

ICU Delirium: Psychological Management and Mental Health Care among Patients Admitted in Intensive Care Unit

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ABSTRACT

Delirium is defined as an acute brain dysfunction which affect the overall wellbeing of an individual. According to The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) the term “delirium” leads to shift in normal baseline cognitive level of an individual. In hospital especially in intensive care unit (ICU) there are high probability to have this condition. Usually this occur due to multiple other clinical reasons too but this condition is controllable and preventable. With some mutual efforts of staff working in ICU, nurses, doctors and psychologist.

Keywords: ICU Delirium, Psychological Management, Mental Health Care, Patients Admitted, Intensive Care Unit

Patients with altered mental status are frequently referred to as "delirium" in clinical settings, a true diagnosis of the condition implies the presence of particular symptoms. The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5) describes delirium as having diminished capacity to concentrate, direct, maintain, and shift attention. Along with this, there is a shift in cognition, such as a memory loss, disorientation, or perceptual issues. Prominently, a baseline neurocognitive condition (like dementia) or a significantly decreased level of arousal cannot explain the inattention and change in cognition (e.g., sedative administration and coma).

Patients with this disease may exhibit symptoms like anxiety, paranoia, hallucination, seeing objects that aren't there, being profoundly disoriented in time and space, becoming agitated to the point of becoming violent, etc. in an intensive care unit (ICU) or other hospital settings. Acute brain syndrome with reduced intellectual functioning that affects patients receiving care in a critical care unit is how the disorder is formally defined.

Short-term disorientation and cognitive abnormalities are characteristics of delirium. Based on various causes, there are four subareas:

1. a general medical condition, such as sepsis;
2. a stimulant condition, such as cocaine, opioids, or phencyclidine [PCP];

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3. numerous causes, such as brain injury and kidney disease; and
4. many predisposing factors, such as sleep deprivation.

Delirium is characterized by a sharp decline in cognition and consciousness, along with attention being particularly affected. Delirium is a potentially fatal but treatable condition of the central nervous system (CNS) that frequently includes perceptual abnormalities, aberrant psychomotor activity, and sleep cycle dysfunction.

Different names for delirium

1. Intensive care unit psychosis
2. Acute confusional state
3. Acute brain failure
4. Encephalitis
5. Encephalopathy
6. Toxic metabolic state
7. Central nervous system toxicity
8. Paraneoplastic limbic encephalitis
9. Sundowning
10. Cerebral insufficiency
11. Organic brain syndrome

Diagnostic Criteria – DSM-5

In DSM-5, standard A for wooziness: "An aggravation in consideration (i.e., diminished capacity to coordinate, center, support, and shift consideration) and mindfulness (diminished direction to the climate)" could be hazy. The standard likened "mindfulness" to "decreased direction to the climate"; moreover, it utilizes the expression "bewilderment" which as of now shows up as one of the "extra aggravations in discernment" in rule C. To explain the importance, the parenthesized expression "diminished direction to the climate" was taken out, and the last part of basis A was changed to "joined by diminished familiarity with the climate."

Other conditions related to symptoms of delirium are:

1. Substance intoxication and withdrawal delirium: condition where symptoms A and C are clearly present in the patient.
2. Medication induced delirium: This occurs as a side effect of some medications.
3. Due to medical conditions: There is proof that the disturbance is caused by the physiological side effects of another medical disease based on the history, physical examination, or test results.

Psychological Causes

→ **Environmental causes**

- Being sleep deprived
- Social exclusion
- Immobilization
- Unfamiliar environment
- Unnecessary noise
- Sensory deprivation
- Lack of daily light variation

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- Sleep disturbance and deprivation

→ **Psychological causes**

ICU admission stress

- Patients are in critical condition and facing imminent death.
- People experience numerous or major medical issues.
- They could be unable to express their demands.
- A loss of self-control occurs.
- Patients are in an unfamiliar and thoughtfully in dangerous setting.

→ **Cognition at the time of ICU admission**

- Advanced Age
- Patient's past cognitive state may make them more vulnerable to delirium.
- Prior traumatic/ depressed events

Psychosocial factors

- Marital distress
- Generalized hospital anxiety
- Pre-operative anxiety
- Depression
- Financial worry/tension

→ **Medical causes**

- Extreme pain level
- Electrolyte imbalance
- Medication reaction or side effects
- Sepsis
- Metabolic disturbances
- Cumulative Analgesia
- Electrolyte imbalances
- Dehydration

Signs and symptoms

- Displaying agitation or even being calm
- Confusion
- Aggression
- Anxiety
- Hearing voices that are not present
- Using language that is improper failing to pay attention or follow instructions
- Uncertain of their location and the time of day,
- Seeing things that are not there
- Acting otherwise than usual
- Alterations in sleeping patterns
- Emotional alterations
- Unusual behaviours, such as tremors or picking at clothing
- Memory issues

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Extensively used Assessment tools for Delirium

1. ICDSC

The eight items on the Intensive Care Delirium Screening Checklist (ICDSC) are delirium symptoms that are assessed over the course of eight to twenty-four hours. For each symptom that appears within the allotted time range, patients receive one point (zero points if symptom did not manifest). Level of consciousness, inattention, disorientation, hallucinations, delusions, or psychosis; psychomotor agitation or retardation; inappropriate speech or mood; disruptions of sleep/wake cycles; and symptom variation are the eight symptoms. With a score of 4, delirium and a positive ICDSC are both present.

