International Journal of Midwifery and Nursing Practice

Karpagam K
Department of Medical
Surgical Nursing,
Saveetha College of Nursing,
SIMATS, Thandalam,
Chennai, TamilNadu, India

Subash A
Department of Medical
Surgical Nursing,
Saveetha College of Nursing,
SIMATS, Thandalam,
Chennai, TamilNadu, India

A study to assess the level of anxiety among intensive care unit patients

Karpagam K and Subash A

Abstract
The World Health Organization (WHO) takes a more holistic view of health. Its constitution defines health as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. The ability to lead a socially and economically productive life (WHO, 1948). This definition reflects concern for the individual as a total person functioning physically, psychologically, and socially. So the present study aims to assess the level of anxiety among Intensive Care Unit patients. A quantitative approach with descriptive research design was adopted to conduct the study among 60 Intensive Care Unit patients who were selected by convenience sampling technique. Semi-structured interview method was used to collect the demographic data and the level of anxiety was assessed among Intensive Care Unit patients with Hamilton Anxiety Scale by structured questionnaire. The results of the study shows that among 60 samples the out of 60 samples 21(35%) members had mild anxiety, 22(36.7%) members had moderate level of anxiety, 17(28.3%) members had severe level of anxiety. This study proves that a study to assess level of anxiety among Intensive Care Unit Patients is effective method to prevent any other psychiatric complication during patient admitted in the ICU and to provide the better quality of life to Intensive Care Unit Patients.

Keywords: level of anxiety, intensive care unit patient

Introduction

The World Health Organization (WHO) takes a more holistic view of health. Its constitution defines health as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. The ability to lead a socially and economically productive life (WHO, 1948). This definition reflects concern for the individual as a total person functioning physically, psychologically, and socially.

Illness is a highly personal state in which the person's physical, emotional, intellectual, social, developmental or spiritual functioning is thought to be diminished. Illness behaviors includes assumption of the sick role during this stage and Emotional responses such as withdrawal, anxiety, fear and depression which are common depending on security of the illness, perceived degree of disability and anticipated duration of the illness.

Feelings of loneliness, fear of death, anxiety and insecurity about concrete matters such as the technical equipment and the different alarms are some of the experiences that dominate the patients' narratives. Recent research has confirmed that survivors of ICU treatment continue to experience both physical and psychological problems for some time after discharge from ICU. They reported prevalence of anxiety and depressive problems in ICU survivors ranges from 12% to 43% (for anxiety) and 10% to 30% (for depression). Psychological manifestation of stress include anxiety, fear, anger, depression and unconscious ego defence mechanisms. A common reaction to stress is anxiety (Ashworth, 2003) [1]. Anxiety, pain and fear can all initiate or perpetuate the stress 3 response which if left untreated or under treated, anxiety can contribute to the morbidity and mortality of critically ill patients (Dorrie, Fontain, 2008) [10].

Anxiety is not just nervousness. There are both psychological symptoms and physical symptoms. It's not uncommon for those with anxiety to experience such as Rapid heartbeat (heart palpitations), Excessive trembling and sweating, Nausea and dizziness, Chest pain and headaches, Weakness in the limbs and muscle tension.

The first ever nationwide survey on mental health covering 28 states in 2015- 2016 gives us a better idea about the prevalence of anxiety disorders in India. The National Mental Health Survey conducted by the National Institute of Mental Health and Neuro Sciences (NIMHANS) in 2015 -2016, indicates that the total prevalence of anxiety disorders in India amount to 3.1 percent of the population.

Corresponding Author:
Karpagam K
Department of Medical
Surgical Nursing,
Saveetha College of Nursing,
SIMATS, Thandalam,
Chennai, TamilNadu, India

According to this, the prevalence of anxiety disorders such as phobic disorders, agoraphobia, generalized anxiety disorder, obsessive compulsive disorder is higher in females than in males. Adolescents are also disproportionately affected with anxiety disorders as in many cases, symptoms of an anxiety disorder manifest themselves in early adolescence and may continue to persist throughout adulthood and old age. The survey also indicates that mental disorders including anxiety disorders affect the productive age group between 30 and 49 the most and peaks during this time.

