Research Article

iMedPub Journals
http://www.imedpub.com/

Health Science Journal
ISSN 1791-809X

2016
Vol.10 No.6:470

DOI: 10.21767/1791-809X.1000470

The Anxiety States of Fathers of Hospitalized Children and its Causes

Nazan Çakirer Çalbayram[1], Sebahat Altundağ[2*], Bahise Aydin[2]

[1]Ankara University, Midwifery, Turkey

[2]Department of Pediatric Nursing, Pamukkale University, Denizli, Turkey

[*]**Correspondence:** Sebahat Altundağ, Pamukkale University Health Science Faculty, Department of Pediatric Nursing, Turkey, Tel: +90 258 296 43 55; Fax: +90 258 296 44 74; E-mail: saltundag@pau.edu.tr

Received: 04.10.2016; **Accepted:** 22.10.2016; **Published:** 01.11.2016

Abstract

Background: A sick child will affect family directly. The life of the family will extremely change compared to their life before the illness.

Objective: The purpose of this study was to determine the anxiety state of fathers with hospitalized children and its causes.

Method: The study used a descriptive design. It was a cross-sectional study carried out between February and June 2015. The universe of the study consisted of fathers of hospitalized children in a Children's Hospital in Ankara, the capital city of Turkey. The data collection procedure used a socio-demographic characteristics and causes of anxiety questionnaire and State Trait Anxiety Inventory-S.

Results: The states causing anxiety in fathers were defined as child's disease, hospitalization, taking medicine, being unable to accompany the child, procedures, diet, comfort and safety of the child and the father. The mean state anxiety level of the fathers was found to be 48.94 ± 11.68.

Conclusion: Fathers' anxiety can be reduced by giving them information on the child's disease, hospital conditions and what needs to be done.

Keywords: Fathers, Hospitalized children, Anxiety

Introduction

A sick child will affect not only himself/herself but also the family directly. The impact of the disorder on the child and family can vary by variables such as whether it is a congenital or acquired disease; the age at which the disease was diagnosed; the level of child's compliance; mother-father-child relationship; the stability in the family; the degree of the disease; the diseased body part; the level of pain or loss; type of treatment; the effect of the disorder; the meaning that the disease carries; the thoughts about the disease; and the effect of the disorder on the child's social harmony, school life and similar relationships [1].

The disease of the child causes significant changes in the family order. The life of the family will profoundly change compared to their life before the illness. The parents, brothers and sisters, and the immediate environment as well as the sick child himself/herself will be adversely affected by the disease due to reasons such as increasing expenditures, and the tension created by the treatment process. In families with sick children, the care job usually falls on mothers' shoulders, whereas fathers play a supporting role [2-6]. For this reason, the emotional state of fathers related with their hospitalized children may not have been adequately involved in studies.

Background

It is known that the burden of a disease in the family primarily falls on mothers; however the role of father as a facilitator of the child's integration and a supporter for mother is ignored. It is emphasized in studies that chronic diseases create stress on family members [7]. Riddle et al. conducted a study in 1989 on the anxieties of parents of 155 children staying in intensive care unit. It was argued in this study that mothers experienced more stress than fathers, and that it stemmed from the conflict between the responsibilities of mother role and work role. The medical procedures involving intervention to the child's body are also perceived quite stressful by the mother [8]. Akşit and Cimete reported in their study that the supportive implementations of nurses reduced mothers' anxiety [9].

The procedures during treatment, the purpose of the treatment, and the requirements during treatment may be misunderstood by mothers and fathers. According to Board (2004) because of the nature of the illnesses presented in the pediatric intensive care unit, many procedures are performed on the children, most right at the bedside such as suctioning, obtaining blood, placing intravenous lines and central lines, and performing a lumbar puncture. Seeing a child undergo these events can cause much stress and anxiety in parents [10]. Mothers, in comparison to fathers, have a tendency to reveal depressive symptoms and pressure more [11]. When the related literature is reviewed, it can be seen that studies generally concentrate on mothers [9,12-16], and that studies determining the anxiety level of fathers are rare.

Methods

Study design

A descriptive design was used in the study.

