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Bad thoughts: Brazilian women's responses to mothering while experiencing postnatal depression

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ABSTRACT

Objective: this study explores Brazilian women's experiences of mothering of their infants while experiencing postnatal depression.
Design: a cross-language qualitative descriptive design.
Method: the sample was composed of 15 women diagnosed with postnatal depression in a psychiatric institute in São Paulo, Brazil. Open-ended interviews were conducted and the data underwent thematic analysis.
Results: 13 women worried that harm would come to their infants. Seven of these women self-identified as potential sources of harm, with two women physically hurting their infants. The remaining six women worried about unknown agents, such as disease, hurting their infants. In response to these *bad thoughts*, women mothered their infants in one of four ways: (1) transferred care, completely delegating this task to family members; (2) shared care, asking family members to share the responsibility; (3) sole care, having to look after their infants by themselves because they had no available family support; (4) and smother care, being hyper-vigilant, constantly watching their infants and not trusting infant care to anyone else.
Conclusions: the bad thoughts influenced the women's adaptation to mothering their infants. Health professionals should assess these thoughts early in the postnatal period and the women's mothering responses for the protection of mother and child.

Introduction

Postnatal depression (PND) is a frequent health problem for many women from diverse cultures (Beck, 2002; Halbreich and Karkun, 2006). Estimates suggest in the first postnatal year a prevalence of 21.9% in industrialised countries (Gaynes et al., 2005), and up to 40% in developing countries (World Health Organization (WHO), 2009). PND has been recognised as an important international health issue characterised by symptoms such as low self-esteem, feelings of guilt and incompetence, loneliness, and appetite and sleep disturbances (Registered Nurses' Association of Ontario, 2005). Women who experience PND are likely to have comorbid disorders, such as generalised anxiety disorder (Wisner et al., 2013), and twice as likely to have future depression over a period of five years (Goodman, 2004).

Already well documented by research from industrialised countries is that PND can have harmful effects on mother–infant interaction through the first year following childbirth (Beck, 1995; Field, 2010). Depressed mothers are significantly less sensitive parents than non-depressed mothers; across infants' first year depressed mothers were noted to be more irritable and hostile, to be less engaged, and to exhibit less emotion and warmth with their infants (Lovejoy et al., 2000). Mothers with depressive symptoms face additional challenges in decision making (Lovejoy et al., 2000), and routine parenting behavioural changes in response to their infants' behaviour (Field, 2010). There are also implications for infants' growth and development because depressed mothers more often demonstrate intrusive or withdrawn interactions with their infants and inadequate caregiving practices (Field, 2010), which expose children to high risk for delayed cognitive and language development (Sohr-Preston and

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Scaramella, 2006), mental health problems (Lieb et al., 2002), suboptimal physical growth (Field, 2010; Ertel et al., 2011), and a wide range of interpersonal, neuroendocrine, and behavioural problems (Kessler et al., 2003; Field, 2010). In addition, depressed mothers are less likely to seek and receive appropriate medical care for their infants (Cornish et al., 2006), which increase child injury risk during infancy and toddlerhood (Schwebel and Brezausek, 2008). Women experiencing clinical depression are more likely to experience thoughts of harming their infants and consequently are at higher risk of hurting their infants (Jennings et al., 1999).

Although PND has attracted substantial research attention in industrialised countries in the last 40 years (WHO, 2009), there is still a lack of understanding of this issue in developing countries (Oates et al., 2004), such as Brazil: a multicultural developing country with the fifth largest economy in the world (Leahy, 2011). Despite its favourable economic position and advances in the health fields, with the establishment of a Unified Health System guaranteeing free access of the population for health assistance (for further details on the Brazilian health system; Paim et al., 2011), the country still faces many challenges in the spheres of maternal health (for further details on maternal and child health in Brazil; Victora et al., 2011), including mood disorders related to childbirth. Yet, in relation to maternal health Brazil still has the highest rate of caesarean sections in the world (around 52% in 2010; Ministry of Health, Brazil, 2012) and maternal mortality rates of 75 deaths per 100,000 newborns; the acceptable rate for the Millennium Development Goals is 35 deaths per 100,000 newborns (United Nation Programme Development, 2012).

