management of their own internal states.

Keywords

healthcare professionals, perinatal loss, stillbirth, psychological experiences, neonatal units

Introduction

Miscarriage, stillbirth or neonatal death occurring a few days after delivery is an extremely complex and painful event, which strongly impacts expecting parents, as well as neonatal/gynecological units' routine. The heterogeneity of definitions and classifications of perinatal loss in each legislation system makes it difficult to analyze and compare different countries. Epidemiological data show how common perinatal loss still is: since the new millennium, the rate of miscarriages and stillbirths has been diminishing much slower than both maternal and child (aged 5 or less) mortality rates (Lawn et al., 2016). An estimated 2.6 million third trimester stillbirths occurred worldwide in 2015, of which 98 percent in low-income and middle-income countries (Lawn et al., 2016).

The scientific literature particularly emphasized the repercussions of perinatal loss, characterized as an unexpected, inexplicable, and potentially traumatic event (Abboud and Liamputtong, 2003; Armstrong, 2007; Engelhard, 2004; Kersting and Wagner, 2012; Säflund et al., 2004), on maternal and parental experiences (Avelin et al., 2011; Badenhorst and Hughes, 2007; Cacciatore et al., 2008; Hughes and Riches, 2003; Rådestad et al., 2014; Trulsson and Rådestad, 2004).

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Parents usually experience shock, frustration, rage, feelings of emptiness and loneliness (Flenady et al., 2014; Hutti, 2005; McCreight, 2008), possibly leading to short- and long-term psychological morbidity (Blackmore et al., 2011; Cacciatore, 2013; Lok et al., 2010; Turton et al., 2009), thus highlighting the importance of professional care and support during the whole process of bereavement.

Despite the inability to accurately predict and prevent most perinatal losses, adequate clinical care provided by trained healthcare professionals can still alleviate the psychological impact of such events, possibly avoiding further deterioration of parental trauma (Erlandsson et al., 2011; Lee, 2012; Pullen et al., 2012; Rådestad, 2001). The ongoing support of couples must be a continuous process, starting from the diagnosis and continuing throughout delivery and postpartum, even after the parents have returned home (Lisy et al., 2016; Pullen et al., 2012; Royal College of Obstetrician and Gynaecologist (RCOG), 2010).

Numerous studies pointed out that healthcare professionals' attitudes and communication skills, when adequate, might positively impact parents' decision-making, resilience, and long term well-being (Ellis et al., 2016; Flenady et al., 2014; Gold, 2007; Hughes and Riches, 2003; Lang et al., 2011; Leon, 2008). Conversely, inadequate care might exacerbate an already difficult grief (Henley and Schott, 2008; Leon, 2008; Lisy et al., 2016), hindering the parents' process of healing (Gold, 2007).

Healthcare professionals' ability to sensitively engage patients (Cacciatore, 2010; Cacciatore and Flint, 2012), using appropriate timing and language, seems to play a central role in delivering the most suitable care, mitigating the couple's traumatic response (Lisy et al., 2016).

To this day, the scientific literature mainly focused on maternal/parental experiences and the quality of care that is provided to bereaving families. Nevertheless, perinatal loss represents a stressful and emotionally demanding event for healthcare professionals as well, since they must deal with the additional burden of managing their own emotions while caring for the patients during the short and long term.

Moreover, repeated exposure to perinatal loss might add up to a profound distress, eventually bringing healthcare professionals to the point of questioning their own competence (Madrid and Schacher, 2006). Excessive emotional involvement, if not properly processed, might lead to the onset of vicarious traumatization (McCann and Pearlman, 1990).

While caring for traumatized patients, healthcare professionals are constantly exposed to themes of vulnerability and death. Impaired cognitive processing and changes in the attitudes toward themes of security, self-control and trust have been observed. *Secondary traumatic stress* is a syndrome comprising symptoms that closely resembles those of post-traumatic stress disorder (PTSD): intrusive thoughts, nightmares involving the patients' trauma, fatigue, irritability, and anger (Newell and MacNeil, 2010). Acknowledging such symptoms is central for identifying risk factors and developing effective prevention programs. Since the clinical course of such symptoms is currently poorly investigated, a deepened understanding might positively impact healthcare professionals' sense of agency, promoting the mobilization of additional resources to increase professional efficacy.