Setting and sampling

The research was conducted as a cross-sectional study between 01 February, 2015 and 01 June, 2015 to determine the anxiety state of Turkish fathers with hospitalized children and its causes. The universe of this study was made up of fathers of hospitalized children in a children's hospital in Ankara, the capital city of Turkey. The fathers of all hospitalized children were involved in the study regardless of the children's diagnoses. The emergency service, surgical service, extensive care units and polyclinics of the hospital were excluded from the scope of the study. Illiterate fathers and those who refused to participate in the study were also excluded. The sample size was eventually determined to be 217 fathers who have hospitalized children.

Ethical considerations

Written permission was obtained from related institutions to carry out the study. Ethical approval, which agreed to the principles in the Declaration of Helsinki, was obtained from the local university ethical council (with date 19.12.2013 and no 966 ethical council approval) prior to the study. The fathers gave their written informed consent to participate in this study.

Measurements/instruments

The data of the study were collected using a data collection form developed by the researchers based on the related literature. The data collection form was made up of three parts. The fathers of the sick children were informed about the process prior to the application and their consent was taken. 10 fathers were administered a pilot study to help them understand the questions in the survey, answer them and to standardize the questionnaire forms. Following the pilot study, 2 open-ended questions in the data collection form were changed to close-ended questions since they could not be answered effectively. The fathers who were involved in the pilot study were excluded from the study. The data were collected after the data collection form was finalized.

Socio-demographic form

Information about the individual characteristics of the fathers and children were collected. It consisted of data such as the age and education level of the fathers, family type, number of children, social security, employment status, and income status, the age and gender of the hospitalized child, and hospitalization data.

Information form for the causes of anxiety

It consisted of parts such as fathers' state of receiving information on the disease, states worrying the fathers, the subjects that fathers wanted information on and what needed to be done to reduce anxiety [10,17,18].

State trait anxiety inventory-S

The State Trait Anxiety Inventory-I (STAI-S) was developed by Spielberger et al., in 1970. Öner & Le Compte completed the adaptation of the questionnaire and reported cronbach alpha coefficient as 0.83 for the STAI-S was accepted as reliable. There were direct and inverted statements in the scale. When scoring the "inverted" statements expressing positive emotions, the items with a weight value of 1 were converted to 4, and 4 to 1. Responses with a value of 4 in statements expressing negative emotions indicated high level of anxiety. On the other hand, responses with a value of 4 in inverted statements showed low level of anxiety, whereas the responses with a value of 1 indicated high level of anxiety. 10 items included inverted statements (items 1,2,5,8,10,11,15,16,19, and 20). The Cronbach's alpha for the scale was between .83 and .92. Scores that could be obtained from the scale varied between 20 and 80. A high score indicated high level of anxiety, while a low score meant low level of anxiety [19]. The Cronbach's alpha for the father administration of the STAI-S was .93.

Data collection/procedure

Fathers were given the information form by the researchers and they answered the items in a quiet place without being under any influence. The data were collected by the researchers using face to face interview technique. The implementation of the forms took about 25-40 minutes. Fathers read the questions and responded to the questionnaires themselves.

Data analysis

A statistical software package was used for the analysis of the data obtained from the study. Frequency, mean and percentage calculations were used in the evaluation of the data. The data were analyzed using t-test in two independent groups and one-way ANOVA in groups more than two. The results were evaluated at $p< 0.05$ and at 95% confidence interval. All statistical analyses were conducted using SPSS for Windows, version 17.0.

Results

The mean age of the fathers participating in the study was 39.29 (min: 20-max: 68). 33.5% was high school graduates. 67.0% had core family structure and average number of children was 2.48 (min: 1-ma: 9). 90.2% of the fathers was employed. 89.3% had social security and 48.2% perceived their income was equal to their expenses.

Mean age of the hospitalized children was 3.84 (Min: 0-max: 12). It was determined that 53% was male, 62.7% was previously hospitalized, 53.7% was hospitalized 2-3 times, and that 62.2% stayed in hospital less than a week and 6.9% more than a month. It was found that 88.9% of the fathers was informed about the health problem and that in 76.2% of the cases the informer was the physician and only 56.5% considered the information adequate.

