Title

STRESS AND COPING IN FATHERS FOLLOWING THE BIRTH OF A
PRETERM INFANT

Authors

Kirsty Sloan BPsych(hons) M Clin Psych
School of Psychology
Griffith University, Brisbane, Australia

Jennifer Rowe PhD RN
Senior Lecturer
School of Nursing and Midwifery
Research Centre for Clinical Practice Innovation
Griffith University, Brisbane, Australia

Dr Liz Jones BA(hons) PhD
Senior Lecturer
School of Psychology
Griffith Psychological Health Research Centre
Griffith University, Brisbane, Australia

Contact author

Jennifer Rowe PhD RN
Senior Lecturer
School of Nursing and Midwifery
Research Centre for Clinical Practice Innovation
Griffith University
Kessels Road, Nathan
Queensland 4111, Australia
Ph: 61 7 37357389
Fax: 61 7 37355431
Email: Jennifer.rowe@griffith.edu.au

STRESS AND COPING IN FATHERS FOLLOWING THE BIRTH OF A PRETERM INFANT.

Abstract

Purpose: The purpose of this study was to investigate the stress experience of fathers of preterm infants during the infant's hospitalization. Specifically it aimed to examine fathers' stress, coping styles, and their use of and satisfaction with, sources of social supports .

Design: The descriptive design was based on Lazarus and Folkman's model of stress and coping. 21 fathers completed a questionnaire based on standardized measures and semi-structured interview.

Results: Fathers reported moderate levels of stress. Fathers favoured the use of accommodation coping strategies and made efforts to re-frame the situation. Partners were the most frequently identified source of social and emotional support and nurses and doctors were the most frequent providers of informational support. Half the fathers were satisfied with social support but less were satisfied with the informational support they received.

Conclusion: It is important to understand fathers' adjustment in this difficult situation in order to develop effective, supportive interventions in hospital and beyond discharge.

Introduction

The birth of a preterm infant is a direct and major parental stressor (Doering, 2000; Feldman, 2000; Franck, 2005; Miles, 1992; Pinelli, 2000). The stress experienced by parents of preterm infants has been identified as significantly higher than for parents of full-term infants (Affleck et al., 1991; Carter et al., 2005; Davis, 2003; Miles et al., 1992; Rimmerman & Sheran, 2001; Shields-Poe & Pinelli, 1997; Singer et al., 1996; Singer et al., 1999). This situation creates a need for practices that support parents during the acute phase of their infant's hospitalisation in neonatal intensive care (NICU) and neonatal special care (NSCU), units. While there is consensus on the need to support parents in order to promote infant care, parent-child relationships and family function in both the short and longer term (Doucette & Pinelli, 2004; Goldberg & Divitto, 1995; Singer et al., 1999), support for this view relies heavily on research into maternal experience. In order to provide effective support to both mothers and fathers, it is necessary to understand how fathers cope and how they use social support. The study reported in this paper examined fathers' stress and coping.

Having a preterm infant brings with it specific stressors and challenges for mothers and fathers including feelings of anxiety, loss of control, role alteration and separation from the infant and fear for the future and wellbeing of the infant (Hughes et al., 1994; Lundqvist & Jakobsson, 2003; Miles et al., 1992; Rowe et al., 2005; Werceszczak et al., 1997). Fathers of preterm infants have been found to experience greater stress than fathers of term infants (Rimmerman & Sheran, 2001). Stressors in the transition to fatherhood, including changes and ambivalence in role and status, and loss of maternal employment (Diemer, 1997), are exacerbated in preterm birth (Pohlman, 2005). In the NICU or NSCU fathers may tend to feel marginalised (Jackson et al., 2003, Lindberg et al., 2007) and are likely to be much less engaged than mothers in caregiving to their babies during their visits to neonatal units (Jackson et al., 2003; Franck & Spencer, 2003).

Mothers and fathers of preterm infants cope in different ways (Pinelli, 2000). Delegating care may be a coping mechanism used by fathers while mothers need more direct participation in their infant's care (Jackson et al., 2003). Other research has suggested that fathers wish to be more involved than they are (Lindberg et al., 2007). Information is important to fathers (Lindberg et al., 2007) and fathers communicate with medical staff as a coping strategy. A study by Hughes et al. (1994) found that father's used this more than spousal communication as a coping strategy. More generally men are more likely to use problem-focused and rational strategies (Matud, 2004; Ptacke et al., 1994). Fathers tend to use less coping strategies than mothers, specifically in the areas of social support, mobilising social and practical support, and spiritual support (Pinelli, 2000).

