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A mixed method research on experience of stress among mothers of children admitted in Pediatric Intensive Care Unit of Indira Gandhi Medical College and Hospital, District Shimla (Himachal Pradesh)

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ABSTRACT

The Pediatric Intensive Care Unit is a multidisciplinary unit that provides care for infants, children and adolescents who become critically ill or injured. Admission of a child to the Pediatric Intensive Care Unit is a stressful situation for the mothers who are accompanying them in PICU. It is very difficult to explain the devastating stress experienced by mothers. Aim & objective: The aim of the study is to assess the level of stress, the qualitative experience of stress and its association with selected demographic variables. Methods: The study has adopted Mixed Method Research design and was conducted in PICU K IGMC& Hospital, Shimla. A total of 32 (total enumeration) and 9 mothers (purposive) were taken respectively for quantitative and qualitative interview. A semi-structured interview schedule, Perceived Stress Scale and Qualitative interview were used for data collection. Results: Data analysis was done by using the descriptive, inferential statistics, Colaizzi's steps and by mixing of data. The study results reveal 6 (18.8) of mothers had high and 26 (81.3) had a severe level of stress. The type of family, family budget alters due to the illness of child were found to have a strong association at 0.05 level of significance. The causes of stress, the impact of stress, predominant thoughts/feelings, adaptive thoughts and behaviors, perception about medical care/ health care professionals, information needs and perception of support system emerged as the main themes of the qualitative study. In mixing the quality of stress is explored in the forms of the impact of stress and cause of stress etc. has clearly supported the level of stress among mothers. Conclusion: The results of the study show that mothers are highly stressed due to the child's admission in PICU. So its emphasis on the use of coping strategies, grievance and counselling cells in the hospital.

Keywords— PICU, Stress, Mother

1. INTRODUCTION AND BACKGROUND

The Pediatric Intensive Care Unit is a multidisciplinary unit that provides care for infants, children and adolescents who become critically ill or injured. Admission in a Pediatric Intensive Care Unit (PICU) is often a transitional phase in the child's recovery from a critical illness. It is a place where mechanical ventilation, tracheostomy and other lifesaving procedures like Cardiopulmonary resuscitation, intubation are done. When parents, guardian and sibling witness these procedures it causes great stress and mental instability among them which leads to unexplained pain and devastating stress. Stress in human life includes tension, anxiety, worry and pressure. Stress is the tension producing factors and it leads to many other stresses listed as physical, physiological, emotional, cognitive, psychological and parental, economical stress and change in parental role etc. A child's illness and hospitalization may stir up intense emotions for parents: concern and anxiety are often mixed with feelings of insecurity, guilt, fear and grief.

1.2 Need for the study

The present study was undertaken to assess the stress and explore the experiences of the parents while being with their children in the Pediatric Intensive Care Unit. It helps in exploring the hidden feelings of the mothers with their child's illness. This helps in changing the mechanical attitude of the health care professionals towards parents of the ill child. This also changes our focus of patient Centered care to family Centered care. According to the (HMIS) Health Management Information System data, out of 20.93 million live births during 2012-13, 18.7 million were weighted at birth and 3.14 million babies (17%) were found to be

having weight less than 2.5 Kg this low birth weight can lead preterm birth to problems like birth asphyxia, neonatal jaundice and many other problems which ultimately leads to High PICU admission rates¹.

1.3 Conceptual framework

The conceptual framework for this research is guided by both the adjustment and adaptation phase of the Resiliency Model. The focus of this study is stress and it disturbs the normal physiological or psychological functioning of an individual and coping is to contend with, face, or encounter dangers and difficulties and to manage or deal competently with a situation or problem. The modifying variables utilized for this study are the demographic variables which may influence adjustment or adaptation indirectly and directly and include: clinical variables (diagnosis, admission to PICU, age of child, Diagnosis of child, length of PICU stay) and parent demographic variables (gender, age, marital status, no. of children, and socioeconomic status). The goal of both phases of the Resiliency Model of Family Stress, Adjustment and Adaptation, is successfully coping in response to a stressor.

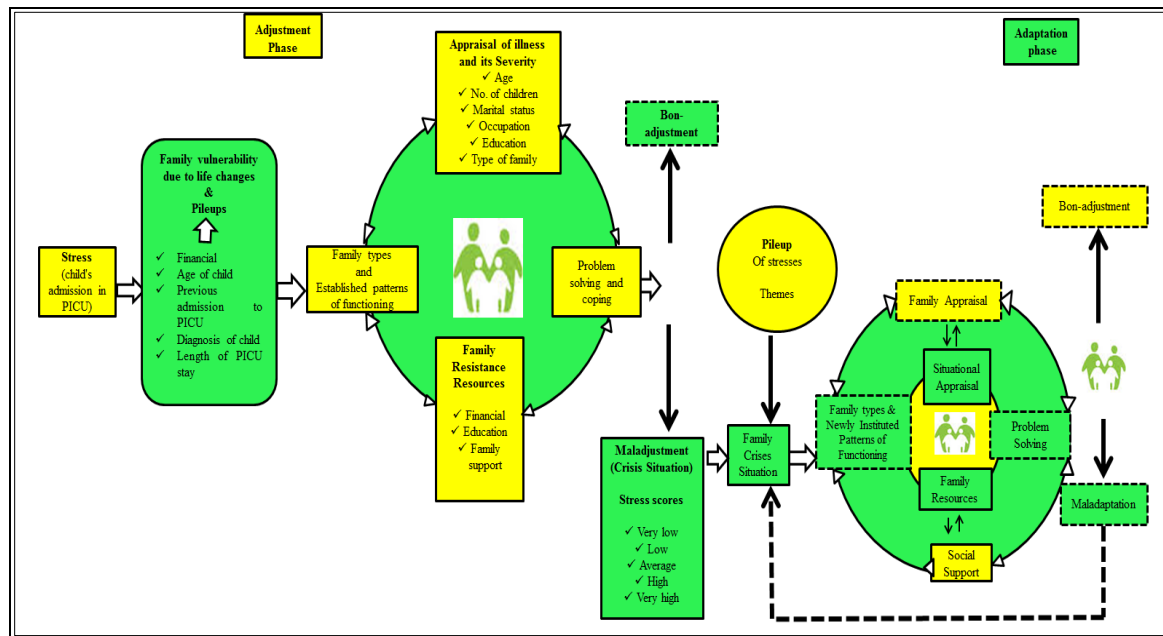


Fig. 1: The modified resiliency model of family stress, adjustment and adaptation

2. REVIEW OF LITERATURE

Section I: Literatures related to the stressors among parents with children in the Pediatric Intensive Care Unit.