One in seven Indians is affected by a mental disorder, says the latest paper published by Indian Council of Medical Research in *Lancet Psychiatry*, "The burden of mental disorders across the states of India: the Global Burden of Disease Study 1990-2017." What is worrisome is that the proportional contribution of mental disorders to the total disease burden in India has almost doubled since 1990, the research states. That means 19.73 crore or 14.3 per cent population of the country is reeling under one or the other mental disorder.

Anu Mary, Varghese (2018), conduct *a* study to assess the post-traumatic stress symptoms and anxiety among patients after discharge from ICU at KMCH, Coimbatore, KMCH College of Nursing, Coimbatore. Among 60 participants, 33.3% of them were having less PTSS score and 66.7% were having greater level of PTSS score with a mean score of 47.3. 13% of the patients are having mild level of state anxiety, 64% of the patients are having moderate level of state anxiety and 23% of them are having severe level of state anxiety. The mean score of STAI state anxiety was 50.38. 35.0% of the patients are having mild level of trait anxiety, 61.7% of the patients are having moderate level of trait anxiety and 3.3% of them are having severe level of trait anxiety with a mean score of 46.31. The study results showed that there is a high level of PTSS and moderate to severe levels of anxiety after discharge from ICU.

The Intensive Care Unit (ICU) is a potentially hostile environment for the vulnerable critically ill patient. Frequently reported stressful environmental factors are noise, ambient light, restriction of mobility, and social isolation. Usually one registered nurse and one or enrolled nurses are responsible for the care of two or four patients during the shift. The staff never leaves the patient alone.

Anxiety, agitation, delirium and pain are common findings in the ICU. These unhealthy states may lead to increased irritability, discomfort, hypertension, tachycardia, cardiac ischemia, harmful motor activity and psychologic disquiet for the patient. The appropriate treatment of these conditions may lead to decreased morbidity and mortality in the critically ill patient.

Patients expressed wishes of physical contact, in addition to the contact the nurse had during treatment, like holding hand, getting a foot rub or receiving a cares. Patients want to participate in caring actions and be understood for their needs and wishes which requires communications between the one who gives and the one who receive care.

Several studies have reported that patients who need intensive care unit (ICU) treatment may experience psychological distress with increasing development of psychological illness and morbidity related to psychological disorders. The presence of anxiety, depression and post traumatic stress disorder (PTSD) symptoms have been reported in three studies to have increased by 40%, 30% and 60% respectively, in ICU survivors.

The purpose of the study
1. To assess the levels of anxiety among Intensive Care Unit (ICU) patients at Saveetha Medical College and Hospital.
2. To determine the association between the level of anxiety with the socio demographic variables among Intensive Care Unit patients at SMCH.

Methods and Materials
A quantitative research approach with descriptive research design was used to conduct study in Intensive Care Unit patients at Saveetha Medical College and Hospital. 60 samples were selected by using a convenience sampling technique. The inclusion criteria for samples were Patients were admitted in ICU, Patients could speak and understand Tamil, Patient give concern to participate in the study, Patients were conscious and without ETT/Ventilator, O_2 mask. The exclusion criteria for the samples were Patients who were in emergency care with ventilator support, Patients who were unconscious, semiconscious and delirious, Patients who are not willing to participate. The data collection period was done with prior permission from the Dtrector of Saveetha Medical College and Hospital and ethical clearance was obtained from the institution. The purpose of the study was explained to the samples and written informed consent was obtained from them. The demographic data were collected using a structured interview questionnaire, and then data was collected by the investigator himself, an average of 3-4 patients could be interview by per day. Questioning demographic data was asked first as per interview schedule followed by the question relation to anxiety. And each question was repeated as per the interview schedule during the interview to help the patients to understand and given the correct response. Responses were recorded as per the interview schedule during the interview. At the end of interview the question asked by the patients were clarified. Pearson's correlation coefficient was used to assess the level of anxiety among Intensive Care Unit patients. Chi square was used to association of level of anxiety among Intensive Care Unit patients with their selected demographic variables.

