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The experience of becoming a grandmother to a premature infant

- A balancing act, influenced by ambivalent feelings

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Running head: Becoming a grandmother to a premature infant

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Abstract

Aim and objectives: To explore and describe the experience of becoming a grandmother to a premature infant. **Background:** Becoming a grandmother involves a new perspective of life. Grandmothers of sick infants find themselves in a new situation with an adult child undergoing serious stress. Few studies have approached the grandmothers' own experience of becoming a grandmother to a premature infant. **Design:** A qualitative content analysis was used. **Methods:** Eleven women, 52 to 66 years of age, who were grandmothers to premature infants born at a gestational age of 25 to 34 weeks were interviewed during 2010. The infants were < 3 years old at the time of the interview. The interviews were analysed with qualitative content analysis. **Results:** The overall theme was; a balancing act. Two categories of experience were identified; emotional experiences and a new role. 'Emotional experiences' was related to the first meeting, ambivalent feelings, and confidence in care. 'A new role' was related to the subcategories supportive, a balance of involvement and limitations.

Conclusions: To become a grandmother to a premature infant was experienced as a balancing act influenced by ambivalent feelings of joy, fear and worry. The grandmothers sensed the seriousness of the situation at the same time as they wanted to be happy about the newborn infant. They worried about their adult child's as well as the premature infant's health, but put their own needs aside. The grandmothers' new role was a balance between being involved and supportive without disturbing. Staff in a neonatal intensive care unit should be open to grandmothers' needs and acknowledge them as an obvious support for the immediate family of a premature infant. **Relevance to clinical practice:** NICU staff should be open to grandmothers' needs and acknowledge them as an obvious support for the immediate family of a premature infant. The grandmothers need guidance and information about what to expect concerning the infants health, the parents situation and their own role. **Key words:** content analysis, extended family, family care, neonatal care, preterm infant

Introduction

To be a parent of a premature infant in a neonatal intensive care unit (NICU) is often associated with stress, anxiety, depression and lack of control (Arockiasamy *et al.*, 2008; Jackson *et al.*, 2003; Lindberg & Öhrling, 2008; Lundqvist & Jakobsson, 2003; Miles *et al.*, 1992; Miles *et al.*, 2007). Parents have reported that the separation after birth as well as the infant's appearance and behaviour may be stressful (Jackson *et al.*, 2003; Lindberg & Öhrling, 2008; Miles *et al.*, 1992). Parents are not prepared for having a premature infant, and initially they may have difficulties feeling like a parent (Jackson *et al.*, 2003; Lindberg *et al.*, 2008; Lindberg & Öhrling, 2008). Moreover, if the parents have children at home they may experience problems with divided attention between the siblings at home and the infant in the hospital (Lindberg & Öhrling, 2008). Parents of infants in a NICU have stated that the principal role of grandparents is to provide emotional support (McHaffie, 1992). However, grandparents are not always allowed to visit their adult child and premature grandchild admitted to the NICU (Greisen *et al.*, 2009). Little is known about the experiences of becoming a grandparent to a premature infant. If grandparents are expected to provide support to the family in a NICU, more information about how grandparents experience the situation is needed.

Background

Grandparents' general experience of grandparenthood when the child is healthy is enjoyable, and frequent contact with the grandchild can be predicted to result in high levels of satisfaction (Peterson, 1999). However, when the child is ill the grandparents' role changes. For instance, when the immediate family is occupied with an ill child, the extended family

may need to step into a parent role with siblings (Ravindran & Rempel, 2011). Grandparents of children with complex congenital heart disease have reported that one important approach to supporting the parents is to attend to the needs of siblings and to ensure that siblings keep up with daily routines and day-to-day activities (Ravindran & Rempel, 2011). Grandparents of critically ill infants have described a phenomenon of double concern; a concern for both the sick grandchild and the parents (Hall, 2004a; Hall, 2004b). During the critical intensive care period the grandparents felt scared, worried, helpless and frustrated. They wanted to be there and were willing to do whatever possible to support the parents (Hall, 2004a; Hall, 2004b). Grandfathers felt that the immediate family needed them, and grandmothers who were used to be seen as someone to trust saw it as their duty to help (Hall, 2004a; Hall, 2004b). Grandparents who lost a grandchild have described increased alcohol and drug use, thoughts of suicide, and emotional pain for their adult child who is also grieving (Gilrane-McGarry & O Grady, 2011; Youngblut *et al.*, 2009).