Given the limited amount and the dis-homogeneity of scientific works addressing the repercussions of perinatal loss on healthcare professionals, this study was conducted using a systematic approach, subdividing the topic in terms of psychological impact, needs, and clinical implications.

Methods

Literature search and eligibility criteria

The following systematic review was conducted in compliance with PRISMA—*Preferred Reporting Items for Systematic Reviews and Meta-Analyses*—guidelines for search, systematization, and report of systematic reviews (Mother et al., 2009). The research was conducted in January 2016 and included studies published from

January 1985 until December 2015. Studies were identified by querying online databases (*ProQuest Psychology Journal, PsycARTICLES, PsycINFO, Periodicals Archive Online, Periodicals Index Online, and PubMed*) with a combination of the following keywords: (1) *stillbirth*, *perinatal loss*, *perinatal grief*, *perinatal death*, with (2) *staff distress*, *physician grief*, *obstetrician*, *healthcare professionals*, *burnout*, *nurs**. The eligibility of each article was independently assessed by two authors. Progressive exclusion was performed starting from the title, then the abstract and finally the full text. Including criteria for articles eligibility were as follows: (1) publication within the given time interval (1985–2015), (2) publication in English, (3) publication in peer-reviewed journals, and (4) focus on healthcare professionals' inner experience.

We opted for publications in English, rather than in our own mother tongue, due to the vast amount of international literature available. Our choice was additionally motivated by the general lack of Italian studies pertaining to our focus and our goal to conduct a deep, comprehensive analysis. With regard to criterion 4, we chose to include only papers pertaining to the effects of perinatal loss exposure on healthcare professionals, in terms of mental states, personal experiences, attribution of meanings and emotional impact.

Database searches resulted in a total of 31,666 articles, 627 of which were in compliance with the eligibility criteria, based on title and abstract evaluation. Duplicate removal resulted in a total of 213 articles. 193 were excluded based on full text evaluation (Figure 1) for compliance with criterion 4. In fact, they were focused on parental bereaving, specific customs or support groups for couples who suffered a perinatal loss (22); they assessed the quality and quantity of care delivered by healthcare professionals to the parents and their own fulfillment in terms of care's effectiveness and general well-being (12); they analyzed the features of decision making related to preterm birth, focusing on parents' and healthcare professionals' responsibilities inside neonatal intensive care units (13); they assessed the effectiveness of different therapies employed in neonatal end-of-life care, including palliative ones (13); they investigated disorders, diseases, and infections pre- and post-partum and available treatments (28); they focused on entirely different subjects (e.g. risk factors for perinatal loss, infant health practices, infertility, preterm birth, impact of newborn infants on the family system, disorders and risk factors in adolescence) and were too heterogeneous to be grouped in macro-categories (104); and finally one article was withdrawn from publication, because of major overlaps with previous publications from the same authors (1).

The remaining 20 articles have undergone qualitative analysis—see Figure 1 for the PRISMA flow diagram.

Data analysis

Duplicate removal resulted in a total of 213 articles. Full-text analysis was conducted independently by two judges in order to identify works relevant to our focus. Any discrepancy regarding the inclusion/exclusions of papers was discussed. When an agreement could not be reached, a third judge was consulted.

Meta-analysis based on the 20 identified studies was deemed unsuitable, given the high methodological variability, the type and size of samples employed, and the instruments used.

