

# Scientia Psychiatrica

Journal Homepage: <u>www.scientiapsychiatrica.com</u> eISSN (Online): 2715-9736

# Psychiatric Disturbances in Patients and Relatives Due to Intensive Care Admission

# Ignatius Aldo Winardi<sup>1\*</sup>

<sup>1</sup>Department of Anesthesiology and Intensive Care, Faculty of Medicine, Universitas Sriwijaya, Palembang, Indonesia

#### ARTICLE INFO

#### **Keywords:**

Cardiac arrest
Delirium
Hospitalizations
Intensive care
Post traumatic stress disorder

## \*Corresponding author:

Ignatius Aldo Winardi

### E-mail address:

<u>aldoppds@gmail.com</u>

The author has reviewed and approved the final version of the manuscript.

# https://doi.org/10.37275/scipsy.v4i4.134

## ABSTRACT

The issue of psychiatric disorders arising from the admission of inpatient patients and their relatives has persisted for a significant period of time. This phenomenon may occur as a result of psychological trauma experienced by either the patient or their family. The majority of the family members experience fear and anxiety around the potential loss of their loved ones. Recent research has indicated that a significant proportion, ranging from 51% to 69%, of individuals within familial relationships exhibit this particular occurrence. Outpatient cardiac arrest (OCA) is recognized as a highly influential occurrence in precipitating this psychological phenomenon. The management of critically ill patients in the intensive care unit (ICU) presents a complex and demanding task. The individual's status undergoes quick and unpredictable fluctuations. The presence of ambiguity gives rise to the development of delirium, which is characterized as a state of acute brain malfunction and is observed in 50-80% of patients in the intensive care unit (ICU). The phenomenon is also correlated with prolonged hospitalizations and increased mortality rates. This review was aimed to described psychiatric disturbances in patients and relatives due to ICU admission.

# 1. Introduction

The admission of a patient to the intensive care unit (ICU) of a hospital often gives rise to psychological trauma, both for the patient and their family. The predominant psychological phenomena encompass a range of conditions such as depression, anxiety, sleep deprivation, and post-traumatic stress disorder. It is commonly observed that a significant proportion of individuals may experience the development of post-traumatic stress disorder (PTSD) subsequent to the loss of their family members within the intensive care unit (ICU) setting or even as a result of their own admission to the ICU. 2,3

Individuals who have experienced traumatic events frequently exhibit fragmented or altered memory, which may manifest as hallucinations and delusions.<sup>4</sup> The timely identification and effective management of

this psychological phenomenon, along with the provision of psychoeducational resources, have the potential to mitigate the manifestation of symptoms. Certain studies or assessments have the capacity to quantify the psychological vulnerability associated with conditions such as depression, anxiety, and other symptoms, with the aim of mitigating the development of chronic psychological diseases.<sup>2-4</sup> This review was aimed to described psychiatric disturbances in patients and relatives due to ICU admission.

# Intensive care unit and its impact on mental health condition

The management of critically ill patients in the intensive care unit (ICU) presents significant challenges. The individual's status undergoes quick and unpredictable fluctuations. The potential duration

of the patient's stay in the Intensive Care Unit (ICU) is undetermined, and the prognosis currently lacks clarity. Ambiguity in medical settings has been shown to make delirium more likely. Delirium is a state of severe brain dysfunction that affects between 50% and 80% of patients in the intensive care unit (ICU). This phenomenon is additionally linked to prolonged hospitalization periods and an increase in fatality rates. The etiology of this illness remains unknown, as it is influenced by multiple factors. Neuroanatomic variables, sedatives or analgesia, sleep problems, potential infections, and hereditary factors are all relevant considerations. 5-8

Numerous stressors can impact both the patient and their family members during their admission to the intensive care unit (ICU). Adverse neuropsychiatric events can happen because of a critical illness and the presence of many system organ dysfunctions, either on their own or in connection with the intensive care unit (ICU) while the patient is in the hospital or afterward.<sup>9</sup> Around half of patients will experience delirium during an extended period of stay in the intensive care unit (ICU), while post-traumatic stress disorder (PTSD), depression, and anxiety are likely to manifest after the patient's departure. Deficits in cognitive functioning have been observed in patients undergoing intensive care unit (ICU) treatment.<sup>10-12</sup>

# Post-traumatic stress disorders in ICU survivors and family members

Following the initial month of hospital release, a considerable proportion, ranging from 25% to 60% of individuals who have been in the intensive care unit (ICU), may experience post-traumatic stress disorder (PTSD). Moreover, within the subsequent 6 to 12 months, an additional 17% to 34% of ICU survivors will develop PTSD. The occurrence of this psychological event is associated with a notable decline in the quality of life among patients as compared to the general population. The ICU diary is employed to document the occurrence of psychiatric events in family members. The prioritization of early action in addressing these sequelae is of utmost

significance for the at-risk population.<sup>13</sup>

The analysis of intensive care unit (ICU) admissions reveals that the presence of long-term psychological complications has a significant impact on both patients and their family members. Post-traumatic stress disorder (PTSD) typically arises in individuals whose family members have been exposed to or have directly observed instances of actual or perceived mortality in others. The restricted visitation policies in the intensive care unit (ICU) may result in family members experiencing sleep deprivation due to heightened levels of stress. Furthermore, a significant proportion of patients in the intensive care unit (ICU) exhibit an inability to autonomously make decisions regarding their medical conditions. This is mostly attributed to factors such as delirium, coma, drowsiness, and neurological impairment. Individuals who have experienced traumatic events frequently exhibit fragmented or altered memory, which may manifest as hallucinations and delusions. 14,15

