Psychopathological risk in pregnancies after a perinatal loss

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Abstract

Pregnancies after a perinatal loss are a delicate moment in a woman's life as well as in her family's. Despite their frequency, their psychological impact and the risks connected to them, pregnancies with these characteristics lack of an adequate support, showing deficiencies both in current care standards and in the guidelines for perinatal assistance. This article would like to give food for thought about this topic, suggestig possible interventions in the psychologic area to support this delicate stage of both familiar and individual cycle.

Introduction

Internationally, perinatal loss and its grief are not classified in a uniform manner (Lawn et al., 2016). In this article, we will consider the italian classification because, differently from the international ones, includes all types of child loss, from conception to the first months after birth, not distinguishing between the early stages of pregnancy and the further ones, and neonatal losses.

Perinatal loss is much more frequent than expected. Only in Italy, the number of occurrences is very high: every year almost 180.000 families suffer of this type of loss. Up to 80% of these deaths occur in the first three months of pregnancy, while the remaining occure in subsequent periods, with a sharp increase getting closer to the date of birth (ISTAT - Italian National Istitute of Statistics, 2016).These values, which reflect the world's average, lack of appropriate social and cultural recogniton as well as of unambiguous guidelines for an adequate psychological support, which are still not available for operators (Alderdice, 2017; Frøen et al., 2011).

It has been proven that perinatal loss at a general level can be an incredibly difficult and traumatic experience for parents who go through it.

Although fetal endouterine death (stillbirth) has potentially more traumatic elements than early losses (Chung, Redd, 2017, Gold et al., 2016;), research has shown that it is not the lenght of gestation that defines the lenght and the depth of mourning, but the intensity of emotional investment and affection towards that pregnancy (Moulder, 1994; O'Leary, 2004).

Examples of perinatal loss are early abortion, miscarriage, extrauterine pregnancy, voluntary or therapeutic interruption, severe fetal pathology with the decision not to continue pregnancy with a fetus or newborn affected by terminal illness, death in utero (stillbirth), death in labour, death at birth or immediately afterwards, in Neonatal Intensive Care, the death of one or more twins in a multiple pregnancy (spontaneous loss or selection), loss after assisted procreation. The sudden death

of the infant or SIDS (Sudden Infant Death Syndrome), accidents and infanticide should also be considered.

Following cases should also be evaluated: decision to give the baby up for adoption, forced removal for maternal psychiatric pathology or for other serious reasons, and finally surrogacy, which is not included in Italian case studies, but which has opened a line of international research into the experience of donor mothers, for example with the studies of Ahmadi Teharan et al. (2014), Jadva, Imrie, Golombok (2014) and Lamba, Jadva, Golombok (2018).

Studies on perinatal loss show that this tragic event often leads to very deep grief (Bennett et al., 2008): after the diagnosis, paralyzing sensations can emerge in reaction to the idea of carrying a dead child and having to give birth to it, with experiences of shock, panic, horror, anger and confusion (Burden et al., 2016; Trulsson, Radestad, 2004). Just after the birth, a painful state can appear in the upper limbs called "empty arm syndrome" (Ravaldi et al., 2008), while the breast can go through lactation onset as a reaction to other babies' crying (Cole, 2012). In the following months, up to the first year and even beyond (Campbell-Jackson, Bezance, Horsch, 2014), emotional suffering can result in physical pain, with clinical cases ranging from appetite variations, sleep difficulties, headaches and dizziness (Murphy, Shevlin, Elklit, 2014). Acute anxiety and post-traumatic stress disorder are also very frequent, as well as important dissociative symptoms (Engelhardet et al., 2003; Van Emmerik, Kamphuis, Emmelkamp, 2008). Typical syndromes are an increase in somatization and obsessive-compulsive behaviors, as well as depression (Murphy et al., 2014), irritability and a strong desire for the lost child (Krosch, Shakespeare-Finch, 2017). Among parents who experience post-traumatic stress after perinatal loss, some may be at risk of suicide, heart attack, illness and possible death (Prigerson et al., 1999), while 35% of mothers, one month after the event, believe to be still pregnant from the previous child (Friedman, Garth, 1989).