Results

Qualitative analysis was carried out considering aims, methodologies employed, and results. Detailed information for each article is displayed in Table 1. The chosen studies were carried out in North America (8), South America (1), Asia (5), Europe (5) Oceania (1), and cover four decades: one was published in the 1980s, three in the 1990s, six from 2000 to 2010, and finally 10 from 2010 to date. Two articles concerned theoretical considerations, while 18 were original experimental studies regarding healthcare professionals. Sampling for each study was performed from nurses (9), obstetricians/physicians (5), nurses/midwives (2), and

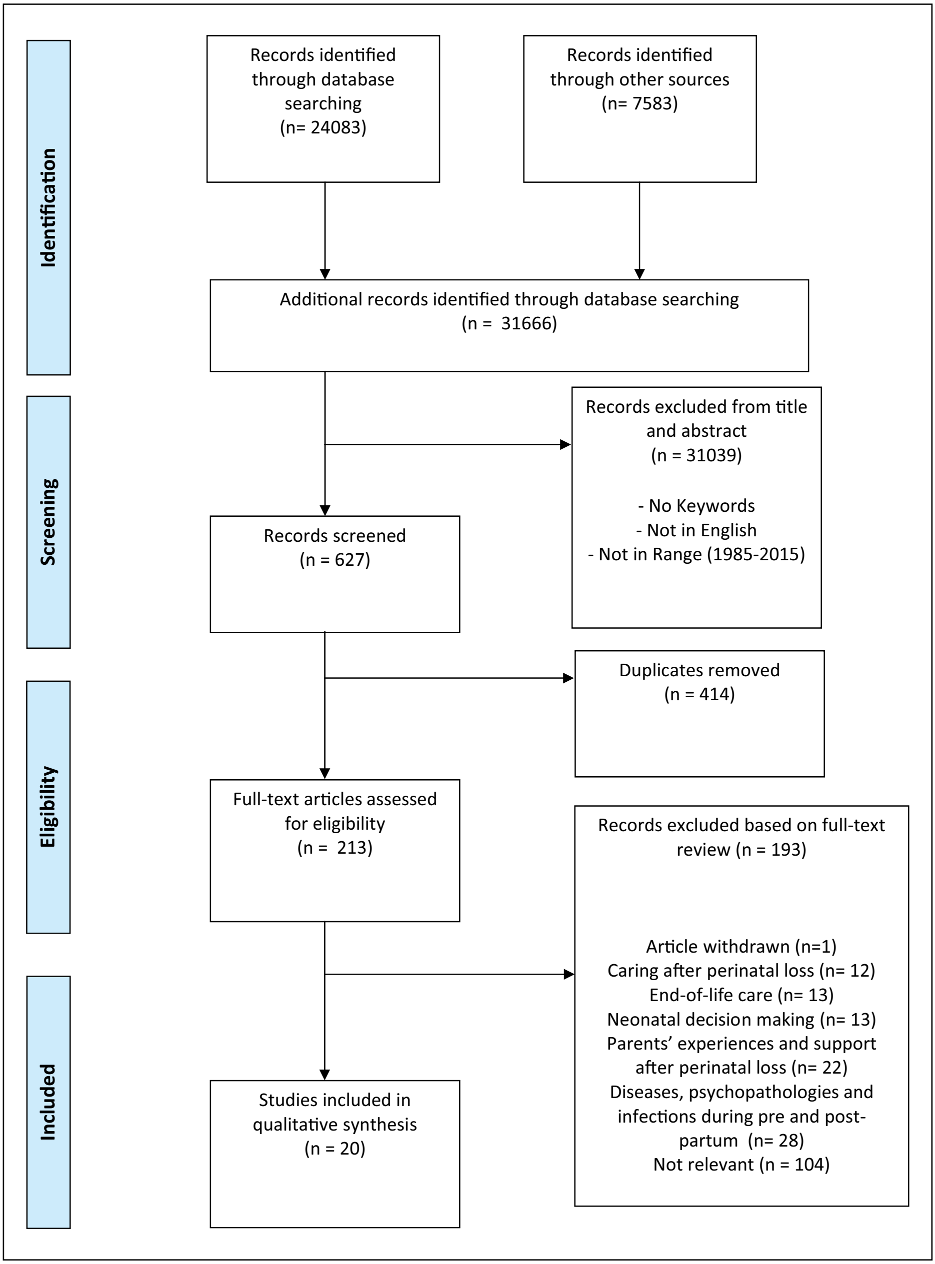

Figure 1. PRISMA flow diagram for literature search.

every healthcare professional involved in perinatal loss (2).

