

# 4th International Conference on Nursing Education and Research

December 3-4, 2018 Dubai, UAE

## The Change in Nutritional Status in Traumatic Brain Injury Patients: A Retrospective Descriptive Study

Dina A. Masha'al\*, Cindy L. Munro, Carmen Rodriguez, Brian Graves and Risa Nakase-Richardson  
Jordan University of Science and Technology, Jordan

There is a high prevalence in malnutrition among traumatic brain injury (TBI) due to the hypermetabolism and hypercatabolism which develop post injury. Traumatic brain injury patients are different, even among themselves, in their energy requirements and response to nutritional therapy. This implies that there are other factors that affect the energy intake of these patients and enhance the incidence of malnutrition.

This study examines the nutritional status of TBI patients upon admission to the intensive care unit (ICU) and during their hospital stay to describe baseline status, detect changes in nutritional status over 7 days and identify the factors affecting the adequacy of energy intake and the change in nutritional status as a consequence. Anthropometric measurements, biomedical measurements, measures of severity of illness, daily health status, level of brain injury severity and other data were collected from the medical records of 50 patients, who were  $\geq 18$  years old, mechanically ventilated in the first 24 hours of ICU admission and had a Glasgow Coma Scale score between 3-12. These data were used to examine the previous relationships.

Although there was no statistically significant change found in body mass index and weight, there was a significant change detected in other nutritional markers, including hemoglobin, albumin and total lymphocyte levels over the 7 days of ICU and hospital stay. No significant relationship was found between the adequacy of energy intake and total prescribed energy, severity of illness, level of brain injury severity, daily health status, patient age, intracranial pressure or time of feeding initiation.

### Biography:

Dina Masha'al is a professor assistant at Jordan University of Science and Technology, Irbid, Jordan. She studied the nutritional status of ICU patients who are enterally fed in the ICU. Also, she has done a project about the quality of life of post stroke survivors. She completed her Ph.D. in Nursing in 2016 at University of South Florida.