Results and Discussion
Section A: Sample characteristics
Among 60 sample regarding the age out of 60 samples 26(43.4%) samples were come under type age group of 15-20 years, 24(40%) were under the age group of 20-30 years, 10(16.6%)samples were under the age group of above 30 years. Regarding religion out of 60 samples 34(56.6%) samples were Hindu religion, 24(40%) samples were Christian, 2(3.4%) samples were under Muslim religion. Regarding type of marriage out of 60 samples 35(58.4%) samples were consaguineous marriage, 25(41.6%) samples were non consagineous marriage. Regarding type of family, out of 60 samples, 45(75%) samples were lived in nuclear family, 5(8.3%) samples were lived in joint family. Regarding number of children out of 60 samples 15(25%) samples were one children, 28(46.7%) samples were two children, 16(26.7%) samples were three children. Regarding occupation out of 60 samples 4(14%) samples were unemployed, 1(3%) samples were government jobs, 25(83%) samples were private job. Regarding Socioeconomic status out of 60 samples 6(10%) samples

were poor class, 5(8.3%) were rich class, 49(81.7%) samples were lower class. Regarding education out of 60 samples, 28(46.7%) samples were uneducated, 18(30%) samples were primary educated, 5(8.3%) samples were secondary educated, 9(15%) samples were graduated.

Section B: Assessment of level of anxiety among intensive care unit patients.

Among 60 samples 21(35%) members had mild anxiety, 22(36.7%) members had moderate level of anxiety, 17(28.3%) members had severe level of anxiety. (Table 1)

The present study is supported by Balasubramaniyam (2013), conduct a study on A Study to Assess Level of Anxiety among Intensive Care Unit (ICU), Patients in a Selected Hospital, Salem, Tamilnadu. Non experimental, descriptive research design with cross sectional survey approach was used for the present study. The study was conducted in a selected Hospital, Intensive Care Unit, Salem, Tamilnadu. All adult ICU patients who remained in ICU for greater than 24 hours were eligible for the study. Purposive sampling which is a non-probability sampling was used to select the samples for the present study. A total of 50 patients admitted to intensive care unit were the sample for study. Level of anxiety was measured by using structured interview schedule developed by the author. The tool has two section ie, section A and section B. Section A consists of demographic variable and section B consists of

five point Likert scale with 30 anxiety items with five domains. The five domains are anxiety items related to isolation, use of hospital aids, dependency, life threats and financial ruin. Major findings revealed that majority (40%) of the patients were between $31 - 45$ years of age and were males (76%), from upper middle socio economic class (66%) and most of the patients admitted in ICU less than one week (88%), majority had no previous exposure (78%) and from urban (74%). Thirty four percentages of them were graduates. Overall observation of anxiety shows that 42% of them had moderate level of anxiety, 32% had severe anxiety and 26% had panic level of anxiety. Severe level of anxiety was found highest for the factor related to isolation(48%), whereas, moderate and severe level of anxiety were found highest for use of hospital aids (38%), life threats (38%), dependency(36%) and financial ruin(38%). There was no significant association between level of anxiety and age, sex, previous exposure, family, education, employment, residence and diagnosis except occupation and income. This small study provides a start to the prospective mapping of anxiety levels on time of transfer and shortly after transfer from an ICU to the wards. It also provides information to researchers who want to examine ICU transfer anxiety. By understanding the anxiety experienced by ICU patients, nurses are better able to provide psychological support and thus more holistic care to this group of patients.

Table 1: Frequency and percentage distribution of level of anxiety among intensive care unit patients.

N = 60

	Frequency	Percentage
Mild	17	28.3%
Moderate	22	36.7%
Severe	17	35%

Section C: Mean score and standard deviation score of anxiety level of intensive care unit patients.