A further possible psychopathological complication is the occurrence of a persistent complex bereavement disorder (APA, 2013; McSpedden et al., 2017). Furthermore, couples suffering a perinatal loss, are at greater risk of interrupting their relationship than those in which a healthy child is born (Gold, Sen, Hayward, 2010), since the numerous adverse psychological and physical consequences of this event are responsible of an increase in stress and relational conflict, introducing greater problems in sexuality and intimacy (Hutti et al., 2014).

In view of all this, this particular kind of grief, for so long not recognized as such, has to be considered and subsequently treated as a real and proper mourning (Haussaire-Niquet, 2004). Despite some peculiarities, perinatal losses present the same evolution, feelings and fears of other types of losses, with the same risk of running into a complicated grief and developing symptoms of anxiety, depression or other psychopathological problems. It also shows a direct link with difficulties in creating attachment relationships with present and future children, with problems ranging from affective disinvestment to the idealization of the lost child, to psychopathological

disorders in subsequent pregnancies and to critical issues in the three-generation family systems (Gandino, Vanni, Bernaudo, 2018).

Pregnancies following a perinatal loss experience

Most women who experience a perinatal loss try to conceive and have a new pregnancy soon after their loss (Carter et al., 2007; Côté-Arsenault, Morrison-Beedy, 2001; Wojcieszek et al., 2016) and about 50-80% has a new pregnancy within a year (Blackmore et al., 2011; O'Leary, 2009), since for many of these women it is common belief that a new pregnacy would remove the traumatic memories connected to the loss and make them feel happy again.

Unfortunately, pregnancies after a perinatal loss are a psycologically stressfull period (Gaudet et al., 2010; Hutti, Armstrong, Myers, 2011) as the new pregnancy represents a situation that can possibly lead to the repeating of all the suffering of the previous one and both parents are going to be continually challeged by their personal traumatic memories related to previous pregnancy (Gandino et al., 2018). If the time needed for mourning was not enough, it is possible for them to feel dizzy and emotionally too fragile. Since the new pregnancy reactivates a traumatic experience, it amplifies the risk to develop a post traumatic stress disorder and it is frequently associated with anxiety, fear, hypervigilance, and uncertanty, linked to restless concerns about fetus' well-being (Amstrong, 2004; Côtè-Arsenault, Bidlack, Humm, 2001; Côtè-Arsenault, Mahlangu, 1999; Côtè-Arsenault, Marshall, 2000; Engelhard et al., 2001; Geller, Kerns, Klier, 2004; Turton et al., 2001).

Although women are more likely to experience acute anxiety in later pregnancies (Côté-Arsenault, 2003) and are at greater risk for depression (Nynas et al., 2015), some authors have identified the presence of a self-protective mechanism called "emotional cushioning" (Côté-Arsenault, Donato, 2011). According to Côtè-Arsenault and Donato (2011), the "emotional cushioning", or EC, is a complex defensive mechanism, that can be conscious or unconscious, and helps women protect themselves from pregnancy-related anxiety, in particular the fear of incurring into the trauma of a further perinatal loss. In this case, the mental and physical space for the new child can struggle to be created, all preparations tend to be postponed: the pregnancy is not announced, the name is not chosen, any emotional attachment with the child is avoided, no emotional investment in parenthood before birth is done. In one of their studies, Côtè-Arsenault and Donato (2011) showed that the majority of interviewed women used this form of defense.

The authors hypothesized that, although the EC is different for each individual and varies over time with different levels of awareness, most subjects have experienced anxiety and concern, while trying to intentionally restrain them. This defensive mechanism allowed women to control excessive concerns by increasing both self-confidence and confidence in their pregnancy, as they believed that expressing their true emotions, the fear and anxiety they experienced, would put

pregnancy and their ability to cope with their own emotions at risk, increasing anxiety even in the ones close to them. The authors hypothesized that the EC allows women to maintain a sense of normalcy during pregnancy, allowing them to invest their energies in something else and not just on loss fear.

