Therapeutic Nursing Intervention:

Reducing Hospital Delirium in Elderly Hospitalized Patients

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Introduction

In my hospital and many others, hospital delirium is a common occurrence in elderly patients in short and long-term care. Delirium is a neuropsychiatric syndrome that is characterized by altered mental status and reduced ability to focus attention (Echeverria et al., 2022). In my two years of nursing, I have seen a few patients with delirium in the Telemetry Unit at Fair Oaks Hospital. However, I did not know much about reducing the occurrence or signs and symptoms of it. I work in a small, suburban hospital in Northern Virginia. Recently they won The Magnet Recognition award in 2023 and have multiple past years of recognition as well. The unit I work on is an acute care unit commonly known as the Telemetry or Progressive Care Unit; it consists of thirty-six beds, with a Nurse-to-Patient ratio of 4:1 or 5:1. We usually have three or four clinical technicians that work on the unit. More recently, we have had a fifth technician some days to help the nurses with everyday tasks. I have noticed delirium in my patients who have been in the hospital for a few days or more; while sometimes their mental status could be altered due to a disease process, these are usually ruled out, and I am not sure why patients start to have what we call, or doctors diagnose as hospital delirium. I work on the day shift, and though delirium is worse at night, patients still exhibit symptoms during the day as well.

Hospital Delirium in Patients Admitted to the Hospital

In the acute care unit I work in, delirium is common among older adult patients; occurrence is around 58-75% of hospitalized older adults (Azhar et al., 2023; Li et al., 2020; Lin et al., 2023). I had a patient who was there for heart failure in her eighties, and she began to have some changes in her mental status, so initially, I called a code stroke. When I returned to work the next day, she was more alert, and her scans were all negative for stroke, and the doctors believed that she was exhibiting signs of hospital delirium. According to many of my sources, delirium is common in older hospitalized adults and has varying etiologies or precipitating factors (Vasilevskis et al., 2012; Shen et al., 2024; Echeverria et al., 2022; Spear et al., 2024). Shen et al. (2024) write that the incidence of delirium is around twenty-three percent of hospitalized elderly patients. According to this group, factors that contribute to delirium are age, malnutrition, hearing or visual impairments, acute medical conditions, surgery, medication use, dehydration, injuries, and psychological stress (Shen et al., 2024). My patient's contributing factors were advanced age, dehydration, psychological stress, and acute medical conditions.

A factor that presents a higher risk of falls is that confused patients tend to get up more often and forget where they are. Sometimes these patients can become combative and be harmful to themselves and staff or others. Confused patients are much more difficult to help when it comes to keeping them safe on the unit when it is busy with patients coming and going to tests and constant medication administration. Symptoms of delirium tend to become worse at night than during the day. Sometimes, with the patient's confusion, we must call the doctor and get antipsychotics ordered. If the patient is harming others or themselves, we need to order soft wrist restraints, which in my opinion does not help much for an already confused patient. There is also an effect on the patient's circadian rhythm because they tend to be up at night more and then sleep during the day, which can contribute to delirium.

Delirium in the hospital can affect the safety of patients, putting them at risk for falls and medication compliance and causing them to be in the hospital longer. Longer medical admissions put the patient at risk for advanced disease, decreased mobility, decreased cognitive function, and mortality risk (Spear et al., 2024). According to Spear, et. al. (2024, p.1), delirium is preventable with early recognition and nonpharmacological interventions. As many factors contribute to delirium, it is possible that the more predisposing or precipitating factors a patient has, the more likely they would be to develop delirium while in the hospital. The hypoactive form of delirium is much harder to diagnose and recognize (Spear et al., 2024; Echeveria et al., 2022). A program that started at Yale University called the Hospital Elder Life Program (HELP) was initiated to assess delirium, hospital stay length and falls for acute elderly in-patients in the hospital (Shen et. al., 2024). "The total healthcare cost attributable to delirium is estimated at $164 billion annually" (Echeveria, et. al., 2022).

Current Clinical Practice

Current practices in the hospital include the Confusion Assessment Method (CAM), a screening tool clinicians use to assess for mental status changes. It assesses acute changes, altered levels of consciousness, disorganized thoughts, and inattention (Shen et. al., 2023). Delirium is diagnosed when two criteria are present. There is also a one-minute assessment for patients not in the ICU called the Nursing Delirium Screening Scale (Nu-DESC) (Shen et al., 2023). This scale tests “disorientation, inappropriate behavior, inappropriate communication, hallucinations or illusions, and psychomotor retardation” (Shen et al., 2023, p. 1). Prevention is the main intervention for delirium by identifying patients who are at risk and identifying modifiable factors such as environment, history of dementia, infection, medications, and treating the cause of the patient’s admission. Pharmacological interventions are also used to prevent delirium in cases of substance withdrawal, in pain management, and in treating infections with antibiotics (Echeveria et al., 2022). In hyperactive delirium, antipsychotics are recommended. Melatonin has also provided a benefit to patients (Echeveria et al., 2022) by helping regulate their sleeping patterns.

On my unit specifically a big complaint from older adults is noise, lack of sleep, and not getting out of bed enough. The unit is busy, patients are coming and going for procedures. There are semi-private rooms, so two people will share them with a curtain in between. Some patients will not benefit from the natural light since they have a curtain that separates them. Overnight, there might be a patient who has dementia, sharing a room with a patient who is just a similar age range, and there will be frequent noise or interruptions throughout the night. Some patients are there for stroke workups, so they are woken up every four hours, even throughout the night, to assess their neurological functions or deficits. Since the nurses are always running around the unit, it is challenging to get patients up and moving around the unit because there are so many responsibilities. Many factors inhibit and can increase the incidence of delirium in older patients on the unit. There are quiet times in place on the unit during the day and at night for the patients to get rest. Visitors are required to leave by eleven at night. However, if it is a semi-private room, we ask visitors to leave by nine to help the patients rest.