A total of 10 focused on the psychological impact of perinatal loss, 5 centered on the attitudes toward perinatal loss, and 3 investigated needs and coping strategies connected to perinatal loss. Samples employed in the 18 experimental studies varied greatly in terms of size, from a minimum of 8 to a maximum of 804 subjects (M=203.7; ds=222.4). In total, 10 studies

Table 1. Summary of included studies.

Authors	Nationality	Methodology	Sample	Measures	Impact/needs/coping/themes
Kirkley-Best et al. (1985)	USA	Empirical study, quantitative study	Obstetricians and obstetrical residents ($N=70$)	TI	The death threat level doesn't have effects on attitudes toward stillbirth.
Defey (1995)	Uruguay	Clinical reflection	–	–	Feelings of impotence, frustration, sense of guilt. Risk of burnout syndrome. The development of a set of goals and steps for intervention with care staff.
Lundqvist and Nilstun (1998)	Sweden	Empirical study, quantitative study	Nurses ($N=144$)	Ad hoc questionnaire about nurses' experience related to perinatal death	Parents' refusal to touch or hold their dead baby is a problem (ethical conflict); feelings of personal failure in influencing parents' attitude toward perinatal death.
Gardner (1999)	USA	Empirical study, qualitative study	Midwives and nurses ($N=44$, USA; $N=37$ UK; $N=33$ Japan)	Ad hoc questionnaire about feelings and needs (open-ended questions)	Perspectives of nurses and midwives from different countries (USA, UK, and Japan). Anxiety and lack of experience, knowledge, communication skills. Needs for increased knowledge and support for a sensitive care of bereaved parents.
McCreight (2005)	UK	Empirical study, qualitative study	Nurses ($N=14$)	Semi-structured in-depth interviews about feelings and needs	Awareness of the personal costs related to provision of care and support. Need to recognize the importance of managing emotions and narrating the emotional labor.
Chan et al. (2005)	China	Empirical study, quantitative study	Nurses ($N=169$)	Ad hoc questionnaire about attitudes toward bereavement care/policy/education	Positive bereavement care attitudes. Positive correlation between attitudes toward bereavement, educational needs, and hospital policy support. Need for increased knowledge, communication skills, support, and experience.
Chan et al. (2008)	China	Empirical study, quantitative study	Nurses ($N=334$)	Self-report questionnaire developed by Chan et al. (2004), about nurses/midwives' attitudes toward bereavement care/policy/education	General positive attitude to bereavement care. Need for knowledge, support of bereaved couples, sharing the feelings with colleagues and receiving support.
Gold et al. (2008)	USA	Empirical study, quantitative study	Obstetricians ($N=804$)	Survey about experiences, beliefs. Training, skills	The majority of participants reported a large emotional impact on their personally; a lot of obstetricians reported the thought of giving up obstetric practice. Strategies to cope: talking informally with colleagues or friends and family.

(Continued)

Table 1. (Continued)

