Revista Multidisciplinaria Perspectivas Investigativas
Multidisciplinary Journal Investigative Perspectives
Vol. 3(2), 9-13, 2023
https://doi.org/10.5281/zenodo.10049331

Delirium in intensive care unit patients
Delirio en pacientes en la unidad de cuidados intensivos

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ABSTRACT

The aim of this study was to analyze the prevalence of delirium in mechanically ventilated patients admitted to the Intensive Care Unit. We proceeded methodologically from a descriptive documentary type of research with bibliographic design, in a population of 15 scientific articles. The prevalence of delirium in critically ill patients is not completely understood, but it is known that its presence is an independent predictor of mortality, hospital stay, duration of mechanical ventilation, cognitive deterioration after hospital discharge, that is why the medical-nursing health personnel play a fundamental role in these patients, since they must assess the CAM-ICU, in a reliable way, in order to provide immediate follow-up and treatment, reducing the number of cases in the ICU.

Descriptors: living conditions; patients; clinical medicine. (Source: UNESCO Thesaurus).

RESUMEN

La investigación tiene como objetivo analizar la prevalencia del delirio en pacientes con ventilación mecánica ingresados en la Unidad de Cuidados Intensivos. Se procedió metodológicamente desde un tipo de investigación descriptiva documental con diseño bibliográfico, en una población de 15 articulos científicos. La prevalencia del delirio en pacientes en estado crítico no se comprende por completo, pero se sabe que su presencia es un predictor independiente de mortalidad, estancia hospitalaria, duración de la ventilación mecánica, deterioro cognitivo tras el alta hospitalaria, por eso el personal de salud médico - enfermera cumple un rol fundamental en estos pacientes, ya que debe valorar el CAM-ICU, de una manera confiable, así poder dar un seguimiento y tratamiento de manera inmediata, disminuyendo los casos en la UCI.

Descriptores: condiciones de vida; paciente; medicina clínica. (Fuente: Tesauro UNESCO).

Received: 9/1/2023. Revised: 17/1/2023. Approved: 11/02/2023. Published: 01/04/2023.
Research articles section

INTRODUCTION

Delirium is a state caused by severe and reversible brain dysfunction that is detectable on admission and persists after hospital discharge. It is caused by the patient's clinical or surgical condition, the effects of medications, exposure to toxins or a combination of all factors, is characterized by cognitive impairment in level of consciousness and attention, changes in behavior and mood, increased or decreased psychomotor activity, changes in the sleep-wake cycle. Early detection and prevention are the best way to reduce and treat delirium (Bastos, *et al*. 2020).

It usually occurs in critically ill patients hospitalized in the intensive care unit (ICU), there are several predisposing factors that influence the presence of delirium such as advanced age, sex more frequent in men, severe illness, dementia, surgery, alcoholism, renal failure, depression, visual or hearing impairment were also found. Stimuli such as physical paralysis of a critically ill patient and somatic limitations, hypoxia, painful phenomena, bladder catheterization, multiple procedures, infectious process, drugs such as benzodiazepines, anticholinergics, among others (Casault, *et al*. 2021), (Stollings, *et a*l. 2021).

It is classified as acute, i.e., lasting several hours and lasting several weeks or months. Clinically, it can be hyperactive or hypoactive. It can manifest as hyperactive (agitation, hallucinations), hypoactive (psychomotor retardation, lethargy, lethargy) or mixed (fluctuation of symptoms between the above forms), the inactive type being the most common condition. The prevalence of delirium is close to 70% and the incidence can be as high as 89%. In addition, patients who develop this disorder have worse clinical outcomes, contributing to longer hospital stays and increased likelihood of adverse events such as respiratory and neurological complications (Mori, *et al*. 2016), (Bento, *et al*. 2018).

The health care team is often the first to identify behavioral changes in intensive care patients. This reinforces the importance and need for early identification of delirium by the nurse using valid tools. The use of assessment tools should be encouraged to facilitate the identification of delirium, among them are: the RASS scale (Richmond Agitation- Sedation Scale), for its use we must also take into account the degree of sedation and agitation of the patient and the method of assessment of delirium in the ICU (CAM-ICU) (Mart, *et al*. 2021).

The research aims to analyze the prevalence of delirium in mechanically ventilated patients admitted to the Intensive Care Unit.

METHOD

We proceeded methodologically from a descriptive documentary type of research with bibliographic design, in a population of 15 scientific articles, with the intention of analyzing the study variable from an analytical-synthetic context to structure a theoretical corpus from the application of the content analysis technique in order to scrutinize the situation of greater preponderance present in the analyzed research works.

