

## A STUDY TO ASSESS THE LEVEL OF STRESS AMONG MOTHERS OF CHILDREN ADMITTED IN PEDIATRIC ONCOLOGY WARD AT TERTIARY HOSPITAL.

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### Abstract

**Objective:** The study was conducted to assess the level of stress among the mothers of children with oncological conditions and to associate the level of stress with selected demographic variables of the mothers of the children with oncological condition. **Design and methods:** A descriptive design was applied for the study to assess the formulated objectives. **Setting and participants:** A non probability convenience sampling technique was used to select a sample of 30 mothers of children admitted in pediatric oncology ward G block of Sri Ramachandra Hospital, Porur. **Results:** The results of the study showed that the majority of the mothers of children with oncological condition had 50% severe stress, 43.4% had moderate stress and 6.6% had mild stress and there was a significant relationship between age, no. of children, education, occupation, income, type of family and area of residence. **Conclusion:** The study was undertaken to assess the level of stress among mothers of children with oncological condition in Pediatric ward at Sri Ramachandra. The majority of the mothers of children with oncological condition had 50% severe stress, 43.4% had moderate stress and 6.6% had mild stress.

**Keywords:** stress, mothers, oncological children

### INTRODUCTION

*“Strength is born in the deep silence of long-suffering hearts; not amidst joy.” –  
Felicia Hemans*

Early childhood is the most important phase for overall development throughout the lifespan. Brain and biological development during first year of life is highly influenced by an

infant's environment. Early experiences determine health, education, and economic participation for the rest of life. During early childhood children undergo rapid growth that is highly influenced by their environment. Many challenges faced by adults such as mental health issues, obesity, heart diseases, criminality and poor literacy and numeracy can be traced back to early childhood. Children with chronic illnesses are more likely to experience frequent hospital visits. Some of their treatments may be scary or painful. Hospital stays can be frightening and lonely. Common childhood medical problems are cleft and craniofacial abnormalities, developmental disabilities, fever, infections, obesity, and from insect or animal bites.

Cancer is a disease in which a cell or a group of cells display uncontrolled growth beyond the normal limits, invasion into adjacent tissues and sometimes metastasis to other locations in the body through lymph or blood. These three malignant properties of cancers differentiate them from benign tumors, which are self-limited and do not invade or metastasize. Cancer affects people at all ages with the risk for most types increasing with age. The most common cancers of children are: leukemia, brain and other central nervous system tumors, Neuroblastoma, Wilms tumor, Lymphoma, Rhabdomyosarcoma, Retinoblastoma, Bone cancer etc.

Cancers are treated by various therapeutic procedures. Chemotherapy, radiotherapy and surgery are the core treatment modes of cancer in children. Progress in the medical science and technology has resulted in a remarkable improvement of survival rate. The powerful treatment needed to conquer the cancer cells is balanced against unwanted short and long term side effects. Procedures for administering the treatment have been developed with the advancement of the therapeutic care. The advances in the medical care have led to a 5 year survival rate of more than 80% on average for the children with cancer today (NOPHO, 2004). Where chronic disease would ruin their life and make them to spend their entire life in hospital.

A Pediatric Oncology ward is a highly stressful environment to most mothers. The majority of mothers with children admitted at Oncology ward are faced with the possibility of losing them. Stress is simply a fact of nature forces from outside affecting the individual. The individual responds to stress in ways that affect the individual as well as their environment. Cancers are primarily an environmental disease with 90-95% of cases due to lifestyle and environmental factors and 5-10% due to genetics. Common environmental factors leading to cancer death include, tobacco (25-30%), diet and obesity (30-35%), infections (15-20%), radiation, stress, lack of physical activity and environmental pollutants (Patistea, Makrodimitri, & Panteli, 2010).

In general, stress is related to both external and internal factors. Internal factors cause about 14% of all human deaths in 2012 (12.6 million). These environmental factors cause stress to mother and children. External factors include the physical environment, including job, relationships with others and all the situations, challenges, difficulties, and expectations one is confronted with on a daily basis. Internal factors which influence the ability to handle stress includes nutritional status, overall health and fitness levels, emotional well-being, and the amount of sleep and rest (Chen&Miller,2013). Mother's stress is the emotional and physical strains experienced by a child caring or someone with a chronic debilitating disease or life threatening condition. Mothers play an essential role, in caring for child with cancer. Social and economic deficits due to care giving may include lifestyle disruption, less socializing and greater out of pocket and lost productivity cost. Though mothers may feel trapped, isolated, and experience a loss of freedom, their need to be with their child at all times and experience stress related to coping with the heavy load of care giving.

