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Stressful events, social support and coping strategies of primiparous women during the postpartum period: a qualitative study

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ABSTRACT

Objective: to identify problems and events perceived as stressful by primiparous mothers during the postpartum period, and to explore the social support and coping strategies they used to face these situations.
Design: a qualitative study. Data were collected via semi-structured interviews and analysed using a content-analysis method.
Setting: Geneva University Hospitals, Geneva, Switzerland from October 2006 to March 2007.
Participants: 60 women interviewed six weeks after the birth at term of their first child.
Findings: during the early postpartum period, interaction with caregivers was an important source of perceived stress. Upon returning home, the partner was considered as the primary source of social support, but the first need expressed was for material support. Breast feeding was perceived negatively by the new mothers, and this may be due to the difference between the actual problems encountered and the idealised expectations conveyed by prenatal information. Educational information dispensed by medical staff during the prenatal period was not put into practice during the postpartum period. Mothers expressed the need to be accompanied and counselled when problems arose and regretted the lack of long-term postpartum support.
Key conclusions and implications for practice: both the prenatal education and postpartum social support seem to mismatch women's needs and expectations. Concerted efforts are required by health professionals at the maternity unit and in the community to provide mothers with more adequate postpartum assistance.

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Introduction

The arrival of a child is an exceptional event in a woman's life. An ideal image of happiness is widely associated with childbirth in our society and often fuelled by the mass media. Moreover, the woman and her partner are confronted with physical and psychological changes, as well as new roles and responsibilities, during the postpartum period. The problems resulting from the birth of a first child require emotional, behavioural and cognitive re-adjustments that may generate stress. This transition towards parenthood is a very critical stage and anxiety disorder, post-traumatic stress syndrome and/or postpartum depression have been observed among 13% of women (Czarnocka and Slade, 2000; Forman et al., 2000; Soet et al., 2003). Evidence shows that these disorders may negatively affect the mother–infant interaction, conjugal and family relationships, and also child development (Sutter-Dallay, 2006). In Geneva, the average hospital stay after a birth is four days. After discharge, compulsory health-care insurance covers the cost of a maximum of 10 home visits. However, it is not clear whether this help is sufficient and best suited to mothers' needs. Most studies dedicated to the prenatal and childbirth periods focus on the identification of risk factors and obstetric events associated with postpartum psychological disorders and the development of preventive strategies. Much less research has been conducted on postpartum stress and on women's personal and social resources in terms of social support and coping strategies.

Literature review

Numerous studies have shown that a high level of stress during the perinatal period increases the risk of postpartum depression (Terry et al., 1996). Terry et al. (1996) studied the stress level of

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mothers after birth and concluded that it may be associated not only with pregnancy and childbirth-related, stressful events, but also with child temperament and insufficient social support, both received and perceived. Hung (2001) developed a 61-item postpartum stress scale adapted to Taiwanese women and showed that the main stressors were tiredness, lack of time and infant feeding. The three perceived stress dimensions were maternity role attainment, lack of social support and body changes (Hung, 2001, 2005). Social support provided by close relations and professionals plays a protective role and modulates the impact of stress on physical health and psychological well-being (Barrera, 1986; Sarason and Sarason, 1990; Bruchon-Schweitzer, 2002). Its beneficial role during pregnancy has also been reported by Glazier et al. (2004) in a study of 2052 Canadian mothers describing the mediating effect of social support on stress and symptoms of depression and anxiety. Other studies have demonstrated that satisfaction with the social support given by their partner and/or family had significant beneficial effects on the later well-being of the mother and child by reducing the risk of postpartum depression (Collins et al., 1993; Tarkka and Paunonen, 1996; Terry et al., 1996). Similarly, social support provided by health professionals, when perceived as satisfactory and adequate, has positive effects on mothers' well-being during the postpartum period (Tarkka and Paunonen, 1996; Webster et al., 2000; Melender, 2002). However, the different studies conducted on this aspect of care showed that health professionals mainly offer informational and educational support, whereas emotional support is rarely provided. A previous study conducted among 300 women in our maternity unit demonstrated that 46% of women feel unable to express their feelings and emotions to caregivers (Razurel et al., 2003). This corroborates the results of other studies that highlight the gap between women's needs and the professional support actually given (Beger and Cook, 1998; Ruchala, 2000). Interestingly, a review by Gagnon and Barkun (2003) showed that parents who received abundant information during antenatal classes had difficulties in assimilating information referring to the postpartum period. Although the main goal of antenatal education is preparation for childbirth and parenthood, data are lacking to determine its adequacy and actual effects (Gagnon and Sandall, 2007). Similarly, few studies have explored the coping strategies used by mothers to manage the changes following childbirth (Terry, 1991; Besser and Priel, 2003; Spiby et al., 2003). In addition, the questionnaires used in these reports only assessed general coping strategies and were not sufficiently precise to explore the mothers' specific responses to postpartum stress.