Many discrepancies exist in my unit in preventing delirium. We use CAM assessment tools and can identify patients exhibiting signs and symptoms of delirium. We are good at treatments for patients going through substance or alcohol withdrawal using the Clinical Institute Withdrawal Assessment (CIWA) Scale and the Clinical Opiate Withdrawal (COW) Scale to assess and manage the withdrawal with pharmaceuticals as appropriate. The unit has quiet times and visitor policies that are formal and informal, which we follow to help our patients get rest. The charge nurses do their best to cohort patients with similar diseases or conditions in semi-private rooms to help with rest. We have orders to ambulate patients but are unable to ambulate them as much as we would like or as much as is needed. Some days, the unit is so busy that patients cannot ambulate because physical and occupational therapy are too busy. However, most of the time, patients only ambulate when they are on the unit.

Nursing Interventions for Delirium Prevention and Management

One intervention that I came across through research is the Hospital Elder Life Program (HELP). HELP is an evidence-based program innovated by the Yale School of Medicine in 1999 to prevent delirium and reduce the length of hospital stays and falls by about 40% (Shen et al., 2023). Zachary et al. (2020) conducted a three-year retrospective study on the effectiveness of the HELP program on medical-surgical and telemetry units in 2014-2016. They concluded that implementing the HELP program improved patient outcomes and the financial burden (Zachary et al., 2020). Implementing HELP on the unit I work on by training the nurses and using EPIC charting with a geriatrician. Some practices we could emphasize are reorienting patients at risk, encouraging and enforcing early mobilization, improving sleep strategies, using hearing aids and vision aids, and proper hydration and nutrition. Some of these are already in place; elderly patients get seen by nutritionists based on scores from our assessments after the doctor is contacted. The hospital provides vision and hearing aids if the patient does not have their own with them. Emphasizing the importance of mobilization of patients to the nurses would be an excellent intervention to put in place. This way, we could have a better outcome and also prevent falls. My unit has already been working on new initiatives for fall prevention; another factor that would help in using the CAM assessment to identify those patients with a risk of delirium, which would make them at higher risk for falls. Elderly patients who have trouble sleeping in the hospital could be given pharmacological sleep aids, quiet times, and encouragement from family to leave at a particular time of night to let the patient get good sleep, close doors, and limit interactions at night.

Another intervention that could be put into place to prevent delirium in older adults would be to educate healthcare professionals, family members, and the patients themselves to recognize the warning signs of delirium. Azhar et al. group (2022) performed a quality improvement project by educating patients and their caregivers on delirium. Their study concluded that there was a significant lack of knowledge about delirium. After the education was provided, patients and caregivers could help in the early identification, prevention, and management of delirium (Azhar et al., 2022, p. 1905). This could be implemented in the unit since we do not discuss delirium as a fall risk factor or causing increased length of patient stay. The knowledge can also be provided to patients at risk for delirium and their family members to aid the healthcare team in recognizing early warning signs of delirium and preventing it. Awareness and management of delirium can help in preventing delirium in patients who are at high risk of complications.

Lastly, a strategy called “AWOL” used by Spear et al. (2024) was tested in a quality improvement project to prevent delirium in a skilled nursing facility (SNF). Though this is a long-term care unit, their strategy could also be implemented in acute care. It involves a two-minute assessment called “AWOL.”, where “A stands for age, W for “world” spelled backward, O for orientation, and L for assessment by the nurse” (Spear et al., 2024, p. 2). A score of one or more would indicate that the patient is at risk for delirium and implementing prevention interventions such as mobilizing the patient, encouraging nutrition and hydration, monitoring input and output, promoting sleep, reorienting patients, and ensuring patients have the visual or hearing aids (Spear et al., 2024, p.2). This can easily be implemented in our unit by using the quick two-minute assessment. It would have to be implemented into Epic, the Electronic Health Record (EHR), involving IT, but I think it could be done. This study was limited because they had a small sample size and limited resources.

Any of the three implementation strategies above could be implemented in the unit. I think, by far, the best one to initiate would be the implementation of educational material for the patients and their caregivers, including the Healthcare team on the unit. The more education, the more prevention interventions can be put into place. The implementation strategy could be incorporated through our EBP team and with help from the nursing director. This would also decrease falls in the unit and could be added to our fall prevention strategies.

Conclusion

Delirium in older adult patients causes an increase in health costs, more prolonged admissions, increased falls, functional decline, and increased mortality. By implementing recognition strategies and early intervention for older adult patients at risk for delirium, we can reduce the risks and effects of delirium. This is not talked about in hospitals and is preventable with nonpharmacologic interventions. Pharmacologic interventions can also be used in hospitals. However, the more essential strategies are recognizing warning signs and nonpharmacologic interventions that we can put in place to prevent further patient deterioration. Quick assessments using CAM and educating the healthcare team and family or caregivers on delirium can significantly reduce the incidence of delirium in the hospital. This, in turn, reduces costs of care and length of stay and overall better patient outcomes. Delirium can be prevented through the power of knowledge and early intervention strategies.

Honor Pledge

I pledge to support the Honor System of Old Dominion University. I will refrain from any form of academic dishonesty or deception, such as cheating or plagiarism. I am aware that as a member of the academic community it is my responsibility to turn in all suspected violations of the Honor Code. I will report to a hearing if summoned.

- Michelle C Shufelt

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