Postnatal and perinatal mental health issues (e.g., PND) have been overlooked in the Brazilian health context. The limited amount of research on PND in Brazil has been focused mainly on prevalence (with ranges from 12% to 37%; Da-Silva et al., 1998; Tannous et al., 2008), and on the validation of screening measures such as the Edinburgh Postnatal Depression Scale (Santos et al., 2007). PND has been neglected in primary health care settings in Brazil (Santos Jr. et al., 2009; Santos Jr. et al., 2013). Part of the problem concerning the invisibility of PND in clinical settings arises from inadequate preparation of health care professionals to screen for and provide appropriate care for depressed mothers (Santos Jr. et al., 2013). This reality could be a reflection of the lack of established protocols or practice guidelines by the Ministry of Health of Brazil to support primary health care professionals in the screening, diagnosis, and treatment of PND.

The current health policy determines that during pregnancy Brazilian primary health care professionals should be trained to follow a protocol that recommends at least six pre-natal consultations with a nurse or clinician to evaluate the progression of pregnancy in order to minimise co-morbidities. In the postnatal period, the protocol recommends one consultation in the first week postnatal and another around 40 days, but there is no focus on women's mood disorders. After that, the focus of health care is redirected to children until they are five years old. The children receive consultations with nurses or clinicians to follow their growth and development processes as well as to provide them with immunisations (Ministry of Health, Brazil, 2001). No protocol is defined to guide health care professionals to deal with PND or other perinatal mental issues. The postnatal time for the woman and her infant is 'under-researched and under-served; health-service responsibilities for postnatal care are often ill-defined or ambiguous' (Diniz et al., 2007, p. 1597). The lack of attention to postnatal care in developing countries might come from the perception of the postnatal period as less important when compared to the antenatal and childbirth periods (Bick et al., 2008).

Because the majority of current knowledge about PND is derived from industrialised countries (O'Hara and Swain, 1996; Goldbort, 2006), accurate claims in relation to women's experiences of PND in developing countries still constitute a knowledge gap (Oates et al., 2004). Therefore, further studies are necessary to explore and understand the particularities of PND in these contexts to achieve a broad global comprehension of PND. To contribute to this knowledge, a study was undertaken to understand the experience of Brazilian women with PND. In this article, we address women's understandings of thoughts of harming and mothering of their infants while experiencing PND. To our knowledge, no research report has been published addressing these issues for Brazilian women experiencing PND.

Method

Design

This was a cross-language (Squires, 2008) qualitative descriptive study (Sandelowski, 2000) involving purposeful criterion sampling (Patton, 2002), minimally structured open-ended interviewing, and thematic analysis (Braun and Clarke, 2006). This study proposal was evaluated and approved by the Ethics Committee at the University of São Paulo.

Sample and setting

Criterion sampling is a purposeful sampling strategy used to obtain information-rich cases that meet predetermined criteria deemed important to understanding the target phenomenon under investigation (Patton, 2002). Women were eligible for inclusion if they had been diagnosed with PND, whose infant was alive and healthy, and who were able to participate in interviews. Women were excluded if they had another concurrent mental disorder. Women were recruited from an academic psychiatry institute in São Paulo, Southeast of Brazil. This institute is the main referral centre for the treatment of women with mood disorders related to childbirth in São Paulo, the largest city in Brazil with a population of approximately 11 million people. The first and third authors of this article presented the research proposal to a team of psychiatrists and psychologists responsible for providing individual consultations for women with mental disorders related to the reproductive cycle. These specialists introduced the study to women who were not in an acute phase of PND and who were assessed as mentally capable of narrating their experience. The women indicating interest were then referred to the first author who described the details of the study. The women usually took a few days before making a final decision on their participation, which was communicated to the researcher by phone call or electronic mail. Women agreeing to participate then indicated their consent by reading and signing an informed consent document. The final sample was composed of 15 women. Data collection ended when the interview content appeared to be redundant (Sandelowski, 1995).

As shown in Table 1, at the time of the interviews, the median length of time since diagnosis of PND was two years and four months (range one to four years). The mean age of these women was 35 years, most were married or in consensual unions and had a bachelor's educational level. The mean family income was three thousand Brazilian Reais (1500 USD, 1200 EUR), which is considered in Brazil a medium-income salary. The mean number of children they had was 1.6 including the index child. None of the women with prior children had a history of PND, most of the women did not have a history of depression, and the mean time of diagnosis with PND and initial treatment was 3.1 months. In relation to treatment, all women had psychiatric pharmacological treatment, and six of the women had also psychological therapy. In the psychiatry institute, psychological therapy is seen

Table 1
Demographic and clinical characteristics by mothers' responses to fears of harm for their infants.

