

Experiences of fathers of babies admitted into a neonatal unit in a tertiary hospital in Port Harcourt, Nigeria

Abstract:

Introduction: In time past mothers were regarded as sole caregivers of NICU babies, however the fathers' role is now increasingly being recognized. Mothers are involved in providing care such as feeding, hygiene, and kangaroo mother care. Fathers are usually called on for medical bills and usually enter the neonatal unit for observational visits. We explored experiences of father's whose infants were managed in, and had been discharged from the neonatal intensive care unit (NICU) which is referred to as the Special Care Baby Unit (SCBU) of University of Port Harcourt Teaching Hospital (UPTH), Port Harcourt, Nigeria.

Materials and Methods: This was a cross sectional study carried out in the neonatal clinic of UPTH over a period of 10 weeks. Participants were fathers who had brought their babies for follow up. Information obtained using interviewer administered questionnaires included biodata, occupation and experiences during their babies' stay in SCBU.

Results: There were thirty seven participants, 15 (40.5%) of whom were in the middle socioeconomic class. Generally the experience was described as stressful by 25 (62.5%), confusing by 5 (12%), and pleasant by 7 (18.9%) fathers.

Contributors to stress were financial implications of babies' care (13: 35.1%), illness in the mother (5: 13.5%), lack of care for other children (16: 43.2%) and worries about procedures and equipment used on their babies (14; 37.8%). Fathers also experienced disruptions in family (14; 35.1%) and social life (22; 55%). Thirty three (82.5%) fathers had family support. Religion and prayers were some of the strategies fathers employed to cope with their stress.

Conclusion: Fathers found the SCBU experience stressful and need to be given more support in and outside the hospital.

Key words: fathers, experiences, newborns, NICU

29 **Introduction:**

30 The birth of a new baby is usually a joyful experience for the family. Parents are thus not usually
31 prepared for anything less than the coming of a healthy newborn. The premature birth of a baby
32 or the presence of serious illness, all of which require admission into hospital is in most cases a
33 source of stress and anxiety for families and has been reported to have long term implications for
34 parents [1, 2]

35 In time past mothers were regarded as sole caregivers of babies in intensive care units, however
36 the fathers' role is now increasingly being recognized [3]. Mothers are involved in providing care
37 such as feeding, hygiene, and kangaroo mother care. Fathers are usually called on for medical
38 bills and usually enter the neonatal unit for observational visits [3]. Research has shown that
39 when children are hospitalized, while mothers give up their roles to accompany them, fathers
40 take on some of the roles of mothers such as care for healthy children and domestic activities, in
41 addition to their continued roles as providers for the family [4]. While mothers' experiences have
42 been researched on to a large extent, there is limited information on the experiences of fathers of
43 sick newborns [5, 6]. This paper sought to explore experiences of father's whose infants were
44 managed in, and had been discharged from the SCBU of UPTH, Port Harcourt, Nigeria

45 **Materials and Methods:**

46 This was a descriptive cross sectional study carried out in the neonatal clinics of UPTH over a
47 period of 10 weeks. The hospital has a neonatal intensive care unit (NICU), referred to as Special
48 Care Baby Unit (SCBU) which caters for sick newborns delivered in and outside the hospital. It
49 has 12 incubators and a capacity to care for 35 babies at any given time. There is a mothers'
50 apartment about a stone throw from the ward where mothers lodge at a small fee during the
51 period of babies' hospitalization. Babies whose mothers had antenatal care and delivered in the
52 hospital are admitted into the in-born section of the ward while those born elsewhere or who had
53 been previously discharged from the inborn section and needed readmission are admitted into the
54 out -born section of the ward. There are breastfeeding rooms in the wards for inborn and out-
55 born babies. There are no family rooms or designated resting places for fathers. Following
56 discharge the babies are followed up in the neonatal clinics in the outpatient section of the
57 Pediatrics Department.