Authors	Nationality	Methodology	Sample	Measures	Impact/needs/coping/themes
Roehrs et al. (2008)	USA	Empirical study, qualitative study	Nurses (N = 35)	Online survey with open-ended questions and a related interview guide	Coping strategies: attention to the care, talking to nursing peers, and spending time with their own family members. Need for education about grief training and communication skills.
Chan and Arthur (2009)	China	Empirical study, quantitative study	Midwives and nurses (N = 185)	Self-report questionnaire developed by Chan et al. (2004), about nurses/midwives' attitudes toward bereavement care/policy/education	Positive attitude toward perinatal bereavement care in nurses/midwives with religious beliefs and focused on the importance of hospital policy. Need for increased knowledge and training on coping strategies, need for support from the hospital staff.
Chan et al. (2010)	China	Empirical study, quantitative study	Nurses (N = 573)	Self-report questionnaire developed by Chan et al. (2004), about nurses/midwives' attitudes toward bereavement care/policy/education	General positive attitude toward bereavement care result associated with position, information about hospital policies, and training for coping with bereavement care. Differences in nursing practices across Asian cities.
McGrath (2011)	USA	Theoretical reflection	–	–	Feelings of sorrow, fear, personal loss, regret, fatigue, insomnia, and mood swings. Grief and pain both in the workplace and in the personal lives. Description of bereavement debriefing sessions at John Hopkins Children's Center.
Kelley and Trinidad (2012)	USA	Empirical study, qualitative study	Physicians (N = 8)	Semi-structured focus groups	Physicians considered stillbirth as an unexpected event. It is viewed less traumatic than the death of a neonate. It is reported discomfort in bringing up the topic with couples. Importance of improving communication skills and training on the bereavement needs of couples.
Farrow et al. (2013)	USA	Empirical study, qualitative study	Obstetricians (N = 335)	Ad hoc questionnaire about emotional responses	53.7% of obstetricians reported grief, 17.2% self-doubt, 16.9% depression, and 16.4% self-blame. Older age, solo practice, higher volume practices, and higher proportion of Medicaid patients are found to be associated with psychological impact.
Kain (2013)	Australia	Empirical study, qualitative study	Nurses (N = 24)	Focus groups about nurses' beliefs, perceptions, and experiences	Grief and distress, sadness, and dilemmas. Needs for maintaining treatment boundaries (familiarity and trust) within the nurse–patient relationships, for acknowledging nurses' grief and sadness in order to alleviate many of the dilemmas.

Table 1. (Continued)

Authors	Nationality	Methodology	Sample	Measures	Impact/needs/coping/themes
Puia et al. (2013)	USA	Empirical study, quantitative study	Nurses ($N=91$)	Open-ended statement asking nurses' experiences	Six themes: getting through the shift, symptoms of pain and loss, frustrations with inadequate care, showing genuine care, recovering from traumatic experience, and never forget. Need for emotional support in order to cope with experiences similar to post-traumatic stress symptoms.
Wallbank and Robertson (2013)	UK	Empirical study, qualitative study	Physicians, midwives, and nurses ($N=184$)	IES, PANAS, WES, Brief COPE	More than half of participants reporting subjective distress levels. The lack of supervisor support resulted associated with negative coping strategies. Variables that predicted distress included negative affect, negative appraisal of care, cumulative losses, dysfunctional coping styles, and perceived support. Support and supervision can mitigate the distress.
Ben-Ezra et al. (2014)	Israel	Empirical study, quantitative study	Nurses ($N=90$)	Ad hoc interview about background characteristics; IES-R; CES-D; PSP; SPANE	Higher level of psychiatric symptoms (PTSD, depressive and psychosomatic) after exposure to perinatal death and in comparison to the non-exposed group. Preparation and professional support in order to improve the resilience are suggested.
Nuzum et al. (2014)	Ireland	Empirical study, qualitative study	Obstetricians ($N=8$)	Semi-structured interview with open questions about experience of stillbirth, impact, coping	Two themes emerged: human response to stillbirth (personal impact) and weight of responsibility (sense of professional burden). Training and education in perinatal bereavement care are recommended.
Gandino et al. (2014)	Italy	Empirical study, quantitative study	Physicians, nurses, midwives, and ward assistants ($N=485$)	Closed-ended questions about personal and professional grief, responsibilities, emotional reactions; MBI-HSS	Physicians and medical staff significantly differed in handling perinatal death. Burnout's levels are different in Italian social-sanitary personnel, depending on seniority and number of perinatal losses.

TI: Threat Index (Neimeyer et al., 1984); IES: Impact of Event Scale (Horowitz et al., 1979); PANAS: Positive And Negative Affect Scale (Watson et al., 1988); WES: Work Environment Scale (Moos, 1986); CES-D: Center for Epidemiologic Studies Depression Scale (Radloff, 1977); PSP: Psychosomatic Problems Scale (Hagquist, 2008); SPANE: Scale of Positive and Negative Experience (Diener et al., 2009); IES-R: Impact of Events Scale–Revised (Weiss and Marmar, 1997); MBI-HSS: Maslach Burnout Inventory–Human Services Survey (Maslach and Jackson, 1996); PTSD: post-traumatic stress disorder.

employed a quantitative methodology, while 8 a qualitative one.