A descriptive study with the purpose of description of sources of stress and stress symptoms over time for mothers with a child in the pediatric intensive care unit (PICU) and a comparison with mothers with a child in a general care unit (GCU). The sample contained 31 PICU and 32 GCU mothers who were studied during four time periods over 6 months using the Parental Stressor Scale: PICU and the Symptom Checklist-90-Revised. Results showed that PICU mothers were stressed by the total intensive care experience and the use of monitors. PICU mothers experienced more stress symptoms than the GCU mothers did during all four time periods².

Section II: Literature related to the stress and coping strategies of parents with children in the Pediatric Intensive Care Unit.

A prospective observational study on parental stress in PICU of a tertiary care medical college hospital in Mangalore. The study samples were parents of children in PICU with a sample size of 100. The Parental Stress Scale (PSS: PICU), was used to assess the stress. The results revealed that the average parental stress score was 3.5. The main causes of extremely stressful situations where the sight of their child being unresponsive, the sight of monitors & equipment in PICU, other sick children in PICU, crises in other children in the PICU. Parents of children who got admitted in PICU for the first time were more stressed. Younger parents were more stressed than older parents, irrespective of the illness and clinical status. Age of the child, sex, socioeconomic status, urban/rural, father/mother did not vary stress levels, all had similar stress level (score>3). Among the procedures, the majority (52%) parents felt intravenous cannulation as more stressful followed by blood sampling (43%). Young parents and first PICU admission were more stressful. Socioeconomic status, residential area and age of children did not affect the level of stress. Many of these stress factors can be looked into and remedial steps can be taken to relieve some of this stressors³.

Section III: Literature related to the experiences of parents with children in the Pediatric Intensive Care Unit

A qualitative study conducted on parents' experiences of having their child admitted to a paediatric intensive care unit. The total study sample was 12. The analysis revealed two categories: 'being involved' and 'being informed' with seven subcategories: 'caring for the parents', 'security and trust', 'altering the parental role', 'stress and fear', 'the importance of knowing', 'interaction in the care process' and 'being prepared'. An overarching theme emerged: the experience was 'like being in another world'. The study concludes that a child's admission to a paediatric intensive care unit is a stressful situation, and for the parents to be able to handle the anxiety, stress, emotion and fear they need to be informed of and involved in their child's care⁴.

3. RESEARCH METHODOLOGY

The aim of the study was to assess the stress among mothers of children admitted in the Pediatric Intensive Care Unit. This chapter presents the methodology to find a solution for the research problem.



Fig. 2: Schematic diagram of research methodology

4. DATA ANALYSIS AND INTERPRETATION

In current study data analysis is described under the following sections:

Section A: Background information of the mothers

Section B: Association of the research findings with selected demographic variables.

Section C: Qualitative analysis of the experience of stress.

Section D: To prepare nursing intervention model based on findings for the management of stress.

Section E: Mixing and discussion of the quantitative and qualitative data.

4.1 Section A: Background information of the mothers

Table 1: Distribution of mothers based on background information, N=32

S. No.	Variables		F	%
1.	Age (in years)	Less than 18	2	6.3
		19-29	22	68.8
		30-39	7	21.9
		More than 40	1	3.1
2.	Religion	Hindu	29	90.6
		Muslim	3	9.4
3.	Total family members	0-2	1	3.1
		2-4	12	37.5
		5 & more than 5	19	59.4
4.	Type of family	Nuclear	23	71.9
		Joint	5	15.6
		Extended	4	12.5
5.	Type of marriage	Married	32	100
6.	Total no of children	1	11	34.4
		2	11	34.4
		3	10	31.3
7.	Education status	No formal education	8	25
		Primary	4	12.5
		Secondary/ Higher secondary	10	31.5
		Graduate & above	10	31.5
8.	Occupation	Government	4	12.5
		Private	3	9.4
		Labourer	1	3.1
		Housewife	24	75.0
9.	Monthly income (in rupees)	Less than 10000	9	28.1
		10000-20000	8	25.0
		20000-30000	6	18.8
		More than 30000	9	28.1
10.	Fathers education	No formal education	1	3.1
		Primary	7	21.9
		Secondary/Higher secondary	22	68.8
		Graduate & above	2	6.3
11.	Fathers occupation	Government	12	37.5
		Private	16	50.0
		Labourer	4	12.5

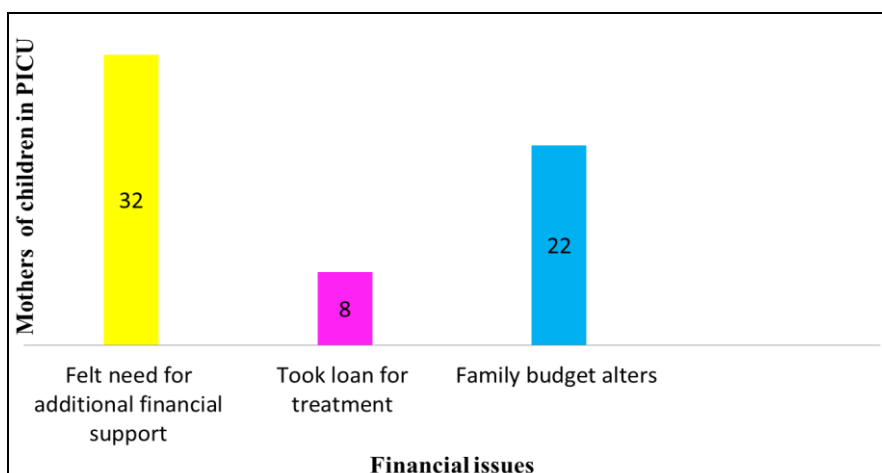


Fig. 3: Bar diagram showing the distribution of mothers based on financial issues (N=32)

