

A Descriptive Study to Assess the Level of Stress and Copying Strategies among the Relatives of Client Admitted in Medical Intensive Care Unit and Surgical Intensive Care Unit in Krishna Hospital, Karad

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Abstract: ***Objectives:** To assess the stress level among the relatives of clients admitted in medical intensive care unit & surgical intensive care unit. To assess the coping methods of relatives of clients admitted in medical intensive care unit & surgical intensive care unit and to compare the stress level & coping methods of relatives of clients admitted in medical intensive care unit & surgical intensive care unit. **Methodology:** The study was conducted on 50 relatives of the clients admitted in medical and surgical intensive care units in Krishna hospital, karad. A descriptive survey approach was considered. Study design was non-experimental research design. Non-probability purposive sampling technique was used. The instrument used for data collection was a structured interview schedule. **Results:** - The present study found that more than half of the relatives 60% had moderate stress and 14% had severe stress Majority of the relatives 22% were used moderate coping and 13% had poor coping **Conclusion:-** The relatives of clients admitted in MICU & SICU having moderate stress and are using moderate coping methods. The relatives of clients admitted in MICU are coping good than the relatives of client admitted in SICU.*

Keywords: Level of stress, copying strategies, relatives of client

1. Introduction

Stress bombards us every day from all directions. Maybe it's sitting in the midst of highway gridlock when you are already late for an important appointment. Or how about the bill you forgot to pay? It could be a phone call from the school complaining about your child's behavior. These are just the annoying little stress triggers that we handle every day. What about the larger issues? Retirement, moving, divorce or, heaven forbid, the death of a loved one or friend can come out of the blue and here comes the stress, launching you into treading murky waters one more time. The impression is that the feelings of stress come from outside sources when, in reality, it happens inside of us. When we feel as though we are under pressure, our bodies react the same way that we have trained them to do with a rise in blood pressure, tightening of muscles and accelerated breathing. These physical symptoms are generally referred to as "fight or flight" responses. This is a term left over from historical times when the choices were to flee or stand and fight. Unfortunately, today we don't have those options. Each situation must be dealt with and that's where the stress comes in. Some stress is unavoidable and is actually good for you as we will discuss further on. But too much stress leads to troubles that can range from upset stomach to anxiety attacks and even as serious as heart attacks Research has shown that today we have fewer friends than we used to

and live in a more fragmented, isolated society with lower levels of social support, which is an important buffer of stress.(2)

However, contrary to popular myth, stress is not a unique problem to the 21st Century, human kind has suffered stress since the dawn of human evolution. Modern society however, has undergone more complex, radical change in the span of a few short years than in the whole of human evolution, and this is partly why stress is more of a problem today. (3)

From the relatives perspective, intensive care unit are busy and intimidating places, dominated of sick client, worried staff and family members, advanced medical technology, bright lights and shrill monitors. Most intensive care unit offer little privacy for relatives who may be in the midst of the medical and surgical crises, with only their curtains separating family members from each others. Relatives are introduced to many unfamiliar staff members where they perceive as holding the clients fate in their hands. The technical language that staff members use may be confusing and relatives often search the faces of physicians and nurses for clues about how their client is really doing. Although MICU and SICU may be a traumatic environment, it also offers hope to relatives, sometimes the last hope. Some

relatives hold fast to the belief that the intensive care unit is a place where miracles can happen.(4)

Anxiety, sadness, and anger are the predominant emotions that relatives experience, particularly when their client is unstable or has a disease with an unpredictable cause. The severity of illness, uncertainty of prognosis, range of outcomes, ethical dilemmas and societal expectations for client's health and wellbeing converge to make these settings is especially stressful.(5)

Satisfying relatives on going need for information plays a critical role in their ability to cope with the stressor and their coping of relatives in the event of hospitalization of a critically ill client.(6)

The purpose of this study is to identify and compare the stress and coping methods among the relatives of client admitted in MICU and SICU. Identifying the experience perceived as most stressful and coping methods used by relatives can help the nurse in anticipating family needs and formulation of policies and interventions.

Family centered cares, family participation in the care in client are trends in the medical and surgical nursing. Which have been receiving increasing focuses. Medical and surgical intensive care unit of Krishna hospital, karad. Has started with the aim of providing holistic quality care to critically ill client. For this, family centered care is the need of the era. If one want to facilitate family centered care the stressors must be accurately identified and they must be helped to cope-up and this has to be incorporated in the plan of care of the family and client. To date, there were no studies conducted in Krishna hospital karad that relates to stressors and coping methods used by the relatives of client admitted in MICU and SICU. This Endeavour could help the nurses in the development of effective nursing intervention for relatives and client.