Among the 10 studies that employed a quantitative methodology, 4 employed standardized scales and questionnaires for assessing PTSD, emotional distress, depression symptoms, burnout, subjective perception of well-being, coping strategies, and death imagery. The other six employed ad hoc questionnaires or surveys for assessing healthcare professionals' perinatal experiences, in terms of beliefs and psychological processes related to grief. Authors who carried out qualitative studies employed surveys, focus groups, and semi-structured interviews, to examine healthcare professionals' experiences connected to perinatal loss, in terms of needs and meanings.

Emotional features

Given the close nature of care, the emotional difficulties experienced by parents can be strongly perceived by healthcare professionals, who in turn experience conflicted emotions given the simultaneous occurrence of life and death.

The studies investigated healthcare professionals' emotional and attitudinal responses to perinatal loss. Among the most common emotions experienced, Defey (1995) observed frustration, impotence, and guilt, arguing about a possible hostility and victimization carried on by parents. Some authors observed a strong tendency to self-blaming and feelings of inadequacy in being able to appropriately manage situations involving grieving parents (Farrow et al., 2013; Gold et al., 2008; Puia et al., 2013; Wallbank and Robertson, 2013) suggesting that such responses might be instrumental in achieving a sensation of increased control over the situation. Feelings of impotence, uselessness, and resignation were observed as well (McCreight, 2005; Puia et al., 2013). The association between loss and personal failure might lead healthcare professionals to experience a sustained state of tension, pushing them to question their own self-esteem, thus setting in motion a process of traumatization (Wallbank and Robertson, 2013). Embarrassment might be a form of emotional response, particularly when delivering a diagnosis of stillbirth. Self-doubt, grieving, sense of isolation, and frustration were among the emotional responses most commonly observed (Farrow et al., 2013; Gardner, 1999). Furthermore, the trans-cultural survey carried out by Gardner (1999) in the United States, United Kingdom, and Japan detected caution, fear, and insecurity. A survey conducted by Gold et al. (2008) on a sample of 804 obstetricians reported how nearly 1 in 10 considered a career change, due to the emotional difficulties experienced in caring for bereaving parents. Moreover, additional responses might arise in an effort to distance themselves from such a stressful event (inhibition, negation, detachment, emotional blunting, indifference, and apathy), as a form of self-protection from a potentially overwhelming emotional involvement (Defey, 1995). When emotional management was well-integrated in the system of meanings and complemented by a deep professional knowledge, it became a valuable asset in caring for bereaving parents and a chance for personal growth (McCreight, 2005).

Psychopathological features

Studies exploring the psychological impact of perinatal loss on the staff of gynecological and neonatal units found increased levels of distress, vulnerable caring, and coping styles (Wallbank and Robertson, 2013). Moreover, Ben-Ezra et al. (2014) observed higher levels of PTSD, depressive and psychosomatic symptoms in nurses exposed to perinatal loss. Age and workload might have an influence on healthcare professionals' psychological response: some authors observed a direct correlation between vulnerability to stress, age, and multiple experiences of perinatal loss (Ben-Ezra et al., 2014; Farrow et al., 2013; Gandino et al., 2014); conversely, Wallbank and Robertson (2013) suggested that novelty might be a risk factor. Gardner (1999) and Chan et al. (2010) analyzed the attitudes toward perinatal loss in a group of nurses and found a strong correlation between seniority and positive/emphatic attitude; the latter might represent a facilitating factor in parental bereaving, instilling a sense of self-efficacy and self-assurance.

Some authors reported symptoms of burnout syndrome, characterized by irritability and psychosomatic disorders (Defey, 1995; Gandino et al., 2014; McGrath, 2011), often experiencing the urgency to change ward or, in some cases, even career (Gold et al., 2008). Repeated exposure to stressful events, like miscarriage and stillbirth, might lead to a constant re-traumatization, emotional collapse, and depersonalization (Defey, 1995; McGrath, 2011). Conversely, Gandino et al. (2014) observed lower levels of emotional distress and depersonalization in comparison to other hospital wards; however, burnout scores were positively correlated to seniority and exposure to perinatal loss and negatively correlated to perceived personal and professional competence.