Table 1 Depicts that 22(68.8%) of mothers belonged to the age group of 19-29 years another 7(21.9%) belonged to the age group of 30-39 years and remaining 1(3.1%) were in the age group of more than 40. It was found out that 29(90.6%) of them belongs from the Hindu religion and 3(9.4%) were from the Muslim religion. The 19(59.4%) has 5 & more than 5 as total family members whereas only 1(3.1%) of the mother has family members between 0-2. Majority of the mothers 23(71.8%) has nuclear families where as 4(12.5%) of them belongs to the joint families. All the mothers 32(100%) were married. The 11(34.4%) of the mothers

has 1 & 2 children and 10(31.3%) has 3 children. The 10 (31.5%) of them were having an education level of secondary/higher secondary, graduate and above where as 4(12.5%) has a primary level of education. Majority of 24(75%) were a housewife and 1(3.1%) was working as a labourer. The 9(28.1%) mothers have a family income less than 10,000 & more than 30,000 followed by 6(18.8%) of them has family income between 20,000 -30,000. It also depicts that 22(68.8%) of fathers has a secondary/higher secondary level of education and 1(3.1%) has no formal education. In occupation 16(50%) of the fathers were doing private jobs and 4(12.5%) were a labourer.

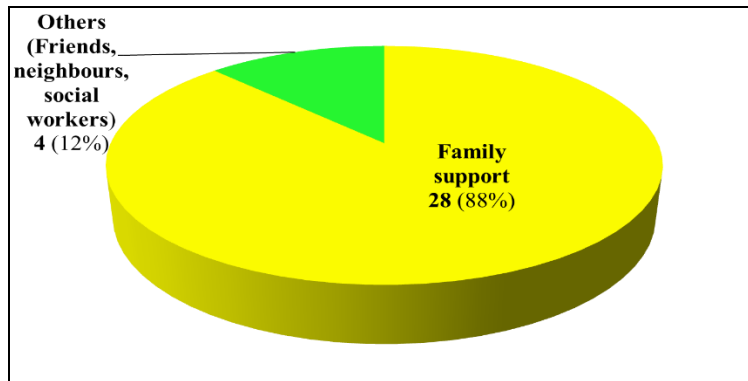


Fig. 4: Pie diagram showing the distribution of mothers related to the source of financial support (N=32)

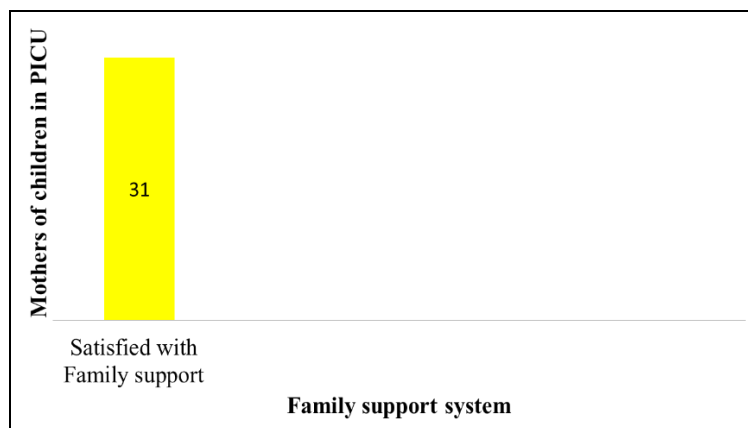


Fig. 5: Bar diagram showing the distribution of mothers on the basis of family support system (N=32)

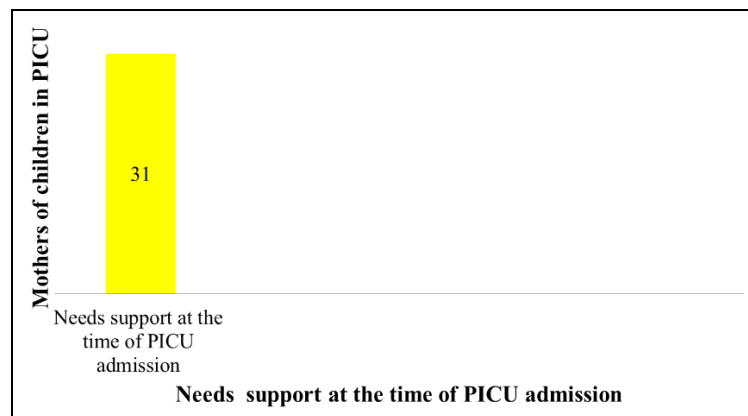


Fig. 6: Bar diagram showing the distribution of mothers need support at the time of PICU admission (N=32)

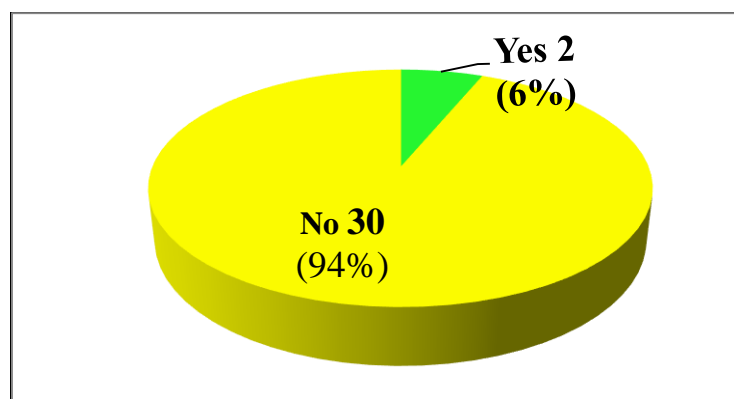


Fig. 7: Depicts that 30(93.8%) of the mothers has no previous PICU exposure and only 2(6.3%) of them has Previous PICU exposure (N=32)