## **Materials and Methods**

The reviewed literature for the study was organized under the headings Literature related to child with oncological condition Literature related to stress among mothers. The conceptual framework of this research was based on Wiedenbach's Helping Art of clinical nursing theory (1964). The tool consisted of demographic variables and parent self-report responses to stress consists of 37 questionnaire. It is a standardized 4 point rating scale (Mahony&Dermis, 2000). A non probability convenience sampling technique was used and the sample size was 30 mothers of children admitted in pediatric oncology ward G block of Sri Ramachandra Hospital, Porur. Descriptive statistics (mean and standard deviation) and inferential statistics (Chi-Square Test) were used to analyze the data and to test the hypothesis. A descriptive design was applied for the study to assess the formulated objectives. The study was conducted in pediatric oncology ward in G Block of Sri Ramachandra Hospital, Porur.

### **Sampling Criteria**

#### **Inclusion criteria:**

##### **Mothers: who's**

1. Age between 21-51 years.

2. Children age between 1-15 years with oncological condition.
3. Willing to participate
4. Understand English or Tamil.

**Exclusion criteria:****Mothers:**

1. Having any medical illness.
2. Undergoing any alternative therapy.
3. Who are divorced and widow.
4. Who's child undergoing surgical treatment.
5. Who's child undergoing any alternative therapy.

**Description of the instrument:**

The instrument used for this study consisted of:

- demographic variables of mothers and children like age, No. of children, Education, Occupation, Income, Type of family, and Area of residence and age, Sex, Diagnosis, Stages of cancer, and Relapse of cancer.
- Parent self-report responses to stress consist of 37 questionnaires. It is a standardized 4 point rating scale (Mahony&Dermis, 2000).

The study was conducted in the Pediatric oncology ward of Sri Ramachandra hospital, Porur, Chennai-116. Based on the inclusion and exclusion criteria 25 mothers were selected for this study through convenient sampling technique. The period of data collection extended from 5/3/2016 to 7/3/2016 (3 days). Time spent for the data collection was 15-20 minutes for each sample. The data was collected through standardized 4 point rating scale. The tool was provided in both Tamil and English. Confidentiality and privacy was assured through out of the procedure.

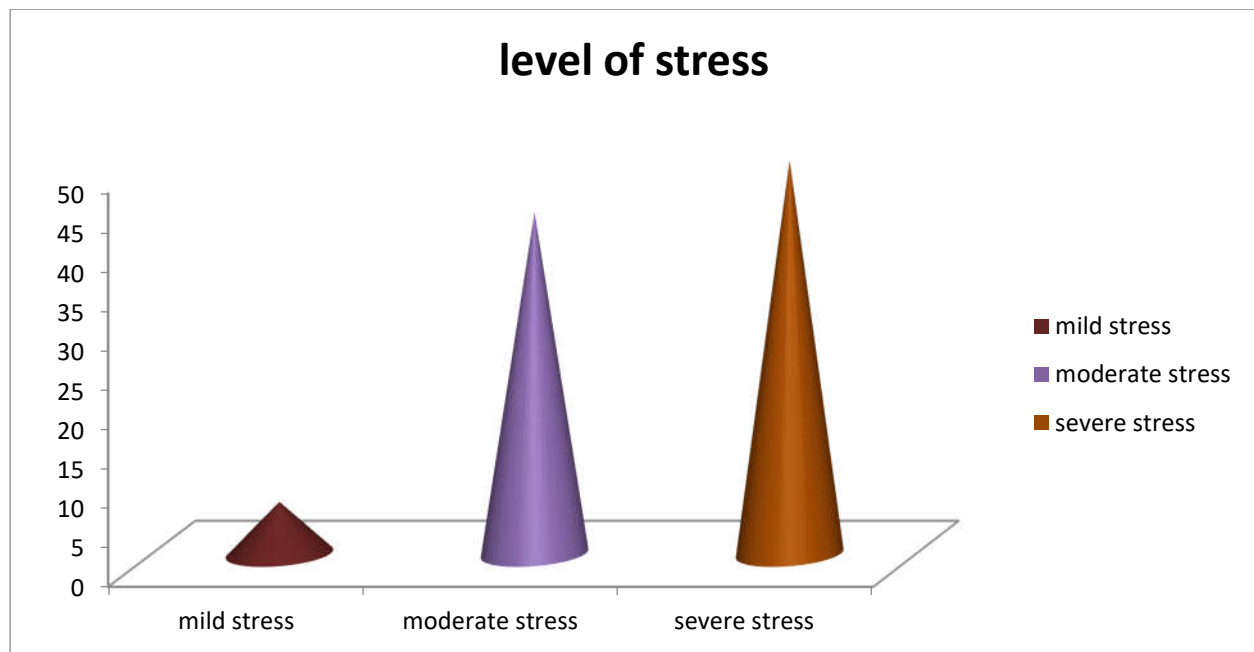
**Findings**

The results of the study showed that the majority of the mothers of children with oncological condition had 50% severe stress, 43.4% had moderate stress and 6.6% had mild

stress and there was a significant relationship between age, no. of children, education, occupation, income, type of family and area of residence.