However, previous studies on the couple's relationship after a perinatal loss have found that the intention to protect their partners, avoiding the sharing of feelings and negative experiences, promote emotional distance between them instead (Bennett et al., 2005). Since the EC potentially works as an emotional buffer, it could therefore reduce the satisfaction of relationships between partners, even if it allows women to function within their current roles and relationships. Further negative aspects of the EC also consist in not seeking help, or in not sharing one's feelings or concerns with the available personal support system, and not committing oneself to the process of creating a prenatal attachment with the child (DiTullio, 2019).

Some women however, who do not use EC in the strict sense, try to shield themselves by waiting for the worst, with the erroneous belief that they will suffer less if the pregnancy did not go well (Galst, 2018). In my clinical experience, I care for parents who regretted not being informed during pregnancy about the possibility of abortion or fetal death, thinking that the feeling to be prepared for this eventuality would induce them to inhibit attachment to the child, saving them from pain.

The inhibition of the prenatal attachment, the action of bonding with the baby, with consequent affective disinvestment is frequent also in mothers who wait for the outcome of amniocentesis or other diagnostic tests. In this case we speak of "temporary pregnancies", where, the risk that something may be genetically wrong in the fetus, could lead them to the decision to terminate the pregnancy (Rohtman, 1986). After the amniocentesis, anxiety and depression are immediate because of this risk. In the event that the test result is reassuring, the mothers feel reassured and begin to invest emotionally in the unborn child (El-Hage et al., 2012).

When the previous pregnancy was voluntarily interrupted due to a diagnosis of fetal anomaly, it is common to experience the so-called "waiting on alert" (Bernhardt et al., 2013), characterized by considerable concern and anxiety, which is not reduced by positive diagnostic outcomes and remain until the child's infancy, accompanied by fears for his health and for his development (Redlinger-Grosse et al., 2002). It is important however to recognize that women who use EC and other self-protective defenses accept the existence of their pregnancy, with different mental processes from those present in cases of denial or "denial of pregnancy" (Bayle, 2008; Dayan, Bernand, 2013).

Another problem that can develop after a miscarriage, stillbirth or a voluntary termination of pregnancy, and appear in subsequent pregnancies, is for example the fear of childbirth or secondary tocophobia (Hofberg, Ward, 2003). The tocophobia corresponds to a pathological phobic state where the specific anxiety for childbirth, or the fear of dying in the meantime, are so intense that it pushes the woman to avoid this event as much as possible. Some authors, for example, found in a

group of women with secondary tocophobia, the fear that the child was already dead (Hofberg, Brockington, 2000). The fear of giving birth thus becomes, in these cases, paralyzing, terrifying and debilitating, both in physical and emotional terms (Scollato, Lampasona, 2013). Many women who suffered a perinatal loss resulting in a highly traumatic birth develop a post-traumatic disorder and, to protect themselves emotionally, require elective caesarean section in the new pregnancy (Hofberg, Ward, 2003; Saisto et al., 1999).

In my clinical practice, for example, I took care of mothers who, after vaginally giving birth to their child which died in the last trimester of pregnancy, were unable to defecate for a long time, as bowel movements reminded them of labor, making them anxious. When they became pregnant again, they did not tolerate the idea of having to give birth without a caesarean.

Often the reminders of the previous pregnancy such as dates, anniversaries, coming back from the hospital and, most of all, going under ultrasound scan, can traumatise the woman again, bringing her to dissociative disorders (O'Leary, 2005).

As a reference, I report the case of a 30 year old italian mother, living abroad, who, once pregnant, decided to give birth to her child in Italy. For this reason, she took a flight every week in order to attend a childbirth preparation course in her hometown. The unbearable syntomps of post traumatic stress disorder caused by a previous stillbirth stopped her from going to the hospital abroad, where she gave birth before, and from asking assistance to health care professional abroad, bringing her to this extreme choice.

It is vital to consider that, during pregnancy, high levels of stress and anxiety often lead to a negative series of outcomes not only for the mother but also for the newborn, leading for example to an increased frequency of early birth or low weight at birth (Grote et al., 2010) as well as irritable temper in the child (Van den Bergh et al., 2005; Wurmser et al., 2006).