	Mothers (n=7) identifying themselves as source of harm	Mothers (n=6) identifying external sources of harm	Mothers (n=2) not mentioning that harm would come
Demographic profile			
Age (years)			
25–29	1	0	2
30–39	4	5	0
40–42	2	1	0
Education level			
Elementary	1	2	1
Secondary	3	0	0
Higher	3	4	1
Civil status			
Married or consensual union	6	5	2
Divorced	1	1	0
Women income (monthly in thousands BRL*)			
≤ 1	3	2	2
$>1 \leq 2$	0	2	0
$>2 \leq 3$	3	0	0
≥ 4	1	2	0
Clinical profile			
Number of children (including the index child)			
1	4	4	1
2	2	2	0
≥ 3	1	0	1
Time of PND† diagnosis and initiation of treatment (months)			
Mean	3.4	3.3	1.5
Range	2–6	1–5	1–2
Prior depression			
None	4	4	2
Postpartum depression	0	0	0
Depression unrelated to childbirth	3	2	0

* Real (BRL) is the Brazilian currency. At the time of this paper 1000 Reais roughly corresponded to 400 EUR and 530 USD.
† Postnatal depression.

as complementary to psychiatric therapy, which is characterised by medication prescriptions. We had no access to details on the treatment protocols, thus we only have data on the length of the treatment as the study participants mentioned it.

Data collection and analysis

Minimally structured open-ended interviews were conducted from May 2011 to January 2012. The first author, with almost five years of experience in the mental health field, conducted all of the interviews at times and places chosen by participants. Most of the interviews were conducted in the women's homes; five interviews were conducted in an office in the Clinical Hospital. Interviews with the women covered the following topics: (a) their experience of the index pregnancy and childbirth; (b) how they felt after giving birth; (c) how they came to notice their illness; (d) their experiences during this recognition period; (f) how they came to seek help or treatment; (g) their support through this time; and (h) their relationship with their child, husband, and other family members during this period.

Prior to the process of thematic analysis (Braun and Clarke, 2006) the first author transcribed the interview recordings, and then started a process of language translation of the dataset from Portuguese to English. Translation in cross-language qualitative studies is a strategy to mitigate the language gap between researchers not sharing the same language (Temple and Young, 2004; Lopez et al., 2008). An experienced professional translator in the health care arena translated these data from Portuguese to English. A native Portuguese speaker and fluent speaker of English conducted a back translation of the interview data from English into Portuguese. The Portuguese-to-English and English-to-Portuguese versions were compared and mistranslations corrected. During the process of data analysis, yet another professional translator further ensured that the meanings conveyed by the interviewees were faithfully represented. The goal of the translation process was to optimise interpretive validity (Maxwell, 2012) that is, faithfully represent women's understandings and meanings.

Once the final English version was completed, the authors worked together to analyse the data. Data were initially organised by each participant's responses to the topics covered aligned with their individual demographic, obstetric, and clinical background data. Further case- and variable-oriented data matrices were then constructed to display information organised by each participant and by the responses to each topic. This allowed us to discern key thematic lines characterising each participant and participants as a group. To optimise the theoretical validity (Maxwell, 2012) of the findings presented here, or our interpretations of the data, we moved back and forth between the transcribed interview data both in English and Portuguese to ensure accuracy and consistency in approach of our developing interpretations. This report is focused on the women's thoughts of harming their infants and the response to mothering as this was a central topic in their descriptions of their experiences with PND.

Findings

Most of the women worried that harm would come to their infants. Of the 15 women, 13 described this concern. Of these 13 women, seven identified themselves as the potential source of harm whereas the remaining six women worried about some unknown agent, such as disease, hurting their infants.

