# Depression among Patients Who are in Critical Condition

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#### **Abstract**

Background: Patients who are admitted to the Intensive Care Unit (ICU) are in critical condition, and because of their illness, they often struggle with mental health problems such as depression. The purpose of this study was to evaluate the level of depression experienced by critically ill patients after they were admitted to the ICU.

The aim of the present study was to determine the prevalence of depression among critically sick patients who were admitted to the intensive care unit (ICU).

Methodology: A random sampling technique was used to select 50 critically ill patients from the intensive care unit (ICU), and a cross-sectional research design was utilised in order to determine the prevalence of depression among critically ill patients at K.H. & M.R.C. using the Hamilton Depression Rating Scale (HDRS). During the course of the investigation, both descriptive statistics and inferential statistics were utilised.

Result: The findings of this investigation revealed that 19 of the samples, or 38 percent, belonged to the age group of 41 to 60 years, 18 of the samples, or 36 percent, belonged to the age group of 21 to 40 years, and 13 of the samples, or 26 percent, belonged to the age group of 61 to 80 years. In the study, there were a total of 29 male participants (58%) and 21 female participants (42%). 18 out of the sample,

or 36%, had completed primary school, 13 out of the sample, or 26%, had completed high school, and 6 out of the sample, or 12%, were illiterate. The mean score was 18.64, and that indicates that the majority of the people in the study sample were suffering from severe depression.

Conclusion: Patients in critical condition who were admitted to the intensive care unit often suffered from mental health conditions such as depression.

#### 1. Introduction

New advances in medical technology have made hospital operations simpler, which, in turn, has the potential to enhance patient outcomes by enhancing rehabilitation, lowering the risk of complications, and lowering mortality rates. [1] [2]. Although technology can be of assistance in successfully carrying out physical treatment, it is not guaranteed to be of major benefit to patients suffering from mental illness or mental disorders. [3]The finest examples of environments that are known to provoke psychological disorders include the intensive care unit (ICU), the critical care unit (CCU), the medical or surgical ICU, and the cardiac care unit. [4] Patients who are severely sick are at a high risk of developing psychological problems a result of the life-threatening atmosphere, the sounds associated with technological advances, the treatments that are done on them, and so on. These technological advancements can assist in the improvement of one's physical health, but they occasionally have the potential to have a negative impact on one's mental health. [5] [6] A patient's mental health, in addition to their physical health, may be severely impacted by the environment of a critical care unit. The environment of a critical care unit may have an effect on the patient's mental health. [7] Stress can have an effect on a patient's mood, and the patient may end up suffering from psychological disorders such

depression, trouble sleeping, psychosis, and other conditions. [8]Stress, depression, and anxiety are the factors that have an effect on quality of life. Emotional distress, in addition to the fact that it can increase the length of time spent in the hospital, it contributes to an increase in the expense of medical care. [9] [10] It is believed that the prevalence of depression among patients in the intensive care unit is approximately thirty percent. [11] The impact of psychological difficulties such as depression may last long after a patient is discharged, but the severity of the impact can vary. [12] According to the findings of the study, 24% to 32% of patients experienced mild depression after being discharged from the hospital within three to six months, 43% to 64% of patients experienced mild depression after being discharged from the hospital within twelve months, and 40% to 66% of patients experienced mild depression after being discharged from the hospital within two years. [13] A few more studies have shown that within two to three months after being discharged from the hospital, 17% of patients suffer from severe depression. [14] [15][16]It is imperative that mental health concerns, such as depression, in patients who have been admitted to the intensive care unit be identified at an early stage by the medical staff in order to prevent further complications. [17] **Psychological** problems such as depression can have an

effect on critically sick patients who have been brought to the intensive care unit (ICU). Since these problems can have an effect on a patient's physical health, it is essential to recognise depression early and provide help for its prevention. [18] The need for early diagnosis of psychological issues such as depression cannot be overstated. Despite the fact that relatively few investigations have been carried out to identify it. Predisposing risk factors for depression in patients hospitalised to the intensive care unit include length of time spent in the hospital, age, the need for mechanical ventilation, the patient's level of education, as well as pain. [19] [20] Because of the factors listed above, the

Because of the factors listed above, the purpose of the study was to look for signs of depression among seriously ill patients or patients who were admitted to the intensive care unit.

#### **Problem Statement: -**

Depression among Patients who are in Critical Condition

#### Objective: -

To assess Depression among Patients who are in Critical Condition

#### 2. Methods

The research design that was utilised for this study was a survey research design that was cross-sectional. Following are the inclusion and exclusion criteria that were used for the simple random sampling technique that was used to collect the total sample size of 50 from the intensive care unit at K.H. & M.R.C. For the purpose of determining the severity of depression, the Depression Hamilton Rating (HDRS) was applied. Prior to obtaining ethical clearance from consent authorities, informed and written consent from patients was first sought from those individuals. Statistics, both descriptive and inferential, were utilised in the analysis that was carried out.

Detailed description of the instrument: -

Section I: This first part of the questionnaire contained demographic information such as the respondent's age, gender, education level, marital status, occupation, and residence.

The Hamilton Depression Rating Scale (HDRS) was utilised in Section II in order to evaluate the patients' levels of anxiety. This scale consists of 17 questions, and the scoring will be as follows: Mild (scores 0 to 13), Moderate (scores 14 to 17), and Severe (scores 15 to 17). (more than 17).