Previous research has indicated that mothers and fathers identify each other as the most common source of support (Miles et al., 1996). In Miles et al.'s study fathers identified support from nurses most frequently in the initial acute phase in NICU followed by the infant's mother but found mothers the highest source of support as time went on. Both nurses and doctors were identified as a source of support by both mothers and fathers. More generally fathers have been found to have less access to support resources than mothers during parenting transition (Levy-Shiff, 1999). Further, Levy-Shiff (1999) found that resources available to fathers were less effective in their buffering effect against stress. Little other research is available which examines coping strategies employed by fathers of preterm infants or the mechanisms for different types of social supports they have available and use. No research specifically reports fathers' experiences in this context within Australia or looks at both sources of different types of social support and satisfaction with different types of support.

In order to examine fathers' perceptions concerning these experiences we used Lazarus and Folkman's model of stress and coping (1984). The approach recognizes the combination of environmental conditions and person or individual factors as they combine to generate stress and its outcomes. A potentially stressful event is appraised by the person affected and coping strategies are enabled, which leads to an outcome of either stress/strain or adjustment. In the current research the birth of the preterm baby is the stressful event, which may lead to stress, operationalised in the current study as emotional exhaustion. Stressful events may also influence other outcomes for fathers, and the present study also examined their perceptions of their parental competence, specifically satisfaction and efficacy.

Stressful events are understood to be mediated by cognitive appraisal and coping strategies (Pearlin et al., 1981), as well as moderated by social support. Support is also multi-dimensional and in this research was concerned with social, emotional, practical and informational forms.

The study

Aims

The study aimed to identify fathers' stress associated with the birth of a preterm infant, their coping styles, and their access to, use of and satisfaction with, social support resources during their infant's hospitalization in NICU and NSCU. The following questions were asked:

1. What levels of stress (emotional exhaustion) are experienced by fathers?
2. What are the coping strategies used by fathers of preterm infants?
3. What are the sources of support identified by fathers of preterm infants?
4. How satisfied are fathers with the support they are receiving?

Participants

Participants were the fathers of preterm infants who were recruited from the neonatal special care unit (NSCU) of a large metropolitan hospital in Queensland, Australia. Most infants were admitted to the NICU following their birth, and then transferred to NSCU. Inclusion criteria related to infant status and were as follows:

- born less than 37 completed weeks gestation
- requiring no mechanical ventilation at the time of the parent's recruitment
- had no significant apnoeas or bradycardic episodes in the 48 hours prior to parent's recruitment
- taking enteral feeds of at least 60mls/kg/day
- have no central venous lines insitu
- judged to be medically stable by nursing staff.

Fathers were excluded if the infant did not meet these criteria. No specific paternal criteria were set out. Twenty one (21) fathers participated. Approximately 70% of fathers approached agreed to participate.

Ethics

Ethical clearance for the study was granted by the Human Research Ethics committees of the participating hospital and Griffith University, Brisbane.

Data collection

In order to capture information about the stress, coping and social support in fathers of preterm infants when their infant was stable but still hospitalized data were collected in two forms from each participant. A questionnaire was developed using standardized measures for aspects of stress and coping. A semi structured interview was employed to examine social support.

The questionnaire included the following measures, collated in a booklet.

The Maslach Burnout Inventory (Schaufeli et al., 1996) (MBI) subscale of emotional exhaustion was used to measure stress. Maslach (1996) reported a co-efficient alpha for the MBI general survey (emotional exhaustion subscale) of $\alpha = .90$. The MBI was modified via instruction to participants in order to change the context of the scale from a work orientated approach to a more general approach appropriate for fathers of preterm infants. Participants rated their experience of stress and emotional exhaustion on a 7 point Likert-type scale ranging from 'never' to 'everyday'.

The Parenting Sense of Competence Scale (PSOC) (Gibaud-Wallston & Wandersman, 1978) was used to measure parental competence. The PSOC is a 17- item scale that is answered on a six-point Likert type scale ranging from '*strongly disagree*' to '*strongly agree*'. The PSOC is divided into two dimensions of parental competence, parental satisfaction, and parental self efficacy. Internal reliability information indicates alpha coefficients of $\alpha = .82$, for the parent satisfaction component, and $\alpha = .70$, for the parental self-efficacy component. (Sabatelli & Waldron, 1995). Only the self-efficacy dimension was used in the current study.