The aims of this study were to investigate events perceived as stressful by primiparous mothers during the postpartum period and perceived social support, and to identify coping strategies.

Subjects and methods

A qualitative approach was chosen as the most appropriate to explore women's feelings and perceptions (Flick, 2006). Data were collected via semi-structured interviews to facilitate and guide discussion (Seldman, 1991; Britten, 1995; Kaufmann, 1996).

The study was conducted at the maternity unit of Geneva University Hospitals, Geneva, Switzerland between October 2006 and March 2007. All French-speaking women having their first child at more than 37 weeks of gestation after a normal pregnancy without pathology or hospitalisation were eligible for inclusion in the study. Mothers were recruited during their hospital stay (early post partum) by five research midwives who proposed participation in the study, which involved a single interview at six weeks post partum. Of the 68 mothers recruited, three women withdrew after inclusion and three were absent at the time scheduled for the interview. The sample size was considered to be adequate to validate qualitative methods (Murray and Chamberlain, 1999; Flick, 2006). The study protocol was approved by the institutional ethics committee and all participants gave written informed consent.

Data collection

Interviews were conducted at six weeks post partum at the mothers' homes by research midwives trained in using a semi-structured interview schedule. Topics explored included: stressful events perceived by the women during pregnancy, birth and post partum; perceived stress and perception of control of these events; received and perceived social support from family and friends and from maternity staff; coping responses of mothers during the postpartum period; and education received from health-care professionals related to the postpartum period and the perception of its adequacy to the women's needs.

Interviews included open-ended questions such as: 'what events did you perceive as especially stressing?', 'how did you cope with these?' and 'what was the final outcome?' All interviews lasted approximately one hour. Obstetric variables related to pregnancy, labour, mode of birth and breast feeding, as well as data on socio-economic status and antenatal education were collected.

Analysis

Two researchers (CR and MLBS) independently coded the first 10 transcripts according to recognised categories of stress, coping and social support described in the scientific literature (Barrera, 1986; Sarason and Sarason, 1990; Bruchon-Schweitzer, 2002). An event was classified as 'stressful' if it had left a marked impression on the mother. For example, one woman said: 'when my infant was crying, I was very anxious. I felt really stressed …'. This event was considered as a stress-related event and was placed in the category 'infant's tears' (Table 1). Codings were compared and any differences were discussed and resolved in consultation with a third researcher (AD). Based on these discussions, an initial list of codes and coding rules were developed, and all remaining transcripts were coded by CR. An iterative approach was used to construct an 'analytical tree' that was progressively developed during coding of the 60 interviews (Miles and Huberman, 1984) (Fig. 1). Transcripts were coded using Nud*Ist (QSR N6) software.

Findings

Sample

We conducted semi-directive interviews with 62 women. One woman was excluded after interview due to limited language comprehension, and a second because of the continual interruption of the father during the interview; 60 interviews were retained for further analysis. The average age was 31 years. Most were of Swiss nationality (47%) and lived as a couple (97%). Socio-occupational categories were defined as 'high' (women in management positions or in jobs requiring higher education, generally more than four years beyond high school), 'medium' (office workers service workers and skilled manual workers) or 'low' (unskilled workers, unemployed women and women outside the work force). Women were mostly from the 'medium' category (51%). Eighty per cent of our sample had attended prenatal classes. Birth was vaginal and spontaneous for 58.3%, vaginal and assisted

Table 1
Stressful events in the early postpartum period during hospital stay (1–4 days after childbirth) and in the late postpartum period (at home, up to six weeks postpartum).