#### 3. Results

**Table No: - 1** Distribution of Demographic Variables According to Frequency and Percentage: -

	Socio-Demographic			
Sr. No.	Variables	Categories	Frequency	Percentage
1	Age	21-40	18	36
		41-60	19	38
		61-80	13	26
2	Gender	Male	29	58
		Female	21	42
3	Education	Illiterate	6	12
		Primary	18	36
		Secondary	13	26
		Graduate	13	26
4	Marital Status	Married	43	86
		Unmarried	7	14
5	Occupation	Active	29	58
		Inactive	21	42
6	Residence	Urban	9	18
		Rural	41	82

#### Table No. 1 present the following:

• According to age, 19 (38%) of the sample belongs to the age group of 41 to 60 years, 18 (36%) of the sample belongs to the age group of 21 to 40 years, and 13 (26%) of the sample belongs to the age group of 61 to 80 years.

In the study, there were a total of 29 male participants (58%) and 21 female participants (42%).

• Sixteen percent of the sample, or 18, had completed primary school, thirteen percent, or 26, had completed secondary

school and/or graduated from high school, and just six percent, or 12, were illiterate.

- In terms of their marital status, 43 of the sample (or 86%) were married, while 7 of the sample (or 14%) were single.
- According to their occupation, 29 of the sample (58%) were working, whereas 21 of the sample (42%) were inactive, which indicates they were not working.
- Out of the total sample, 41 (82%) were collected from rural areas, and 9 (18%) were collected from urban areas.

**Table No:-2** Level of Depression among critically ill patient according to frequency and percentage

Categories	Frequency	Percentage				
Mild (0 to 13)	7	14				
Moderate (14 to 17)	14	28				
Severe (more than 17)	29	58				

- According to the results of Table No. 2, 58 percent of the sample suffered from severe depression.
- 14 (or 28%) of the sample reported moderate levels of depression.
- 7 (or 14%) of the sample exhibited symptoms of moderate depression.

**Table No:-3** Level of Depression among critically ill patient according to mean and slandered deviation

Categories	Mean	SD
Mild (0 to 13)		
Moderate (14 to 17)	18.64	4.637
Severe (more than 17)		

The results of this study are presented in table no. 3, which shows that the mean score was 18.64 (4.637), which indicates

that the majority of the sample suffered from severe depression.

**Table No:-4** Association of pretest level of depression with sociodemographic variables

Sr. No.	Demographic Variables	J.	level of depression			P Value	Results
		Mild	Moderate	Severe	value		
		(0 to	(14 to 17)	(More than			
		13)		17)			
1.	Age	·					
	21-40	3	4	11			
	41-60	2	4	13	3.587	0.4648	NA
	61-80	2	6	5			
2.	Gender	•					1
	Male	5	6	18	2.033	0.3618	NA

	Female	2	8	11			
3.	Education						
	Illiterate	0	2	4	5.027	0.5403	NA
	Primary	3	6	9			
	Secondary	2	5	6			
	Graduate	2	1	10			
4.	Marital Status						
	Married	5	13	25	1 700	0.4102	NIA
	Unmarried	2	1	4	1.782	0.4102	NA
5.	Occupation						
	Active	6	7	26	2.752	0.2525	NA
	Inactive	1	7	13			
6.	Residence			•	•	•	
	Urban	0	2	7	2.409	0.2000	NI A
	Rural	7	12	22	2.408	0.3000	NA

According to the findings in table no. 4, there is no demographic factor that is strongly connected with the level of anxiety.

#### 4. Discussion

The current study was conducted with the objectives of assessing anxiety among critically ill patients, and the results show that according to age, 19 (38%) of the sample belongs to the age group of 41 to 60 years old, 18 (36%) of the sample belongs to the age group of 21 to 40 years old, and 13 (26%) of the sample belongs to the age group of 61 to 80 years old. According to the findings of the study, 29 (58%) of the samples were male, while 21 (42%) of the samples were female. According to the degree of education, 18 of the sample (or 36%) had completed

primary school, 13 of the sample (or 26%) had completed secondary school and/or graduated from high school, and 6 of the sample (or 12%) were illiterate. According to their marital status, 43 (86%) of the sample population was married, whereas 7 (14%) of the sample population was single. According to their occupation, 29 (58%) of the sample population was working, while 21 (42%) of the sample population was inactive, which implies they were not working. According to the findings of the study, 41 (82%) of the sample were taken from rural areas, while only 9 (18%) were taken from urban areas.

According to the average level of depression experienced by patients who were admitted to the ICU 29 people in the sample (58%) were suffering from severe depression, 14 people in the sample (28%) were suffering from moderate depression, and 7 people in the sample (14%) were suffering from mild depression.

There is no significant association between level of anxiety and any of the demographic variables.

Sajeda A. S. conducted a study to identify patients admitted to the ICU who were suffering from depression. It should be noted that the majority of participants were females, or 56.5% of the total, and that their mean age was 44.6 years (SD 18.2). [21]

Mohammad S. and colleagues carried out a study to determine the rate of depression among patients who were hospitalised in the intensive care unit. It was reported that 310 patients participated in the study, 129 of whom were female and 181 of whom were male; the patients' mean age was 55.11 years (1.62). 53.6% of patients were diagnosed with depression, and average depression score was 18.57. (1.46). There was a strong correlation between depression and age, occupation, education level, length of hospital admissions, and other factors. [22] Sherif A et al did a study to identify the incidence of depression among patients in intensive care units. The results of the study showed that female patients were more likely to suffer from depression, and that 46.5% of patients were affected by the condition. [23] Isali K. et al. did a study to determine the prevalence of depression in critically sick patients, and the results showed that

56 (71.8%) of these patients suffered from depression, with a mean depression score of 9.40 4.286. depression was linked to having certain symptoms. [24]

#### 5. Conclusion

Patients in critical condition who were admitted to the intensive care unit often suffered from mental health conditions like depression.

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