The 20-item Cybernetic Coping Scale (CCS) (Edwards & Baglioni, 1993) was used to measure coping. The CCS is based on the cybernetic theory of stress, coping and well-being and articulates five forms of coping that are used to reduce or eliminate the negative effects of the experience of stress. The five factors of the CCS are: Changing the Situation, Accommodation, Devaluation, Avoidance and Symptom Reduction. The psychometric properties of the CCS have been evaluated (Brough, O'Driscoll and Kalliath, 2005) with good internal reliabilities for all of the five factors; changing the situation ($\alpha = .82$), accommodation ($\alpha = .75$), devaluation ($\alpha = .87$), avoidance ($\alpha = .87$) and symptom reduction ($\alpha = .73$). Participants responded to the CCS on a 5-point Likert type scale, ranging from '*do not use at all*' to '*use very much*'.

The semi-structured interview was used in an effort to build on the scant information available about the way fathers in this situation use social support resources. A pilot interview was conducted with a father of multiple preterm infants to refine the question content and interview direction. The interview had two parts. First, participants were first asked about their experience of having a preterm infant, specifically in the NICU and NSCU. This helped to gather information about sources of stress. Second, they were asked about the different sources of support they had received in four areas, emotional, social, informational, and practical and to rate their satisfaction with this support in each area (would have liked more, less or similar levels).

Procedure

After an initial approach by nursing staff, eligible and interested fathers were given introductory materials prior to consenting to participate. The questionnaire and interview were conducted in person at a mutually suitable time in a private space or alternatively by phone. Participants first completed the questionnaires. The average length of interview was approximately 20 minutes, with a range upwards, to 90 minutes.

Results

The age range of the 21 participants was 23 years old to 44 years old ($M = 32.43$, $SD = 6.48$). Nineteen participants were employed, and two unemployed, at the time. Nineteen of the fathers identified that they were part of a couple and two stated they were single. For thirteen of the fathers this was their first child, whilst the remaining eight had other children, between 1 and 5. 16 fathers had singleton infants and four fathers had multiple birth babies in the NSCU.

Quantitative data were examined to identify outliers. One multivariate outlier was found and the scores were identified as extreme scores and this participant was removed from the quantitative analysis. A sample size of 20 participants remained.

The mean total score ($M = 11.96$, $SD = 7.08$) for emotional exhaustion was comparable with means from the general population (Maslach et al., 1996). Six fathers were in the clinical range. The mean total score for parenting competence was just above the mid-point of the scale ($M = 41.25$, $SD = 9.60$) indicating that fathers on average slightly agreed (on a scale from strongly disagree to strongly agree) with the statements about their parental competence.

The subscales of the Cybernetic Coping Scale revealed that participants used accommodation coping skills the most ($M = 11.19$, $SD = 4.14$), followed by symptom reduction coping strategies ($M = 10.90$, $SD = 3.01$). Coping designed to change the situation was the next most frequently used ($M = 9.33$, $SD = 3.15$), with devaluation ($M = 7.46$, $SD = 3.17$) and avoidant ($M = 6.57$, $SD = 2.20$) coping strategies used the least frequently.

A series of paired sample t-tests were conducted to determine if there was a significant difference between coping strategies used. The alpha level was adjusted to $\alpha = .01$, to make the test more stringent due to the risk of an inflated Type 1 error rate with multiple analyses. There were statistically significant differences between changing the situation and accommodation, $t(20) = -3.14$, $p = .005$; accommodation and devaluation, $t(20) = 4.07$, $p = .001$; accommodation and avoidance, $t(20) = 4.63$, $p < .001$, with accommodation being used more frequently than changing the situation, devaluation and avoidance. Additionally there were significant differences between the use of devaluation and symptom reduction, $t(20) = -3.80$, $p = .001$, and avoidance and symptom reduction, $t(20) = -5.85$, $p < .001$, with

the strategy of symptom reduction being used more frequently than avoidance or devaluation. Finally, fathers used changing the situation more than avoidance ($t(20) = 3.22, p=.004$). Both accommodation and changing the situation also had a negative correlation with emotional exhaustion ($r=.49, p=.022$).