It is an emotional experience to become a grandparent of any infant. If complications arise during delivery and the newborn baby requires intensive care it also activates feelings of guilt, helplessness, disappointment and powerlessness in both parents and grandparents (Blackburn & Lowen, 1986). Family-centered care in the NICU has traditionally focused on the two-generation family; the infant and her/his parents. Little attention has been given to the needs of grandparents to premature infants. Rempusheski's study from 1990 is the only article found that has exclusively approached grandparents' experiences of premature infants. Grandparents of premature infants described emotions ranging from joy to confusion (Rempusheski, 1990). Grandparents were unprepared for becoming grandparents earlier than expected. Moreover, they had difficulties sleeping, eating and concentrating during the critical period (Rempusheski, 1990). Grandparents' first concern was for the adult child; secondly, for

the grandchild, and thirdly, for themselves (Rempusheski, 1990). McHaffie found that parents in a NICU expect more support from grandmothers, especially maternal grandmothers, than from grandfathers (McHaffie, 1992).

Methods

Aim

The aim of the present study was to explore and describe the experience of becoming a grandmother to a premature infant.

Design

To obtain a deep insight in grandparents' experience and supporting role when a premature grandchild is born, interviews with grandmothers and qualitative content analysis were found appropriate (Krippendorf, 2004).

Participants

A sample of grandmothers was recruited using maximum variation. Grandmothers to premature infants born in one NICU level-II and one NICU level-III at two hospitals in the southeast of Sweden were selected. The inclusion criteria were; the infant should have been a patient in a neonatal ward at one of the hospitals; the infant should have been born before a gestational age of 36 weeks; the infant and the grandmother should live in the same county; and the grandmothers should speak Swedish. To get a broad and rich selection, infants were selected with respect to the pregnancy week they were born in. The infants were born from week 25 to 34 and two pairs of twins were represented. At the time of the interview the infants were younger than three years corrected age. Four of the infants had older siblings. Contact was established with 18 grandmothers, of whom 11 agreed to participate.

Data collection

Infants who had been patients in one of the two NICUs were identified through the patient data system. The infants' birth date and week were identified and from these variables the infants were selected. To obtain adequate variation and rich data, infants born between 2006 and 2008 were included during 2010. First the parents were contacted by telephone and informed about the aim of the study. The parents were asked if the infant had a grandmother who might be interested in participating in the study. If so, the parents gave the grandmothers' contact information to the authors performing the interviews (CE, SP). Thereafter the authors contacted the grandmothers and asked them about participation. Grandmothers received oral and written information about the study including a description of the aim of the study and the interview procedure. They were also informed about the voluntary nature of the study, that they could end their participation at any time, and that confidentiality would be maintained throughout the study.

Interview

Data was collected using an interview guide. The interview started with the interviewer asking if the grandmothers had any questions about the aim of the study, the interview or the study sequence. Descriptive data was collected such as the grandmother's age, employment, and information on whether the grandmother was the mother's mother or father's mother and if she had other grandchildren. Thereafter, the interview continued by following the interview guide consisting of the following questions: 1) Would you please tell me about your experience when the premature grandchild was born? 2) What has this meant for you? 3) Is your experience that the parents of the infant needed support? 4) Was it possible for you to visit your grandchild in the neonatal ward? 5) Did you experience a need of support for

yourself? The grandmothers were encouraged to talk openly, although follow-up questions were used for confirmative purposes, for example: What meaning does it have to you? In which manner? Did you have feelings of participation? Could you give support? What are your thoughts about parenting? One pilot interview was performed to prove if the interview guide worked in accordance with the aim of the study. The pilot interview was later included in the data analysis. The grandmother was offered the option of deciding the time and place for the interview. The interviews were performed in the grandmothers' home (n=3) or at the hospital in a calm and comfortable room (n=8). The interviews lasted 30 to 60 minutes. All interviews were tape-recorded and transcribed verbatim. The interviews were performed by two of the authors (CE and SP) who were not involved in the care of the infants.