2. CAM-ICU

The Confusion Assessment Method (CAM), as updated by the CAM-ICU, evaluates four features: 1) An abrupt change or variation from baseline in mental condition, 2) inattention, 3) altered degree of consciousness, and 4) disordered thought. (1, 42) If Features 1 and 2 as well as either Feature 3 or 4 are present, the CAM-ICU is positive, and the patient is diagnosed as having delirium. Each feature depends on elements regarded as common neurologic evaluations and offers a dispassionate appraisal of each.

3. RASS

Using standard reactions to stimuli presented in a logical succession, RASS was created to have exact, unambiguous definitions for levels of sedation that rely on an evaluation of arousal, cognition, and sustainability. All hospitalised patients can utilise the RASS to rate their level of alertness or agitation. To avoid over- and under-sedation, it is usually applied to patients who are mechanically ventilated. The first step in delivering the medication is to get a RASS score. One of the various sedative scales used in medicine is the RASS. The Ramsay scale, the Sedation-Agitation-Scale, and the COMFORT scale for paediatric patients are further scales.

Different types of ICU psychosis

Names	Description
<ul style="list-style-type: none">• Post-operative delirium	It occurs mostly among older age patients after an operation (surgery). For eg: Cardiac delirium (after heart surgery)
<ul style="list-style-type: none">• Acute functional psychosis	There is no known specific neurological or other bodily pathology associated with this psychotic condition.
<ul style="list-style-type: none">• Postictal psychosis	An episode of psychosis occurs within one week after a cluster of seizures
<ul style="list-style-type: none">• Myxedematous psychosis	Uncommon consequence of hypothyroidism such as in hashimoto's thyroiditis or in patients who have had the thyroid surgically removed and are not taking thyroxine.
<ul style="list-style-type: none">• Menstrual psychosis	Occurs following the menstrual period to some frame between 3 days before and 3 days after the first day of the menses.
<ul style="list-style-type: none">• Drug or liquor related psychosis	Number of psychotic conditions occurred as a result of alcohol abuse.

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Names	Description
<ul style="list-style-type: none"> • Post sepsis psychosis 	It occurs among half of the sepsis survivors. Risk is more among people admitted to an intensive care unit and extended hospitalization.
Psychosis of epilepsy	
<ul style="list-style-type: none"> • Epileptic psychosis 	Reflect a basic description in the fidelity of the mind and take place either during or after a seizure.
<ul style="list-style-type: none"> • Ictal/ Postictal psychosis 	Common among people who have experienced drug resistant epileptic seizures over many years. Symptoms: disconnection from reality, some cases aggression or suicidality.
<ul style="list-style-type: none"> • Chronic psychosis 	Lifelong psychotic illness that is also characterized by cognitive and affective dysfunctions.
<ul style="list-style-type: none"> • Psychosis induced by anti-septic drugs 	Adverse neuropsychiatric effects of antibiotic medications. A direct link exists between exposure to antibiotics and acute psychosis.
<ul style="list-style-type: none"> • Organic psychosis 	It incorporates head injury, sickness or contaminations that influences the mind cause side effects of psychosis

Non-pharmacological Management plans

1. Preventive plans

- For avoiding family deprivation, liberal policies should be formed.
- Regularly orient the patient to the date, time and place.
- Cognitive stimulating exercises and activities to enhance attention, perception, comprehension, memory and language.
- Provide familiar environment by regularly asking patient's about their feelings and thoughts.

2. Psychological Counselling

- The existence of what is thought to be a therapeutic environment.
- Establishing a rapport of trust with a therapist.
- A logical plan that offers a solid justification for the patient's symptoms as well as solutions.
- The therapist's capacity for instilling optimistic expectations.
- An intervention that fosters trust between the patient and the therapist and increases the patient's sense of well-being.
- Allow patient to express themselves
- Free association method is highly effective with inpatient.
- Therapist can apply optimistic well-being strategies.

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3. Post intensive care

- Individual counselling with regular follow up.
- For patients under observation after ICU assess them for hospital related anxiety.

CONCLUSION

Patient who are admitting in ICU with complain of ICU psychosis required care in all aspects like psychological care, spiritual care, physical care and pharmacological care. Medication is important aspect for the treatment of all the general medical conditions but non-pharmacological management is more important to consider for the overall wellbeing of a patient and affected caregivers.

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Conflict of Interest

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