Enumerative and descriptive content analysis was conducted on the interview data (Morse & Field, 1996). Responses identifying sources of support and levels of satisfaction with support were assigned codes. All other responses were collated into qualitative categories. Common content in a category was determined when content was mentioned by at least 5 of the participants. The major sources of support identified by participants in each area, social, emotional, practical and informational are detailed in table 1. Family were identified as the main source of social, emotional and practical support, although friends were also a major source of social support and partners a major source of emotional support. Nurses and doctors were the primary source of informational support.

*Insert Table 1

Satisfaction with level of support was examined for each of the four types of support. Fathers' responses were coded into one of four categories for each type of support: generally satisfied, mildly satisfied (where they weren't completely satisfied with the support they received), and two categories of generally not satisfied (would have liked more support than they received and would have liked less support). Table 2 presents fathers' satisfaction with the different types of support provided.

*Insert table 2 here

The interview data were subject to a descriptive content analysis in order to generate categories of information that contextualized the quantitative findings about stress, particularly sources of stress. Four categories illustrate the participants' experiences. These are set out in table 3. Lack of preparation and control, unfamiliarity with the neonatal nursery environment and the importance of information were all evident in the experiences reported by the participants.

* Insert Table 3 here

Discussion

This study set out to examine stress, coping and social support in fathers of preterm infants during the hospitalisation of the infant, but at a point at which the infant was considered medically stable. The findings revealed that fathers experienced moderate levels of emotional exhaustion. The timing of survey may have been consequential. Previous research has examined parents' experiences with preterm infants at the acute phase, that is, within the first two weeks of the infant's birth finding higher levels of stress and distress. See for example Hughes et al., 1994; Miles et al., 1996; Pinelli, 2000; Shields-Poë & Pinelli, 1997. It is reasonable to expect that fathers would be experiencing greater levels of stress during the more acute NICU phase than later, when the infant is stable and progressing. This in turn may impact on their appraisal of their stress and coping and also, on the coping strategies and supports they use. Thus the results of the current study when compared with previous studies may begin to provide insight into the resolution or adjustment made by fathers in response to the stressful beginning they have experienced. This is an important area for further research and has significance for the support strategies that are used, as well as their timing.

However it is also important to consider the six fathers who were experiencing a significant level of emotional exhaustion. This finding suggests that there will be fathers of preterm infants attending hospital who may be experiencing clinical levels of psychological distress even beyond the acute phase following a preterm infant's birth, and thus in need of support.

There are interesting points to be made about the findings relating to the coping strategies that participants identified they used. A range of strategies were being used by participants with accommodation and symptom reduction the most frequently used and changing the situation used less frequently. Accommodation is a strategy designed to adjust desires to meet the situation, where as changing the situation is a strategy designed to bring the situation into closer alignment with desires. While in general, there may be an expectation of males using the more instrumental strategy of changing a situation (Matud, 2004; Ptacek et al., 1994) the environment of the present study presents a significantly different environment, one characterized by inflexibility. Changing the situation in this context is difficult and thus accommodation is the predominant strategy. In addition, accommodation and changing the situation correlated negatively with emotional exhaustion. This unexpected finding is supported in previous work by Affleck et al. (1991) and Affleck and Tennen (1991) which identified that planful problem solving during a very low birthweight infant's hospitalization was associated with greater psychological distress for mothers. While the general literature says that there should be a positive correlation between changing situation and distress (Brough et al., 2005) it seems that this situation is different. It is also possible that investing energy in changing a situation in which there is little capacity for change may have a negative influence on stress and wellbeing.

The findings regarding support generally confirm previous research in terms of the sources of social support (Bialoskurski et al., 2002; Fenwick, et al., 2001; Miles et al., 1996, Redshaw, 1997). In this

study a distinction was made between types of support and who provided them. This study also provided information about the degree of satisfaction fathers identified with these sources of support. Partners and families were the most frequently identified sources of emotional support, families and friends the sources of social support and families, the source of practical support. Approximately half the participants identified that they were generally satisfied with the emotional, social and practical support they received, suggesting the need for more support of these types for many fathers. A small number of fathers required less support, indicating the challenge facing clinicians in providing appropriate levels of support. While fathers identified health professionals as the main source of informational support less than half identified that they were satisfied with the support they received. Text comments suggest that this may relate to the quality of information. This finding supports previous research. For example, Jones, Woodhouse & Rowe (2007) found that fathers identified vague or indirect communication or inadequate explanation about their babies as ineffective communication. Lindberg et al. (2007) found that information and its quality was linked in fathers' descriptions with their described by fathers as linked with their need for control in the NICU.