Ethical considerations

The study was approved by the heads of the neonatal departments at the two hospitals. Thus, since the contact had been established through the infants' parents, both the infants' parents and the grandmothers gave their informed consent to participation. The study was carried out according to the principles of the Declaration of Helsinki, and according to Swedish law (2003:460) no permission from the Ethics Committee is necessary when no influence on the informant is expected (CODEX, 2010).

Data analysis

The data were analysed using content analysis to provide knowledge and understanding of the grandmothers' experience and supporting role when a premature grandchild is born (Hsieh & Shannon, 2005; Krippendorff, 2004).

- The first step aimed to get a sense of the whole; two of the authors (CE and SP) read the transcripts several times individually. The text was discussed and agreement over the content in the transcripts was reached.
- During the second step, meaning units with relevance to the aim and the interview guide were identified.
- The third step involved a condensation of the meaning units, thereby aiming to reduce the text while keeping the meaning of the content.
- The fourth step was a coding process in which the condensed meaning units were categorized into subcategories and categories in agreement with all the authors. An overall theme emerged during this analysis. The analysis was a process back and forth between the above described steps.

Trustworthiness

Credibility was achieved when two of the authors (CE and SP) reviewed the data and reached consensus about its analysis. The dependability of the study is based on its credibility, and this was ensured by using two other authors (GHF and EM), who worked as collaborating analysts during the data analysis (Lincoln & Guba, 1985). Quotations were used as illustrative examples in the presentation of the findings to give the reader an opportunity to evaluate the conformance between the interviews and the categories (Patton, 2002). Together, these techniques support the trustworthiness of this qualitative study.

Results

The study participants ranged in age from 52 to 66 years of age, and nine were employed. Eight women were mothers of mothers, three were mothers of fathers, and six had other grandchildren. Three grandmothers had experience of an earlier premature grandchild. The main characteristic of becoming a grandmother to a premature grandchild was; a balancing act. This theme emerged during the analysis of two categories: emotional experiences and a new role. Within each of the two categories, three subcategories were defined. The category ‘emotional experiences’ was related to the subcategories the first meeting, ambivalent feelings, and confidence in care. The category ‘a new role’ was related to the subcategories supportive, a balance of involvement and limitations (Table 1).

Table 1. Theme, categories and subcategories

Theme	Categories	Subcategories
	Emotional experiences	The first meeting Ambivalent feelings Confidence in care
A balancing act	A new role	Supportive A balance of involvement Limitations

Emotional experiences

The first meeting

The message about the grandchild being prematurely born was experienced as a radical shock because the grandmothers were completely unprepared. They understood the seriousness of the situation but wanted to keep a sense of happiness due to becoming a grandmother and meeting the grandchild. Most of the grandmothers had no previous experience of a premature

infant and no idea of what the infant would look like. For the grandmothers it were important to have the opportunity to see the grandchild with their own eyes. The situation was unreal and hard to understand before meeting their grandchild. Seeing the grandchild made the situation more real, and the feeling of becoming a grandmother began to germinate, mixed with persistent anxiety.

" We saw her...when she was one day old, it was an emotional experience, and I said welcome to the world littlethere she laid in her incubator" (respondent 7)

Meeting their grandchild gave them a sense of security and they could begin to create a relationship with the child. They found the premature grandchild amazing.

" The smallest person I have ever seen, it was wonderful. There are no words to describe it" (respondent 8)

The grandmothers also said that they did not need, want, or dare to hold their grandchild. This was explained by the fact that many of the grandmothers experienced the grandchild as so very small and fragile, their hands being so big in comparison with the grandchild. Others expressed worries about passing on infections.