Rank	Events	n[a]
	Early postpartum period	
1	Interaction with caregivers	46
2	Breast feeding	42
3	Hospital environment	36
4	Visits	25
5	Baby's health	21
6	Scars (caesarean or perineal lesion)	18
7	Tears and rhythm of the baby	17
8	Examination and care of the baby	17
9	Mother's health	16
10	Mother's emotional state	14
	Late postpartum period	
1	Breast feeding	50
2	Logistic organisation	49
3	Tears and rhythm of the baby	45
4	Professional follow-up (information management and attitude)	43
5	Return home	41
6	Health and care of the baby	38
7	Baby blues	23
8	To have a feeling of being a 'good mother'	23
9	Couple	22
10	The mother and her body	22
11	Return to work and childminder	18
12	Anxiety for baby	9

[a] Total number of women who cited the event.

for 18.4%, and by caesarean section for 23.3% of women. The average hospital stay was four days and 90% of the women benefited from midwife follow-up at home for 10 days as Swiss health insurance covers this care.

Identified themes

Five main themes were identified through the analysis of interview transcripts: stressful events, perceived stress, social support, coping strategies and prenatal education. Analyses focused on the importance of these themes during the early postpartum period in hospital (days 1–4), and the late postpartum period at home (up to six weeks). Table 1 presents the 'stressful events' in the early and late postpartum periods evoked spontaneously by women during interviews. Results are given as the number of mothers who reported each event at least once.

Stressful events

Ten stressful events were identified in the early postpartum period and 12 in the late postpartum period. In the early postpartum period, the most stressful perceived problem was the interaction with caregivers, especially when the latter minimised the difficulties encountered by mothers and when they provided contradictory information. Breast feeding, associated pain and feeding difficulties were considered as the second most stressful events. The third event concerned the conditions of hospitalisation, mostly related to the lack of rest and privacy. Most women expected to be able to rest during this time, but overcrowded conditions on the wards did not allow this.

Breast feeding

At home, the major stressful event was breast feeding. Women's perceptions were strongly negative, and pain, sometimes unbearable, was reported as a particularly important aspect of breast feeding:

> I could not see the end. I was completely physically and mentally exhausted. Each time he sucked the left side, I saw stars, I had a stress ball. I dug my nails into my husband's arm. I had my husband beside me to tell me to breathe, because the pain was so bad that I stopped breathing, I held my breath and clenched my teeth, I was almost afraid to put the infant to my breast. (J03)

1. Demographic characteristics

1.1. Age
1.2. Socio-occupational characteristics
1.3. Life events

2. Perceived stressful events

2.1 Stressful events during pregnancy
2.2 Stressful events during childbirth
2.3 Stressful events during the early postpartum (postpartum hospitalisation)
- 2.3.1 Hospital environment (mealtimes, rooms, general areas)
- 2.3.2 Visits
- 2.3.3 Breast feeding
- 2.3.4. Scars (caesarean or perineal lesion)
- 2.3.5 Tears and rhythm of the baby
- 2.3.6 Baby's health (jaundice, respiratory problems, infection, etc.)
- 2.3.7 Examination and care of the baby (bath, nappy change, putting baby to sleep…)
- 2.3.8. Interaction with caregivers (behaviour, manner of speaking, availability…)
- 2.3.9 Mother's emotional state (doubts, fears, baby blues…)
- 2.3.10 Mother's health (pain, personal hygiene, tiredness…)

2.4 Stressful events upon return to home
- 2.4.1 Return home (day of return, organisation of the first day…)
- 2.4.2 Health and care of the baby (putting baby to sleep, portage, bath…)
- 2.4.3. Tears and rhythm of the baby
- 2.4.4. Baby blues
- 2.4.5. Breast feeding (start and stop of breast feeding...)
- 2.4.6. Professional follow-up (information management, attitude)
- 2.4.7 Logistic organisation (outings, holiday, father's role, visits, close circle, moving home
- 2.4.8. Couple
- 2.4.9 The mother and her body (scars, weight, other...)
- 2.4.10. Return to work and childminder
- 2.4.11 Anxiety for the baby
- 2.4.12. To have a feeling of being a 'good mother' (perceived skills as mother/judgement of others

3. Resources

3.1 Personal resources
- 3.1.1. Projects, expectations, expressed needs, beliefs and representations
- 3.1.2. Socio-educational background (previous knowledge, experience)
- 3.1.3 Personality (protective factors): emotional stability stability, perceived self-efficacy ...)