Limitations

The findings from this study need to be read in the light of a number of limitations. Fathers of sick preterm infants have been recognized as a difficult population to recruit into research. Fathers may have self selected to participate or not, based on their stress experience at the time. The small sample size prevented more sophisticated statistical testing of data. Further generalization is not possible given the small size and also single site recruitment. Single point and retrospective data collection also limits the comprehensiveness of data and thus understanding of potentially significant variations in fathers' experiences, emotions and actions during this turbulent time. Despite this it is important to capture the experience as it is settling in participants' perceptions, and to provide better understanding of how

fathers think, feel and act beyond the initial and acute phase of their infant's birth and admission to a NICU.

The operationalisation and measurement of social support have been debated over a long period. The more flexible exploration used in this study assisted in understanding the scope and relevance of support. However, the validity and utility of the measures used in the study needs to be critiqued. The measure of competence used has not yet been tested in the environment. Many of the participants indicated that they experienced difficulties answering the PSOC scale because they did not feel that it applied to them. Fathers indicated that the NICU and NSCU environment prevented them from engaging in what they saw as fatherly behaviours. For example, fathers indicated that they did not feel involved in being able to care effectively for their child, due to the restrictions placed upon them by their baby's condition and by hospital and situational factors. Diemer (1997) has argued that for fathers a sense of parental role attainment and competency are not generally obtained or articulated until 2-6 months following a baby's birth.

Conclusion

This study has contributed to the existing field of research into parenting experience following the birth of a preterm infant. It has built on previous conceptual work in this field. Specifically it sought to advance knowledge of fathers' stress, coping and support while the infant is hospitalized. It has generated knowledge about their experience in the post acute phase, when the infant is stable and has progressed from the NICU to a less technological care environment. This phase has not been adequately researched in the past. It is important to understand parenting adjustment in these difficult circumstances in order to support and prepare fathers for discharge and also to develop early interventions in services beyond discharge. The study has identified a wide range of possibilities for

further research, particularly in considering and critiquing the validity and utility of measures and the need for longitudinal research with varied samples. Understanding fathers' experiences in this and other stressful early parenting situations is important in order to provide appropriate, responsive and proactive services to support and improve that experience.

References

- Affleck, G., Tennen, H., 1991. The effect of newborn intensive care on parents' psychological well-being. *Children's Health Care* 20, 6-14.
- Affleck, G., Tennen, H., Rowe, J., 1991. *Infants in crisis: How parents cope with newborn intensive care and its aftermath*. Springer-Verlag, New York.
- Bialoskurski, M., Cox, C., & Wiggins, R., 2002. The relationship between maternal needs and priorities in a neonatal intensive care environment. *Journal of Advanced Nursing*. 37(1), 62-69.
- Brough, P., O'Driscoll, M. & Kalliath, T., 2005. Confirmatory factor analysis of the Cybernetic Coping Scale. *Journal of Occupational and Organizational Psychology*. 78, 53-61.
- Carter, J.D., Mulder, R.T., Bartram, A.F., Darlow, B.A., 2005. Infants in a neonatal intensive care unit: Parental response. *Archives of Disease in Childhood – Fetal and Neonatal Edition*. 90, F109-F113.
- Davis, L., Edwards, H., Mohay, H., Wollin, J., 2003. The impact of very premature birth on the psychological health of mothers. *Early Human Development*. 73, 61-70.
- Diemer, G. A., 1997. Expectant fathers: Influence of perinatal education on stress, coping and spousal relations. *Research in Nursing and Health*. 20, 261-293.
- Doering, L., Moser, D., Dracup, K., 2000. Correlates of anxiety, depression, and psychological adjustment in parents of NICU infants. *Neonatal Network*. 19, 15-23.
- Doucette, J., & Pinelli, J., 2004. The effects of family resources, coping, and strains on family adjustment 18 to 24 months after the NICU experience. *Advances in Neonatal Care*, 4(2), 92-104.
- Edwards, J. R., & Baglioni, A. J., 1993. The measurement of coping with stress: construct validity of the ways of coping checklist and the cybernetic coping scale. *Work and Stress*. 7, 17-31.
- Feldman-Reichman, S.R., Miller, A.C., Gordon, R.M., Hendricks-Munoz, K.D., 2000. Stress appraisal and coping in mothers of NICU infants. *Children's Health Care*. 29, 279-293.