Some researches show that, while prenatal anxiety is often responsible to lower levels of mental development in children up to 2 years of age and attention deficit disorder for children around 8-9 years of age (Brouwers, Van Barr, Pop, 2001; Van den Bergh, Marcoen, 2004), prenatal stress is associated with cognitive, behavioural, urological and neuroendocrine disorders in children up to 6 years of age (Huizink, Mulder, Buitelaar, 2004). Furthermore, in case of a severe shock that impacts the mothers' life in the two years prior to or following birth, like in cases of both prenatal and perinatal death, there is a greater risk for the newborn to develop a dissociative disorder, or disorders in which dissociative processes play an important role when becoming adults (Colli, 2006; Liotti et al., 2000).

Children born after a perinatal loss

A pregnancy experience following a perinatal loss can impact the attitude of parents towards the newborn (Lamb, 2002), and once this happens within a family, it can become the unconscious container of mourning transmission trough generations (Schwab, 2012).
In fact, various problems related to the parents' role and the development of attachment toward the children born after this particular type of mourning, frequently arise (Gaudet et al., 2010; Hughes et al., 2001; O'Leary, Thorwick, 2008). Prenatal and postnatal attachment, for example, is lower in these cases (Alhusen, 2008), while in the long term there is a high risk of developing disorganized attachment (Heller, Zeanah, 1999).

Often these parents report not being able to experience normal enthusiasm waiting for their child to be born, and this behaviour can isolate them and drive them away from other families (Burden et al., 2016). This struggle in establishing a normal prenatal connection results into a lack of preparation for birth and absence of memories linked to the event (Côtè-Arsenault, Donato, 2011). The children subject to this parents' behaviour, the "penumbra baby" as identified by Reid (2007), are going to live in constant need of attention and recognition by their grieving parents (Gandino et al., 2018).
To overcome these issues, it would be extremely important that a sufficient amount of time between the interruption of the previous pregnancy and the beginning of a new one goes by, quantifiable in at least 12 months or more depending on the subject (Carter, Mirsi, Tomfohr, 2007; Côtè-Arsenault, Morrison-Beedy, 2001; Wojcieszek et al., 2016). A conception too close to a perinatal loss can interfere with a complete mourning and the new pregnancy can be experienced as a continuation of the previous one (Gaudet, 2010). Parents may be inclined to associate in their minds the image of the two children, with great difficulties in developing the identity of the newborn who finds himself growing up in the shadow of his brother, occupying the place left empty, often also receiving the same first name. Rousseau (1988), for example, talks about "substitute child" for this cases, while other authors refer to "replacement child syndrome" (Cain, Cain, 1964).

Sometimes the fear of losing another child leads the parents to develop overprotective behaviours towards the newborn, who, seen as fragile and prone to the development of diseases, can in return perceive himself as vulnerable ("vulnerable child syndrome" - Green, Solnit, 1964). Many studies, not surprisingly, show how children born after a perinatal mourning can develop problems related to their identity, have sleep disorders, aggressive behaviour or experience some difficulties in separations (Hughes, Turton, Evans, 1999; Hughes et al., 2011; Sabbadini, 1988;).

Sometimes, instead, the newborn can be perceived as a blessing or a gift ("gift child" - Vollmannn, 2014) or "rainbow baby" (Kasprazk, 2017) and enjoy a special position inside the family. Often, however, assigned to him the hard task of making the family feel complete again, he

assumes the role of looking after his parents, comforting them from pain and anger (Heller, Zeanah, 1999). Even if the newborn may develop conflictive and ambivalent emotions towards the deceased brother (Gandino et al., 2018), rebelling against family expectations can be very difficult because of feelings of guilt and responsibility (Vollmann, 2014), and for the loyalty he is supposed to show to his family (Boszormenyi-Nagy, Spark, 1973).

Bowen (1991) defines the perinatal loss as an "emotional shock wave" spreading over generations. *This "wave" is induced by repercussions that implicitly spread in the family following a serious event and which, if they have no possibility of expression, are transformed into a symptom* (Gandino et al., 2018). If families do not have the resources to mourn this loss, there is a real risk that this event will be transmitted in the relationship with the children, both with those who are already born and those who are going to be born, creating a chain of mute pain between generation with no possibility of solution (D'Elia, 2007).