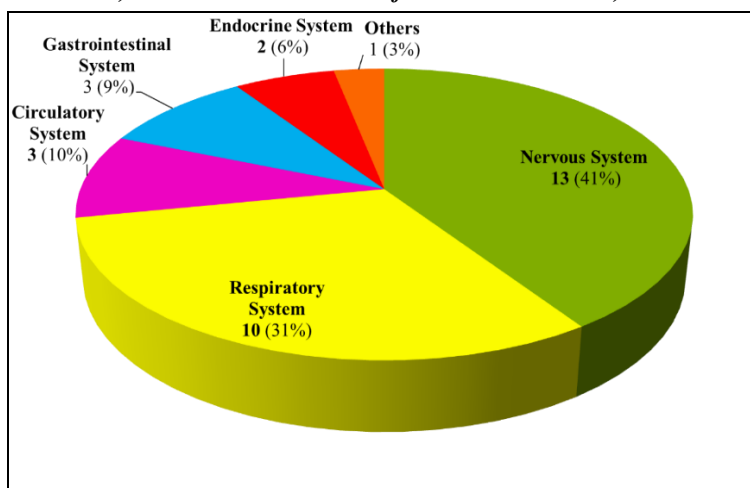


Fig. 8: Pie diagram showing the frequency distribution of children based on the systems affected (N=32)

Table 2: Clinical diagnosis and length of hospital stay of the children admitted in PICU N=32

S. No	Diagnosis	Length of hospital stay
1.	Won- Willibrands disease with epistaxis anaemia	2
2.	Acute Bacterial Meningitis	6
3.	Hypoglycaemia	4
4.	Acute Bacterial Meningitis	9
5.	TBM with Communicating Hydrocephalus	31
6.	Gastroenteritis	1
7.	Bronchopneumonia with severe illness	4
8.	Bronchopneumonia with severe illness	1
9.	Early onset of sepsis	2
10.	Birth asphyxia	2
11.	Failure to thrive & respiratory distress	11
12.	Acute febrile encephalopathy with tubercular meningitis	10
13.	Status Epilepticus	12
14.	Status Epilepticus	15
15.	Congenital CMV infectionwith extracephalic cholestasis	23
16.	Late onset of sepsis with pneumonia	11
17.	Status Epilepticus	10
18.	Hypogyemia	3
19.	Care of right sided craniotomy	4
20.	Hyaline membrane disease	7
21.	Communicating Hydrocephalus	1
22.	Bronchopneumonia with severe bronchitis	1
23.	Pyrexia of unknown origion	1
24.	Shock	5
25.	Pyrexia of unknown origion	4
26.	Bronchopneumonia with severe bronchitis	7
27.	Lober Pneumonia	7
28.	Pyogenic Meningitis	1
29.	Birth asphyxia	5
30.	Shock	6
31.	Bronchopneumonia	8
32.	Lober Pneumonia	7

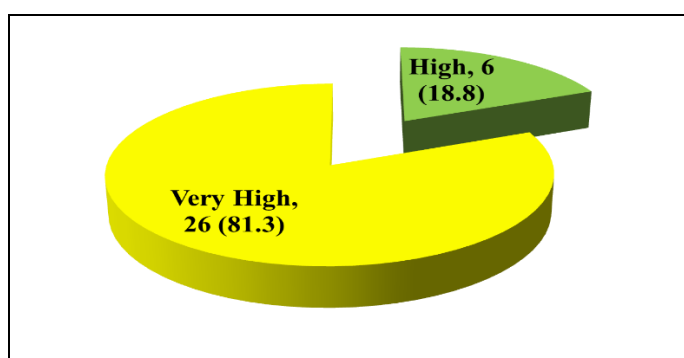


Fig. 9: Pie diagram shows the Perceived Stress Scores of mothers in the Pediatric Intensive Care Unit (N=32)

Table 3: Depicts the level of stress among mothers N=32

S no.	Level of stress	F	%
1.	High	6	18.8
2.	Very high	26	81.3

Table 3 Reveals that 26(81.3%) mothers have a very high level of stress and 6(18.8%) has a high level of stress and no mother falls in the category of very low, low and average stress.

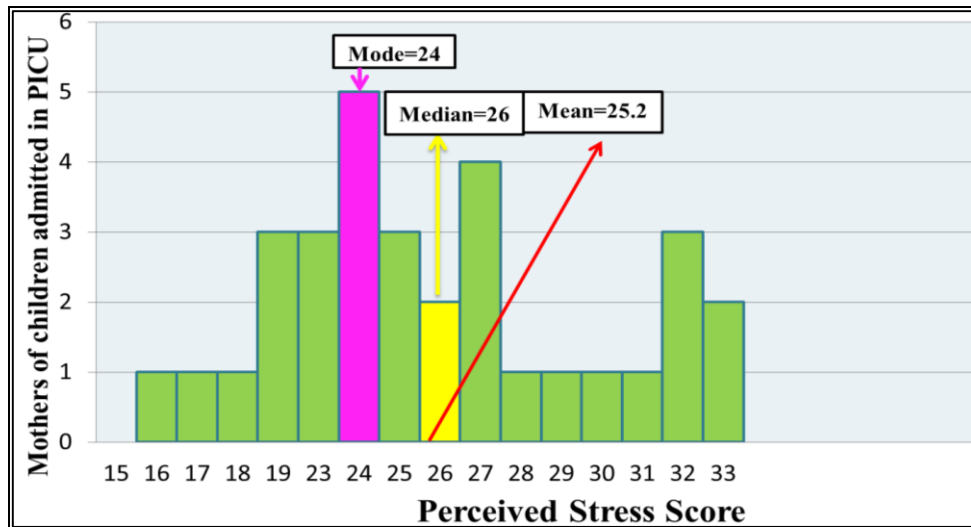


Fig. 10: Histogram depicts distribution of mother’s with minimum 16 and 33 as Perceived Stress Scores. And mean, mode median (N=32)