Mothers identifying themselves as the source of harm

The women who identified themselves as potentially hurting their infants described having '*bad thoughts*' (a direct translation of '*pensamentos ruins*' in Portuguese as this was the phrase most often used by women to describe their experiences) that for most of these women began in the first postnatal week and occurred most intensely when they were taking care of their infants. These women recalled imagining scenes in which they were throwing the infant out the window, throwing blankets on top of the infant, dropping the infant in the bathtub, or punching or hurting the child with a knife. One woman imagined two scenes:

> I thought like this, 'could it be that if I throw him over the edge, he'll die?' When giving him a bath, the same thing. I thought like this, 'if I drop him into the bathtub will he be able to save himself?' [W2].

When their bad thoughts came, these women felt an intense urge to hurt their infants, with two of these women describing one

or more acts of physical aggression when they were by themselves. These two women had neither planned nor wanted their pregnancies. One woman recalled: 'I smothered him for about two minutes with a pillow. Well, not totally choking him. I was always doing bad things to him, all the time' [W1]. The second woman stated: 'I took hold of her and threw her in the cot' [W3]. A third woman who never physically harmed her child but did frequently scream at her recalled: 'I never hit her but I reached the point of yelling at her' [W6].

Whether they only thought about hurting their infants or actually did, none of these women wanted to hurt them. As one woman observed: 'You know that contradiction. It's like this. I want to throw her out the window, but I know I can't do that. It was very distressing' [W7]. For the two women who actually hurt their infants, they knew they were doing something wrong. One woman recalled: 'I threw her in the cot, she went dead quiet somehow, looking at me. She had no reaction' [W3]. The second woman recalled in more detail:

> I think what held me back from doing an even worse evil thing was that he had no reaction. He would look at me with the face of an angel, fearlessly, trusting in me [W1].

What stopped these women from doing further harm was the lack of reaction of their infants when they had expected crying and agitation.

Mothers identifying external sources of harm

In contrast to the women who feared that harm would come to their infants from themselves, six women had bad thoughts centred on other sources of harm that were typically only vaguely conceived, such as an unspecified disease or something else trying to kill their infants. These women were afraid their infants would die at any time. One of these women, who had two other children, no history of depression, and had wanted and planned this pregnancy, recalled this fear clearly: 'I was afraid my child would die. I'd spend the night in bed with that fear. When he was on the bed, I'd think, he will be suffocated; could it be he'll live?' [W11]. Another woman with two children and history of depression mentioned her worry about something hurting her infant: 'I was afraid of something happening to my son and not having someone to help me' [W8]. Similarly, another woman with her first child recalled her worry that the infant would die, but did not specify the reason: 'I was afraid my child would die. I'd spend the night in bed with that fear' [W10].

Mothers' responses to fears of harm coming to their infants

As summarised in Table 2, in response to the bad thoughts they were having about their infants, the seven women who saw themselves as harming their infants (including the two women who actually did) described transferring care of their infants to another family member (W1, W2) or sharing care with another family member (W3, W4, W5, W6). The one remaining woman (W7) for whom these options were not available became the sole caregiver for her infant. Of the six women who saw external sources as harming their infants, two of them (W8, W9) became sole caregivers for their infants, and the other remaining women (W10, W11, W12, W13) described a hyper-vigilant form of care of their infants we refer to as smother care.

Transferred care

Women who transferred care did not assume any care of their infants, delegating that responsibility to family members. These women did not see themselves as mothers; consequently, they did not accept their infants as their own, and did not want to look after them. Among these women was one [W1] who had physically harmed her infant. In all of these cases, family members had to take care of the infants for almost two years, which was the amount of time that it took for these women to start to feel able to look after their infants. They believed they would have to provide as much attention as possible to the children to compensate for their lack of care. However, they still had problems recognising the infants as their children: 'As much as I try, it seems he is not entirely my son' [W2].

Shared care

In contrast to the women who transferred care to others were the women who asked family members (husband, mother or sister) to share the responsibility of care. Among these women was the second woman [W3] who had physically harmed her infant. In shared care, the women were responsible for breast feeding their infants, bathing them and changing their diapers, while the family members spent more time with the infants and comforted them when they were crying. These women liked having the infants, but were afraid of being alone and hurting them when the bad thoughts intensified. To ensure the safety of the infants, they consciously avoided taking care of the infants by themselves. One woman recalled: 'I myself took the precaution of distancing me and the baby because I had no wish to do her any harm. I was protecting her' [W6]. By sharing the care of the infants the women could rest more, and avoided the stress of looking after the infants while thinking about hurting them. The women concluded that family support helped them to adapt to the unexpected depression experience, and that the family member was the only person they could talk to about their feelings.