58 Participants were fathers who had come with their babies for follow up post discharge from the
59 SCBU. Informed consent was obtained from the fathers and only those who gave consent
60 participated in the study. Fathers were interviewed using a semi-structured questionnaire with
61 some open-ended questions. The interviewer administering the questionnaire allowed fathers to
62 express themselves and categorized responses into the different responses on the questionnaire.
63 Responses to open ended questions were written down as much as possible in the fathers' own
64 words. Where responses differed from those on the questionnaire, they were also categorized
65 into different themes and documented. Information obtained included biodata, occupation and
66 experiences during their babies' stay in SCBU. Social class of families was computed using the
67 method by Oyedeji et al [7]. Data were entered into an excel spread sheet. Quantitative data such
68 as age, were analyzed using SPSS version 20. Ethical approval was obtained from the Research
69 and Ethics Committee of the University of Port Harcourt Teaching Hospital.

70 **Results:**

71 There were thirty seven participants. Fathers were aged 22-58 years with a mean of 39.35 ± 6.34 .
72 Eighteen (48.6%) babies spent 8-21 days in hospital. Ten fathers (28%) were in the low
73 socioeconomic class, 15 (40.5%) in the middle and 12 (32.4%) in the high socioeconomic class
74 Generally the experience was described as stressful by 25 (62.5%), confusing by 5 (12%),
75 pleasant by 7 (18.9%) and frightening by 4 (10%) fathers.

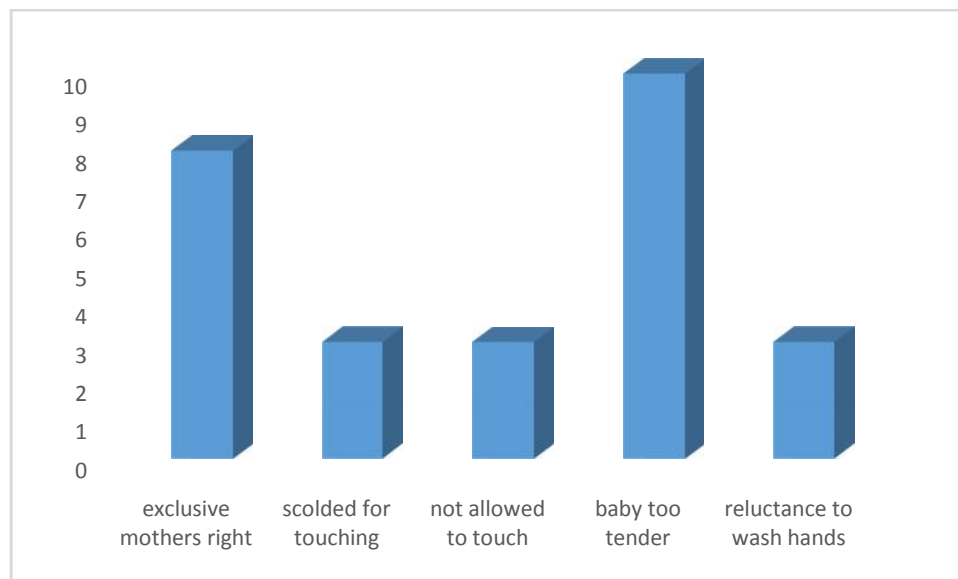
76 Contributors to stress were financial implications of babies' care (13: 35.1%), illness in the
77 mother (5: 13.5%), and lack of care for other children (16: 43.2%)

78 Results are further grouped into experiences during the period of babies' hospitalization, effects
79 on various aspects effects on respondents' lives, support received by fathers and coping
80 strategies.

