

BACKGROUND

CHI Bergan-Mercy is one of the two level I comprehensive trauma hospitals located in Nebraska. Medically complex patients in the intensive care unit (ICU) have numerous medical needs due to the severity or complexity of their health conditions and therefore require a longer rehabilitation process. Occupational therapy (OT) is important in this process to promote early mobility, activities of daily living (ADLs), and prevent further decline in their health condition (Azeveda & Gomes, 2015). Patients who receive OT in the in ICU demonstrated better coping strategies, increased levels of independence, and enhanced quality of life (Bombarda, Lanza, Santos & Joaquim, 2016). OT can provide a holistic view of the patient and be a positive promoter of engagement in meaningful activities. Not only do psychiatric disorders such as delirium and confusion occur in almost half of all ICU patients, anxiety and depression are common in patients following their ICU stays, and may be mixed with post-traumatic stress disorder (PTSD) (Pochard, 2011). Patients' experiences with past trauma and various socioeconomic factors can also impact psychosocial health while in the hospital.

CLIENT HISTORY

The patient in this case study was a 35 year old male who presented to the hospital following an altercation with law enforcement and possible suicide attempt. The patient was admitted with multiple gun shot wounds to bilateral lower extremities (BLEs) resulting in multiple fractures and a gun shot wound to the mandible penetrating through the face into the frontal lobe of the brain resulting in a right hemispheric subdural hematoma and bilateral frontal subarachnoid hemorrhage. He underwent several reconstructive procedures, a tracheostomy, and PEG tube placement. The patient experienced significant pain and limited range of motion in BLEs impacting his functional mobility and participation in ADLs. He received a psychiatry referral and denied any suicide attempt and current suicidal ideation. The patient had a significant past medical history of unmedicated anxiety and depression and declined psychiatric intervention this hospital stay. He became self-limiting throughout the course of rehab therapy's plans of care and was increasingly affected by mood as well as his evolving personal circumstances and familial conflicts.

RESEARCH QUESTION

Is early psychosocial screening and mental health intervention with ICU patients effective for improving emotional regulation and coping skills, thus impacting their functional outcomes?

METHODS

- Throughout the OT plan of care, the patient and his mother were provided education on weight bearing precautions and typical brain injury progression.
- OT provided cognitive testing for identifying executive functioning skills such as problem solving due to the frontal lobe being affected. Functionally, motor initiation and planning were also evaluated due to the location of the brain injury.
- When pain became a limiting factor for therapy sessions, coordination with nursing for optimal pain management was implemented. All health data and therapy documentation was recorded via EPIC Hyperspace which allowed for interprofessional communication. In order to provide trauma-informed care, consistency in the occupational therapist providing care was important and helped with rapport building due to his somewhat limited communication secondary to some tracheostomy complications.
- During times when the patient was most impacted by his mental health, motivational interviewing strategies aided therapy progression. These principles included seeking to understand his values and barriers in order to set more achievable goals and identify techniques to promote self-efficacy with both physical functioning and mental health needs. For example, this meant downgrading from sit to stand and stand-pivot transfers to a slide board transfer in order to increase his autonomy and emphasize success with the rehab therapy process.
- Later OT sessions included environmental modification by helping the patient to transfer to a wheelchair and temporarily escape the stressors of the ICU. He was able to experience the rehab therapy's satellite room and get an idea of the type of equipment available at inpatient rehab facilities as well as complete his first shower since his hospital admission.
- OT also promoted social engagement during a time when he was experiencing frustrations regarding his familial circumstances by visiting the lobby and feeling some fresh air outside.

RESULTS

- After a 3 week stay in the ICU, the patient's status was downgraded and he was transferred to another unit for an additional few days. While OT was still able to continue his plan of care, length of stay and discharge to the next level of care for him at inpatient rehab limited further psychosocial intervention.
- The therapy interventions, addressing both body structures and functions as well as psychosocial components, yielded positive outcomes. The patient displayed increased trust in the therapy team and improved pain management secondary to better communication of his needs with the interprofessional team. He demonstrated self-advocacy in regards to personal and familial situation and utilized resources such as social work and pastoral care.
- Overall, the patient's improved mood and coping skills were evident through his increased participation and engagement with OT sessions. He demonstrated increased autonomy and became independent with the slide board transfer and wheelchair propulsion. However, this may have also lead to somewhat of a functional plateau due to his preference of using the slide board, a pain-free transfer option, to the sit to stand or stand-pivot transfers.
- Retrospective data was collected during the patient's inpatient rehab stay and poor activity tolerance with transfers and functional mobility became an overarching barrier to his success. While the patient did end up discharging to jail, it was noted in his electronic medical record that he exhibited positive reframing in regards to his personal and familial circumstances and focused on his therapies throughout rehab to motivate him.
- While not all intended psychosocial interventions were able to be provided for the patient in this case study, it is of note that further research and program development for trauma informed care in the ICU was pursued. This included a psychosocial screening tool, educational handouts for post-intensive care syndrome (PICS), ICU diaries, and rehab therapy in-services on the topic.

BOTTOM LINE FOR OT

The psychosocial component combined with more emphasis on life skills training rather than mobility alone could lead to shortened lengths of stay and greater functional outcomes at discharge (Hodgson, et al., 2016). By having a better understanding of the prevalence of PICS-like outcomes in the ICU, OT can help to identify patients at risk and design interventions specifically to mitigate those risks (LaBuzetta, Rosand, & Vranceanu, 2019). Providing screening and early intervention for these psychosocial factors impacting patient care can help to facilitate quality of life for the patients and their families while taking some burden off of the rest of the interprofessional care team. Because emotional distress during hospitalization is the best predictor of future emotional distress for both patients and their families or caregivers, a focus on prevention may be most effective for improving long-term mental health outcomes (Parker, et al., 2015). Past trauma, socioeconomic factors, type of critical care illness, or degree of neurological impairment may impact the types of intervention that will be effective for an individual patient. Some examples of intervention include mindfulness meditation, coping skills, and resiliency training.

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