- Franck, L.S., Cox, S., Allen, A., Winter, I., 2005. Measuring neonatal intensive care unit-related parental stress. *Journal of Advanced Nursing*. 49, 608-615.
- Franck, L. S., & Spencer, C., 2003. Parent visiting and participatin in caregiving activities in a neonatal unit. *Birth*. 30(1), 31-35.
- Gibaud-Wallston, A., & Wandersman, L. P., 1978. Development and utility of the parenting sense of competence scale. Paper presented at the The annual meeting of the American Psychological Association., Toronto, Canada.
- Goldberg, S., Divitto, B., 1995. Parenting children born preterm. in: Bornstein M.E. (Ed.), *Handbook of Parenting*, vol. 1, Children and Parenting. Lawrence Earlbaum Associates, New Jersey..
- Hughes, m., McCollum, J., Sheftel, D., Sanchez, G., 1994. How parents cope with the experience of neonatal intensive care. *Children's Health Care*. 23, 1-14.
- Jackson, K., Ternestedt, B. M., Scholin, J., 2003. From alienation to familiarity: experiences of mothers and fathers of preterm infants. *Journal of Advanced Nursing*. 43(2), 120-129.
- Jones, L., Woodhouse, D., Rowe, J., 2007. Effective nurse parent communication: a study of parents' perceptions in the NICU environment. *Patient Education and Counselling*. 69, 206-212.
- Lazarus, R. S., Folkman, S., 1984. *Stress, appraisal and coping*. Springer Publishing, New York.
- Levy-Shiff, R., 1999. Fathers' cognitive appraisals, coping strategies, and support resources as correlates of adjustment to parenthood. *Journal of Family Psychology*. 13, 554-567.
- Lindberg, B., Axelsson, K., Öhrling, K., 2007. The birth of premature infants: Experiences from the fathers' perspective. *Journal of Neonatal Nursing*. 13, 142-149.
- Lundqvist, P., Jakobsson, L., 2003. Swedish men's experiences of becoming fathers to their preterm infants. *Neonatal Network*. 22(6), 25-31.
- Lupton, D., Fenwick, J., 2001. 'They've forgotten that I'm the mum': constructing and practising motherhood in special care nurseries. *Social Science and Medicine*. 53, 1011-1021.

- Maslach, C., Jackson, S. E., Leiter, M. P., 1996. Maslach Burnout Inventory Manual (3rd ed.). Consulting Psychologists Press, Inc, Palo Alto, California..
- Matud, M. P., 2004. Gender differences in stress and coping styles. *Personality and Individual Differences*. 37, 1404-1415.
- Miles, M., Funk, S., Kasper, M., 1992. The stress response of mothers and fathers of preterm infants. *Research in Nursing and Health*. 15, 261-269.
- Miles, M. S., Carlson, J., Funk, S. 1996. Sources of support reported by mothers and fathers of infants hospitalized in a neonatal intensive care unit. *Neonatal Network: The Journal of Neonatal Nursing*. 15(3), 45-52.
- Morse, J., Field, P., 1996. *Nursing research: the application of qualitative approaches*. Chapman and Hall, London.
- Pearlin, L., Menaghan, E., Liberman, M., Mullan, J., 1981. The stress process. *Journal of Health and Social Behaviour*. 22, 337-356.
- Pinelli, J., 2000. Effects of family coping and resources on family adjustment and parental stress in the acute phase of the NICU experience. *Neonatal Network*. 19, 27-37.
- Pohlman, S., 2005. The primacy of work and fathering preterm infants: findings from an interpretive phenomenological study. *Advances in Neonatal Care*. 5(4), 204-216.
- Ptacek, J.T., Smith, R.E., Dodge, J.L., 1994. Gender differences in coping with stress: When stressor and appraisals do not differ. *Personality and Social Psychology Bulletin*. 20, 421-430.
- Redshaw, M., 1997. Mothers of babies requiring special care: attitudes and experiences. *Journal of Reproductive and Infant Psychology*. 15(2), 109-120.
- Rimmerman, A., Sheran, A., 2001. The transition of Israeli men to fatherhood: a comparison between new fathers of pre-term/full-term infants. *Child and Family Social Work*. 6, 261-267.