The states that caused anxiety in fathers were determined to be the child being sick (86.6%), being hospitalized (71.5%), taking medications (65.0%), being unable to accompany (65.0%), medical procedures (64.1%), diet (50.6%), the comfort of the child and the companion (48.8%) and safety (35.5%) **(Table 1)**.

Table 1 The distribution of the anxiety states of the fathers.

Anxiety states	I am not anxious		I am less anxious		I am anxious	
	n	%	n	%	n	%
The child being sick	9	4.1	20	9.2	188	86.6
Being hospitalized	30	14	32	15	155	71.5
Taking medications	48	22	28	13	141	65
Being unable to accompany	46	21	30	14	141	65
Diet	62	29	45	21	110	50.6
Medical procedures*	25	12	53	24	139	64.1
Safety	90	42	50	23	77	35.5
Comfort of my child and the companion	73	34	38	18	106	48.8

* blood collection, attaching intravenous catheter, draining fluid from the waist, attaching urinary catheter, etc.

The fathers generally stated that they wanted information on all subject areas. However there were also some fathers who did not want information on the following subject areas: medications given (6.9%), convalescent care at home (7.4%), hospital contact numbers (7.4%), administration of the drugs (10.1%), procedures such as intravenous catheter, urinary catheter (10.6%), the name and the office of the nurse (11.1%), the place of the toilet and bathroom in the service (12.9%), and hospital discharge training (13.8%) **(Table 2)**.

The mean state anxiety score of the fathers (SAS) was determined to be 48.94 ± 11.68 (21.00-75.00). While SAS for 20-30 year-old fathers was 52.04 ± 12.59, it was 46.72 ± 10.72 for fathers 41 and over, and it was statistically significant and high ($p<0.05$). As the age of the father increased, the score obtained from the scale decreased. The mean SAS of fathers whose children experienced hospitalization before was 49.07 ± 10.37, whereas it was 48.72 ± 13.67 for fathers whose children were hospitalized for the first time and the difference was determined to be statistically significant ($p<0.05$). As the age of the child decreased, the anxiety state of the father increased, and the increase was found to be statistically significant ($p<0.05$). It was also determined that the mean SAS for fathers who had more income than their expenses was 39.66 ± 10.79, it was 49.51 ± 12.02 for fathers whose income was equal to expenses, 49.45 ± 11.06 for fathers whose income was less than expenses, and that the relationship between them was statistically significant ($p<0.05$). While the relationship between the state of fathers' demand for information and SAS was determined to be statistically insignificant ($p>0.05$), the mean SAS of fathers who received information and considered it adequate was found to be 46.53 ± 12.12, and it was determined to be lower than the mean SAS of fathers who found the information inadequate (49.47 ± 13.14) and who found it partly adequate (52.63 ± 9.76). However, the relationship between them was determined to be statistically significant ($p<0.05$).

Fathers stated that their anxiety would be relieved if more explanations were made by the physician (88.9%), the nurses explained the procedures (60.4%), they talked to the parents of children who survived this disease (45.6%), they were given an audio-visual training on the disease (51.2%), they stayed in hospital with their children (55.3%), and they accompanied their children during treatment (56.7%) **(Table 3)**.

Table 2 The distribution of the subject areas which fathers wanted information on.

Subject areas	I don't want to know		I want to know	
	n	%	n	%
The disease	2	0.9	215	99.1

Dangerous adverse effects	2	0.9	215	99.1
Common side effects	2	0.9	215	99.1
What needs to be considered related with the disease	3	1.4	214	98.6
All adverse effects likely to happen	3	1.4	214	98.6
When the child will recover	4	1.8	213	98.2
How long the treatment will take	5	2.3	212	97.7
How long the child will take medications	10	4.6	207	95.4
Medications given	15	6.9	202	93.1
Hospital contact numbers	16	7.4	201	92.6
Convalescent care at home	16	7.4	201	92.6
Diet	21	9.7	196	90.3
The name and the office of the physician	22	10.1	195	89.9
Administration of the drugs	22	10.1	195	89.9
Procedures such as intravenous catheter, urinary catheter	23	10.6	194	89.4
The name and the office of the nurse	24	11.1	193	88.9
The place of the toilet and bathroom in the service	28	12.9	189	87.1
Hospital discharge training	30	13.8	187	86.2

Table 3 The distribution of the measures that needed to be taken to reduce the fathers' anxiety.