3.2. Social resources
- 3.2.1 Partner
- 3.2.2 Close family circle (mother, father, sisters, brothers)
- 3.2.3 Friends
- 3.2.4 Partner's family, other mother sharing room at the maternity unit

3.3. Health-care professional support
- 3.3.1 Prenatal education
- 3.3.2 Maternity unit professionals: nurse, doctors, midwives
- 3.3.3 Midwive visits at home
- 3.3.4 Gynaecologist (private practice) or general practitioner
- 3.3.5 Paediatrician
- 3.3.6 Other (psychologist, physiotherapist, social worker…)

3.4 Other educational/cultural resources (media, books, brochures, other ..)

4. Perception and significance of stressful events

4.1 Causative attribution to self
4.2 Causative attribution linked to the baby
4.3 Causative attribution to coincidence, luck, nature …
4.4 Other external causative attribution (caregiver, institution…)
4.5 Feeling of control (in control/lack of control)
4.6 Positive/negative effects; mode of expression

5. Coping strategies

5.1 Vigilant strategy, mobilisation of internal resources
5.2 Search for social support
5.3 Action plans, assertion of position
5.4 Compliance (e.g. with medical prescriptions)
5.5 Passive strategy: impotence, withdrawal, avoidance
5.6 Expression of feelings
5.7 Positive re-evaluation

Fig. 1. 'Analytical tree'.

There is a strong idealisation of breast feeding with important projections and stakes. It appears to be perceived as one of the indicators of a 'good mother':

> It was difficult to take the decision to stop breast feeding. Because I feel bad myself about not being able to produce enough milk and satisfy my baby. Yes, like a failure. I was not capable of…. Then I said to myself, will I be able in general to take care of him? The fact that I could not breast feed raised the question in my mind about my own ability to take care of this child. Will our relationship be sufficient? All that, I linked to my breast feeding. (Ch1)

Women considered breast feeding as a natural behaviour and focused on information given during prenatal education where the future difficulties of breast feeding are often concealed:

> Finally, it was mostly to do with breast feeding. No one told us about the disadvantages. It was only that it is very good, it is very satisfying. I had fissures on the second day. No one had told me about that. During the prenatal course, there were slides with attractive women breast feeding their child, but no negative aspects were mentioned, just that everything was going very well. Whereas me, I almost gave up. (M14)

Most women perceived breast feeding as a negative event and were unable to achieve any degree of satisfaction. An additional major event concerned the practical organisation of breast feeding, and women reported this as a source of high anxiety with feelings of being completely overwhelmed.

Social support during the early postpartum period

During the early postpartum period, women considered emotional social support, which includes help to maintain self-esteem, as the most important factor. 'Interaction with the caregiver' emerged as the major stressful event. Women were dissatisfied with the social support provided by health professionals and considered it to be either insufficient or unsuitable for their needs:

> The infant cried a lot. I called the midwife and she said 'what do you want me to do?' I was very disappointed. I needed someone to give me support. (M13)

Similarly, emotional support was also perceived as the primary protective factor in relation to the second-most stressful event, breast feeding:

> When you encounter breast-feeding difficulties, you have the impression that nobody is listening to you, you are told to keep trying, everything will go well, and it is not important. It is a pity and it is very hard …. (M06)

For the event 'baby's health', informative support was considered to be the most satisfactory option if open-ended. Women want to be considered as partners in the care process, and if the informative support is directive or contradictory between professionals, it is perceived negatively.

Social support during the later postpartum period

At home, the expected social support is diverse and of a different type. Faced with the practical organisational aspects, women feel great concern and express a tremendous need for material support. Although the privileged support base is the partner, women have the impression that there is a lack of understanding of their needs. Thus, the expected and positively perceived support is essentially material. The maternal grandmother was frequently mentioned and her support was generally perceived as positive. Nevertheless, midwives play a major role during this period, particularly for breast-feeding difficulties, and they are considered as a reference for decision-making.