2. Literature Survey

The reviewed literature for the present study:-

Research conducted on lived experience in the intensive care unit a phenomenological study, It is accepted by 23 June 2010. It is used on anxiety and stress of family members whose patient admitted in Intensive Care Unit. Study was conducted on 6 family members and analyzed using qualitative thematic analysis. So result that family members want honest information about patient progress and out comes. So nurse has to maintain good relationship with family members and patient. So love and support is necessary to relieve anxiety and stress. So this research concluded that the research provided in insight into how family members view the impact of the admission how they subsequently found ways of dealing with the situation. (11) Research conducted on acute post traumatic stress symptoms among urban mothers with newborn in Intensive Care Unit. A study was conducted at Boston medical centre and total sample of study is 59 Neonatal intensive care unit baby and 60 mothers within first week after birth .In method they assess the acute post traumatic stress symptom were analyzed as a continuous variable and they reached the

categorical severity criteria for acute stress disorder .In result mother shows increase symptom of acute post traumatic stress and depression 23% of neonatal intensive care unit and 3WBN. So this research concluded that acute post traumatic stress symptom may enhance intervention to help urban families of neonatal intensive care unit infants. (12)

Research conducted on symptom experienced by family members of patient in ICU. This research conducted at families in critical area and accepted in 2003. They are taken moderate sample size from 20 to 166 family members study mostly completed in single centers and most included patient from coronary care unit. In methods they used qualitative and descriptive sample. In methods they used qualitative and descriptive samples. They concluded that many patients are unable to communicate their wishes because they are sedated, receiving mechanical ventilation, confused or comatose so decision making and treatment choice on patient family members. Experience shows that relatives are increasing in stress level in psychological and physical level. (13)

Research conducted on family members in the ICU could potentially suffer from clinically diagnosable psychological condition. This accepted in May 2009 this research based on family members physical and mental health. They choose a survey method sample size is 32 to 284 family members mostly in ICU. The result cannot be generalized because of relatively small sample size, predominantly female size. They found that 50% of family members show depression and anxiety this is their conclusion. In conclusion this investigation focuses on family members from a specific population of patient. (14)

3. Materials and Methods

The study was conducted on **50** relatives of the clients admitted in medical and surgical intensive care units in Krishna hospital, karad. A descriptive survey approach was considered. Study design was non-experimental research design . non-probability purposive sampling technique was used. The instrument used for data collection was a structured interview schedule.

4. Results

Analysis and interpretation of the data was based on the projected objectives of the study viz.

- 1 To assess the stress level among the relatives of clients admitted in medical intensive care unit & surgical intensive care unit.
- 2 To assess the coping methods of relatives of clients admitted in medical intensive care unit & surgical intensive care unit.
- 3 To compare the stress level & coping methods of relatives of clients admitted in medical intensive care unit & surgical intensive care unit.

5. Organization of Study Findings

Section- A) Description of samples characteristics.

Section: -B) Description of relatives is according to stress level.

Section: - C) Description of relatives according to coping methods.

Section: -D) Relation between stress and coping methods of relatives of client admitted in intensive care unit.

Table 1.1: Description of clients admitted in ICU by Age, N=50

Sr. no.	Variables	Numbers	%
A)	Age of the client		
1	15 - 30 years	09	18
2	31 - 45 years	10	20
3	46 - 60 years	15	30
4	61 - 75 years	15	30
5	76 - 90years	01	02
	Total	50	100

Data shows majority 30% client were from 46-60 years and 61-75 years old.

Table 1.2: Distribution of client as per unit

Sr. no.	Variables	Numbers	%
A	Distribution of clients as per unit		
1	MICU	25	50
2	SICU	25	50
	TOTAL	50	100

The above table shows 25% clients were from MICU and SICU unit.

Table 2.1: Distribution of relatives by age group

Sr. no.	Variables	Numbers	%
A)	age of the relatives		
1	15 - 30 years	14	28
2	31 - 45 years	21	42
3	46 - 60years	8	16
4	61 - 75years	7	14
	Total	50	100

Data presented that 42% of relatives were belongs to 31-45yrs and 28 % of relatives belongs to 15- 30yrs.

Table 2.2: Distribution of the relatives by sex

Sr. No.	Variables	Numbers	%
A	sex of the relatives		
1	Male	35	70
2	Female	15	30
	Total	50	100

Data presented Majority of the client 70% were males. 30% were females.

Table 2.3: Distribution of relatives by their family income

Sr. No.	Variables	Numbers	%
G.	Family income/ monthly		
1	1000-4000	26	52
2	4001-8000	14	28
3	8001-12000	1	2
4	12001-above	9	18
	Total	50	100

The table represented majority 52% of family income from 1000-4000/- Of the client admitted in intensive care unit.