4.2 Section B: Association between the level of stress and selected demographic variables.

Table 4: Association between the levels of stress with selected demographic variables. N=32

S no.	Variable	Chi square value	Df	P value
1.	Age	3.357	3	.340
2.	Religion	.492	1	.483
3.	Total no. of family members	5.254	2	.072
4.	Type of family	9.953	2	.007*
5.	No. of children	4.550	2	.103
6.	Qualification	3.556	2	.169
7.	Occupation	3.556	3	.314
8.	Total monthly income	6.199	3	.102
9.	Fathers education	1.368	2	.505
10.	Occupation	1.055	3	.788
11.	Mostly supported by	2.959	2	.228
12.	Took loan for treatment of your child	.274	1	.601
13.	Family budget alters due to the illness of a child	4.311	1	.038*
14.	Satisfied with the support system	.238	1	.625
15.	Needs support at the time of PICU	.238	1	.625
16.	Previous PICU exposure	.492	1	.483

Table 4 Depicts type of family and Family budget alters due to the illness of the child has a very strong association with stress levels at 0.05 level of significance.

Table 5: Depicts the degree of association of stress of the mothers with associated demographic variables. N=32

S no.	Variable	Stress		Total	
		16-20 High	21 & Over		
1.	Type of family	Nuclear	3 (13.0%)	20 (87.0%)	23 (71.8%)
		Joint and Extended	3 (75.0%)	6 (25.0%)	9 (28.1%)
		Total	6(18.75%)	26(81.25%)	32 (100%)
2.	Family budget alters due to PICU admission	Yes	2 (9.1%)	20 (90.9%)	22 (68.75%)
		No	4 (40.0%)	6 (60.0%)	10 (31.25%)
		Total	6(18.75%)	26(81.25%)	32 (100%)

Table 5 Depicts in the type of family the nuclear families 20(87.0%) has very high stress as compared to the joint 5(100.0%) and extended families 1(25.0%). 20(100.0%) mothers believe that family budget alters due to child’s admission in PICU whereas 6(60.0%) of mothers disagree on the same.

4.3 Section C: Qualitative analysis of data

Table 6: Distribution of mothers based on demographic variables. N=9

S no.	Variables	Personal profile of the subjects	F	%
1.	Age (in years)	19-29	6	66.7
		30-39	1	11.1
		More than 40	2	22.2
2.	Religion	Hindu	9	100
3.	Total family members	2-4	3	33.3
		5 & above	6	66.7
4.	Type of family	Nuclear	6	66.7
		Joint	1	11.1
		Extended	2	22.2
5.	Marrital status	Married	9	100
6.	Total no of children	1	3	33.3
		2	3	33.3
		3	3	33.3
7.	Education status	No formal education	1	11.1
		Primary	2	22.2
		Secondary/ Higher secondary	4	44.5
		Graduate & above	2	22.2
8.	Occupation	Government	2	22.2
		Private	2	22.2
		Housewife	5	55.6
9.	Monthly income (in rupees)	Less than 10000	1	3.1
		10000-20000	1	3.1
		20000-30000	4	12.5
		More than 30000	3	9.4
10.	Fathers education	No formal education	2	22.2
		Primary	3	33.3
		Secondary/Higher secondary	3	33.3
		Graduate & above	1	11.2
11.	Fathers occupation	Government	4	44.4
		Private	3	33.3
		Labourer	2	22.3

Table 6 Depicts that 7(33.3%) of mothers belonged to the age group of 30-39 years remaining 1(11.1%) were in the age group of more than 40. It was found out that 29(90.6%) of them belongs from the Hindu religion and 3(9.4%) were from the Muslim religion. The 6(66.7%) has 5 & above as total family members whereas only 3(33.4%) of the mother has family members between 2 and 4. Majority of the mothers 6(66.7%) belongs from nuclear families where as 1(11.1%) of them belongs to the joint families. All the mothers 9(100%) were married. The 3(33.3%) of the mothers have 3, 2, 1 children. The 4 (44.5%) of them were having an education level of secondary/higher secondary 1(11.1%) has no formal education. Majority of 5(55.6%) were a housewife and 2(22.2%) was working as government and private employee. The mothers 4(12.5%) has family income less than 20,000-30,000 and 1(3.1%) of them has family income less than 10,000 & 10,000-20,000. It also depicts that 3(33.3%) of fathers have a primary level of education and 1(11.2%) has graduation and above as level of education. In occupation 4(44.4%) of the fathers are a government employee and 2(22.3%) was a labourer.

Table 7: Distribution of mothers based on financial support and issues. N=9

S no.	Variables	Personal profile of the subjects	f	%
1.	Felt need for additional Financial support	Yes	9	100
2.	Mostly supported by	Self	8	88.9
		Others (friends, social workers, neighbours)	1	11.1
3.	Took a loan for treatment of your child	Yes	1	11.1
		No	8	88.9
4.	Family budget alters due to the illness of a child	Yes	5	55.6
		No	4	44.4

Table 7 Depicts that 9(100%) of the mothers has felt the need for financial support. The 6(66.7%) of them were supported by family and 1(11.1%) were supported by others (friends, social workers, neighbour's). Majority 8(88.9%) of them has not taken any loan and 1(11.1%) have taken a loan for the treatment of their children admitted in PICU. Majority 5(55.5%) has the opinion that family budget alters due to the child's illness whereas 4(44.4%) refuses on the same opinion.

