

## Experiences of fathers with babies admitted to neonatal care units: A review of the literature

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### ABSTRACT

There is a growing understanding of the role and place of men in maternity care generally and for fathers of babies in neonatal care in particular. This review offers a systematic narrative review on issues affecting fathers, whose babies are admitted in neonatal units. Twenty-seven papers in the review highlighted four key themes: stress & anxiety; information; gender roles; and emotions.

KEY WORDS: father; NICU; neonatal; experience

### Introduction

. With improved survival of preterm and sick infants, the psychological experience of families is receiving increasing attention, including the role of fathers in childbirth. In addition, mental health is high on the policy agenda and the father-child bond is well recognised (Nelms 2004, Devault *et al.* 2005). However, little is known about the effect on this relationship when the infant is in a neonatal intensive care unit (NICU) (Davis *et. al* 2003). Since most NICU studies have focused on mothers, our review consolidates the findings of research involving fathers of babies being cared for in such units.

### Review statement

This review highlights the current evidence in the literature in terms of fathers' experiences of their infant's stay in a neonatal unit, focussing on the major themes. This will help to develop an intervention study to improve fathers' experiences of neonatal care.

### METHOD

This literature review focuses on developed world, English-language studies without limit on year of publication. Studies from less developed countries may have originated from different neonatal unit/nursery circumstances and were excluded. The following databases were searched: MEDLINE; CINAHL; AMED (via NICE British Nursing Index, EMBASE); Cochrane Library; ERIC; Interim BJM; Web

of Knowledge; ZETOC; Emerald; Psycharticles; MIDIRS ; and PubMed. Reference lists were searched for relevant publications. Once the papers were assessed as passing the inclusion criteria they were not graded, as our main scope was to outline the range of issues.

## RESULTS

The electronic search retrieved 166 articles; hand-searching resulted in 20 more. After initial assessment, 74 were included for further scrutiny and after review 27 papers made it to the final review (Table 1).

Four major themes were identified: stress & anxiety; information; gender roles and emotions.

### Stress and anxiety

A preterm or sick baby can be distressing for parents. Several studies have explored the implications for parents and how they cope while their babies are being looked after in neonatal units (Jotzo & Poets 2005; Shaw et al 2006; Carter et al. 2005). Most studies focussed on mothers, though a few have either compared mothers and fathers or focussed specifically on fathers' experiences and stress.

Carter and colleagues' (2005) large-scale study in New Zealand (NZ) found that a small but significant group of the 300 parents needed some intervention to help with their symptoms. Fathers of babies born before 30 weeks reported significantly higher depression scores than those of term babies. They concluded that the combination of a parent's personal psychological resources; contextual sources of support; stress and infant health status interact to determine parental responses to parenthood. Lefkowitz (2010) looked at the severity of post-traumatic stress disorder (PTSD) symptoms in parents and found a correlation with concurrent stressors and family history of anxiety and depression, as did Schappin and colleagues (2013). In most studies fathers reported less stress than mothers. Feeley *et al.* (2012) identified three stressors for fathers: (1) infant factors (size, health status, feedback); (2) interpersonal factors (rewards, attitudes, beliefs regarding fatherhood; family management; previous experience); and (3) neonatal unit environment (physical and social).

'Open' visiting times reduces stress as fathers have other commitments (children at home, work, distance to travel), which mean that they visit less frequently and for shorter periods (da Costa Cuhna *et al.* 2014; Latva *et al.* 2006; Franck & Spencer 2003). The majority of fathers return to work during their baby's NICU stay (Helth & Jarden 2008; Garten et al. 2013). Some studies have suggested this adds to the fathers' stress (Feeley 2012), while fathers have also described work as therapeutic (Hollywood & Hollywood 2010); a useful distraction (Helth & Jarden 2013) and part of the return to reality (Lundqvist et al. 2007). Jackson *et al.* (2003) reported that fathers are happy to leave care to staff and have other concerns outside the NICU (i.e. work, home life). Franck and Spencer (2003) found fathers felt 'better' when participating in their babies' care.

Some studies suggest that having an infant in NICU appears to be associated with a similar level of stress and anxiety to becoming a parent to term-born babies (Schappin *et al.* 2013; Carter *et al.* 2005) and it is not necessarily an intrinsically distressing event.