Table 2.4: Distribution of relatives by their qualification

Sr. No.	Variables	Numbers	%
H)	Educational qualification of the relatives		
1	Primary	3	6
2	High school	24	48
3	Degree	15	30
4	Illiterate	8	16
	TOTAL	50	100

The table presented that the educational status of the relatives that majority 48% of relative are educated up to high school, 30% were educated up to degree.

Table 2.5: Distribution of the relatives by religion

Sr. No.	Variables	Numbers	%
A)	Religion of the relatives		
1	Hindu	45	90
2	Muslim	4	8
3	Christian	0	0
4	Lingayat	1	2
	TOTAL	50	100

The above table showed majority 45% relatives belongs to HINDU religion.

Table 2.6: Distribution of Relatives According to their Stress Scale (MICU)

Sr. No	Stress score	number	%	Category
1	114 & less	02	08%	Low stress
2	115 - 158	19	76%	Moderate stress
3	>158	04	16%	Severe stress
	Total	25	100%	

The data presented shows that 16% had severe stress, 76% had moderate stress and 08% had low stress in the MICU relatives.

Table 2.7: Distribution of relatives according to their stress scale (SICU)

Sr.No	Stress Score	Number	%	Category
1	114 & Less	12	48%	Low Stress
2	115 - 158	11	44%	Moderate Stress
3	>158	02	08%	Severe Stress
	TOTAL	25	100%	

The data shows that 08% had severe stress, 44% had moderate stress and 48% had low stress in the SICU relatives.

Table 2.8: Categorization of stress level of relative of client admitted in MICU.

Sr No	Domains	Numbers	Max Score	Mean	Mean %	SD
1	Physiological	13	65	38.92	33.60%	12.86
2	Social	13	65	42.6	40.66%	4.69
3	Psychological	12	60	27.88	25.71%	5.24
4	Physical	04	20	9.88	8.99%	2.14
5	Environmental	03	15	12	11.34%	1.58
6	Financial	02	10	7.96	7.13%	1.98

The data shows that relatives of the client admitted in MICU had sever (40.66%) social stress and it is followed by physiological (33.60%) stress, and psychological (25.71%) stress score.

Table 2.9: Categorization of stress level of relative of client admitted in SICU.

Sr No	Domains	Numbers	Max Score	Mean	Mean %	SD
1	Physiological	13	65	31.52	27.25%	10.32
2	Social	13	65	34.8	30.60%	10.17
3	Psychological	12	60	24.76	21.49%	7.90
4	Physical	04	20	7.96	6.46%	3.61
5	Environmental	03	15	8.32	6.85%	3.54
6	Financial	02	10	5.92	4.77%	2.78

The data shows that relatives of the client admitted in MICU had sever (mean%) score(30.60%) social stress and it is followed by physiological (27.25%) stress, and psychological (21.49%) stress score.

Table 3.1: Distribution of the relatives according to their coping methods in MICU

Sr no.	Coping score	Number	Percentage (%)	Category
1	55 or less	04	16%	Poor coping
2	56 to 80	11	44%	Moderate coping
3	>80	10	40%	Good coping
	TOTAL	25	100%	

The data shows that majority relatives (44%) used moderate coping and (16%) had poor coping methods in MICU setup.

Table 3.2: Distribution of the relatives according to their coping methods in SICU

Sr No.	Coping score	Number	Percentage (%)	Category
1	55 or less	08	32%	Poor coping
2	56 to 80	11	44%	Moderate coping
3	>80	06	24%	Good coping
	TOTAL	25	100%	

The data shows that majority relatives (44%) used moderate coping and (32%) had poor coping methods in SICU setup.

Table 4.1: Relationships between stress level and coping methods of relatives of client admitted in medical intensive care unit.

Variables	Mean +SD	coefficient correlation	Inferences
Stress	139.24 ± 20.10	0.24	NS
Coping methods	73.84 ± 13.83		

The data in the table 4.1 shows that there is no significant relationship between stress and coping scores ($r=0.24$, $p=>0.05$)

Table 4.2: Relationships between stress level and coping methods of relatives of client admitted in surgical intensive care unit

Variables	Mean +SD	coefficient correlation	Inferences
Stress	113.28 ± 29.56	0.31	NS
Coping methods	63.36 ± 16.28		

The data in the table 4.2 shows that there is no significant relationship between stress and coping scores ($r=0.31$, $p=>0.05$)

Table 4.3: Relationships between stress level and coping methods of relatives of client admitted in medical and surgical intensive care unit

Variables	Mean +SD	coefficient correlation	Inferences
Stress	139.24 ± 28.49	0.40	NS
Coping methods	113.28 ± 38.32		

The data in the table 4.3 shows that there is no significant relationship between stress and coping scores ($r=0.40$, $p=>0.05$)

6. Discussion

Relatives of the client admitted in MICU had severe 30.60% social stress and physiological 27.25% stress, and psychological (21.49) stress score. The relatives of the client admitted in MICU had severe 30.60% social stress and it is followed by physiological 27.25% stress, and psychological (21.49) stress. Similar Research conducted on family members in the ICU could potentially diagnosable psychological conditions. In methodology they done survey to, assess the stress and anxiety. In this they are done the descriptive study and sample size from 32 to 284 family members. The result from this studies suggested that wives of ICU patients reported multiple emotions such as anxiety, depression or fear and they focused multiple stresses such as potential loss of their partner and family disruption. In conclusion they suggested that patient family members have psychological symptoms like a stress and anxiety.