Ambivalent feelings

The grandmothers experienced ambivalent feelings of joy and fear. The feelings included happiness, calmness, fear, anxiety, and sorrow during the time the infant was a patient in the ward. The feelings towards the infant and the infants' health situation varied according to the wellbeing of the parents. The grandmothers' whose grandchildren were very premature, had a complication, or were born with a disability that probably would influence their future life

experienced the situation as difficult. An increased anxiety about the future was expressed in cases where the infant needed nursing care even after discharge from the hospital.

” I did not know if I should laugh or cry, if I should be glad or sad or what I actually should feel. Such complete chaos ” (respondent 2)

The health of the grandchild was of great importance in determining the grandmothers’ ability to cope with the situation. Having the experience of an earlier premature grandchild meant that the grandmother felt calmer this time.

Many of the grandchildren were in a critical condition and the grandmothers were concerned about the immediate family. Their first concern was for the mothers’ health, and secondly worries for the grandchild’s health. Some grandmothers did not dare or want to think about the grandchild until the mothers’ health was stable. The parents’ wellbeing was of greater importance than their own wellbeing, and the grandmothers wanted the parents to be empowered.

” You don’t think of how bad you feel, you don’t allow yourself to do that ” (respondent 9)

The grandmothers said that they did not want to burden or worry the parents with their own questions or thoughts. Some of the respondents became emotional during the interviews and were surprised about their own unexpected reactions. They realized that no one had asked about their feelings about the situation before. None of the grandmothers had asked for professional help themselves, while some had communicated with relatives, friends or

colleagues. However, grandmothers who had talked to other people about their own feelings experienced a comfortable feeling that helped them cope with the situation.

"My sister and I talk very much. It is helpful" (respondent 7)

People who asked about the grandchild mediated positive feelings of caring and support.

Confidence in care

The grandmothers felt confident and satisfied when the grandchild received specialist neonatal care. Observing the nurses' and physicians' competence and their continuous control over the situation gave them a sense of confidence. Information about premature infants' normal growth and beliefs about the future satisfied the grandmothers. They appreciated the knowledge conveyed by nurses and physicians and their emotional engagement, it provided security. The experience of confidence for provided care reduced the grandmothers' sense of worries. However, some found the environment at the ward busy, but mostly it was described as a new world; "calm", "quiet" and "fantastic".

"It is a world of its own, completely self-contained. It was like an egg or something... (respondent 2)

Grandmothers experienced that the immediate family felt secure when both parents could stay at the NICU and enhanced confidence in care when the nurses and physicians were engaged and interested. Besides the care of the infant, the grandmothers had noticed that the parents were well cared for both during the time in the ward and after discharge. The parents were welcome to contact the ward after discharge, and this too was seen as increasing the sense of security. All grandmothers found their own as well as the nurses' and physicians' caring role

important for the parents. The counsellor explored the feelings of the parents, which in turn helped the grandmothers to be involved and communicate with the parents.

” ...I think there were a lot of feelings that needed to be expressed. To talk to someone that was not personally engaged...”(respondent 6)

A new role

Supportive

It was obvious to the grandmothers that they should support the immediate family emotionally as well as practically whenever necessary during the hospital stay as well as after discharge.

The grandmothers played a supportive role for the new parents, helping them to emotionally manage the situation. At the beginning, the grandmothers saw the parents as being in a crisis, needing support. Some had the experience of the father needing their support and presence just after the delivery. The grandmothers noticed that the father was in shock until the mothers' health was stabilized. The grandmothers supported the father by listening, talking and giving advice.

” I was there as a support when they felt they needed me, precisely then” (respondent 1)

The grandmothers found it important to listen and be emotionally supportive without expressing their own opinion. Mostly grandmothers had daily contact with the parents, both during the hospital stay and after discharge. It was important for the grandmother to be available for the immediate family. Another way to support the immediate family was to notice the parents' need for environmental change. Staying in the NICU for many weeks was

a psychological strain, and the parents needed support to understand their own need to leave the ward for a while. The grandmothers felt that their support during and after the time in the NICU was helpful for the parents. The practical support firstly was help with food. Either they came with food to the hospital or they invited the parents to dinner. They also helped out with housework like shopping, washing and cleaning.