### Information

Information-sharing was linked to stress, knowledge and parenting self-efficacy. Matricadi *et al.* (2012) included a trained consultant working with parents of very premature babies and added infant massage. Both parents reported (a) increased knowledge and (b) mothers reported reduced 'role-stress' alteration.

Studies have measured a combination of effects on knowledge; stress levels; wellbeing and control (Abdeyazada *et al.* 2014; Mode *et al.* 2014). Munday (2003) used a neonatal unit family needs inventory and found five subscales of needs: assurance, information, comfort, proximity and support. Fathers' needs did not differ significantly from mothers' and the importance of some needs changed over time, between admission and discharge. The quality of information depends on whether information has been remembered and its perceived appropriateness. Information sharing can be a 'double edged sword' (Hollywood & Hollywood 2010) with potential both to empower the father and to exacerbate his fears (Arockiasamy *et al.*; 2008; Lindberg *et al.* 2007).

Since fathers who go back to work end up visiting mainly during the evenings, they may receive updates and information second hand (through the mother) or not having the same access to senior healthcare professionals as the mother has during the day.

### Emotions

Hugill *et al.* (2014) used participant observation, in-depth interviews with fathers and a staff survey. Fathers reported engaging in considerable effort to manage their emotions as they balanced what they wanted to feel and what they thought others expected them to feel resulting in:

*'retreating into learned gender based behaviours of emotional disconnection to seemingly protect them from further anguish'* (Hugill *et al.* 2014: 659).

This study showed that focusing on observed emotions / behaviours is not enough to understand the often 'silent' 'emotional work' of fathers. There is a strong norm in Western cultures, for fathers to suppress their own emotions to appear strong and supportive to fit the stereotype of being emotional inexpressive (Seidler 2007).

Deeney *et al.* (2012) found that fathers spoke in gender stereotypical ways about feelings, using terms such as *'keep soldiering on'*; *'baton down the hatches'* and *'be strong'*. They also noted that being distracted by the technology while coming to terms with the NICU environment was unhelpful to fathers. It may be that staff notice their initial preoccupation with machines and measures and react to this in a well-meaning but ultimately patriarchal way.

Mothers (not fathers) find information and support from staff reduces their anxiety (O'Brien 2013; Matricadi 2012). Fathers may be more likely to be happy for staff to help their partners and take a 'background' supportive role themselves. In Jackson's (2003) study, mothers reported a strong need to have some control and responsibility for their babies' care while fathers described feeling confident in leaving care to the staff.

### Attachment and bonding

Fathers, although 'shocked' by early birth were ready to become involved immediately as it marked the beginning of the relationship with their child. As mothers of NICU babies are often ill or in

another ward/hospital, this may be a useful fatherly adaptation. Fathers expressed a need for help to take on the physical 'duties' of cuddling by merit of their larger hands and inexperience in handling babies (Fegran *et al.* 2008).

Mothers described their bond with the baby in terms of 'feelings and touches' and fathers as a relationship of 'looks and words' Guillame *et al.* (2013). The creation of a bond between mothers and fathers and their premature babies is rooted in their relationship with their caregivers, which makes staff behaviours very important (Ibid). Lindberg *et al.* (2008) found that fathers had a stronger bond with their infants than with male friends whose babies were born at term. They spent more time with their babies. They felt changed by the experience and that their relationships with their partners had strengthened (no non-NICU controls).

### Gender

Changing gender roles is reflected in several studies on perspective of fathers on neonatal units (Hollywood & Hollywood 2011; Fegran 2008; Hugill 2015). Franck and Spencer (2003) found mothers visited NICU more frequently (although observation was limited to the period 08.00-19.30), but almost all parents demonstrated social interaction with their babies. Hence there is scope to assist fathers. Interestingly, Fegran (2006) describes fathers as being 'ready' to start this new relationship with their child while mothers needs some time to adjust to the premature break in the relationship she was having by carrying the baby within her body.

Fathers in Hollywood and Hollywood's (2011) study described being treated as a 'second parent' by staff. This may be as a result of not being in the NICU when information is shared. Helth and Jarden (2013) used two theories to investigate fathers' experiences with the skin-to-skin (STS) method in a Danish NICU: (a) attachment theory; and (b) gender theory in parenthood. Fathers may see themselves as less important than mothers and take a supporting role, although they will give care when the mother is absent (Thurman & Korteland 1989). Many of Helth and Jarden's fathers volunteered that they had not played with dolls as children and expressed the need to learn this. Being treated as equal to the mother and given the chance to participate in infant care was important. STS helped fathers get over the shock of premature birth and helped release their emotions. Knowing the evidence that STS would offer physical benefits to the baby gave the fathers confidence as caregivers. Hugill's (2014) ethnographic study involved staff reflecting upon how their own experiences, beliefs and attitudes concerning fathers and fatherhood. The study demonstrated a wide spectrum of responses including fathers being ridiculed by some staff.