81 **Experiences during hospitalization:**

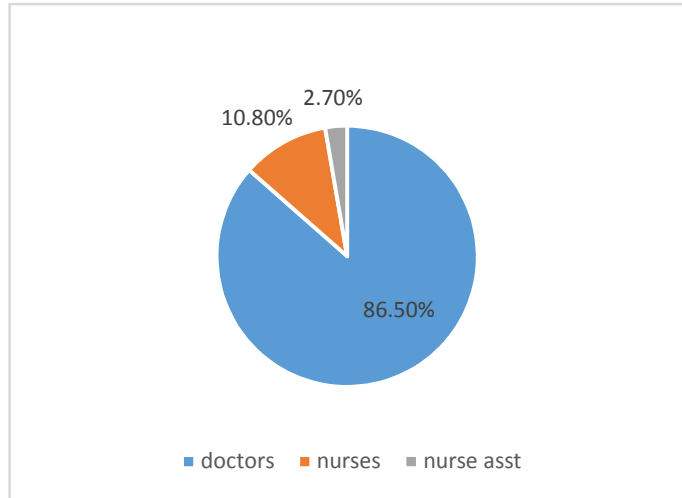
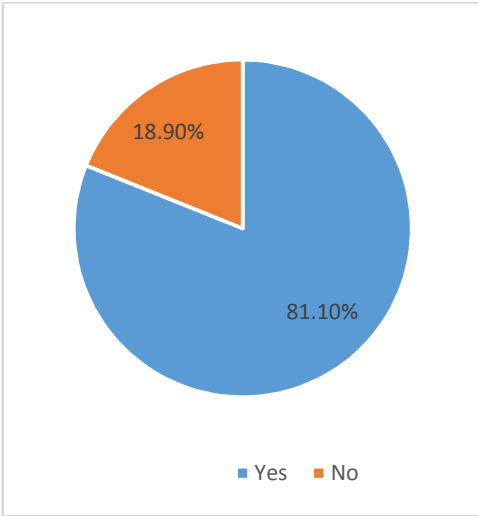
82 Twenty five (67.6%) of fathers felt welcomed in the SCBU environment, however 12 (32.4%)
83 reported feeling like outsiders. Some of the reasons for this were: 6 (16.2%) felt they had limited
84 access to their babies, one said 'Nurses will always make you feel that way'; Another felt he was
85 never listened to; and 3 (8.1%) did not like the way they were addressed by the staff

86 Many (27; 73%) of the fathers would have liked to have more contact with their babies but eight
87 (21.6%) felt that this was exclusively for mothers, three (8.1%) reported being scolded by nurses
88 for touching their babies. Figure 1 shows hindrances to fathers contact with their babies.



89
90 Figure 1: Hindrances to fathers contact with babies

91
92 Figures 2a and 2b show responses on adequacy and sources of information received from staff
93 regarding baby's condition. Fathers got enough information especially from doctors. Four fathers
94 (10.8%) who felt that information was not enough complained that too many medical terms were
95 used which they could not understand. In (23; 62.2%) fathers perceived that they were given
96 more information than their partners.



97

98 Figure 2a: adequacy of information given to fathers Figure 2b: sources of information

99

100 Fourteen fathers (37.8%) worried about the procedures and equipment used on their babies.
 101 Some of the worries were fear of effect of X rays on their tender babies (3; 8.1%), fear of
 102 unknown effects of phototherapy lights on their babies' eyes (2; 5.4%) and feeling their babies'
 103 pain during procedures like venipunctures (11; 29.7%)

104 Twenty two (59.5%) felt the physical layout of the SCBU was not conducive for fathers. Some
 105 (24.3%) reported that they had to sleep in their cars when they had to be in the hospital
 106 overnight. Others (32.4%) felt there should be some arrangement for fathers who wanted to stay
 107 in the hospital.

108 Thirty four (91.9%) of the fathers would encourage other fathers to seek care in the SCBU if
 109 their babies needed such care.

110 **Relationship with SCBU staff**

111 Thirty two (86.5%) described the attitude of the nurses as either friendly or welcoming and 5
 112 (13.5%) as cold while all but one (2.7%) described the attitude of the doctors as friendly or
 113 welcoming. Fathers felt the attitude of staff towards them was transmitted to their partners and
 114 babies in the same way. The five fathers who felt nurses were cold towards them felt they were
 115 cold towards their partners and babies as well.

116

117 **Effect on various aspects of respondents' lives:**

118 Table I gives an overview of the effect of hospitalization on various aspects of respondents'
119 lives. Three (8.1%) fathers who were having their first babies said that there was no effect on
120 family life. For 17 (45.9%), it was inconveniencing, challenging and stressful, while for 13
121 (35.1%) it disrupted family routines.

122 Social activities like visitation and extracurricular activities were disrupted in 20 (54.1%).

123 The experience brought fathers closer to their partners in 27 (73%). Sixteen fathers (43.2%)
124 reported that their other children were given less attention.