Coping strategies

In the early postpartum period, women mainly search for social support as a coping strategy. This can be easily understood as they are in a hospital context and need to be reassured and comforted. At home, the main strategy is the mobilisation of internal resources. For events related to their own health, e.g. urinary incontinence, mothers use avoidance or minimisation strategies. At six weeks post partum, several women spoke of negative emotions and thoughts that they named the 'baby blues'. However, none reported consulting a professional to talk about their feelings. Moreover, they have a tendency to embellish what they experience, either to correspond to social and desirable norms or to prove that they are 'good mothers' capable of facing their responsibilities:

> …And I think there is a preconceived image of the ideal mother. When I asked friends who gave birth at the same time as me: 'how is your daughter? Is she crying a lot?' They all told me no. They said no, she never cries. Recently, I asked them again about it, and they then said that they could not even take a shower! And I said to them: 'but I thought that she did not cry?' And even worse, they had not told me the truth, and I found this extremely distressing. I do not know, it is all a façade. (S09)

Professional education

Information dispensed during antenatal classes appears to be of little use during the postpartum period. Women's motivations to attend prenatal classes are primarily directed towards childbirth, and they reported that advice on the postpartum period was too far removed from their concerns at that time and was not retained. In particular, women mentioned a gap between the course content and actual practice.

Discussion

The qualitative design of this study enabled the identification of sources of perceived stress experienced by primiparous women during the early and late postpartum periods, and insight into the coping strategies used. It also allowed the exploration of mothers' perceptions of the social support received and its adequacy to meet their expectations during this sensitive period.

In our study, the factors associated with postpartum stress are not major life events, but daily hassles. In the early postpartum period, women reported the interaction with the caregiver, followed by breast feeding and the hospital, as important stress-related factors. During this period, social support is mainly provided by health professionals. In our sample, women expressed their dissatisfaction with the support provided, both on the emotional and self-esteem levels. In contrast, an open and non-directive informative support was highly appreciated and expected regarding care of the infant. Sarason and Sarason (1990) noted that the effectiveness of the social support depends on the adequacy perceived between a type of support and its source. Caregivers should be more aware of women's expectations in

order to provide effective and adequate care during hospital stay, which has become markedly shorter in the last decade.

The socio-cultural context may affect the type and importance of the stressful events. In a study conducted in Taiwan, the problems perceived as most stressful at three weeks post partum were tiredness, lack of time and infant feeding (Hung, 2001, 2005). In our study at six weeks post partum, the main stressful events were breast feeding, practical organisational aspects and the baby crying. Women highlighted major organisational difficulties, particularly when the family was absent or if the social network was perceived as unavailable or inadequate. The mother's socio-economic status may also influence the importance and impact of events. In our study, mothers were mainly from the higher levels and the categories presented in Table 2, as well as their frequency, need to be cross-validated with a wider and more varied sample.

Breast feeding as the major stressful event is an interesting and surprising result. In our study, 98.3% women were breast feeding when they left the maternity unit. Similar rates were shown in the same hospital by Boulvain et al. (2004). Our research showed that women perceived breast feeding as highly negative and threatening during the whole study period, with pain as the most important negative feature. Great value was placed on successful breast feeding, sometimes considered as one of the indicators of a 'good' mother. Women emphasised the discrepancy between the information given during the prenatal classes, which idealised breast feeding, and the actual reality. Today, breast feeding is actively promoted by society and professionals. Two meta-analyses were conducted in this field. The first showed that structured information given during the antenatal period improves the rate of breast-feeding implementation (Fairbank et al., 2000), and the second that an educational intervention carried out in the prenatal period significantly improved the breast-feeding starting rate (Dyson et al., 2005). Our research highlighted the disillusionment of mothers when they observed the gap between their expectations and the difficult reality of breast feeding.

Educational concepts dispensed by health professionals, especially during prenatal classes, were only partially taken into consideration. These classes were attended essentially to prepare for childbirth, and women were not receptive to information concerning the postpartum period. These results are consistent with those reported in similar studies. In a qualitative study, Nolan (1997) showed that antenatal classes were insufficient to help parents acquire the practical competences to take care of their child during the first weeks after childbirth. Another exploratory study showed that women are well prepared for labour and childbirth, but not for the changes provoked in the family by the arrival of a child and the care required (Renkert and Nutbeam, 2001). In our study, women insisted on the necessity to be followed and guided when difficulties occurred, particularly in the postnatal period. They formulated a clear request for a longer postpartum follow-up more adapted to their needs, and regretted the absence of postpartum classes to strengthen the knowledge related to breast feeding and the rhythm of the child. Several studies conducted to evaluate the impact of postpartum interventions showed that these had beneficial effects on the mothers' well-being and a preventive effect on postnatal depression (Dennis and Creedy, 2005).