The role of pregnancy in reactivating traumatic grief

With reference to previous considerations, it can be deduced how consequences of parenting and pregnancy after a loss are a burden that can be very difficult to bear, both for women and their families. Surpringly, despite their frequency, the psychological impact and the risks they are able to arise, it is surprising how pregnancies with these characteristics lack of adequate supports, with deficiencies both in care standards and in guidelines for prenatal care (Frøen et al., 2011). During these moments, women often experience high levels of stress and their difficulties lead to a greater use of health care, with higher social costs involved (Hutti et al., 2011). It is therefore of primary importance to deal with prevention and treatments that could help women and their families to cope with this delicate phase of both family and individual experience (DiTullio, 2019).

Perinatal loss and subsequent pregnancies, in addition to the relational and emotional dimensions of women, affect "the body dimension" even more. The child's death often occurs within the female body and even when this does not happen, the body is completely involved. Clinical evidence shows, for example, that in certain cases mothers that gave birth to a child who is dead (both in prenatal and neonatal phase), for a long time after their child is dead, release milk from the breast when they hear other babies crying, despite being under medication to inhibit this reflex (Cole, 2012).

In subsequent pregnancies, the memories of the previous one and its outcome make the woman experience two sensations at the same time: on one hand, the investment in the new pregnancy, where the body is seen as a potential guardian of a reparative condition with the task of growing up and giving birth to a child and on the other hand, since this experience contains the seeds of trauma and fear that had preceded it, together with the anguish that everything could happen again, the

body is perceived as a potential source of danger. Women's body, then, become the main character of two opposite and at the same time paradoxically coinciding dimensions: the "fullness" of pregnancy and the "emptiness" of mourning and trauma.

In subsequent pregnancies, the traumatic memory of the child's death, his birth, the pregnancy, are continually reactivated. This can happen especially if the woman tries to get pregnant again too early after a perinatal death. If too little time has passed or there has not been sufficient time to grieve the loss, some typical mourning processes could influence women's well-being, leading to dissociative processes, exacerbations of post-traumatic symptoms, anxiety and depression, affective disinvestment and other emotional defences described in the previous sections of this article (O'Leary, 2005).

In order to be able to recognize the main emotional syndroms and processes and to provide an adequate psychological support, it would be interesting, for example, to analyse in which grief stage the new pregnancy has been actively sought and in which one it has been conceived. A model of physiological mourning that I personally consider useful for understanding the perinatal loss and its reflexes in pregnancies, is the cognitive-evolutionary model described by Onofri and La Rosa (2015).

According to the model, there are three different stages of grief, not necessarily in a defined sequence and which may overlap.

In the first stage, similar to a "phase of disbelief" and to the concept of acute trauma, the most activated system is the defence system. Defence mechanisms can cause the person's personality to be divided in different parts, as a result of the implementation of "dissociative processes", a transitional alteration of the integrative function of memory and consciousness, aimed at decreasing superior mental activity and physical pain. This mechanism is often comparable to the concept of structural dissociation of the personality.

According to a recent descriptive redefinition of the meaning of parts of personality, originally differently conceptualized (Steele, Boon, Van der Hart, 2017 compared whith Van der Hart, Nijenhuis, Steele, 2006), it is believed that the first stage of grief causes the development of "*parts that work in everyday life"* (Apparently Normal Part of the Personality - ANP), regardless of their apparent normality or functionality level, and *"parts locked in the time of trauma"* (Emotional Parts of the Personality - EP) which are blocked on systems of defence and action, such as aggressive behaviour, hypervigilance, escape, freezing, feigned death, from which emotional state of minds were born. In the first few weeks, people who experience grief continually oscillate between these two positions.

According to Liotti and Farina (2011), traumatic grief can inhibit the ability to integrate traumatic memories into the main memory of the brain, for a variable period of time, preventing full consciousness. As the physiological stages of grief continue, these dissociative phenomena

spontaneously evolve towards elaboration and integration. If some manifestations of traumatic grief persist over a long time, we could consider them as "fixations" in this first stage caused by traumatic memories that are difficult to elaborate because they are generated by a subcortical hyper activation. As a consequence, the defence system is going to be reactivated as soon as the environmental stimuli will trigger the grief (Onofri, La Rosa, 2015).