” Having an infant in the neonatal ward made them isolated from the world. So in that way they needed more practical help than otherwise” (respondent 5)

In families with siblings the grandmothers supported the immediate family with child minding. They wanted to offer relief through caring for the older siblings. They also said that they thought of the siblings’ emotional need to be involved in the new family situation as well as spending time with their parents, aiming to prevent the siblings from feeling neglected. Some siblings slept at the grandmothers’ home, thus allowing the parents to be with the newborn infant as much as possible. Through the support provided, they noticed that the parents could support each other better. The grandmothers continued to support the immediate family with everyday practical duties when needed after discharge, especially when one of the parents went back to work while the other parent stayed at home with the infant.

A balance of involvement

A balance was described between being involved without disturbing. As the grandmothers did not want to take over, they stayed in the background and respected the fact that they were not the parents. The grandmothers had a desire to be engaged without being intrusive.

” I recognize that I am very close, although it is not my child. I want so much but without being intrusive” (respondent 4)

As time went on they got very close to their grandchildren but still preferred to be a background figure. They respected the waiting time until they could see their grandchild. The most important thing was the immediate family’s wellbeing, health and condition. The grandmothers’ own need to be involved came second. Through contact with the parents the grandmothers received information about the health status and development of the infant, which gave them feelings of involvement and calmness. Mostly, the information transferred from the parents to the grandmothers was enough. If they lacked any information they tried to find it themselves, on the internet for instance. However, some of the grandmothers had appreciated being given a brochure about the needs of premature infants, as well as the routines of the ward. Some felt like visitors and did not participate in the care of the infant during the time in the NICU. They respected the situation but also wished for a higher degree of involvement than they were allowed to have; it was hard not to be there. Others pointed out that the situation was good, the immediate family needed to be by themselves in a calm environment.

The grandmothers described great happiness when they could be with the grandchild. Those who had other grandchildren did not experience any emotional difference in the relationship with the prematurely-born grandchild after discharge. They believed the relationship would have been similar even if the grandchild had been born full-term. After discharge the grandmothers had a stronger feeling of involvement; some did babysitting and found that satisfying.

Limitations

Most of the grandmothers were satisfied with the support they had provided the family, although there was a limit related to if they were still employed. They were able to be more available if they were retired. Another limitation was the difficulty experienced when not having a driving licence, which in turn made it difficult to visit the grandchild whenever they wanted. Visiting-hours at the ward and fear of passing on infection to the infant were also experienced as limitations. Moreover, because the grandmothers didn't have a personal contact with the staff they expressed an uncertainty of how to act and behave when visiting the NICU.

"I felt unsecure when arriving at the ward. How should I behave and how could I avoid doing something wrong" (respondent 6)

Discussion

This study describes the experience of becoming a grandmother to a premature infant in need of intensive care. The grandmothers described their emotional experiences and their new role as a balancing act, influenced by ambivalent feelings. The respondents found it important to meet the premature infant; seeing the infant prompted feelings of being a grandmother.

However, it was not important to touch the baby. This is different to previous results when grandmothers from the USA described the importance of touching the infant (Rempusheski, 1990). It is also different from new mothers' bonding behaviour; the urge to see, touch and hold their infant (Klaus *et al.*, 1970; Tilokskulchai *et al.*, 2002). The respondents explained that it was more important to protect the infant against germs and infection than for them to touch the infant.

Hearing about the grandchild's pre-term arrival was associated with many ambivalent feelings, including joy, fear and worry. The immediate worries involved concerns for the mother's health. When they knew the mother was fine, they started to worry about the infant's health and prognosis. This finding is supported by previous studies in which concerns about premature infants' chances of survival and risks of disabilities have been addressed (Hall, 2004b; Rempusheski, 1990). Since the grandmothers reported that they were unprepared for the news and did not know what to feel it is possible that parents of the immediate family need to be professionally advised by oral and/or written policies on how to best inform grandmothers about the arrival of a premature infant.