Helth and Jarden (2013) showed that fathers saw work as an important contact to the outside world. Gender theory explains this as allowing the father to 'play his part' and prove his worth. STS was an 'action' which enables fathers to do this (Fegran *et al.* 2008).

Thurman and Korteland (1989) suggest that fathers should be encouraged to be more intimate with their babies in NICUs. Babies born early or who have serious neonatal illnesses are generally less responsive, hence parents must work harder to develop relationships. Mothers achieve this by engaging in behaviours such as look, touch, stroke, talk, hold, smile and kiss and non-engaging behaviours such as talking to others (Minde *et al.* 1980). The methodology was replicated in Thurman and who found fathers were less intimate than mothers unless they were visiting their baby alone. Perhaps fathers facilitate mothers' intimacy with the baby when they are together or the parents support each other more when together. Other studies have shown that men take a 'back seat' when the mother is present. Garten *et al.* (2013) found fathers were encouraged to have

regular and close contact with their infants (92.7%). Almost half of the fathers did not talk about their own worries with their partners to save causing their partners additional stress. Other studies have reported that one of their main duties was providing emotional support to the mother and/or managing the family's everyday life (Thurman & Korteland 1989; Helth & Jarden 2013).

There are significant socio-cultural determinants to some of the fathers' experiences. For example, cultural practices in Taiwan mean that fathers are the main visitor during the first weeks of an infant's admission to NICU. Mothers tend to stay in a postpartum centre or at home. Lee *et al.* (2012) provided an information booklet and nurse guidance to fathers. The intervention increased fathering ability and perceived support from nurses and reduced stress. Nurses took more initiative to talk to fathers and encouraged them to follow the guidance. It is not possible to separate the effect of information alone from the increased communication and care from nurses.

### Discussion

Evidence on the usefulness of interventions to support fathers, reduce their stress and increase their involvement is mixed: from reports of few or no effects (Matricadi *et al.* 2012) to measureable positive effects (Lee *et al.* 2013). Fathers may face different issues and they require help to be tailored accordingly. Our review found gender differences but also differences amongst fathers e.g. almost half of fathers did not discuss feelings with their partner, meaning that over half did (Garten *et al.* 2013). The solution to these issues is not only about information-giving (too much can be counter-productive Hollywood & Hollywood 2011). Fathers experience a different set of stressors from outside the hospital environment and their reactions to their infants' admission to a NICU is dependent on many factors. From the point of view of infant needs, development can be affected by the parents' state of mind. Helping to relieve parental stress and suffering may benefit the whole family.

In some studies the self-reporting of stress and anxiety may have been affected by 'social desirability bias' i.e. the tendency to represent oneself in a favourable light.

Encouraging fathers to visit for longer periods (perhaps less frequently) could make their visits more productive. During visits nurses need to be clear and consistent when advising fathers on caregiving and help them to make optimal use of the time they have to visit (Feeley *et al.* 2012).

Fathers felt most self-efficacious when left alone with their babies (Thomas *et al.* 2009). Staff should be aware that fathers may receive selected information from mothers who are more immersed in the maternity care system (having received information when pregnant) and who generally visit more frequently and for longer. There are practical ways to give fathers better access to the necessary information they.

There are methodological problems in many of the studies reviewed: (1) use of convenience samples; (2) restricted range of potential adverse effects have been examined; (3) control groups (i.e. other new parents) rarely included.

### Conclusions / Recommendations for practice

The review suggest that practical interventions may benefit fathers, including visiting times; interventions which help fathers in their bonding; or availability of senior staff in the evenings when fathers are able to visit.

This review has revealed that fostering good relationships between the mother and the father and their premature baby is often rooted in relationship with their caregivers, hence staff need to consider the needs of men. Staff need to reflect on their own expectations and be aware of the potential 'silent emotional work' of fathers used in managing feelings and their expressions. Screening for the small but significant number of vulnerable fathers is important and can be started in the antenatal period. This requires good communication between midwives and the neonatal team.

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