According to this point of view, we can deduce that the defence system of the newly pregnant, or trying to conceive woman, can be overwhelmed and disorganized by the death of the child and other related traumatic memories. The defence system, that remains active even in harmless situations, will remember the trauma through the repetition of the sensorimotor experience lived in contexts perceived as threat (Ogden, Pain, Fisher, 2006). The woman therefore will continuously reactivate the sensorimotor experiences she had during her previous pregnancy and puerperium. Even the conception of a child could be perceived as a dangerous experience, despite being sought to begin the new pregnancy, as it is considered responsible for the previous experience. Consequently, many couples experience sexual difficulties after a loss (Cacciatore et al., 2008). We can not ignore the idea that, in any case, no one knows what the outcome of the new pregnancy will be and this uncertainty worsens the traumatic potential of the pregnancy itself while it develops.

To understand these processes, it could be interesting to investigate what happens when women enter the defensive mode described above and to analyse how these defences cope with psychopathological symptoms. At the moment, there is a lacking of publiced research on dissociative phenomena, both after a perinatal loss and in pregnancies following such loss.

For example, with regard to “emotional cushioning” (EC), it would be of great advantage to deepen the conceptualization about how this defensive mechanism develops and to know if and which dissociative and sensorimotor mechanisms are connected to it and at which level. This would be useful to understand, for example, which parts of personality are involved in emotional avoidance, which parts in its expression, which parts in the denial of grief (with the illusory replacement of the two pregnancies), which parts in carrying on everyday life and which parts are invested in the new child. It would be essential to explore the "cause-effect" relationships that these phenomena have in women’s mind, also taking into account what happens in the female body. In my clinical activity, I followed mothers who, because of these defensive reactions, avoided touching their belly and caressing it to feel the baby, didn’t use their voice to communicate with him, couldn’t perceive his movements or somatised their fear by turning it into pain, causing themselves contractures sometimes wrongly perceived as threats of abortion, or perceived as other diseases. Furthermore, these behaviours could highlight a dysfunction in prenatal attachment bond (O’Leary, 2004).

With reference to an argument by Caldwell (1997 - as quoted in Giannantonio, 2013), which considers important to determine the ways in which traumatized people avoid contact with their

own body or if they present a deficit in this area, it could be useful to observe how women prevent the access of emotional or sensorimotor information with respect to what they are avoiding to feel. This is also an important element, since during pregnancy the body is continually manipulated by healthcare professionals for routine visits and checkups. It should therefore be taken into account both how and how much the touch of other people can impact on the perception of threat or experience of safety (Giannantonio, 2013).

After the initial "stage of disbelief and dissociation" described above, a stage of activation of the attachment system follows (Onofri, La Rosa, 2015): from few hours to few days after death, mothers and sometimes fathers as well, feel pain and spasm, cry, develop somatic reactions, search irrationally for the child and can also be obsessed about finding out why their baby died, or attach themselves morbidly to health records. The strong anger experienced can lead them to sue the healthcare professionals, or, in any case, to feel a strong resentment.

The desperate search for the child can soon arouse the desire of a new conception, often with the illusion of filling the big emptiness perceived inside.

When the "stage of despair" then appears, symptoms often imputable to depression can develop. In this phase, in a physiological grief, the attachment and care system are activated together amplifying each other. However, typical mourning behaviours, such as caring for the grave, lighting candles and enhancing memories, after a perinatal loss, are usually inhibited. Often, especially if the loss is due to early abortion, burial and farewell rituals have not been possible due to both cultural and legislative factors and there is no narrative sharing of pain with other people due to cultural taboos about the event, further complicating the grief. Social sharing of condolences lacks for similar reasons, even in late pregnancy or neonatal loss cases, leading to the same results (Haussaire-Niquet, 2004).

