### Intensive care unit stressors perceived by patients

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n intensive care unit (ICU) is defined as a specially staffed, specially equipped, separate section of a hospital dedicated to the observation, care, and treatment of patients with life threatening illnesses, injuries, or complications from which recovery is possible. People admitted to intensive care unit experience feelings of being trapped in metal tubes, alien abduction, and having a gun to their head, amongst other things.

A phenomenological study finding showed that critical illness survivors are left in a state of limbo (disruption, imprisonment and being trapped) characterized by a struggle to reclaim their pre-critical illness, ICU identity and uncertainty about future<sup>2</sup>.

Understanding intensive care stress factors can help identify patients who are most at risk of developing complications. Furthermore, modifiable risk factors and beneficial interventions can be identified to reduce the prevalence and impact of long-term complications.

#### Statement of the problem

A cross sectional study to identify intensive care unit stressors as perceived by the patients in a selected hospital in Mumbai.

### **Objectives**

Identify the stressors and stress



level perceived by the patients transferred from ICU to the ward.

 Find out association between the level of stressors as perceived by the patients transferred from ICU to the ward and the selected demographic variables.

### **Operational definitions**

Intensive care unit: According to this study, "An intensive care unit (ICU) is a special department of a hospital or health care facility that provides intensive treatment".

Stressors: According to study, "Stressors are the physical, environmental and psychological factors within the ICU that cause a perceived feeling of strain to the patients admitted in I.C.U."

In this study, the perceived stressors have been identified using a standardized Intensive Critical care Unit Environment Stressor scale consisting of 40 items that have 4 point rating from not stressful (score of 1) to highly stressful (score of 4). The items have been classified into three stressors:

- Physical stressors- Item no: 1, 2,
   6, 10, 13, 19, 22, and 24. (Total items= 8)
- Environmental stressors- Item
  no: 3, 4, 5, 7, 8, 9, 12, 15, 16, 17,
  20, 21, 25, and 39. (Total items
  -14)
- Psychological stressors: Item no:
  11, 14, 18, 23, 26, 27, 29, 30, 32,
  33, 34, 35, 36, 37, 38, 40, 28, and
  31. (Total items= 18)

The score obtained has been cat-

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egorized in the following table

exploratory research approach.

Stressors	Not stressful	Mildly stressful	Moderately stressful	Very stressful	Total score
Physical	8	9-16	17-24	>25	32
Environmental	14	15-28	29-42	>43	56
Psychological	18	19-36	37-54	>55	72
Overall	40	41-80	81-120	>120	160

**Percieve:** According to study, perception is what the patient feels and undergoes during the time of stay in the I.C.U.

**Patient:** In this study, patient refers to a person who has been transferred in the ward from the ICU and is admitted in the selected hospital for treatment.

### Assumptions

- 1. Patients experience stress on hospitalization.
- Perceived stress could be measured using standardized stress scale.
- 3. The stressors vary amongst individual patients.
- 4. Level of stress depends on varied factors.
- 5. Self reporting is a reliable tool for data collection.

### Delimitation

- Patients transferred from the I.C.U to the ward of Dr. L.H. Hiranandani Hospital.
- Data collection was only for 30 samples.
- The study was limited to perceptions and no intervention was planned.

### Research methodology

Research approach: The researcher used quantitative non experimental

Research design: The study adopted a cross sectional research design.

Setting of the study: The setting was the location in which a study was conducted. The particular research was conducted in a ward setting situated in a selected private hospital in Mumbai.

**Sample:** 30 patients who were transferred to the ward post intensive care unit admission in a selected hospital in Mumbai.

### Sampling criteria

### **Inclusion criteria**

- Patient who were conscious and well informed having no neurological and psychological disturbances.
- Patients admitted to I.C.U. for more than 24 hours but less than one week.
- Age more than 18 years.
- Patients who were willing to take part in the study.
- Patients who were able to speak and read in English and Hindi.
- Patients with previous I.C.U experience were included in the study.

