



Presenter: Ethan Lau

Session & Time: E-Poster

Room/Time: GUZ 113 & 114 / 3:30-4:30

Discipline: Nursing

Faculty Mentor: Olivia Catolico

Digital Portfolio URL:

Title: Advancing Patient Well-Being Through Effective Pain Management

Abstract:

This poster highlights the importance of effective pain assessment and management and its connection to the global health priority of promoting well-being through the United Nations initiative Sustainable Development Goal 3: Good Health and Well-Being. Pain is a complex physiological and psychological response to tissue injury or potential harm that can significantly affect recovery, healing, and overall quality of life if not properly managed. SDG 3 focuses on ensuring healthy lives and promoting well-being for people of all ages, which includes improving quality of care, preventing complications, and addressing factors that

negatively impact patient health. Effective pain management is directly related to this goal because uncontrolled pain can activate the body's stress response, increase oxygen demand, delay healing, and worsen clinical outcomes. Critically ill trauma patients, particularly those who are mechanically ventilated or otherwise unable to verbally communicate, are especially vulnerable to unrecognized and untreated pain. This poster presents a case study of a 38-year-old female admitted to the intensive care unit following a motor vehicle accident requiring emergency abdominal surgery and treatment for multiple deep lacerations. Because the patient was intubated and unable to self-report pain, nurses used objective assessment strategies, and monitoring physiologic indicators such as elevated vital signs as well as behavioral indicators such as restlessness. A multimodal pain management approach was implemented, including pharmacologic and non-pharmacologic interventions. Following these interventions, the patient demonstrated decreased agitation, stabilization of vital signs, and improved comfort. Key recommendations for improving patient outcomes include consistent use of validated behavioral pain assessment tools for nonverbal patients, implementation of multimodal analgesia to reduce complications associated with untreated pain or excessive opioid use, and ongoing nursing assessment and collaboration. These practices support improved recovery, enhance patient comfort, and contribute to advancing the global health objective of promoting well-being for all.