125

126 Seventeen (45.9%) had some work related problems. Such problems included lack of
127 concentration and getting queried. Eight (21.6%) had some support from the work place. Such
128 support included having an understanding boss and being granted time off to attend to domestic
129 issues.

130 **Support received by fathers**

131 Apart from support received at work by a few fathers (table 1), thirty one (83.8%) reported
132 having some kind of support from extended family members and friends. Fifteen (40.5%) got
133 financial support, 11 (29.7%) reported spiritual support mainly prayers, 10 (27%) got
134 emotional/moral support. Other forms of support included family members/friends volunteering
135 blood donation for sick baby (4; 10.8%) and care for the other children in the absence of the
136 parents (10; 27%).

137 **Coping strategies**

138 Twelve (32.4%) fathers made reference to God and prayers to help them cope with the situation.
139 One of them actually joined a 21 day prayer and fasting program in the church. Other means of
140 coping were; 7 (18.9%) encouraged/ braced themselves for the experience, 5 (13.5%) got
141 encouragement from family members and friends, 5 (13.5%) drew strength from the love for
142 their babies and 2 (5.4%) decided to face one day at a time and 9 (24.3%) also decided to spend
143 more time on their jobs.

144 .

Table I: Effects of stay in hospital on different aspects of respondents' lives

Variables	N	%
Effect on family life		
Inconveniencing, challenging and stressful	17	45.9
Disrupted normal routine	13	35.1
Affected	2	5.4
Gave family serious concern	2	5.4
None	3	8.1
Effect on social life		
Disrupted my outings	20	54.1
Felt isolated	5	13.5
Hung out more to loosen up	3	8.1
None	9	24.3
Effect on relationship with partner		
Felt closer to partner	27	73.0
Felt strain on relationship with partner	2	5.4
Felt distant from partner	4	10.8
None	4	10.8
Effect on work/job		
Having problems at work	5	13.5
Losing money	10	27.0
Getting queried	2	5.4
Support from work	8	21.6
None	12	32.4
Effect on relationship with		

other children

Children given less attention	16	43.2
Child became ill	1	2.7
Child missed school	3	8.1
None	19	51.4

146

147

148

149 Discussion:

150 The study shows that the period of a newborn's hospitalization in the neonatal unit is a stressful
151 time for fathers. Other authors have reported similar findings [8, 9]. Admission of an infant to
152 the neonatal intensive care unit (NICU) places parents and other family members in a stressful
153 situation where they must cope with the NICU environment and its associated demands.

154 Ashwani et al [11] using a parental stressor scale showed evidence that fathers do experience
155 stress with the NICU admission.

156 The financial implications of care was a source of anxiety for fathers. Financial issues have been
157 reported to cause anxiety in parents of hospitalized children [12, 14]. Authors have reported an
158 inverse relationship between fathers' income and anxiety level. [12, 14]. Many of the fathers in
159 the study were in the middle income group. This source of anxiety cannot therefore be
160 overlooked. It is well known that neonatal intensive care is expensive moreso in settings like
161 ours where most of the cost is borne by out of pocket expenses. Added to this is also cost of care
162 for mothers, some of whom were also ill during the period of their babies' hospitalization. Out-
163 of-pocket expenditure accounts for more than sixty percent of the total health care budget, and is
164 the largest single element of financial resources for health care in Nigeria [15]. The full
165 implementation of the National Health Insurance Scheme in Nigeria will help to ease the
166 financial burden on families of hospitalized newborns.

167 Fathers in this study worried about the procedures carried out on their babies and some reported
168 feeling the pain of such procedures. Authors have reported that procedures and treatment may be

169 misunderstood by mothers and fathers. Watching children undergo invasive procedures such as
170 venipuncture and lumbar puncture contributes to stress and anxiety in parents. [16]