### **Exclusion** criteria

- Patients who were unconscious.
- Patients admitted to I.C.U. for less than 24 hours but more than 1 week.

Age less than 18 years.

**Sampling technique:** Sampling technique used in this research was convenience non probability sampling method.

**Tool and technique:** In the present study, questionnaire had been used for data collection.

**Technique:** In the present study, self reporting technique had been used for data collection.

**Pilot study:** In the present study, the pilot study was done on 20 samples.

**Validity:** In the study, content validity was assessed by giving it to nursing experts in the field of nursing.

**Reliability:** The reliability of the tool was assessed by test retest method and the coefficient of correlation was 0.85. Thus, the reliability was assessed.

Data collection: Prior to the process of data collection, the researcher procured permission from the ethical research committee and hospital authorities to conduct the study. The permission was also taken from the Nursing Superintendent and nurse executive of the respective floor of the hospital.

The patients who were transferred from the ICU were identified. The investigators introduced themselves, the purpose and the process of data collection and then took consent from the samples. The questionnaire was administered to the samples and doubts; if any, were clarified. The questionnaire was collected after 30 minutes and the samples were thanked for their cooperation.

### Significant findings

Section I- Findings related to demographic data

Table 1: Demographic profile of the samples

N = 30

Demographic variable	Number	Percentage	
Age (yrs)			
20-40	9	30	
41-60	5	16.67	
61-80	15	50	
>81	1	3.33	
Gender			
Male	20	66.67	
Female	10	33.33	
Type of family			
Joint	15	50	
Nuclear	15	50	
Monthly income	·	11 11	
Less than Rs. 10000/ month	4	13.33	
Rs.10001-Rs.50000/month	14	46.67	
More than Rs.50001/month	12	40	
Occupation		4	
Service	9	30	
Business	5	16.67	
Housewife	10	33.33	
Retired	6	20	

**Demographic data:** Age-majority (50%) of the sample belonged to age group ranging from 61-80 years of age.

**Gender:** 66.67% of the samples were male and 33.33% were females.

Type of family: It was seen that the sample chosen, exactly half i.e. 50% belonged to joint family and 50% nuclear family.

Monthly income: Approximately 47% of the samples had an income between Rs. 10001- Rs.50, 000/ month.

Occupation: 50% of samples were either retired or were housewives.

There existed a non significant relationship between perceived stress and demographic variables like gender (p=0.8654, p<0.05) and former ICU experience (p=0.6029,

p<0.05).

**Previous ICU experience:** Majority of the patients (63.33%) had previous ICU experience.

**Present illness:** It was seen from the sample chosen that majority (33.33%) were admitted for cardio vascular reasons, 30% for respiratory reasons.

## Section II- Findings related to stressors

Physical factors- 67% of the samples perceived mild stress due to physical factors; around 10% did not have any stress due to physical factors.

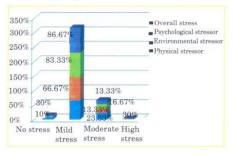
**Environmental factors-** 24% of the samples perceived mild stress due to environmental factors.

Psychological factors: Majority

of the samples i.e. 83.33% had mild stress due to psychological factors, 16.67% had moderate stress level.

Overall: 86.67% of the samples perceived mild stress due to overall factors and 13.33% had moderate stress.

# Section III- Association of perceived stress with selected demographic variables



There was no significant association of perceived stress with age, type of family, monthly income, occupation and present medical illness. Association of perceived stress with gender and former ICU experience was present, though it was insignificant at p<0.05.

### Limitations

No interventions were carried out to minimize stressors and hence limited to only self reporting.

As the samples chosen were random and there was no rapport building involved, the data collected may have variance.

The researchers felt that more time could have been spent with the samples for increasing the data authenticity.

### **Nursing implications**

The study implies use of stress reduction techniques and practices in nursing to reduce the perception of stressors in ICU patients. The findings of the study would be utilized for nursing education, service and administration.