Several women acknowledged the positive effect of the interview itself, which allowed them to look back on events with hindsight. Different studies have evaluated the benefits of a debriefing after childbirth. Lavender and Walkinshaw (1998) showed that a place where mothers could seek support, comprehension and explanations from midwives during the postpartum period had a beneficial effect. Kershaw et al. (2005) reported that a brief, midwife-led, counselling intervention for women who reported a distressing birth experience was effective in reducing symptoms of trauma, depression, stress and feelings of self-blame. However, there is insufficient evidence about the effectiveness of debriefing after childbirth, partly because of the different types of interventions and counselling offered (Gamble et al., 2002; Gamble and Creedy, 2004; Rowan et al., 2007).

Seven categories of coping strategies have been highlighted in this study (Table 2), but these were not specific and women often used several to manage the same event. This is consistent with the transactional model of stress and coping (Lazarus and Folkman, 1984). However, our study did not allow us to determine whether some strategies were more effective than others, and this requires further research.

The early postpartum period corresponds to an intermediary phase where women need not only to be counselled and reassured, but also offered appropriate emotional and self-esteem support. Mothers often mention tiredness as a major problem during this period, and more privacy and rest during hospital stay needs to be privileged. Once home, women emphasise difficulties with organising their time and managing several problems simultaneously, in particular when help is not provided by close family/friends and support eventually received is perceived as inadequate. A reflection is thus needed to improve the availability of practical support (e.g. home help) for mothers to ease the daily pressures.

As mentioned, several women mentioned the need for a longer postpartum follow-up, thus reflecting the fact that problems often arise when the midwives' visits have ended. Although our interviews were centred on data collection, they did appear to have a beneficial effect on the well-being of participants, and this suggests a clear role for educational sessions during this period to improve mothers' quality of life. In addition, our study raises concern regarding the information provided on breast feeding at prenatal classes, which clearly mitigates for a more realistic presentation of norms and expectations. Finally, our study was conducted in a sample of low-risk, primiparous women in a West European urban population, and our results must be considered with caution and cannot be generalised to other settings.

Table 2
Coping strategies.

Vigilant strategy, mobilisation of internal resources
Active search for social support
Action plan, assertion of position
Compliance, conformation to a standard or a norm
Passive strategy: impotence, withdrawal, cognitive and emotional avoidance
Expression of feelings to partner, family and friends
Positive re-evaluation of self

Conclusions

This study provides useful information for health professionals to reconsider postpartum care and follow-up. The findings highlight the discrepancies between the stressful events perceived by women, and the lack of adequacy between received and expected support. In the early postpartum period, the interaction with the caregivers and the hospital environment are the major stressful events. Although professionals are skilled in informative support, the expected support is more on an emotional and self-esteem level and the institutional environment should be aware of these aspects in the organisation of care. Breast feeding is a particularly stressful event. The difference between expectancies, ideal representations and the reality of breast feeding emerges as a real problem. The effectiveness of antenatal education on breast

feeding and postpartum events through informative support is not successful and it must be revisited and sustained post partum. We highlight also the importance of the role of midwives in reassuring new mothers of their skills and the need to avoid provoking any feelings of inadequacy or guilt during this sensitive period. Coping strategies developed by women during the postpartum period are not specific. The lack of professional, long-term, postpartum follow-up is criticised by most women and further research is needed to promote and develop adjusted and effective postpartum support.

Our study suggests that it is important to study the experiences of the mother, child and close family circle during the postpartum period. Stressful events during the early postpartum period are numerous and lived intensively, often negatively. Available social support for women is not always perceived as sufficient or adequate to calmly manage the different events occurring during this time. Knowledge and theories dispensed by health-care professionals are not always used or even considered feasible in practical terms by women. These preliminary results require further research to investigate and develop more effective methods to meet mothers' expectations.

Conflict of interest statement

All authors declare no conflict of interest.

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