171 Many fathers desired to have more contact with their babies but the study showed hindrances to
172 such contact. Nurses acting as one of the hindrances to parental contact with babies has been
173 reported [17]. The parental desire for physical contact with their babies has also been reported
174 [9]. The NICU environment however poses many challenges to parent-infant closeness. Studies
175 show that various forms of parental contact, such as holding, talking and skin to skin contact, are
176 associated with better outcomes for infants and parents during hospitalization and beyond and
177 are associated with better infant neurobehavioral development [18, 19]. Skin-to-skin care, is an
178 important form of physical closeness with benefits for infants, parents and their relationship [20].
179 In many NICUs including ours, this form of care is assigned to only mothers and perhaps gives
180 fathers that perception that contact with babies is exclusive for mothers [13]. Studies show that
181 skin to skin care increases not only maternal-infant bond, but also enhances the father-infant
182 bond and relationships within the entire family [21]. Interestingly, recently, authors
183 implementing a father friendly NICU initiative found higher stress levels in fathers probably as a
184 result of more involvement and closer father–child relationships, in addition to all their other
185 responsibilities during the period [22]. Health workers and nurses in particular should however
186 be educated to encourage parents including fathers to not only be present but to at least have
187 physical contact with their infants [20].

188 Fathers got enough information especially from doctors and were given more information than
189 the mothers. It has been reported that fathers gained relevance in obtaining information from
190 health personnel and transmitting same to mothers [13]. A few fathers felt that information was
191 not enough and complained that too many medical terms were used which they could not
192 understand. Fathers need to get clear information on their babies' illness and procedures from
193 NICU staff. Information if not properly given may be misunderstood by parents and increase
194 their anxiety levels [12].

195 Fathers generally felt that staff were welcoming and friendly. This is important as the quality of
196 relationships between mothers and health professionals in addition to the amount of psychosocial
197 support received have been documented as important in determining their levels of stress and

198 satisfaction during their time on the neonatal unit [23]. This may perhaps also be applicable to
199 fathers.

200 Fathers felt the physical layout of the SCBU was not conducive for them. There have been
201 studies on NICU designs and how they influence the experiences of parents, babies and staff and
202 findings show that parent-infant bonds are affected. Emphasis is increasingly being laid on
203 family-centred care but research shows wide differences in provision of facilities to enable
204 parental presence and involvement in different NICUs [24]. Furthermore, structured support
205 systems seem to be provided more for mothers than fathers and it has been reported that over
206 time such support systems tend to increase for mothers and decrease for fathers [9].

207 The study showed that the disease/hospitalization of the children did affect several aspects of
208 family life. Authors have reported that having a child in the NICU leads to profound changes in
209 family life including a disruption of normal family dynamics [25-28]. In some instances, a major
210 illness brings a family closer together; in others, even a minor illness causes significant strain
211 [29]. The study showed changes in relationships between partners, adverse effects on the other
212 children and even changes in social life. Some fathers reported getting closer to their partners
213 while others reported a strain on their marital relationships. The stresses placed on a parent's
214 marriage when a child is going through treatment have been documented and authors have
215 suggested that parents need time to walk through the experience together. It has also been
216 reported that some families become closer during stressful periods, marriages become stronger
217 and painful experiences promote growth [29-31]. Adverse effects on siblings of hospitalized
218 children such as less attention being given to them as shown in this study have also been reported
219 and is an area that also needs to be explored further [30].

220 Family and friends were a source of support both physically, spiritually and emotionally for
221 fathers. As far back as the 1960s, Sussman et al [32] reported that related kin provided a major
222 form of assistance or help during illness. Family support has also been described as a source of
223 strength for dealing with such situations [18].

224 Fathers made reference to prayers and God to help them cope with their situation. Similar
225 experiences were reported by an Iranian study where parents cited a spiritual aspect, in which
226 trust in God and prayers resulted in calmness during stressful periods [33]. Religion has also

227 been reported to offer comfort and support to some parents at such times [34]. Some fathers
228 threw themselves into their jobs. This may be a way of burying the pain of babies'
229 hospitalization as well as other sources of anxiety. A tendency for fathers to withdraw into their
230 jobs and use their work as an escape from the pain of their child's illness has been reported in the
231 literature [35].

232 In spite of all the challenges, fathers would recommend that other fathers seek care for their
233 babies in the facility. It has been documented that parents tend to evaluate NICU care in positive
234 terms because they are generally grateful for the care their child has been given [36].

235 **Conclusion:** Fathers found the SCBU experience stressful. Some of the contributors to stress
236 were financial implications of care and disruptions in normal family and social life. Fathers need
237 to be given more support in and outside the hospital during periods of newborn hospitalisation

238 **Conflict of interest:** The authors declared no conflicts of interest.