That the grandmothers' own health had a low priority is supported by Rempusheski's study (Rempusheski, 1990). None of the respondents had used professional support to handle the crisis; only social support from friends. The nursing staff may recommend grandmothers to seek professional support to talk about their feelings, as primary prevention. It may also be supportive to attend grandmother groups. To meet people in the same situation may be socially and emotionally supportive and result in less stress (Gerard *et al.*, 2006; Leder *et al.*, 2007).

The respondents in our study wanted to be strong and supportive for the parents but did not know what was expected of them or how they could help. They wanted to be supportive, engaged, and involved but at the same time they were afraid of disturbing or being intrusive. The respondents that had previous experience of a prematurely-born grandchild felt more confident in the situation. To know or to be able to predict the situation is closely related to experiencing less stress. Providing written information to grandmothers about what to expect regarding the development of a premature infant, how they can help, and what they can do, may help to make the grandmothers feel more involved and less stressed (Coyne, 1995; Leder

et al., 2007; Miles *et al.*, 1991; Ravindran & Rempel, 2011). Written information about routines at the ward was also suggested by one respondent.

The grandmothers mentioned that staff members were helpful towards the parents. This finding is supported by other studies of parents in the NICU (Jackson *et al.*, 2003; Korja *et al.*, 2009), while in a Danish study, grandmothers expressed the importance of the staff being kind (Hall, 2004b). The grandmothers also valued professional support to parents from persons outside the staff that were not emotionally or medically involved with the family. This finding is similar to previous results from a study on parents of infants with extremely low birth weight (Eriksson & Pehrsson, 2002).

Several grandmothers experienced that the fathers were initially in shock. This finding is supported by other studies of parents (Eriksson & Pehrsson, 2005; Fegran *et al.*, 2008; Lindberg & Öhrling, 2008). Providing social support to parents in the NICU can help them through the crisis and ease their transition to parenthood (Spielman & Taubman-Ben-Ari, 2009). In agreement with previous results (Hall, 2004b), respondents in the present study found it obvious that they should support their adult children in their new parenting role. They gladly provided both emotional and practical support. For instance, grandmothers helped with older siblings so that both parents could spend time at the hospital without feeling divided between the infant in the NICU and children at home, as has been described earlier (Hall, 2004b; Lindberg *et al.*, 2008; Lindberg & Öhrling, 2008; Ravindran & Rempel, 2011). The grandmothers' experience was that the parents turned to them to get practical support as well as for confidence, advice, and for talking. This finding indicates that the grandmothers were a valuable support for their adult children. The respondents also found that the parents helped each other through the crisis, a finding supported by a study of parents in NICU (Lindberg *et al.*, 2008). Thanks to the generous Swedish health care system it is possible for both parents to

stay in the hospital. However, when one of the parents starts working after discharge from the hospital the other parent may need more support from the extended family. Parents have previously described a sense of insecurity when leaving the hospital after discharge from the NICU (Jackson *et al.*, 2003). There is also an increased risk of extensive stress in both mothers and fathers to premature infants (Lefkowitz *et al.*, 2010; Shaw *et al.*, 2009).

Limitations for providing good support included that the grandmothers were still working and that they were afraid of passing on an infection to the infant. All grandmothers said that they restricted their visits because of the risk of infection. To our knowledge, this finding has not been reported previously. Open visiting hours for the extended family have decreased during the last ten years in Sweden (Greisen *et al.*, 2009). One suggested explanation for the decrease is increased awareness of infants' need for a quiet environment (Greisen *et al.*, 2009). Another explanation could be the risk of infection. It is important to balance the risk of infection, a quiet environment, the importance for grandmothers of seeing the infant, and the possibility for grandmothers to support the parents in order to provide the best care for the whole family. A care program involving grandmothers may be relevant here.