**Table 1: Frequency and percentage distribution of level of stress among mothers of the children with oncological condition. (N=30)**

S.No	Variable	Mild stress		Moderate stress		Severe stress	
		f	%	f	%	f	%
1.	Mother's stress	2	6.6	13	43.4	15	50



**Fig 1: Percentage distribution of level of stress**

**Table 2: Association between the level of stress and demographic variables among the mothers of children with oncological condition. (N=30)**

Stress Demographic variable		Mild stress		Moderate stress		Severe stress		Chi square $X^2$
		F	%	F	%	F	%	
Age in yrs	21-30yrs	1	3.3	5	16.7	6	20	2.5 (5.35)
	31-40yrs	1	3.3	8	26.7	9	30	
	41-50yrs	0	0	0	0	0	0	
	Above 51	0	0	0	0	0	0	
No. of children	1	1	3.3	4	13.33	8	26.7	1.98 (3.36)
	2	1	3.3	9	30	6	20	
	3	0	0	0	0	1	3.3	
	Illiterate	0	0	0	0	0	0	
	Primary	2	6.67	8	26.7	6	20	

Education	Higher secondary	0	0	3	10	5	16.7	6.50 (10.65)
	Graduate	0	0	2	6.67	4	13.33	
Occupation	Housewife	2	6.67	9	30	12	40	8.35 (10.65)
	Employment	0	0	3	10	3	10	
	Self – employment	0	0	1	3.3	0	0	
Income	Below 10,000	0	0	3	10	7	23.3	4.88 (5.35)
	10,001-20,000	2	6.67	9	30	6	20	
	20,001-30,000	0	0	1	3.3	2	6.67	
	Above 30,001	0	0	0	0	0	0	
Family type	Nuclear	2	6.67	9	30	6	20	4.02 (4.61)
	Joint	0	0	4	13.33	9	30	
Area of residence	Urban	2	6.67	11	36.6	14	46.6	2.8 (4.61)
	Rural	0	0	2	6.67	1	3.3	

### Nursing practice

Nurses play an important role in creating a comfortable environment for mothers. The nurse should give guidance and counseling for the mothers. The nurses can give health education to the mother regarding knowledge on child's condition and alternative therapy. The nurse must show respect, kindness and compassion to the mother. The nurse should not oppose the spirituality to religion and provide diversional therapy to the mother like communicating with mothers of other children.

### Nursing education

The nursing curriculum needs to be strengthened to enable nursing student to identify the factors of compliance and non-compliance of stress. It is considered as important for all mothers of the children undergoing chemotherapy to know the therapy and the drugs used, action and side effects of the drugs. It will give a better knowledge and attitude for the student nurses to function effectively as future staff nurse.

**Nursing administration**

The nurse administration should take active part in recommending and health policy making the developing protocol, procedure and standing ores related to health education on bounding stress. Nurse administrator can appoint a health educator for the purpose of educating the knowledge for mother and children. It provide the adequate allocation of budget manpower to implement effective health education which helps the mother and children to gain knowledge and confident.

**Nursing research**

The findings of the study help professional nurse and students to develop inquiry by providing a base for conduction of research. The professional responsibility of the nurses as centered on provision of high quality nursing intervention to the problems identified and to promote positive health outcomes. The new knowledge obtained through the study would enhance evidence based nursing practice and helps to defer the finding and implement. Provide appropriate intervention and conduct classes to improve knowledge on the condition and level of stress.

**Recommendation**

1. Replication of this study in large samples in large number of intervention.
2. Similar study can be done on the children with oncological condition.
3. A comparative study can be undertaken to compare to finding of the urban and rural mother.
4. The same study can be conducted by using experimental design.
5. Evaluate study can be done by structured teaching method to assess the level of stress among mothers.

**CONCLUSION**

The study concludes that majority of majority of the mothers of children with oncological condition had 50% severe stress, 43.4% had moderate stress and 6.6% had mild stress and there was a significant relationship between age, no. of children, education, occupation, income, type of family and area of residence.



### **SOURCE OF FUNDING**

The investigator had no external source of funding and the source was self funding.

### **ETHICAL CLEARANCE**

Permission was obtained from HOD of Pediatric Department and from the Assistant Professor of Pediatric Oncology department. Permission was obtained from the ward in charge before the data collection procedure. The purpose and procedure of this study was explained to the mothers and verbal consent was obtained from them. The tool was provided in both Tamil and English. Confidentiality and privacy was assured through out of the procedure.

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