239 **Disclaimer:** This study was presented as a poster presentation at the 50th National and 2nd
240 International Conference of the Paediatric Association of Nigeria, January 22 – 25 2019 in
241 Ibadan, Nigeria

243 **References**

- 244 1. Hughes MA, McCollum J. Neonatal intensive care: mothers' and fathers' perceptions of
245 what is stressful. *J Early Intervention*.1994;18 (3):258– 268
- 246 2. Jackson K, Ternestedt BM, Skollin J. From alienation to familiarity: experiences of
247 mothers and fathers of preterm infants. *J Adv Nurs*.2003;43 (2):120– 129
- 248 3. Gallegos-Martínez J, Reyes-Hernández J, Scochi CGS. The hospitalized preterm
249 newborn: The significance of parents' participation in the Neonatal Unit *Rev. Latino-Am.*
250 *Enfermagem* 2013 Nov.-Dec.;21(6):1360-6
- 251 4. Bruce E, Lilja C, Sundin K. Mothers' lived experiences of support when living with
252 young children with congenital heart defects. *J Spec Pediatr Nurs*. 2014;19(1):54–67.
- 253 5. Thomas KA, Renaud MT, Depaul D. Use of the parenting stress index in mothers of
254 preterm infants. *Adv Neonatal Care*.2004;4 (1):33– 41

- 255 6. Arockiasamy V, Holsti L, Albersheim S. Fathers' Experiences in the Neonatal Intensive Care
256 Unit: A Search for Control Pediatrics 2008; 121: 2
- 257 7. Oyedeji G.A. (1985) Socioeconomic and Cultural Background of Hospitalized Patients in
258 Ilesa. Nigerian Journal of Paediatrics, 12, 111-117
- 259 8. Wray J, Lee K, Dearmun N, Franck L. Parental anxiety and stress during children's
260 hospitalisation: the StayClose study. Child Health Care. 2011;15:163-74.
- 261 9. Miles MS, Funk SG, Kasper MA. The neonatal intensive care unit environment: sources
262 of stress for parents. AACN Clin Iss Crit Care Nurs. 1991;2: 346-354
- 263 10. Charchuk M, Simpson C Hope, disclosure, and control in the neonatal intensive care
264 unit. Health Commun. 2005; 17(2):191-203.
- 265 11. Ashwani A N, Neela Aruna Rekha, C. Suresh Kumar, Parental Stress Experiences with
266 NICU Admission in a Tertiary Care Centre, International Journal of Psychology and
267 Behavioral Sciences, Vol. 7 No. 1, 2017, pp. 27-31. doi: 10.5923/j.ijpbs.20170701.05.
- 268 12. Çalbayram NÇ, Altundağ S, Aydin B. The anxiety states of fathers of hospitalized
269 children and its causes. Health Science Journal 2016; 10(6):1-6.
- 270 13. Gallegos-Martínez J, Reyes-Hernández J, Scochi CGS. The hospitalized preterm
271 newborn: The significance of parents' participation in the Neonatal Unit. Rev. Latino-
272 Am. Enfermagem 2013; 21:1360-6
- 273 14. 32. Hannon RP, Willis SK, Scrimshaw SC (2001) Persistence of maternal concern
274 surrounding neonatal jaundice. Arch Pediatr Adolesc Med 155: 1357-1363.
- 275 15. Aregbeshola BS, Khan SM. Out-of-Pocket Payments, catastrophic health expenditure and
276 poverty among households in Nigeria 2010. Int J Health Policy Manag. 2018; 7: 798-
277 806.
- 278 16. Board R. Father stress during a child's critical care hospitalization. J Pediatr Health Care.
279 2004;18: 244-249
- 280 17. Watson G. Parental liminality: a way of understanding the early experiences of parents
281 who have a very preterm infant. J Clin Nurs. 2011; 20:1462-71.
- 282 18. Reynolds LC, Duncan MM, Smith GC, Mathur A, Neil J, Inder T, Pineda RG. Parental
283 presence and holding in the neonatal intensive care unit and associations with early
284 neurobehavior. J Perinatol. 2013; 33:636-41.

