

Parental Stress in Intensive Care Unit

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Abstract

Aim: Parenteral stress in pediatric intensive care unit is different in mothers when compared to fathers. The main focus of this study is to compare maternal stress to that of paternal stress and the effect of counseling on parenteral stress. *Method:* One hundred parents are interviewed (mother and father separately) using parenteral stress scale, which rates 15 factors on a scale from 1 to 4. *Results:* The average maternal stress score was 3 and paternal stress score was 2.6. After counseling maternal stress came down to 1.6 where as paternal stress was found to be 2. Stress among ventilated cases 3.4. Among male children was 3 and neurological cases was 3.2. *Conclusion:* The stress among mothers in pediatric intensive care is higher than stress in fathers. Parenteral stress was found to be highest in male children and ventilated cases. On counseling the relief in maternal population was statistically significant than the paternal population.

Keywords: Maternal Stress; Paternal Stress; Stress Scoring.

Introduction

Pediatric intensive care unit is a place where the parental stress is a very important factor, which needs to be taken care by the intensive care givers. There were several studies on parental stress in PICU in the recent past. In most of these studies the separation from their child was the most concerned issue for the parents, followed by the honesty in effort put in by the health care providing team [1,2,3]. Other factors include the procedures performed on their child, inability of parents not being able to perform parental duties when their child required the most as perceived by the parents [2,4]. As India is a place with large socio economic diversities the perception of information provided by the health care unit about their child played a very important role in parental stress [7,8]. There was also a variation in factors causing stress in mothers when compared to fathers [5,6]. The main aim of this study is to address the major factors responsible for parental stress in a PICU

and stress perceived by mothers and fathers separately, and relief on effective counseling.

Methods

The study was performed in a 20-bedded PICU in tertiary care center (Navodaya Medical College Hospital) from January 2016 to March 2016. About 100 parents were interviewed. Parents of children from age 1 to 5 years were included. Parents of upper and lower socio economic status were taken equally. Parents of children referred from other centers, parents of children who died within 36 hours of admission were excluded from the study. Children with second PICU admission were not included in the study. Children admitted during the period of study who were not accompanied by parents for various reasons were excluded from the study.

The study was a prospective study in which parental stress score was framed from 15 items and were graded on a scale of 4 for each factor, where the maximum possible score for any parent was 60 and minimum possible score was 15. (Each parent was interviewed separately in vernacular language to avoid inter observer bias. Before starting the interview the parents were explained about the need for it and about the scoring system that includes 1(no stress), 2(some stress), 3(moderately stressful) and

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4(extremely stressful) [9].

Informed consent had been obtained from the parents before study. Ethical committee of the hospital has approved the study. The stress levels were interpreted with assistance from the consultant Psychiatrist of the hospital. Statistical analysis of collected data was performed. For every individual parent stressor score was obtained.

Results

A total of 100 parents were interviewed both mothers and fathers separately. The patient male to female ratio was 1:1. Among them 64% were from rural background and 36% were from urban background. As mentioned earlier 50% were of higher socio economic strata and the remaining were lower.

Out of the admitted children those with CNS disorders were around 45% and 56% were of other miscellaneous conditions. Among the 100 cases admitted 19 cases were ventilated. The stress scores obtained from individual parent for 15 different factors was taken and average for each factor is compiled for mothers and fathers separately and the following results were obtained. The average maternal stress score was 3 and paternal stress score was 2.6. The average of various stress scores pertaining to each factor is given in Table 1. Stress among ventilated cases 3.4 while that of non ventilated children was 2.4. The average score in single male child was found to be 3.2 where as that in single female child were 2.35. And the mean score of stress in parents in single child was found to be 2.8 and that of parents with more than 3 children was 2.4.

Post counseling maternal stress came down to 1.6 and paternal stress has come down to 2.0.

Sl. No	Factors	Mother	Father
1.	Separation from child	3.4	2.8
2.	Painful procedures	3.3	2.6
3.	Inability to visit child frequently	3.0	2.4
4.	Inability to reduce grief of child	3.0	3.0
5.	Unable to provide regular care for child	2.6	2.6
6.	Seeing the child cry excessively	2.8	2.8
7.	Unable to feed the child	3.2	2.2
8.	Long hospital stay	2.7	2.4
9.	Notable to perform daily Work	3.3	2.6
10.	CNS	3.2	3.2
	Others	2.8	2.6
11.	Ventilated	3.6	3.2
	Non ventilated	2.4	1.8
12.	Type of Family		
	Joint	3.2	3.3
	Nuclear	3.1	3.4
13.	Socio Economic Status		
	Lower	2.8	3.2
	Higher	2.6	2.8
14.	Single Male child	3.3	3.1
	Single Female child	2.6	2.1
15.	More than 1 child		
	Male	2.8	2.0
	Female	2.8	1.9

Discussion

There was a wide religious and socioeconomic diversity in the families of parents interviewed during the course of study. Uncertain outcome, painful procedures and separation from children are extremely stressful leading to anxiety and anger among parents, which are to be considered by the health care unit while counseling the parents.

In the current study the stress perceived by mothers was found to be higher than fathers. Mothers felt most stressful due to separation from children and due to

various painful procedures performed on their children. Inability to visit the child and help the child played a major role in stress among fathers. The socioeconomic status and the number of children also played a major role in parental stress.

The severity of the child's illness was a major factor contributing for stress among the parents [10]. The Conditions affecting the central nervous system were found to be the major factors responsible for stress among other conditions leading to PICU admission. Stress was found to be the highest in ventilated children [11]. Parents with single children and single male child experienced more stress than others. The

fear of losing the child played a major part in the stress. There has been not much difference in stress scores in joint and nuclear families. Parents of low socioeconomic strata experienced more stress because of the higher cost of treatment involved.

Coming to the counseling aspect the relief in stress was statistically more significant in mothers compared to fathers. The relief was more in non ventilated children compared to that of the ventilated children. Counseling the parents belonging to higher socio economic strata was more demanding than compared to those of the lower socioeconomic strata, while the educational qualification of the parents played a very minimal role [12].

Conclusion

The stress among mothers was found to be higher. Parental stress was found to be higher in male children and parents of ventilated cases. Neurological conditions were more stressful among others. Relief in maternal stress was statistically significant compared to that of paternal stress.

The perception of more stress in mothers might be due to unable to feed the child and lack of proper knowledge of the condition affecting the child, further studies are required to determine.

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