Measures to reduce anxiety	Yes		No	
	n	%	n	%
More explanations by the physician	193	88.9	24	11.1
Explanations of the procedures by a nurse	131	60.4	86	39.6
Accompany the child during the treatment	123	56.7	94	43.3
Stay in the hospital with the child	120	55.3	97	44.7
Audio-visual training on the disease	111	51.2	106	48.8
Talking to parents of children who survived this disease	99	45.6	118	54.4

Discussion

It is a widely known fact that the burden of a disease in the family mostly falls on mothers; yet the role of father as a facilitator of the child's integration and a supporter for mother is ignored [3-5]. Mothers generally undertake active roles in the care of their sick children and even can give up their favorite activities and affairs. Thus they are under more stress than fathers, and their risk of depression is higher [15]. This study was carried out to determine the state anxiety of Turkish fathers who had hospitalized children and its causes.

It was determined in the study that more than half of the fathers were given information by the physician, however only half of those informed found the information adequate **(Table 2)**. Franklin reported that parents primarily needed information about the health of their infants and the course of the disease. In addition, it was also stated in the study that the information given to parents by neonatal intensive care team should be satisfactory, clear and comprehensible [20]. Çalışır et al. determined that fathers mostly wanted information on the diagnosis of their children's disease, other procedures, health state and related changes or developments [14]. It was found in the study that the states causing anxiety in fathers were child's disease, hospitalization of the child, taking medications, being unable to accompany, medical procedures, diet, the comfort and safety of the child and the companion **(Table 1)**. Parents who have babies in neonatal intensive care unit may experience anxiety due to reasons such as feeling they haven't been able to fulfill their parental roles, lacking information on the disease and treatment of the baby and the roles they should undertake, being unfamiliar with hospital environment, feeling guilty of the child's disease, and financial issues [21,22]. According to Karahroudi et al. fathers' participation in the care of their hospitalized child in the pediatric intensive care unit will reduce fathers' stress [23].

Health care workers, particularly nurses, should inform parents about hospital and procedures during the children's admission to hospital. It is thought that parents' anxiety might be reduced in this way.

In cases when one of the family members is sick, the relatives of the sick individual struggle with both emotional and physical challenges. During this process, relatives experience a feeling of intense despair [24]. In some families the stress can be too intense to disrupt the family dynamics [25]. According to Spielberg's two factor theory, the expression of an individual's complex enthusiastic responses occurring in the environmental conditions where there is a real threat or danger is defined as "state anxiety". Such kind of a reaction ends with the elimination of environmental stress [26,27]. It is well known that anxiety disorder and depression incidence increases in chronic diseases [28,29].

In the current study, the majority of fathers stated that their anxiety would be relieved if doctors made more explanations, nurses explained the procedures and protocols, and they talked to parents whose children survived this disease. Çalışır et al. determined that fathers needed to talk to their children's doctor everyday, talk to the nurse looking after the baby at any time, and be recognized by hospital staff. Their findings were found to be in line with the results of our study [14]. Davis and Fallowfield reported that the adaptation process of parents to the disease was a complex process, and parents felt better and their behaviors changed towards their children when they received information about the disease, they saw the other sick children and talked to their parents, and that these factors were effective in ensuring the child's adaptation to the disease [30]. Curley and Meyer reported that parents' talking to other parents with similar health problems or receiving support played an important part in reducing anxiety and gaining new coping skills [31]. It was determined in the study that the fathers wanted to get information about the disease on issues such as adverse effects, medications, when the child would recover, and care at home. Çalışır identified demanding for information about changes in child's health state, diagnosis and treatment as preferential in the requirements list [14]. Franklin stated that parents needed information primarily about their babies' health state and course of the disease [20]. It was determined that mean state anxiety of fathers was 48.94 ± 11.68 (21.00-75.00). It was found that as the age of the father got younger, the rate of SAS increased. It can be thought that the young age of father and his inexperience about hospitals and diseases increased his anxiety level.