7. Conclusion

The studies conclude that majority relatives (44%) used moderate coping and (16%) had poor coping methods in MICU setup. And majority relatives (44%) used moderate coping and (32%) had poor coping methods in SICU setup. The relatives of clients admitted in MICU & SICU having moderate stress and are using moderate coping methods. The relatives of clients admitted in MICU are coping good than the relatives of client admitted in SICU.

8. Future Scope

8.1 Nursing Implication

The findings of this study have implications for nursing practice, nursing education, nursing administration and nursing research.

8.2 Nursing Practice

Any relatives of client who are being diagnosed to be chronic illness of her time with the patient hence it is the responsibility of the nurses to bring the family in the caring process To provide this information, nursing staffs need to be educated on stress and coping of relative of client in the hospital and on the factors to be considered while providing information and explanation.

8.3 Nursing Administration

The administrator should plan and organize educational programme for nursing personnel, in order to prepare them to provide quality care. Client education services are an integral part of nursing care. Nursing administrators should see that stress reduction programmes are included in staff welfare programmes and relaxation techniques are taught to the nursing personnel as a part of their orientation programme.

8.4 Nursing Research

Research in nursing field helps in the growth of the professional and personal life. Professional organizations in nursing are convinced of the importance of nursing research as a major contribution of meeting the health on welfare of patients Research can also be done in the area of stress and coping to identify unique Stressors for relative in particular settings. Findings can be used to determine action plans.

8.5 Nursing Education

Most of the time the nursing education focuses on the physical health in terms of treating the signs and symptoms and should be given to conduct in service education program to upgrade the knowledge of the nurses about factors causing stress and its relationship with coping, which may help to plan effective care Client education services provide opportunity for nurses to train children and families on relaxation techniques, which will help them to function at their optimum level.

References

- [1] Pochard F, Azoulay E, Chevret S, Lemaire F, Hubert P, Canoui P, Grassin M, Zittoun R, le Gall JR, Dhainaut JF, *et al.* Symptoms of anxiety and depression in family members of intensive care unit patients: ethical hypothesis regarding decision-making capacity. *Crit Care Med* 2001;29:1893–1897.
- [2] Azoulay E, Sprung CL. Family-physician interactions in the intensive care unit: effective communication empowers family members. *Crit Care Med* (In press)
- [3] Azoulay E, Chevret S, Leleu G, Pochard F, Barbotou M, Adrie C, Canoui P, Le Gall JR, Schlemmer B. Half the families of intensive care unit patients experience inadequate communication with physicians. *Crit Care Med* 2000;28:3044–3049.
- [4] Azoulay E, Pochard F, Chevret S, Lemaire F, Mokhtari M, Le Gall JR, Dhainaut JF, Schlemmer B. Meeting the needs of intensive care unit patient families: a multicenter study. *Am J Respir Crit Care Med* 2001;163:135–139.
- [5] Wasser T, Pasquale MA, Matchett SC, Bryan Y, Pasquale M. Establishing reliability and validity of the critical care family satisfaction survey. *Crit Care Med* 2001;29:192–196.
- [6] Curtis JR, Patrick DL, Shannon SE, Treece PD, Engelberg RA, Rubenfeld GD. The family conference as a focus to improve communication about end-of-life care in the intensive care unit: opportunities for improvement. *Crit Care Med* 2001;29:N26–N33.
- [7] Way J, Back AL, Curtis JR. Withdrawing life support and resolution of conflict with families. *BMJ* 2002;325:1342–1345.
- [8] Truog RD, Cist AF, Brackett SE, Burns JP, Curley MA, Danis M, DeVita MA, Rosenbaum SH, Rothenberg DM, Sprung CL, *et al.* Recommendations for end-of-life care in the intensive care unit: the Ethics Committee of the Society of Critical Care Medicine. *Crit Care Med* 2001;29:2332–2348.
- [9] Yehuda R. Post-traumatic stress disorder. *N Engl J Med* 2002;346:108–114.
- [10] Bleich A, Gelkopf M, Solomon Z. Exposure to terrorism, stress-related mental health symptoms, and coping behaviors among a nationally representative sample in Israel. *JAMA* 2003;290:612–620.