Sole care

Not all women had the support of available or willing family members. In these cases, the women felt obligated to fully care for the infants by themselves. They did not have access to this kind of support, either because they lived far away from their family, or their husband/partners did not want to help. Having no options but to continue caring for their infants, these women saw themselves becoming deeply sad because it was more difficult to mother without any support while experiencing depressive symptoms. One woman who had two children recalled: 'I had to keep taking care of my son, but I was very depressed' [W7]. As a consequence, the women could not pay attention to themselves

Table 2
Types of mothering by the three groups of mothers' responses to fears of harm for their infants.

	Mothers (n=7) identifying themselves as source of warm	Mothers (n=6) identifying external sources of harm	Mothers (n=2) not mentioning that harm would come
Caring relationship			
Transferred care	2	0	1
Shared care	4	0	1
Sole care	1	2	0
Smother care	0	4	0

or others (e.g., other children, the husband/partner). They could not go out of house with the infant, because they had no desire to have contact with people. As one woman recalled: 'I didn't go out anywhere, not even to take the kids to go to the doctor. It was a really bad time' [W9].

Smother care

The four women who thought some outside force would hurt their infants described a hyper-vigilant form of care. They watched their infants all the time, not sleeping or sleeping little to make sure that the infant was safe, or not allowing for other people to take care of the infant, protecting the infant against anyone or anything. One of these women who had a wanted but unplanned pregnancy recalled:

> I was way overprotective! I had to do everything, I had to make his bottle, it was me who gave him all his baths because I knew I had to take advantage of his every second, with this feeling that he might die, and this was very strong [W10].

These women recognised that their care was still harmful to their infants because their vigilance meant the infant had limited opportunity to develop close bonds with other family members. One of those women recalled: 'I smothered him during this period in the sense of constantly watching over him, holding him a lot' [W13]. As this woman indicated, the women in this group figuratively smothered their infants by not allowing them to interact with other people or experience things outside the bounds of the women's vigilance. In the hopes of protecting them against all harm, the women set no limits in taking care of them, not thinking about themselves and not interacting with others.

Mothers who did not mention that harm would come

In contrast to the 13 women who mentioned fears of harm coming to their infants were two women (W14, W15) who did not mention this at all. Neither of them had a history of prior depression, and both wanted but only one woman had planned her pregnancy. One of these women had transferred the care of her infant to a family member. She recalled feeling guilty for not taking care of the infant, and feared having another baby because she was afraid of having PND again. The second woman shared the care of her infant. As she recalled:

> I didn't care what was done. I said things like this: 'I'll give a bottle, change a diaper and you [husband] work out what to do with her, because I don´t want to think about this' [W14].

She described her disappointment at having a girl when her husband had desired a boy. Her husband helped her in taking care of the infant, but this woman stayed emotionally reserved and did not think about the infant's well-being.

Discussion

Bad thoughts drove most of the women studied to fear that harm would come to their infants either from themselves or some other source. The percentage of mothers reporting thoughts of harming their infants may be underestimated (Jennings et al., 1999). Barr and Beck (2008) posited that the underestimation of women who experience those thoughts could be related to the women's feeling of shame or an inability to share these thoughts with others. To our knowledge, no article has been published on this issue in Latin-American cultural contexts.

Researchers from others contexts (mostly developed countries) have referred to thoughts of harming the infant in many ways, including intrusive thoughts (Humenik and Fingerhut, 2007; Fairbrother and Woody, 2008), thoughts of harming (Jennings et al., 1999), and aggressive obsessive thoughts (Abramowitz et al., 2003). In our study, the Brazilian women referred to these thoughts as bad thoughts. All of these terms refer to unwanted thoughts concerning harm to the newborn (Fairbrother and Woody, 2008). Most researchers have focused on a postnatal time period later than four months after childbirth (Jennings et al., 1999; Humenik and Fingerhut, 2007). Yet, Jennings et al. (1999) noted that the peak of these thoughts was at two weeks postnatal. This information aligns with our data, in which nine of the 15 women reported the first episode of bad thoughts appearing within the first 10 days postnatal; for the remaining women the mean time was 1.6 months.