It was determined in the study that anxiety level increased as the income level of the father decreased. Financial issues are among the states causing anxiety in parents in the literature, too [32,33].

As the age of the child got younger, the anxiety level of the father was determined to increase. It is thought that young age in children caused fathers to experience anxiety related with recovery, discharge from hospital and remaining sequel, and created more anxiety.

It was determined in the study that the mean state anxiety score of fathers whose children had been hospitalized before was higher than fathers whose children were hospitalized for the first time. This may have stemmed from the fact that fathers whose children had previously been hospitalized were anxious to experience the same things again.

Aksu determined in a study carried out on mothers who had children with chronic diseases that state anxiety of mothers was high depending on recurrent hospitalizations, constant medications, general state disorders, policlinic visits, and the fact that mothers have to spend more time in hospital [12]. Çakan and Sezer found that the state anxiety of mothers who had children with chronic disease was higher than that of mothers who had healthy children, but that the relationship between them was not found to be significant. The reason for this was based on the fact that mothers accepted the situation, and that they believed that both the health care staff and mothers themselves did their best for the treatment [13].

Conclusion

In this study the mean state anxiety score of the fathers (SAS) was determined to be 48.94 ± 11.68 (21.00-75.00). It was determined that the state anxiety scores of fathers who had hospitalized children were affected by the ages of father and the child, previous hospitalization of the child, income level and the state of getting information.

It was also found that issues such as the child being sick, hospitalization, taking medications, being unable to accompany the child, procedures, diet, and the comfort and safety of the child and the companion caused anxiety in fathers. Fathers in the study stated that their anxiety would be relieved if they were given more information by doctors, they were informed about the procedures by nurses, they talked to parents whose children survived this disease, they were trained audio-visually on the disease, they accompanied their children in hospital, and they stayed with their children during the treatment process.

The limitation of the study was that there were excluded services in the hospital. Therefore these services (surgical service, emergency service, polyclinics, and pediatric intensive care units) should be involved in future studies.

Conflict of interest

The authors declared no conflicts of interest.

Acknowledgment

This study was presented as a poster presentation in 5th National and 2nd International Mediterranean Pediatric Nursing Congress on November 15-18, 2015 in Türkiye.

References

1. Er M (2006) Parents and siblings childhood diseases. J Child Health Diseases 49: 155-168.

2. Thompson VL, Hupcey JE, Clark MB (2003) The development of trust in parents of hospitalized children. J Spec Pediatr Nurs 8: 137-147.

3. American Medical Association (1998) Essential guide to depression. Simon & Schuster, New York, USA.

4. Altshuler LL, Choen LS, Moline ML, Kahn DA, Carpenter D, et al. (2001) Treatment of depression in women, a summary of the expert consensus guideline. J Psychiatr Pract 7: 185-208.

5. Gazmararian JA, James SA, Lepkowski JM (1995) Depression in black and white women. The role of marriage and socioeconomic status. Ann Epidemiol 5: 455-463.

6. Knafl K, Zoeller L (2000) Childhood chronic illness: a comparison of mothers' and fathers' experiences. J Fam Nurs 6: 287-302.

7. Orr DP, Weller SC, Satterwhite B, Pless IB (1984) Psychosocial implications of chronic illness in adolescence. J Pediatr 104: 152-157.

8. Riddle II, Hennessey J, Eberly TW, Carter MC, Miles MS (1989) Stressors in the pediatric intensive care unit as perceived by mothers and fathers. MCN Am J Matern Child Nurs 18: 221-233.

9. Akşit S, Cimete G (2001) Children's admission to the intensive care unit, the nursing mother of the family applied to the effects of anxiety CA Nurs J 5: 25-36.

10. Board R (2004) Father stress during a child's critical care hospitalization. J Pediatr Health Care 18: 244-249.

11. Blotcky AD, Raczynski JM, Gurwitch R, Smith K (1985) Family influences on hopelessness among children early in the cancer experience. J Pediatr Psychol 10: 479-493.