Table 8: Distribution of mothers based on the family support system. N=9

S no.	Variables		f	%
1.	Satisfied with the family support system	Satisfied	6	66.7
		Not-satisfied	3	33.3
2.	Needs support during the time of child's admission in PICU	Yes	8	88.9
		No	1	11.1

Table 8 Depicts 6(66.7%) of mothers are satisfied and 3(33.3%) of mothers are satisfied with the family support system at the time of PICU admission. And 8(88.9%) mothers felt the need for support and only 1(11.1%) mother’s doesnot feel any need for support at the tie of PICU admission.

Table 9: Distribution of mothers based on the clinical profile of the child. N=32

S no.	Variables	f	%
1.	Previous PICU exposure	9	100
	Yes		
	No		

Table 9 Depicts that 9(100%) of the mothers as previous PICU exposure. Colaizzi’s (1978) method used to guide the analysis. It consists of the following seven steps:

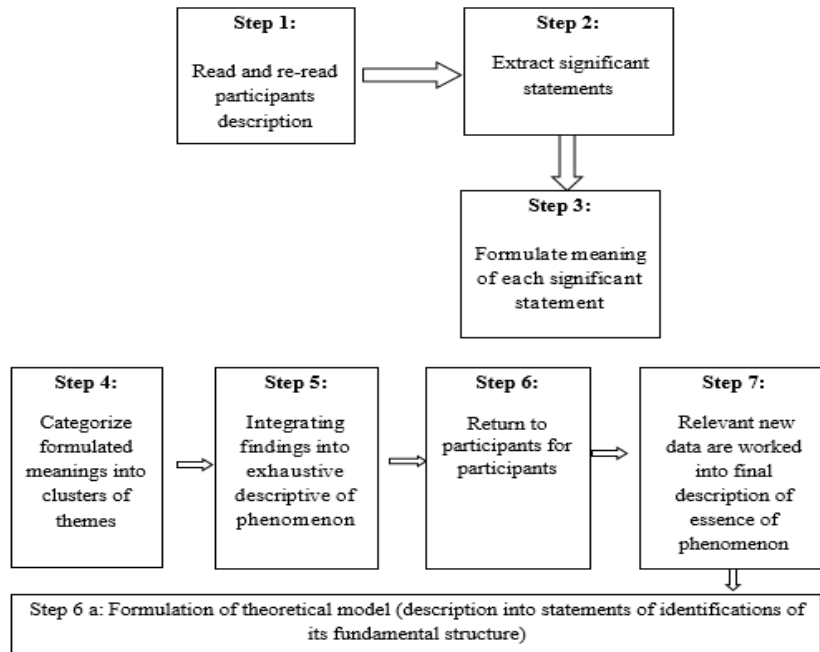


Fig. 11: Analysis by using Colaizzi’s procedural steps Cluster of themes

After careful analysis of the transcript of the in depth interview, so many themes and under which various sub themes have emerged. A total of 119 responses were evolved from the transcript audio taped interviews. Out of which 264 formulated meanings were derived because some of the responses emanating from the study were not exclusive but are interconnected and overlapping. These responses were grouped under various subthemes under the main 7 themes.

Table 10: Clusters of the themes with frequencies of formulated response N=9

S. No.	Clusters of themes	f (%)
1.	Causes of stress	
	1.1 Child’s illness (60)	
	a) Diagnosis	9 (15)
	b) Hospitalization	16 (26.66)
	c) Change in symptoms	3 (5)
	d) Worsening condition	14 (23.33)
	e) Long hospital stay	18 (30)
	1.2 Uncertainty about the (42)	
	a) Condition and progress	9 (21.4)
	b) Reports	11(26.19)
	c) Treatment	6 (14.2)
	d) Outcome of child’s illness	16 (38)
	1.3 Lack of supportive behavior from doctors and staff (32)	
	a) Inadequate information sharing by health professionals	13 (40.62)
	b) Inadequate communication	19 (59.37)
	1.4 ICU atmosphere (18)	
	a) Monitors, alarm	12 (66.66)
	b) Other sick children in ICU	6 (33.33)
	c) Worsening of own & other children conditions	4 (100)

	d) Treatment and procedures	12 (100)
	1.5 Inability to care for child 6	6 (100)
	1.6 Staying away from family 16	
	a) Concern about other children at home, family members	16 (100)
	1.7 Financial constrains/problems	24 (100)
	1.8 Inadequate physical facilities (8)	
	a) Place to sit, sleep	6 (75)
	b) Toilet	2 (25)
2.	Impact of stress	
	2.1 Physical (37)	
	a) Headache	9 (24.32)
	b) Decreased food intake	9 (24.32)
	c) Cough, cold,	1 (2.7)
	d) Inability to work	5 (13.51)
	e) Sleep	9 (24.32)
	f) Abdominal pain	1 (2.7)
	g) Backache	3 (8.1)
	2.2 Psychological (39)	
	a) Inability to concentrate	9(23.07)
	b) Withdrawal	1(5.1)
	c) Loss of parental role	10(2.5)
	d) Fear	18(46.15)
	2.3 Financial	24(29.26)
3.	Predominant thoughts/feelings (82)	
	a) Cause of illness- why it happened	6(7.3)
	b) Progress of child's conditions	2(4.8)
	c) Treatment outcomes	16(19.51)
	d) Financial issues	24(29.26)
	e) Fear of loss	11(14.63)
	f) Feelings: helplessness, guilt, anxiety, fear, bargaining, frustration, hopeful	20 (2.4)
4.	Adaptive thoughts and behaviors (91)	
	a) Belief in fate, Karma	3(5.4)
	b) Prayer	14(15.38)
	c) Trust in god	22(24.17)
	d) Seeking help from others	7(7.6)
	e) Appreciate family support	8(8.7)
	f) Satisfaction with medical care	9(9.8)
	g) Clarifies doubts with medical care professionals	8(8.7)
	h) Compare with more sick children	18(19.7)
5.	Perception about medical care/health care professionals (64)	
	a) Inadequate information haring	14(21.8)
	b) Lack of trust	23(37.5)
	c) Satisfaction	10(17.1)
	d) Full responsibility to doctors	12(20.31)
	e) Blames doctors	2 2(3.1)
6.	Information needs (59)	
	a) Childs condition	36(61.01)
	b) Investigations	13(20.33)
	c) Procedures	8(13.55)
	d) Monitors	3(5.08)
7.	Perception of Support system (13)	
	a) Husband	4(38.4)
	b) Others family members	8(61.53)