According to a previous study, a notable proportion individuals, specifically 17%, experienced symptoms of depression, while 13% exhibited signs of anxiety following a 90-day period of care subsequent to cardiac arrest. Approximately 15% of the population is in need of psychological assistance, while the remaining majority have been prescribed psychotropic medications during this specific timeframe. A study conducted on a sample of 100,000 parents in the United States revealed that 9.5% of them experienced the development of psychiatric disorders such as autism spectrum disorder (ASD), post-traumatic stress disorder (PTSD), depression, anxiety, or other related conditions during their child's stay in the Pediatric Intensive Care Unit (PICU). Notably, the likelihood of mothers experiencing these disorders was found to be higher compared to fathers. 12

The duration of hospitalization is connected to the presence of a familial, psychological problem characterized by a distorted impression of the severity of sickness. Additionally, individuals with this disorder may witness their family members utilizing a ventilator. Individuals who obtain a score greater than

11 on the Hospital Anxiety and Depression Scale (HADS) and a score larger than 12 on the Edinburgh Postnatal Depression Scale (EPDS) may be indicative of experiencing symptoms related to depression or anxiety. Furthermore, it has been observed that the utilization of multimedia in nursing education is associated with a decrease in scores on the Hospital Anxiety and Depression Scale (HADS) for anxiety and depression.<sup>13</sup> This suggests that HADS scores vary depending on the education level of people who experience stress or depression. The timely identification and effective care of this psychological with phenomenon, along the provision psychoeducational resources, may result in a reduction in the manifestation of symptoms. Various research and assessments have been developed to quantify the psychological vulnerability associated with conditions such as depression, anxiety, and other related symptoms, with the aim of mitigating the occurrence of chronic psychological diseases. 13-15

### 2. Conclusion

Various psychological conditions, such as depression, anxiety, and post-traumatic stress disorder, have emerged within both the patient and their family as a result of numerous factors. However, by promptly handling this situation, appropriate interventions, such as the implementation of educational programs within the critical care unit, mitigate the manifestation of psychiatric disorders. Additional research and empirical evidence are required on a global scale in order to have a more comprehensive understanding of psychiatric illnesses that may arise following admission to an intensive care unit (ICU) within the broader societal context.

# 3. References

- Marra A, Pandharipande PP, Patel MB. ICU delirium and ICU-related PTSD. Surg Clin North Am. 2017; 97(6): 1215-35.
- Klein Klouwenberg PMC, Zaal IJ, Spitoni C, Ong DSY, van der Kooi AW, Bonten MJM, et al.
   The attributable mortality of delirium in

- critically ill patients: prospective cohort study. BMJ. 2014: 349.
- Pandharipande PP, Girard TD, Jackson JC, Morandi A, Thompson JL, Pun BT, et al. Longterm cognitive impairment after critical illness. N Engl J Med. 2013; 369(14): 1306–16.
- 4. Naidech AM, Beaumont JL, Rosenberg NF, Maas MB, Kosteva AR, Ault ML, et al. Intracerebral hemorrhage and delirium symptoms. Length of stay, function, and quality of life in a 114-patient cohort. Am J Respir Crit Care Med. 2013; 188(11): 1331-7.
- Needham DM, Davidson J, Cohen H, Hopkins RO, Weinert C, Wunsch H, et al. Improving long-term outcomes after discharge from intensive care unit: report from a stakeholders' conference. Crit Care Med. 2012; 40: 502–9.
- Hopkins RO, Girard TD. Medical and economic implications of cognitive and psychiatric disability of survivorship. Semin Respir Crit Care Med. 2012; 33: 348–56.
- Colbenson GA, Johnson A, Wilson ME. Postintensive care syndrome: Impact, prevention, and management. Breathe (Sheff) 2019; 15: 98–101.
- Svenningsen H, Langhorn L, Ågård AS, Dreyer
   P. Post-ICU symptoms, consequences, and follow-up: An integrative review. Nurs Crit Care. 2017; 22: 212–20.
- Lee M, Kang J, Jeong YJ. Risk factors for postintensive care syndrome: A systematic review and meta-analysis. Aust Crit Care. 2020; 33: 287-94.
- 10. Marra A, Pandharipande PP, Girard TD, Patel MB, Hughes CG, Jackson JC, et al. Cooccurrence of post-intensive care syndrome problems among 406 survivors of critical illness. Crit Care Med. 2018; 46: 1393–401.
- 11. Azoulay E, Vincent JL, Angus DC, Arabi YM, B rochard L, Brett SJ, et al. Recovery after critical illness: putting the puzzle together. A consensus of 29. Crit Care. 2017; 21: 296.

- 12. Geense W, Zegers M, Vermeulen H, van den Boogaard M, van der Hoeven J. MONITOR-IC study, a mixed method prospective multicentre controlled cohort study assessing 5-year outcomes of ICU survivors and related healthcare costs: A study protocol. BMJ Open. 2017; 7: e018006.
- 13. Muscedere J, Waters B, Varambally A, Bagsha w SM, Boyd JG, Maslove D, et al. The impact of frailty on intensive care unit outcomes: a systematic review and meta-analysis. Intensive Care Med. 2017; 43: 1105–22.
- 14. Morgan A. Long-term outcomes from critical care. Surgery (Oxf). 2021; 39: 53–7.
- 15. Nikayin S, Rabiee A, Hashem MD, Huang M, B ienvenu OJ, Turnbull AE, et al. Anxiety symptoms in survivors of critical illness: A systematic review and meta-analysis. Gen Hosp Psychiatry. 2016; 43: 23–9.