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### Safe delivery app presented at Nightingale Institute of Nursing, Noida

aternity Foundation, a Danish Development Organization aims to reduce maternal and newborn mortality in low and middle income countries by developing innovative maternal health solutions and implementing sustainable health programs.

Ms.Anne Marie Frokjaer Barrie, Program Director, Maternity Foundation visited Nightingale Institute of Nursing on April 19, 2018. She was accompanied by JHPIEGO ( Johns Hopkins Program for International Education in Gynecology and Obstetrics) team

After a warm welcome by the students and the faculty members of the of Institute, the guests were escorted to the laboratories: OBG labs, Pediatrics lab, Fundamentals of Nursing lab, Community Health Nursing lab and the library.

This was followed by an interaction session where Ms.Anne Marie Frokjaer Barrie introduced the safe delivery app- a mobile health tool for skilled birth attendants. The moto is - "No woman should die giving life". She briefly described the higher incidence of maternal mortality due to pregnancy or child birth related complications that is more than 800 women die every single day.

The safe delivery app leverages the growing ubiquity of mobile phones to provide lifesaving information and



guidance through easy to understand animated instruction videos, action cards and drug lists. Once downloaded, the safe delivery app is stored on the smartphone and does not require internet access. The app has been adapted to a number of local languages.

This app empowers skilled birth attendants to provide a safer birth for mothers and newborns- everywhere. This provides direct and instant access to evidenced based and up to date clinical guidelines on basic emergency obstetric and neonatal care. It can serve as a training tool both in pre and in- service training and equips skilled birth attendants even in the most remote areas with a powerful on-the-job reference tool.

#### Continued from page 35

Nursing service: The study will help the nurses to utilize the tool to assess the various factors that contribute to stressors and plan interventions according to the felt needs of the patients.

Nursing education: The study will contribute in-service education to provide knowledge about various stressful factors and also train nursing students by enhancing their communication skills and by providing psychological support to patients to reduce their level of stress.

Nursing management: At the administrative level, stress protocols may be implemented in the ICU with the use of stressor tool to mandatorily assess all the ICU

patients and identify the most stressful factors.

Nursing research: The finding and design of this study can be utilized for conducting further studies with larger samples.

## Recommendations for further research

- A similar study could be carried out with larger sample for generalization.
- A comparative study could be taken of various hospital settings to assess the ICU stressors.
- Interventional study to minimize stress could be carried out and the effect of the interven-

- tion could be assessed.
- Studies related to individual stressors and interventions could be carried out.
- A study to see the ICU stressors among nurses could be assessed.
- Protocols could be made for reducing stress and evaluation of the protocols can be carried out.

The researcher could use larger sample for generalization, along with implementation of care to gain accurate data.

### Scope of the study

The findings of the study would help identify the major stressors affecting the ICU patient. The revealed data would identify the measures to be undertaken by the personnel at various levels.

It will provide a guide for interventions to be undertaken to eliminate ICU stressors.

The findings could be utilized as data source for identifying the causes of ICU psychosis or post traumatic stress disorders.

### Conclusion

In conclusion, it is seen that stress exists among all patients irrespective of their age, income, education and employment background.

It is necessary that nurses realize the importance of providing a safe, pleasant and restful environment to reduce stress.

The study also emphasizes the need for constant psychological support and proper communication that could help minimize stress amongst the patients.

This study was undertaken as a project by 4th yr B.Sc Nursing students (Ms.Krupa Babu, Ms. Rosa M, Ms. Simoni Rakshe, Ms. Pooja Yadav) under the guidance of Ms. Sherin Sara E and Ms. Avani Oke.

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A clear rejection is always better than a fake promise.

Unknown

What is a brand? Brand is just a perception, and perception will match reality over time. Sometimes it will be ahead, other times it will be behind. But brand is simply a collective impression **Elon Musk** some have about product.