Themes and meanings

Different studies employed semi-structured interviews and focus groups to investigate healthcare professionals' thematic narratives connected to perinatal loss and their integration into personal stories. Puia et al. (2013) isolated the salient themes in a sample of nurses exposed to perinatal loss: difficulties in maintaining a professional attitude, physical symptoms and emotional pain, frustration, need to provide excellent care, time to elaborate the traumatic event, and vivid memory of the experience. Results from Kain's (2013) study contributed to define grief as a "pervasive, highly individualized, dynamic process," usually observed in the staff of neonatal ward. Emerging themes were as follows: acknowledgment of the loss, recognition of the emphatic relationship between neonatal nurses and the family, and inclusion in grieving rituals. Such results corroborate those obtained by Roehrs et al. (2008), who analyzed narrations from a sample of nurses and observed the difficulties in caring for bereaving parents, the need for emotional recovery, and the increased support from the colleagues and the hospital's directorate. Kelley and Trinidad (2012) analyzed narrations of gynecologists and detected, among the emergent themes, frustration associated with the responsibility of "giving reasons" and explaining why the stillbirth occurred. In relation to caring, the theme of moral conflict emerged, regarding the practice of encouraging parents to touch and hold the corpse, as part of the bereaving process (Lundqvist and Nilstun, 1998): when couples refused to do so, nurses experienced an increased sense of failure.

Healthcare professionals' needs, clinical implications, and policies

The scientific literature suggested a correlation between the sense of inadequacy and helplessness and the lack of specific information and knowledge about stillbirth. Vocational training for healthcare professionals often exclusively focused on academic knowledge, which was ineffective when dealing with emotional needs (McCreight, 2005). A specific knowledge and vocational training is needed in order to deliver appropriate care to bereaved parents, starting from the development of suitable communication skills (Chan and Arthur, 2009; Defey, 1995; Gardner, 1999; Kelley and Trinidad, 2012; Roehrs et al., 2008; Wallbank and Robertson, 2013). Moreover, the literature suggested the importance of receiving emotional support and sharing one's own experience with colleagues and/or physicians (Chan and Arthur, 2009; Chan et al., 2008): counseling and supervision are needed to better cope with the stressful experience, therefore achieving a deepened understanding. Chan et al. (2010) observed a correlation between nurses' attitudes and hospital's assistance, support, and training policies.

Healthcare professionals should be well informed about hospital policies for the management of bereavement, in order to deliver appropriate care and support to the parents in making plans and decisions for themselves (Chan and Arthur, 2009; Chan et al., 2008).

Debriefing sessions focused on emotional processing and support from the medical unit's supervisor, seemed to improve nurses' well-being and quality of care consequently provided to bereaved parents (Puia et al., 2013). Ben-Ezra et al. (2014) suggested increasing professionals' ability to cope with perinatal losses by uniformly allocating high-risk patients between nurses, in order to avoid repeated exposure, thus allowing each professional sufficient time to achieve a complete recovery. Such policy, matched with psycho-educational interventions, might facilitate the conversion of such stressful events into experiences of personal growth.

McCreight (2005) pointed out the potential of the narrative approach to drastically improve the quality of interventions directed to healthcare professionals: the possibility to develop a narration of their own experiences is instrumental in integrating them to their own life story and leads to an in-depth reflection on the meanings, creating a space for re-evaluating how to properly care for the patients. In order to achieve emotional management, it is fundamental, according to the author, to develop education policies and to value aspects of the clinical practice that may have been marginalized.

Discussion

The literature analysis resulted in the identification of 20 studies closely related to the psychological impact of perinatal loss on healthcare professionals. The increased number of publications over the years shows how scientific interest toward the topic has been steadily growing: investigating, on one hand, the psychological impact of perinatal loss on healthcare professionals and their emotional response, while increasing, on the other hand, the effort to implement more effective support/prevention programs. The literature review elucidated the main features of perinatal loss from the perspective of healthcare professionals: typical emotions, possible psychological repercussions, prevention, and support programs available.