- 285 19. Picciolini O, Porro M, Meazza A, Gianni ML, Rivoli C, Lucco G, Barretta F, Bonzini M,
286 Mosca F. Early exposure to maternal voice: effects on preterm infants' evelopment. *Early*
287 *Hum Dev.* 2014 Jun; 90:287-92.
- 288 20. Feeley N, Genest C, Niela-Vilén H, Charbonneau L, Axelin A. Parents and nurses
289 balancing parent-infant closeness and separation: a qualitative study of NICU nurses'
290 perceptions *BMC Pediatr.* 2016; 16: 134.
- 291 21. McGregor J, Casey J. Enhancing parent-infant bonding using kangaroo care: a structured
292 review. *Evidence Based Midwifery* 2012; 50-56.
- 293 22. Noergaard B, Ammentorp J, Garne E, Fenger-Gron J, Kofoed PE. Fathers' Stress in a
294 Neonatal Intensive Care Unit. *Adv Neonatal Care.* 2018; 18: 413-422.
- 295 23. Reis M.D., Rempel G.R., Scott S.D. Developing nurse/parent relationships in the NICU
296 through negotiated partnership. *J Obstet Gynecol Neonatal Nurs* 2010; 39: 675-83.
- 297 24. Flacking R, Dykes F. Creating a positive place and space in NICUs. *Pract Midwife.* 2014
298 Jul-Aug;17:18-20
- 299 25. Calbayram NC, Altundag S, Aydin B. The Anxiety States of Fathers of Hospitalized
300 Children and its Causes. *Health Science Journal* 2016. 6 (10); 470: 1-6
- 301 26. Heermann LA, Wilson ME, Wilhelm PA. Mothers in the NICU: Outsider to Father.
302 *Pediatric Nurs.* 2005;31:176-200.
- 303 27. Kendall-Tackett K. Traumatic Stress symptoms in parents of premature infants. *Trauma*
304 *Psychol Newsletter.* 2009:16-8.
- 305 28. Nystrom K, Axelsson K. Mothers' experience of being separated from their newborns. *J*
306 *Obstet Gynecol Neonatal Nurs.* 2002;31:275-282.
- 307 29. Rankin, S.H., & Stallings, K.D. (1996). *Patient Education: Issues, Principles, Practices,*
308 *3rd ed. Philadelphia: Lippincott-Raven, 128-129.*
- 309 30. Futterman, E., & Hoffman, I. (1973). Crisis and adaptation in the families of fatally ill
310 children. In E. J. Anthony & C. Koupornik (Eds.), *The child in his family: The impact of*
311 *disease and death. (Yearbook of the International Association for Child Psychiatry and*
312 *Allied Professions, Vol. 2) (pp. 127-143). New York: Wiley.*

- 313 31. Craft MJ. Siblings of hospitalized children: Assessment and intervention. *Journal of*
314 *Pediatric Nursing* 1993; 8: 289–297
- 315 32. Sussman, M. B, Burchinal, L. (1962). Kin family network; Unheralded structure in
316 current conceptualization of family functioning. *Marriage and Family Living*, 24(3), 231-
317 240.
- 318 33. Bsiri-Moghaddam K, Basiri-Moghaddam M, Sadeghmoghaddam L, Ahmadi F. The
319 Concept of Hospitalization of Children from the View Point of Parents and Children Iran
320 *J Pediatr*. 2011 Jun; 21: 201–208.
- 321 34. Friedman S B, Chodoff P, Mason J W, Hamburg D A. Behavioral observations on
322 parents anticipating the death of a child. *Pediatrics* 1963; 32: 610-625.
- 323 35. Binger, C. M., Ablin, A. R., Feuerstein, R. C., Kushner, J. H., Zoger, S., & Mikkelsen, C.
324 Childhood leukemia emotional impact on patient and family. *The New England Journal*
325 *of Medicine*, 1969; 280: 414-418
- 326 36. Wigert H, Hellström AL, Berg M. Conditions for parents' participation in the care of
327 their child in neonatal intensive care – a field study. *BMC Pediatr*. 2008; 23:8–3.
328