- Rowe, J., Gardner, G., Gardner, A. 2005. Parenting a preterm infant: experiences in a regional neonatal health services program. *Neonatal, Paediatric and Child Health Nursing*. 8(1), 17-23.
- Sabatelli, R. M., Waldron, R. J., 1995. Measurement issues in the assessment of the experiences of parenthood. *Journal of Marriage and the Family*. 57, 969-980.
- Schaufeli, W., Leiter, M., Maslach, C., Jackson, S., 1996. Maslach Burnout Inventory - General Survey (MBI-GS). in: Maslach, C., Jackson, S., Leiter, M. (Eds.), *Maslach Burnout Inventory Manual* (3rd ed.). Consulting Psychologists Press Inc, Palo Alto, California.
- Shields-Poë, D., Pinelli, J., 1997. Variables associated with parental stress in neonatal intensive care units. *Neonatal Network*. 16(1), 29-37.
- Singer, L., Davillier, M., Bruening, P., Hawkins, S., Yamashita, T. 1996. Social support, psychological distress, and parenting strains in mothers of very low birthweight infants. *Family Relations*. 45,343-350.
- Singer, L., Salvator, A., Guo, S., Colin, M., Lilien, L., Baley, J., 1999. Maternal psychological distress and parenting stress after the birth of a very low-birth-weight infant. *JAMA*. 281(9), 799-805.
- Wereszczak, J., Miles, M.S., Holditch-Davis, D. 1997. Maternal recall of the neonatal intensive care unit. *Neonatal Network*. 16, 33-40.

Table 1: Sources or types of support.

variable/source	mentioned (%)	not mentioned (%)
ss family	18 (90)	2 (10)
ss friend	16 (80)	4 (20)
ss co-worker	5 (25)	15 (75)
ss partner	5 (25)	15 (75)
ps family	13 (65)	7 (35)
ps friend	2 (10)	18 (90)
ps co-worker	1 (5)	19 (95)
es family	13 (70)	6 (30)
es friend	7 (35)	13 (65)
es co-worker	1 (5)	19 (95)
es partner	12 (60)	8 (40)
is nurse	18 (90)	2 (10)
is doctor	15 (75)	5 (25)

N=20 SS = Social Support, PS= Practical Support, ES = Emotional support, IS = Informational support.

Table 2: Satisfaction with levels of Support

Type of support	Generally satisfied (%)	Mildly satisfied (%)	Generally not satisfied	
			Would have liked more (%)	Would have liked less (%)
Emotional	10(50)	5(25)	4(20)	1(5)
Social	12(60)	5(25)	2(10)	1(5)
Practical	9(45)	6(30)	3(15)	2(10)
Informational	9(45)	8(40)	3(15)	0(0)
N=20				

Table 3 Text Descriptions of participant experiences.

Category	Description of category
Shock and lack of preparation	Sudden changes in pregnancy status and preterm birth described as confronting “ you just don’t think it’s going to happen to you, but when it does it just blows you away” “I felt like a stunned mullet, still do”. Lack of emotion, practical or social preparation “ the worst thing was that we hadn’t even had a tour of the hospital, or antenatal classes or anything”.
Lack of control	Stress contributed to the stress of the experience “I’m normally a control freak, in control as a male, as a husband, as a father, yet all this is out of my control, in someone else’s hands...”. “ the main factor was not having any control, just having to sit there and watch and just hope that he was going to be fine, you can’t do anything, just let them (medical staff) do their jobs.”
Differences between NICU and NSCU	NICU environment strange and unfamiliar with its technology NSCU more nurturing and helped fathers develop practical care, holding, bathing, and feeding babies “ I relaxed more in the SCU.. the situation was more relaxed” Changes in staffing and technology created tension in terms of the safety net provided by monitors and close surveillance in NICU “it’s a similar yet different environment.. I found it hard not to have the monitors”
Information	Important to experience

Inconsistent , contradictory or insufficient information was frustrating given
reliance on nursing and medical staff for this support

“ it was great that if we asked questions (of the staff) they were answered”

“at times we didn’t feel like we were given enough information to make a
decision”

“ I found we got different information from different nurses”