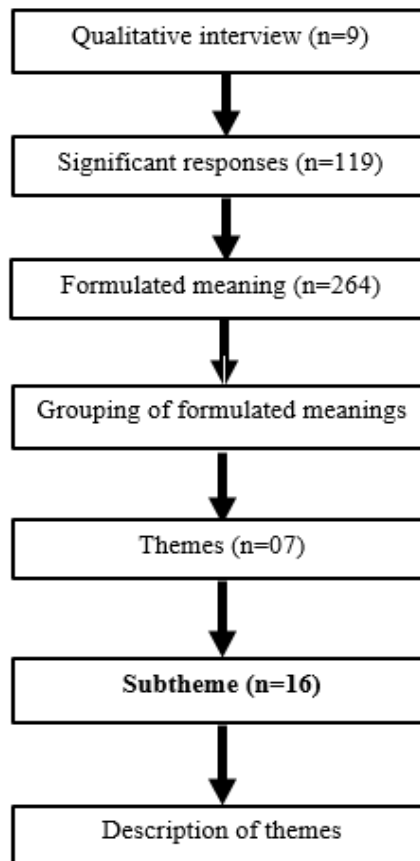


Fig. 12: Summary of data analysis

4.4 Section D: Nursing intervention model based on findings for the management of stress.

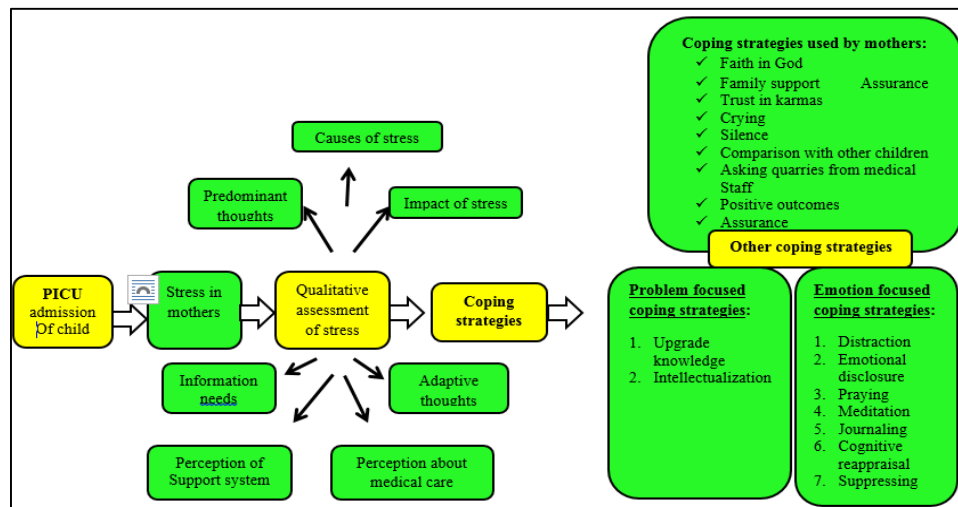


Fig. 13: Nursing intervention model of coping strategies

4.5 Section E: Mixing and discussion of the quantitative and qualitative data.

This study was conducted on the mothers of children admitted in the Paediatric Intensive Care Unit of Indra Gandhi Medical College and Hospital Shimla. The aim of the study was to assess the stress among mothers by using a mixed method approach.

The purpose of the study was to understand the various types of stress experienced by mothers in quantitative form i.e. the overall stress and their feelings or experiences qualitative form of stress related to various types of stress which they experienced when their child was admitted in PICU.

Mixed method approach was used to assess the stress and triangulation is done. Mixing is done by using discussion mode. The quantitative results of the research show that all mothers have high and very high stress with Mean \pm SD as 25.37 ± 4.7 and range is 17. And the qualitative approach has helped in finding various types of stresses and the stress which is dominant in all. The various themes have emerged from the study. And these are psychological and emotional intensity, hospital environment, family and societal impact, belief & spirituality, economic and job impact etc. Out of all these one fifty responses were under the theme psychological or emotional impact and seventy one responses were under the theme hospital environment. So experiences related to psychological problems emerged as the main theme from the transcribed audio taped in depth interview recording. The results of both quantitative and qualitative research support each other with 81.3% of samples with very high stress and 18.8% of samples

with high stress. The similar results are shown in qualitative research with different types of stresses in the form of various themes and the percentage of responses falling in each category. The quantitative results also reveal that mothers face a lot of stress when the child got admitted in PICU for the first time even though if they have previous PICU experience. The quantitative data shows that 2(6.3%) of mothers has the previous impact of hospitalization whereas 30(93.8%) of mothers children first time got admitted to PICU. The same data is supported by the qualitative interview of a mother who says admission of a child to PICU is always stressful irrespective of your no. of exposure to that situation. The use of PSS which consists of 10 items and shows the impact of stress on mother also reveals that during the period of stress mother was not able to do focus on her daily tasks, she was worried about her family members, no focus on work, the priority was child's health only. She was not able to take care of her own health. The same results are revealed by the qualitative results where the mother is tensed about her family life, alteration in her daily tasks, and botheration about the health of other family members. The interviews also reveals that the mother undergoes various health problems such as lack of sleep, hunger, backaches, tension, headache and many more.