The differentiation of the nature of the thoughts, however, is less clearly defined in the literature. Researchers have described the content of these thoughts as infants falling off the table (Beck, 1996); losing the infants due to an illness or contamination (Fairbrother and Woody, 2008); putting a blanket over the infant's head (Beck, 1996, 2002); and dropping or throwing the infants out the window or off the balcony (Fairbrother and Woody, 2008). In our study, the women specified two possible agents of harm to their infants: themselves or some other source. The women who identified themselves as the source of harm felt an intense urge to hurt their infants. These thoughts were focused on scenes in which the women performed an active action of harming the infants (two of them actually physically harming their infants), such as throwing the infants out the window or smothering them. The women who identified some unknown or vague source of harm were passive in their thoughts; they did not get close to carrying out harmful actions towards their infants. In Beck's (1992) study, none of the women who participated had attempted to harm their infants. In the Barr and Beck (2008) study, women's thoughts of harming their infants were experienced with suicidal thoughts. Only two women in our study expressed suicidal thoughts, but they did not relate these thoughts to thoughts of harming their infants. Of these two women, one did not mention harm coming to her infant at all and the other had a history of depression.

Thoughts of harming their infants have been found to interfere with women's mothering (Humenik and Fingerhut, 2007; Fairbrother and Woody, 2008). In their study of 100 depressed mothers, Jennings et al. (1999) found that 25% who had thoughts of harming also had fears of being alone with their infants, and 11% of them reported an inability to care for their infants. In our study, the response to the thoughts of harming the infants led the women to adopt one of four kinds of mothering: transferred, shared, sole, and smother care. These kinds of mothering are not well-described and defined in the current literature. A comparison of our results to other Brazilian studies would be useful, however, few studies have been published on Brazilian cultural health beliefs, values and/or practices related to PND (Silva et al., 2010; Sousa et al., 2011).

A romanticised patriarchal idealisation of motherhood is strongly present in the Brazilian cultural context. In this idealisation, motherhood is understood as an innate role of the woman, carrying social expectations that they will take on the maternal role in a natural and peaceful way (Azevedo and Arrais, 2006). However, broader social changes such as improvements in women's education, urbanisation, and the changing role of women in society, and women entering the labour market and having fewer children (Victora et al., 2011), have been changing this concept and women's response to mothering. The cultural shift in motherhood has yet to be fully studied and understood. Discrepancies between the sociocultural expectations of motherhood and the actual experiences of women have been repeatedly noted as a factor to the development of PND, which affects the motherhood experience (Beck, 2002; Homewood et al., 2009).

Contrary to the current literature on PND's negative effect on mothering, Brazilian research psychologists have identified no

statistically significant differences in the interactions with their infants between depressed and non-depressed mothers at one postnatal year (Frizzo and Piccinini, 2007). However, Sousa et al., 2011 recent findings indicate that Brazilian women experiencing PND had presented feelings of being unable to take care of and fulfil the needs of the infants. In the PND literature from developed countries, Beck (1996, 2002) and Wood et al. (1997) found women's avoidance of caring of their infants to be a way of ensuring their infants' safety, but in these studies the women became unable to care for their infants because they saw them as too demanding and difficult to satisfy. Brazilian women who could not manage to take care of their infants while experiencing PND felt frustrated and feelings of failure in motherhood (Silva et al., 2010).

Not all women were unable to look after their infants; in our study, shared care was the response of these mothers who arranged to have another adult supporting them. The family member who supported the woman was someone close to them who would come to the woman's house to share the care. Jennings et al. (1999) also identified women who were supported by family members, but these women moved temporarily to their family member's homes. Brazilian researchers found that by supporting the women, family members can help them figure out what is happening and how to face the depression (Silva et al. 2010; Sousa et al., 2011). We understand that women using shared or transferred care may have considered this as a strategy for reducing the risk to their infants, and that this might be possible due to extended family care that is often unavailable in North American contexts (Posmontier and Horowitz, 2004).

Our study included women who did not have the support of family members and who were therefore the sole caregivers of their infants. This sole care was described as overwhelming for the women, but they were conscientious about the care required. In contrast to this effort to be thoughtful about care was the 'mechanical care' (Barr, 2008, p. 366) described in which mothers took care of their infants, but felt no sense of connection to the infant or to the task at hand. This mechanical care was something that women felt obligated to carry out, albeit in an automatic, unthinking manner.

