

## EFFECT OF CBT ON DEPRESSION AMONG PARENTS WITH CHILDREN UNDERGOING COMPLEX CONGENITAL HEART SURGERY & PROLONG ICU STAY

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### Abstract

**Background:** Mothers whose children are born with complex congenital heart disease (CCHD) experience stress during their children's hospitalization in a cardiac intensive care unit (CICU).

**Method:** This descriptive correlational study included 30 biological mothers of childrens admitted to a PICU who had undergone cardiac surgery for CCHD. Maternal and children demographics and responses to the Parental Stressor Scale: children Hospitalization and the State-Trait Anxiety Inventory were collected.

**Results:** The association between hospital stay and depression was found significant.

**Conclusions:** Parents feel more stress when the child admission duration is more.

**Keywords:** PICU., CCHD

### Introduction

Congenital heart disease (CHD) is the most common birth defect, with a rate of 8 per 1000 live births.<sup>1</sup> When infants are born with complex congenital heart disease (CCHD), they require surgery during the early weeks of life with inpatient care provided in a pediatric cardiac intensive care unit (PCICU). Parents experience stress as a result of their infants' diagnosis and hospitalization.<sup>2-4</sup> The parental stress associated with this very serious and acute period surrounding open heart surgery is often overwhelming. Parental stress in neonatal intensive care units (NICUs) and pediatric intensive care units (PICUs) has been well described throughout the past 3 decades. Past research on parental stress has been largely focused on parents of premature infants or on older children in the PICU, but little work has been done to explore the stress of parents who have newborns undergoing cardiac surgery soon after birth.<sup>5-7</sup> These studies provide a foundation for understanding parental stress in the PCICU, but are

insufficient to describe the unique experience for parents of infants undergoing neonatal open heart surgery.

### Methods

#### Setting

Data collection occurred at PICUs at children's hospitals.

#### Sample

Mothers who were at least 18 years of age, with childrens who had undergone cardiac surgery for CCHD were approached for participation in this study. Mothers were excluded if their children had other genetic or congenital abnormalities diagnosed or if the children was undergoing end-of-life care. Informed consent was obtained from each study participant before data collection.

### Results

**Table 1: Socio-demographic variables**

Variable	No. of participants (n=30)	Percentage
Age of couple		
Young age	20	66.66
Middle age	10	33.33
Single parent		
Yes	12	40.00
No	28	60.00

**Table 2: Association between hospital stay and depression**

Depression	Hospital stay		Total
	Less than 15 days	More than 15 days	
Mild and borderline	6	2	8
Moderate	4	3	7
Severe	1	5	6
Extreme	0	2	2
Normal	5	2	7

p-value= <0.05 (significant)

The association between hospital stay and depression was found significant.

### Discussion

Parental feel more stress during the period of child admission. The mother's ability to safeguard her baby from harm or discomfort as well as her ability to be close, care for, and hold her baby. Mothers perceived stress from not being able to perform basic parenting tasks for their babies. Mothering of an infant usually centers around clothing, feeding, diaper changing, and holding. Most, if not all, of these parenting functions are paused during the critical care admission, especially during the immediate postoperative period. Parental role alteration was also reported to be the highest stressor in other studies using the PSS:NICU<sup>8-10</sup>. The complexity of care that postoperative children require is often reflected by their critical appearance in a PICU, which may have influenced why infant appearance and behavior was the highest rated stressor by mothers in this study.

### Conclusion

Parents feel more stress when the child admission duration is more.

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