Both quantitative and qualitative methods were employed for studying healthcare professionals' experiences regarding perinatal loss. Only two studies (Gandino et al., 2014; Wallbank and Robertson, 2013) included the whole medical staff; the remaining ones focused only on some healthcare professionals, in most cases midwives and/or nurses. The literature analysis showed a slight change over time in studies' both aims and criteria. Older studies were mostly descriptive and concerned the experiences of healthcare professionals, without addressing policies aimed at preventing and/or mitigating the trauma: the need for a vocational training on perinatal loss was the only notable exception.

Since the 2000s, articles often acknowledged healthcare professionals' need for support and sharing painful experiences, raising self-awareness regarding their own internal states and promoting personal growth. The most common emotions were guilt, frustration (generally referred to their own abilities, or lack of), sense of personal failure, and helplessness. The latter have been often described as so overwhelming that distancing from the parents was actively pursued: healthcare professionals felt unable to face such an extreme emotional weight (Chan and Arthur, 2009; Farrow et al., 2013; Gold et al. 2008; McCreight, 2005; Puia et al., 2013; Wallbank and Robertson, 2013). Different studies (Defey, 1995; Gandino et al., 2014; McGrath, 2011) examined the possibility of the onset of burnout syndrome, mentioning sadness and discomfort among the emotions experienced by healthcare professionals. Certain symptoms of psychiatric disorders were observed by Ben-Ezra et al. (2014), who pointed out how repeated exposure to perinatal loss might be a high risk factor for developing PTSD, depression, and psychosomatic disorders. Several studies (Chan et al., 2005; Gardner, 1999; Nuzum et al., 2014) reported that academic education about grieving and bereaving might be a protective factor in stress management and caring, although the issue of workers already affected by burnout syndrome was not addressed. Some authors (Chan and Arthur, 2009; Defey, 1995; Gandino et al., 2014; Nuzum et al., 2014; Wallbank and Robertson, 2013) speculated that improved support, supervision and the possibility to share one another's experiences, might improve healthcare professionals' ability to both manage internal states and care for grieving parents.

Puia et al. (2013) suggested that well timed *debriefing* and supervised stress management activities might be extremely useful to the hospital's staff, while Farrow et al. (2013) observed that those who underwent vocational training in perinatal loss had a lower chance to feel pain, suggesting *mindfulness* and acceptance-based approaches as better suited for improving stress management. The vast majority of authors suggested psychoeducational training in preparation of perinatal death and, generally, better forms of support for healthcare professionals, in order to enhance their resilience, thus enabling the processing of a painful experience into a form of personal growth.

Limitations

This article has the merit of focusing on a poorly investigated subject. Nevertheless, some critical points should be considered when interpreting our findings. Screening was performed using databases that might have not included the whole scientific literature regarding the focus of this study. The chosen keywords represent a limiting factor as they could have narrowed down the number of suitable articles.

The present work, despite its merit of including international literature, is limited by language as an inclusion criterion: since English is the international language for academic publications, articles published in other languages have been excluded. Given the few studies included in this review, it was not possible to analyze the specific experiences between the different professional categories (physicians/obstetricians, midwives, nurses, and ward assistants). In addition, the measures adopted by the studies, taking into account the different variables, did not allow to compare the scores obtained by each sample. Finally, the heterogeneity of the empirical studies considered, in terms of methodology employed and sample type/size, did not allow for a meta-analysis.

Conclusion

The present systematic review highlighted the main features of healthcare professionals' experiences in dealing with perinatal loss. The scientific literature seemed to converge in suggesting that such loss, given its tragic and unpredictable nature, forces hospital staff to deal with feelings of helplessness, frustration, rage, and guilt, which might lead over time to shock, confusion, depressive symptoms, and acute stress. A deepened understanding of the grief related to perinatal loss could improve the quality of support delivered to bereaved parents, ensuring a more emphatic environment. Future research, focused on monitoring and preventing risk factors for burnout syndrome, stress-related syndromes, and symptoms connected to vicarious traumatization would be desirable.

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