In sharp contrast to mothers who delegated all or some infant care to others or who were caring for their infants by themselves were the women who provided smother care. These women had bad thoughts in which an unknown agent would hurt their infants; these women set no limits looking after the infants. They became hyper-vigilant and did not trust anyone to help. Beck (2002) observed that women suffering from PPD were overwhelmed by the responsibilities of caring for their infants to such a degree that they felt weak, fragile, and vulnerable. Wood et al. (1997) mentioned these feelings of increasing distress as an obsessive behaviour that was overwhelming.

A review of the literature suggests that poor mothering by depressed mothers is a risk factor for long-term negative outcomes for the infant, including behavioural, emotional and health problems (Field, 2010). Behavioural scientists studying maternal–infant attachment behaviour have described two major interactions of the mother with their infants: withdrawn (under-stimulating) and intrusive (over-stimulating) behaviours (Field et al., 2006; Field, 2010). This suggests a relationship between smother care as an intrusive behaviour, and transferred, shared and sole care as a withdrawn behaviour, with all modes of care responses to intrusive thoughts. Descriptions of women's response to mothering during PND still constitute a gap in knowledge. Longitudinal studies are needed further to describe women's responses to mothering during PND, and explore how this mothering is culturally influenced.

Implications for practice and research

First, we suggest that nurses, midwives and clinicians should be aware that thoughts of harming the infants might be present in mothers' experiences of PPD, yet they might find it difficult to mention this to professionals. Jennings et al. (1999) warned that such thoughts were not revealed to health care professionals at the beginning. The women commented on these experiences when they were no longer actively experiencing the thoughts.

Second, the screening of PPD is the first step in identifying women who need support (Bick and Howard, 2010). The two most widely used specific tools for screening PPD (Edinburgh Postnatal Depression Scale – EPDS and Postpartum Depression Screening Scale – PDSS) do not emphasise women's thoughts of harming infants. The EPDS does not include thoughts of harming infants as an item to be screened by health professional (Cox and Holden, 2003), whereas the PDSS has an item to screen if mothers felt like they had to hide what they were thinking or feeling toward the infants (Beck and Gable, 2000, 2005). The Diagnostic and Statistical Manual for Mental Disorders, DSM-5 does not include worries or thoughts of harming the infants as a symptom of PPD as the differential diagnosis of PPD is due to its postnatal onset (American Psychiatric Association, 2013). This silence regarding worries about thoughts of harming infants may divert the attention of health professionals away from this important symptom. Further studies exploring descriptions, incidence, intensity and possible religious connotations of such thoughts from different cultural perspectives may highlight the importance of adding more specific symptoms into the screening tools as well as to the diagnostic criteria for PPD.

Third, the recognition of mothers' thoughts and worries of harming their infants as well as their response to caring for their infants must be further analysed. Different mothering responses while experiencing depressive symptoms is an adaptive behaviour that should be further explored; this knowledge may lead in turn to the development of innovative tailored interventions to support mothers through the early mothering period. Many interventions have been proposed to improve maternal–infant attachment or interaction (Forman et al., 2007; Field, 2010; Alderdice et al., 2013). Yet, few studies have been focused on knowledge derived from a range of national contexts (Alderdice et al., 2013).

As limitations of the current study we point out that women were mostly in their 30s and well-educated, and that two years and four months was the median length of time between when women were diagnosed with PPD and when interviews were conducted. This length of time in addition to the fact that all of the women either were in or had completed treatment might have influenced both their recall and current understanding of early postnatal events. Yet, despite the challenges to access this population in Brazilian contexts (Santos Jr. et al., 2013), the current study represents an important contribution to the emergent literature on PND among Brazilian women and to the international discussion on PND. The authors make no claims about the study results being applicable to all Brazilian municipalities. Nonetheless, the findings may sensitise researchers to the PND experience across the country, given the significant sociocultural and economic discrepancies in Brazil.

Conclusion

Bad thoughts influenced the mothering responses of the depressed mothers with their infants, resulting in the identification of four mothering types: transferred, shared, sole and smother care. These thoughts should be considered by health professionals early in the postnatal period to determine the urgency for assistance and social support for the women. Further research should address mothers' relationships with their infants to better define health interventions and to promote support in the early mothering period.

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