Eleven grandmothers agreed to participate, which could be seen as a study limit in relation to the content analysis. It was rather difficult to find respondents since one of the inclusion criteria was that the grandmother should live close to the family. This criterion was set because all grandmothers should have the same opportunity to visit the family. Due to the criteria living close to the family, some of the grandchildren had reached an age of three years. It is possible that it is more difficult to remember the experience of becoming a grandmother after such a long time. On the other hand, such a special event may stick in the memory and become easy to recall (Blackburn & Lowen, 1986; Hall, 2004a; Hall, 2004b; Rempusheski, 1990).

Eight grandmothers preferred to be interviewed at the hospital. This might have influenced the findings because the respondents returned to the place where they eventually had experienced extensive emotional distress. It is also possible that the grandmothers participating in this study is a selected group of positive and satisfied grandmothers because their participation was approved by the immediate family of the premature infant. Studies about the extended family of a premature infant are rare and further research is necessary in order to learn more about how grandparents may be involved in the NICU. It is for instance important to further explore the experiences of becoming a grandfather to a premature infant.

Conclusion

To become a grandmother to a premature infant was experienced as a balancing act influenced by ambivalent feelings of joy, fear and worry. The grandmothers sensed the seriousness of the situation at the same time as they wanted to be happy about the newborn infant. They worried about their adult child's as well as the premature infant's health, but put their own needs aside. The grandmothers' new role was a balance between being involved and supportive without disturbing.

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Contributions

Study design: CE, SP, EM; data collection: CE, SP; data analysis: GHF, CE, SP, EM; manuscript preparation: GHF, EM.

Conflict of interest

None declared.

References

- Arockiasamy V., Holsti L. & Albersheim S. (2008): Fathers' experiences in the neonatal intensive care unit: a search for control. *Pediatrics*. **121**, e215-22.
- Blackburn S. & Lowen L. (1986): Impact of an infant's premature birth on the grandparents and parents. *J Obstet Gynecol Neonatal Nurs*. **15**, 173-8.
- CODEX C.f.R.E.B. (2010) Rules and guidelines for research.
- Coyne I.T. (1995): Partnership in care: parents' views of participation in their hospitalized child's care. *J Clin Nurs*. **4**, 71-9.
- Eriksson B.S. & Pehrsson G. (2002): Evaluation of psycho-social support to parents with an infant born preterm. *J Child Health Care*. **6**, 19-33.
- Eriksson B.S. & Pehrsson G. (2005): Emotional reactions of parents after the birth of an infant with extremely low birth weight. *J Child Health Care*. **9**, 122-36.
- Fegran L., Helseth S. & Fagermoen M.S. (2008): A comparison of mothers' and fathers' experiences of the attachment process in a neonatal intensive care unit. *J Clin Nurs*. **17**, 810-6.
- Gerard J.M., Landry-Meyer L. & Roe J.G. (2006): Grandparents raising grandchildren: the role of social support in coping with caregiving challenges. *Int J Aging Hum Dev*. **62**, 359-83.

Gilrane-McGarry U. & O Grady T. (2011): Forgotten grievors: an exploration of the grief experiences of bereaved grandparents. *Int J Palliat Nurs.* **17**, 170-6.

Greisen G., Mirante N., Haumont D., Pierrat V., Pallas-Alonso C.R., Warren I., Smit B.J., Westrup B., Sizun J., Maraschini A. & Cuttini M. (2009): Parents, siblings and grandparents in the Neonatal Intensive Care Unit. A survey of policies in eight European countries. *Acta Paediatr.* **98**, 1744-50.

Hall E.O. (2004a): A double concern: Danish grandfathers' experiences when a small grandchild is critically ill. *Intensive Crit Care Nurs.* **20**, 14-21.

Hall E.O. (2004b): A double concern: grandmothers' experiences when a small grandchild is critically ill. *J Pediatr Nurs.* **19**, 61-9.

Hsieh H.F. & Shannon S.E. (2005): Three approaches to qualitative content analysis. *Qual Health Res.* **15**, 1277-88.

Jackson K., Ternstedt B.M. & Schollin J. (2003): From alienation to familiarity: experiences of mothers and fathers of preterm infants. *J Adv Nurs.* **43**, 120-9.

Klaus M.H., Kennell J.H., Plumb N. & Zuehlke S. (1970): Human maternal behavior at the first contact with her young. *Pediatrics.* **46**, 187-92.