12. Aksu MT (2008) Sociodemographic characteristics of depression in mothers of children with chronic illness, anxiety, evaluation of problem-solving ability and quality of life [master's thesis]. İstanbul.

13. Çakan P, Sezer Ö (2010) Attitudes of families with children with chronic illnesses, to be screened for anxiety and other variables. Firat University social science journals. J Soc Sci 20: 161-180.

14. Çalışır H, Şeker S, Güler F, Taşçıoğlu AF, Türkmen M (2008) Newborn needs and anxiety of parents of infants hospitalized in the intensive care unit. CI nurs magazine 12: 31-44.

15. Olsson MB, Hwang CP (2001) Depression in mothers and fathers of children with intellectual disability. J Intellect Disabil Res 45: 535-543.

16. Uğuz Ş, Toros F, İnanç BY, Çolakkadıoğlu O (2004) Mentally and / or physically disabled children in their mother's anxiety, depression and stress level determination. Clin Psychiatry 7: 42-47.

17. Oğuzalp H, Gülsün Pamuk A, Öcal T (2010) Evaluation of parental anxiety and expectation in day surgery. Turk Anaesth Int Care 38: 208-216.

18. Ayoğlu T (2003) Preoperative anxiety levels and sequence information and its effect on blood pressure values of the patient's family did not. istanbul university health sciences institute surgical diseases nursing department.

19. Aydemir Ö, Köroğlu E (2000) Clinical scales used in psychiatry. Psychiatric Association 15.

20. Franklin C (2006) The neonatal nurse's role in parental attachment in the NICU. Crit Care Nurs Q 29: 81-85.

21. Kristensson-hallström I, Elander G (1997) Parents' experience of hospitalization: Different strategies for feeling secure. Pediatric Nursing 23: 361-367.

22. Çelebioğlu A (2004) The feelings of the parents of the newborn and nursing admission to the hospital. Int J Human Sci 1: 1

23. Karahroudi AF, Ghaderi S, Yousefi-Chaijan P, Oskooi NN (2014) The effect of fathers' participation in the care of hospitalized child in pediatric intensive care unit on fathers' stress and coping strategies. Asian J Pharm Nurs Med Sci 2: 68-74.

24. Tabar E (2006) Hasta yakını olmak. İstanbul (Turkey): Pan Yayıncılık 2006: 25

25. Pejovic-Milovancevic M, Popovic-Deusic S, Aleksic O, Garibovic E (2003) Personality characteristics of parents in hospitalized children. Eur Child Psy 12: 125.

26. Lecompte A, Öner N (1988) Süreksiz-durumluluk, sürekli kaygı envanteri el kitabı. Boğaziçi üniversitesi matbaası, İstanbul, Turkey.

27. Öner N (1997) Türkiye'de kullanılan psikolojik testler 3 basım, Boğaziçi Üniversitesi Yayınları, İstanbul, Turkey.

28. Voellinger R, Berney A, Baumann P, Annoni JM, Bryois C, et al. (2003) General hospital psychiatry major depressive disorder in the general hospital adaptation of clinical practice guidelines. Gen Hosp Psychiatry 25: 185-193.

29. Katon WJ (2003) Clinical and health services relationships between major depression, depressive symptoms, and general medical illness. Biol Psychiatry 54: 216-226.

30. Davis H, Fallowfield L (1991) Counseling and communication in health care: Counselling families of children with disabilities. Chichester, John Wiley 223-238.

31. Curley MAQ, Meyer EC (2001) Caring practices: The Impact of the critical care experience on the family. Critical Care Nursing of Infants and Children Martha AQC, Patricia A, Moloney-Harmon, Saunders, 2nd Eds, Philladelpia. P47-67

32. Miles MS, Carlson J, Brunssen S (1999) Nurse parent support tool. J Pediatr Nurs 14: 44-50.

33. Hannon RP, Willis SK, Scrimshaw SC (2001) Persistence of maternal concern surrounding neonatal jaundice. Arch Pediatr Adölesc Med 155: 1357-1363.