Mean score and standard deviation score of anxiety level of intensive care unit patients shows the mean scores for mild (27.3), moderate (20.6) and severe (9.5) and standard deviation score for mild (1.4193), moderate (1.9188) and severe (4.7581). (Table 2)

Table 2: Mean score and standard deviation score of anxiety level of intensive care unit patients.

N = 60

	Mean Deviation	Standard Denviation
Mild	27.3	1.4193
Moderate	20.6	1.9188
Severe	9.5	4.7581

Section C: The association between the demographic variables and the anxiety level among intensive care unit patients.

The present study reveals that the level of anxiety with the demographic variables among Intensive Care Unit patients type of marriage, type of family, socio economic status had shown statistically significant. And the age, religion, number of children, occupation, education had shown statistically Non-significant.

This present study is supported by Saranya R (2019), conducted a study to assess the anxiety level among patients who are newly admitted diagnosed as myocardial infarction and their primary care givers in a selected tertiary hospital,

Tamilnadu, India. The major findings of the study showed that, there was a significant relationship between the patients and primary care givers in State anxiety level with selected demographic variables. There was a significant association between the level of anxiety and demographic variables like Age, Sex and Education. There was a positive correlation between the level of anxiety of patients and their primary care givers. Symptoms of anxiety were prevalent and persistent problems among newly diagnosed as Myocardial Infarction patients and their primary care givers. This study highlights the importance of routine psychological assessment for newly diagnosed as Myocardial Infarction patients and their primary care givers in hospital and after discharge.

Conclusion

This study indicates the level of anxiety among Intensive Care Unit patient is most effective in Intensive Care Unit patient well-being. Because without anxiety is an important indicator of the Intensive Care Unit patient well-being. Whereas increased anxiety level may leads to any other psychiatric complication. While comparing to the level of anxiety especially the demographic variables among Intensive Care Unit patients type of marriage, type of family, socio economic status had shown statistically significant.

Saveetha College of Nursing and Saveetha Medical College and Hospital.

Authour's Contribution
All the authors actively participated in the work of the study. All authors read and approved the final manuscript.

Conflicts of Interest
The authors declare no conflicts of interest.

References
1. Ashworth P Critical Care Nursing and Nurses. Intensive and Critical& Care Nursing 2003;16:335-336.
2. Basavanthappa BT. 2nd edition, *Medical Surgical Nursing*, Jaypee& Brothers, New Delhi, 2009.
3. Kuruvilla J. Essentials of critical care nursing, (1st edition). Jaypee & Brothers Medical Publishers 33-35, 2007.
4. Lewis MS, Collier, Heit Kemper. Medical and Surgical Nursing (6th ed.), Philadelphia: W.B. Saunders Publication, 2004.
5. Nishi Aggarwal. Essentials of Bio statistics, 1st edition, Peepee publishers, New Delhi, 2010.
6. Potter, A, Patricia.& & Perry Anne Griffin. Fundamentals of Nursing (6th ed.). Missouri: Mosby publications, 2006.
7. Suresh Sharma K. I edition, Nursing Research& & Statistics. Elsevier Science, India Ltd, New Delhi, 2012, 90.
8. Bruce. H. Friedman and Julian. F. Thayer, Panic anxiety and heart& rate variability, 2009.
9. Carol Cox& & Julia Hayes. Physiologic and Psychodynamic responses to the administration of therapeutic touch in critical care. 2000;15(6):363-368.
10. Dorrie K, Fontaine. Impart of the critical care environment on the& patient 2008;44(6):230-234. North England journal of medicine.
11. Hungler BP, Polit DF. Nursing Research (8th ed.), Philadelphia: Lippincott Company, 2008.
12. Ischiro Kowachi, Davi Sparrow, Pantel Vokonas S. Prospective & Cohort study on phobic anxiety is strong risk fact for coronary artery disease, 2008.
13. Olson M, Sneed N. Effectiveness of therapeutic touch in reducing& anxiety. Advanced practice nursing 1999;16(2):97-108.