Korja R., Savonlahti E., Haataja L., Lapinleimu H., Manninen H., Piha J. & Lehtonen L. (2009): Attachment representations in mothers of preterm infants. *Infant Behav Dev.* **32**, 305-11.

Krippendorff K. (2004) *Content analysis. An introduction to its methodology.* Sage publications. London.

- Leder S., Grinstead L.N. & Torres E. (2007): Grandparents raising grandchildren: stressors, social support, and health outcomes. *J Fam Nurs.* **13**, 333-52.
- Lefkowitz D.S., Baxt C. & Evans J.R. (2010): Prevalence and correlates of posttraumatic stress and postpartum depression in parents of infants in the Neonatal Intensive Care Unit (NICU). *J Clin Psychol Med Settings.* **17**, 230-7.
- Lincoln Y. & Guba E. (1985) *Naturalistic Inquiry*. Sage Publications. Newbury Park.
- Lindberg B., Axelsson K. & Öhrling K. (2008): Adjusting to being a father to an infant born prematurely: experiences from Swedish fathers. *Scand J Caring Sci.* **22**, 79-85.
- Lindberg B. & Öhrling K. (2008): Experiences of having a prematurely born infant from the perspective of mothers in northern Sweden. *Int J Circumpolar Health.* **67**, 461-71.
- Lundqvist P. & Jakobsson L. (2003): Swedish men's experiences of becoming fathers to their preterm infants. *Neonatal Netw.* **22**, 25-31.
- McHaffie H.E. (1992): Social support in the neonatal intensive care unit. *J Adv Nurs.* **17**, 279-87.
- Miles M.S., Funk S.G. & Kasper M.A. (1991): The neonatal intensive care unit environment: sources of stress for parents. *AACN Clin Issues Crit Care Nurs.* **2**, 346-54.
- Miles M.S., Funk S.G. & Kasper M.A. (1992): The stress response of mothers and fathers of preterm infants. *Res Nurs Health.* **15**, 261-9.
- Miles M.S., Holditch-Davis D., Schwartz T.A. & Scher M. (2007): Depressive symptoms in mothers of prematurely born infants. *J Dev Behav Pediatr.* **28**, 36-44.
- Patton M.Q. (2002) *Qualitative research & evaluation methods*. SAGE. London.

Peterson C.C. (1999): Grandfathers' and grandmothers' satisfaction with the grandparenting role: seeking new answers to old questions. *Int J Aging Hum Dev.* **49**, 61-78.

Ravindran V.P. & Rempel G.R. (2011): Grandparents and siblings of children with congenital heart disease. *J Adv Nurs.* **67**, 169-75.

Rempusheski V.F. (1990): Role of the extended family in parenting: a focus on grandparents of preterm infants. *J Perinat Neonatal Nurs.* **4**, 43-55.

Shaw R.J., Bernard R.S., Deblois T., Ikuta L.M., Ginzburg K. & Koopman C. (2009): The relationship between acute stress disorder and posttraumatic stress disorder in the neonatal intensive care unit. *Psychosomatics.* **50**, 131-7.

Spielman V. & Taubman-Ben-Ari O. (2009): Parental self-efficacy and stress-related growth in the transition to parenthood: a comparison between parents of pre- and full-term babies. *Health Soc Work.* **34**, 201-12.

Tilokskulchai F., Phatthanasiriwethin S., Vichitsukon K. & Serisathien Y. (2002): Attachment behaviors in mothers of premature infants: a descriptive study in Thai mothers. *J Perinat Neonatal Nurs.* **16**, 69-83.

Youngblut J.M., Brooten D., Blais K., Hannan J. & Niyonsenga T. (2009): Grandparent's health and functioning after a grandchild's death. *J Pediatr Nurs.* **25**, 352-9.

Table 1. Theme, categories and subcategories

Theme	Categories	Subcategories
	Emotional experiences	The first meeting Ambivalent feelings Confidence in care
A balancing act	A new role	Supportive A balance of involvement Limitations