Women and their partners, in this stage, if already in search or waiting for another child, might be afraid of forgetting the lost one and at the same time strongly want that child back with them, with the risk that the new pregnancy takes an undefined form: is the couple waiting for a second child or for the return of the previous one? The confusion and the feeling of guilt, both towards the deceased child and towards the new one coming, could be maximised, leading to psychopathological symptoms. As a consequence, in these stage all the issues related to attachment and caring can be manifested. To better understand the difficulties described here, they must be read within the phenomenology of post-traumatic stress (Odgen, Pain, Fisher, 2006; Steele, Boon, Van der Hart, 2017), the theoretical framework of attachment (Ainsworth et al., 1978; Hesse, 2008), the evolutionary theory of multi-motivation (Liotti, Monticelli, 2008) and the model of traumatic developments (Liotti, Farina, 2011).

It would therefore be useful to finalize studies about this topic, to understand how these phenomena affect the quality of emotional investment during pregnancy and which role they play in

building a certain type of defence rather than another one, as well as how they influence the period following the birth. For example, the EC (Côtè-Arsenault, Donato, 2011) could be read as a manifestation of a particular and superimposed "fixation" or "inhibition" of all three systems together: defence, attachment and care, including all the possible traumatic developments of these. Other types of emotional defence, in turn, could consist of different constellations of the same elements and processes, all amplified by the various post-traumatic symptoms. Blockages and difficulties in these stages thus prevent both a good course of grief and the investment of parenting in the new pregnancy.

How to take care of women suffering from perinatal grief

Healthcare professionals that work in perinatal clinical psychology are extremely important to accompany a woman and her family toward a new pregnancy after a perinatal loss.
Being pregnant during the mourning of a previous child is a difficult and complex moment to face, since it is full of a mixture of feelings of anxiety and concern (DeBackere, Hill, Kavanaugh, 2008). The silence and avoidance of sharing experiences becomes the unifying thread between these two pregnancies: the outcome is often an unresolved grief, making the difficulties perceived in the new pregnancy even worse (Gandino et al., 2018).

The influence of the previous loss together with different psychological and post-traumatic symptoms can interfere with the attachment towards the expected child, both before his birth (Diamond, Diamond, 2016; Markin, 2018) and after (Al-Maharma et al., 2016), and lead to an overall worse quality of life. During a pregnancy showing these characteristics, ambivalence becomes the key element, where the same pregnancy interferes with the natural mourning period. These complex experiences can relapse on perception of woman's self-esteem and on her sense of identity, and influence the personal meaning given to life and death. They can affect also the perceived control that both parents have on the pregnancy, on their parenting style and on child education (Heazell et al., 2016), impacting on family system between generations (Gandino et al., 2018).

Consequently, in the area of perinatal clinical psychology, it is necessary to keep a "theoretical lens", useful to deeply understand the woman's trauma, looking to her pregnancy, her childbirth and her previous grief as a whole, experienced inside her relations of affection and through her body, often with limited possibilities to process it with a sharing narration. This pregnancies and the previous grief are, more than other traumatic events in the obstetric sector, candidates eligible for silence and secret, using a typical expression in psychotraumatology: they remain within the right

hemisphere of the brain, with no possibility to be integrated into the memory and therefore with no resolution.

Taking into consideration the opinion of some authors (Onofri, La Rosa, 2015), which refer to cognitive-evolutionary models, when traumatic grief does not have a way out and therefore remains inside the body, the chosen therapies should follow approaches which are based on conversation but are focused on the body. Those approaches do not use as primary points of access the events and the narration of the experience, but the reaction and activation of the body. Examples of these therapies are: EMDR (Eye Movement Desensitization and Reprocessing) (Shapiro, 2000), the Sensorimotor Psychotherapy (Odgen, Minton, Pain, 2006), and, for some aspects, Mindfulness (Kabat-Zinn, 2005) and Compassionate Focused Therapy (CFT) (Gilbert, 2010).

Sensorimotor Psychotherapy, for example, could be an effective tool to make women explore the trauma caused by mourning and the pregnancy with reference to her personal attachment history. By developing a welcoming and not-judging mind-set, this therapy promotes a better and greater contact with the body (physical sensations, postures and movements), as well as the learning of actions that enhance self-esteem, confidence and competence. Consequencely, a better self-regulation of the inner states, the interruption of the emotive short-circuits and the choices of best suited processing ways are possible (Bulleri, De Marco, 2013).