Other findings of quantitative part show that mothers undergo financial stress i.e. 22(68.8%) of mothers agrees on the conclusion that due to child's admission in PICU the family budget alters whereas 10(31.3%) disagrees on the same concept. In the qualitative interviews the Economic and job impact also immersed as one of the major themes with 19 statements and subthemes were worried about financial expenses has 13(68.45%) statements and 6(31.5%) were in stress due to the feeling of jobless and effect on the job. Quantitative part also highlights that 8(25%) of families took a loan for treatment of child during PICU stay. It signifies the impact of financial stress on mothers during the period of the PICU stay.

Qualitative interviews show that most of the mothers were supported by the use of self-support and family members support at the time of hospitalization. The concept of support is more justified by the quantitative findings whereas 6(18.8%) mothers were self-supported, 22(68.8%) were supported by family and 4(12.5%) were supported by friends, social workers and neighbors. Data also reveals that 31(96.9%) of mothers were satisfied with family support at the time of PICU stay.

The qualitative data also highlights the other themes such as belief in fate, trust in god, Hospital environment, Perception towards health care services, Attitude towards professionals, information system and predominant thoughts and feelins as the other theme's which are as such not measured by the quantitative tool i.e. Perceived Stress Scale. These themes also come as the major findings of the qualitative interview and tell about the hidden feelings of the mothers. Major findings of the study according to the objectives are as follows:

- (a) **To assess the level of stress among mothers of children admitted in the Pediatric Intensive Care Unit of Indira Gandhi Medical College & Hospital:** In the present study, results show that 26(81.3%) mothers have very high stress and 6(18.8%) has a high level of stress and no mother falls in the category of very low, low and average stress.
- (b) **To find the association of level of stress with selected demographic variables:** In the present study, results reveal that type of family and family budget alters due to the illness of the child has a very strong association with stress levels at 0.05 level of association. Among the type of families, the nuclear families 20(87.0%) has very high stress as compared to the joint 5(100.0%) and extended families 1(25.0%). 20(100.0%) mothers believe that family budget alters due to child's admission in PICU whereas 6(60.0%) of mothers disagree on the same.
- (c) **To explore the experience of stress among mothers of children admitted in the Pediatric Intensive Care Unit of Indira Gandhi Medical College and Hospital:** The Causes of stress, the impact of stress, predominant thoughts/feelings, adaptive thoughts and behaviors, perception about medical care/health care professionals, information needs and perception of Support system emerged as the main themes of qualitative research.

5. ASSUMPTIONS

- Information provided by mothers will present their true feelings.
- Admission of a child to the Pediatric Intensive Care Unit (PICU) is a stressful experience for mothers.
- The stress may vary among mothers of children admitted in PICU.

6. STRENGTHS OF THE STUDY

- The present study measures the complex experience of stress by mothers which can be not measured easily.
- The study has Diversity of participants which includes mother, grandmother, and father and staff nurse.
- This is the first study to measure the stress by using the triangulation technique.
- The use of triangulation technique explores many hidden areas of mothers stress which generally cannot be explored by the stress assessment instruments e.g. Belief and spirituality, transportation issues, communication problems, comparison of illness to disaster and many others.

7. LIMITATIONS

- The interview with the mothers and other participants was not possible in the first meeting.
- The paucity of the samples i.e. 32 and Due to small sample size the generalization of study findings cannot be done.
- The study was restricted to the IGMC & Hospital only.
- Data collection was time consuming due to unavailability of room for conducting an interview.
- Few mothers did not participate as they were uncomfortable in sharing their feelings about Childs illness

8. NURSING IMPLICATIONS

8.1 Nursing practice

Interventions that improve communication between healthcare providers and parental needs are to be identified and examined like workshops on coping strategies. Other interventions, such as on-sight support groups and activities for the parents may improve psychological functioning of mothers.

8.2 Nursing education

Based upon the study findings nurse educators can conduct workshops, seminars and conferences on the prevention and management of the symptoms and other problems faced by parents in a hospital environment.

8.3 Nursing research

Similar studies can be conducted on stress assessment of the medical professionals dealing with patients and parents in PICU. The findings could be used to inform the development of a PICU parental satisfaction instrument for the sample group. The same study can be done by using the various other research methodology and research designs like grounded theory, meta analysis and longitudinal study, prospective, observational and survey-based study

8.4 Nursing administration

Nurse administrator can plan and organize the in-service education program for the staff nurses to update and renew their knowledge, communicate the various schemes run by the government to reduce the financial burden of the patients and counselling room and grievance cell for the parents.

9. RECOMMENDATIONS

- The PSS: PICU and CHIPS, other scales can be used for the assessment of parental stress in a more in-depth way.
- Parental stress and coping should be examined using a longitudinal mixed methods design which would identify the trajectory of parental stressors and coping strategies over time. A mixed methods design would enable investigators to identify stressors and coping strategies not addressed by the instruments. It would provide information on whether certain resources or interventions are more important at specific time points.
- The result of this study could be used as a basis for a post-paediatric intensive care follow-up service for the children and their families.
- The assessment for the stress can be done on family members especially the primary health care givers.
- Research should be aimed at understanding the stress and coping in mothers and fathers from diverse backgrounds to examine the role of race/ethnicity, income, education, and so forth.
- More studies on both mothers and fathers are needed to understand whether the identification of stress and coping differences exist for partnered couples.
- Few studies have examined nurses' perceptions of parental stress and coping. This area needs to be further developed so that misconceptions can be clarified and nursing interventions can be developed aimed at assisting parents to cope with the PICU environment and parenting a critically ill child.
- Further research on the impact of parental uncertainty on stress and coping needs to be performed and whether improved communication and/or informational programs has any effect on stress and coping.

10. CONCLUSION

In conclusion, the findings of this interview study are a range of themes and subthemes providing insight into the complexity of the parental experiences of PICU admission. The subthemes may provide the groundwork for the development of items for an instrument measuring parental experiences and satisfaction with care. The clinical implications of the findings might be transferable to other PICUs to gain insight into understanding and collaboration between parents and health care professionals. Then, the momentous transitional PICU period might be less stressful both for the child and the parents.

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