ANALYSIS OF RESULTS

Delirium is associated with high mortality and long hospital stay. Given this epidemiological picture, rapid and accurate treatment of delirium becomes a priority in the intensive care unit. The evaluation of delirium as a clinical problem is broad and complex, from diagnosis to treatment and rehabilitation. A systematic approach should guide the care of these patients, so that timely and quality care is provided for immediate improvement (Ormaza-Shiguango, *et al*. 2020), (Herrera, *et al*. 2020).

One of the main accidents to be addressed in the ICU is referred to traumatic brain injury (Olmos, *et al*. 2019), intracranial tumors (Herrera, *et al*. 2020), hemorrhagic stroke (Herrera, *et al*. 2020), ischemic stroke (Bento, *et al*. 2018). However; there are cases when these the non-pharmacological treatments are not sufficient and the patient becomes restless and present psychomotor agitation requires pharmacological intervention.

In this sense; delirium has long been considered a risk factor for death in the intensive care unit and after hospital discharge, leading to increased patient dependency and long-term cognitive impairment (Rojas, *et al*. 2017). Due to delirium: mechanical ventilation cannot be withdrawn in the rapid manner and there are extubation failures, re-intubation; prolonged ICU stay, hospital stay (and thus hospital care costs), anxiety and depression after an ICU stay. In addition, in the long term, there is also a decrease in cognitive and executive functions, causing a lack of autonomy and independence in daily activities (Fuentes-Covian, 2017).

As well pointed out by several authors delirium is an acute and fluctuating clinical presentation characterized by inattention, accompanied by disorganized thinking or altered levels of consciousness. It can appear as hyperactive, hypoactive (most commonly) or mixed. The prevalence of delirium in the intensive care unit (ICU) is highly variable: it affects 30-80% of critically ill patients and its presence is independently associated with higher mortality rates, higher costs and longer hospital stays (Giménez-Esparza, *et al*. 2022).

In addition, these patients have a higher risk of developing long-term cognitive impairment and higher rates of mental status changes, such as anxiety and depression. Risk factors for delirium include advanced age, high risk scale scores, prolonged mechanical ventilation, especially in patients with acute respiratory distress syndrome (ARDS), secure depression, and benzodiazepine use. COVID-19, an epidemic caused by SARS-CoV-2, is associated with extremely high rates of delirium, particularly in ventilated ARDS patients who are affected in 80% of cases (Garcia-Sanchez, *et al*. 2019).

In the reviewed studies delirium, occurs in all existing pathologies, as well as it was in the outbreak of SARS-CoV-2, since there were predisposing factors such as: advanced age, social isolation measures, without physical contact with their relatives can cause symptoms of depression, anxiety, fear and hostility. In patients with Covid-19 there was an increase of delirium events, it was possible to verify that there are two theories to explain this fact; the first virus infection directly in the nervous system and the second through the inflammatory reaction system, either of these two theories causes neuronal damage, altering consciousness to vascular events. Therefore, it is necessary to determine the first symptoms of delirium and use diagnostic tests, such as CAM-ICU, to start with drugs or non-pharmacological measures, and thus shorten the time and severity of delirium (Palacio-Jiménez, *et al*. 2021).

In another article he comments that mixed delirium is the most frequent, followed by hypoactive and hyperactive delirium, with a much lower incidence than the previous forms. Despite its severe morbidity, hypoactive delirium often goes undiagnosed and untreated because its manifestations are often confused with the effects of anesthesia. Delirium in the ICU is closely related to higher mortality at 6 months, the related factors in most articles mention that they are: a long ICU hospital stay and longer duration of MV (mechanical ventilation), having greater short-term adverse events such as extubation and reintubation, MV failure, hospital-acquired pneumonia, pressure ulcers, ICU immobilization or cardiac arrhythmia. Delirium is associated with cognitive impairment by failing to perform daily activities (Garcia-Montalvo, *et al*. 2020).

CONCLUSION

The prevalence of delirium in critically ill patients is not completely understood, but it is known that its presence is an independent predictor of mortality, hospital stay, duration of mechanical ventilation, cognitive impairment after hospital discharge, that is why the medical health personnel - nurse plays a fundamental role in these patients, since they must assess the CAM-ICU, in a reliable manner, thus being able to provide immediate follow-up and treatment, decreasing the cases in the ICU.

FINANCING

Non-monetary

CONFLICT OF INTEREST

There is no conflict of interest with persons or institutions linked to the research.

ACKNOWLEDGMENTS

Universidad Regional Autónoma de Los Andes. UNIANDES, Ambato - Ecuador.

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