These specific approaches can also be very effective since they enable a good outcomes on relational and symptomatologic stabilization, on the sense of confidence and toward the increase in positive emotions and experiences, wether it becomes unadvisable to proceed further on accessing the traumatic memories, which can be too destabilizing during pregnancy. This way, they help women to build up useful resources so they can live this delicate stage feeling “protected”. In addition to the risk of traumatic reactivation of grief during the pregnancy, it should be considered that important social and relational changes are experienced while bearing a child and that the brain itself changes in relation to pregnancy (Kim, 2016), the right hemisphere of the brain results in fact to be the most active part (University of Royal Holloway London, 2014) and these conditions can enhance emotional sensibility.

Currently there are some specific EMDR protocols available that can be applied during pregnancy to prevent both birth trauma and postnatal depression, and that are useful also in experiences of voluntary o spontaneous abortion (De Divitiis, Luber, 2017).

Furthermore, some studies regarding the application of mindfulness therapy to perinatal grief have also been published (Roberts, Montgomery, 2015) as well as studies regarding the use of CTF on mother and child’s distress in perinatal period (Cree, 2010). It would be of great interest to develop specific protocols for the prevention of psychological disorders on following pregnancies and to help women to develop prenatal attachment. Many studies have been published regarding child’s development issues in relation to prenatal stress (De Weerth, 2018; O’Leary, 2004; Porges,

2011), attachment during pregnancy (Markin, 2018), birth-related trauma (Levine, Kline, 2007; McCarty, 2004;) and precocious attachment disorders (Schore, 2003).

In these kind of conditions, where the risk level is significant, the emotional defences often prevents the parent from developing the recognition of the child as the subject of a life project (Perricone, Morales, 2019). In my clinical experience, instead, I have personally noticed that the promotion of an emotional contact with the child during pregnancy works as a protection even in the case of an unfortunate additional loss, avoiding experiences of regret, guilt and worsening of grief for both parents.

Therefore, it is necessary to think about preventive measures, which involve the woman's family, both during pregnancy and in the following phases. Also, the partner deserves a special attention (taking into consideration also homoaffective families) because he often becomes the main resource for the woman (DiTullio, 2019; O'Leary, Thorwick, 2006) and other children if present, taking into consideration the need of support for the whole family to help them grieve (Gandino et al., 2018).

Conclusions

To support a woman who wants to become a mother after a perinatal loss, helping her achieving a conscious conception, in order to promote a sufficient well-being during pregnancy and after the child's birth, therapy should begin immediately after the loss of the previous child. This is necessary to sustain the processes that help women mourning and reaching a personal balance, in order to accept and integrate the child's loss in a healthy manner.

If this is not possible, it should be essential to do it during the new pregnancy. It is important to help women struggling with possible post-traumatic disorders, emotional defences using the approaches provided by psychotherapy previously mentioned, especially in the case of emotional disinvestment.

These measures are useful to promote feelings of security, which are necessary to develop a sufficient parental consciousness and to improve the bonding and the attachment to the newborn, increasing a healthy well-being condition in the long term.

However, in this delicate stage, it should be taken into consideration that women might not want or might not search for psychological support. Coherently to the findings of some authors (Giannantonio, 2014), I have personally experienced that often pregnant women don't want to go through emotional and sensitive experiences, that require a big amount of energy and can destabilise her, although in a temporary and controlled way. In these cases, it is advisable to direct the woman to attend childbirth preparation courses offered by the public or private healthcare service, to take part in a support group for mothers, to get involved in the learning of breathing and

relaxing techniques or other tenchiques that help in getting in contact with their own body, in order to reduce the possible sense of isolation and increase the consciousness of what is happening to them. Finally, it would be of great importance that professionals working in the medical sector, in obstetrics, in perinatal psychology, in infant psychology and in family psychology would further explore the clinical knowledge on this subject and promote awareness and sharing updates through an adequate networking to improve the present standard treatments.

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