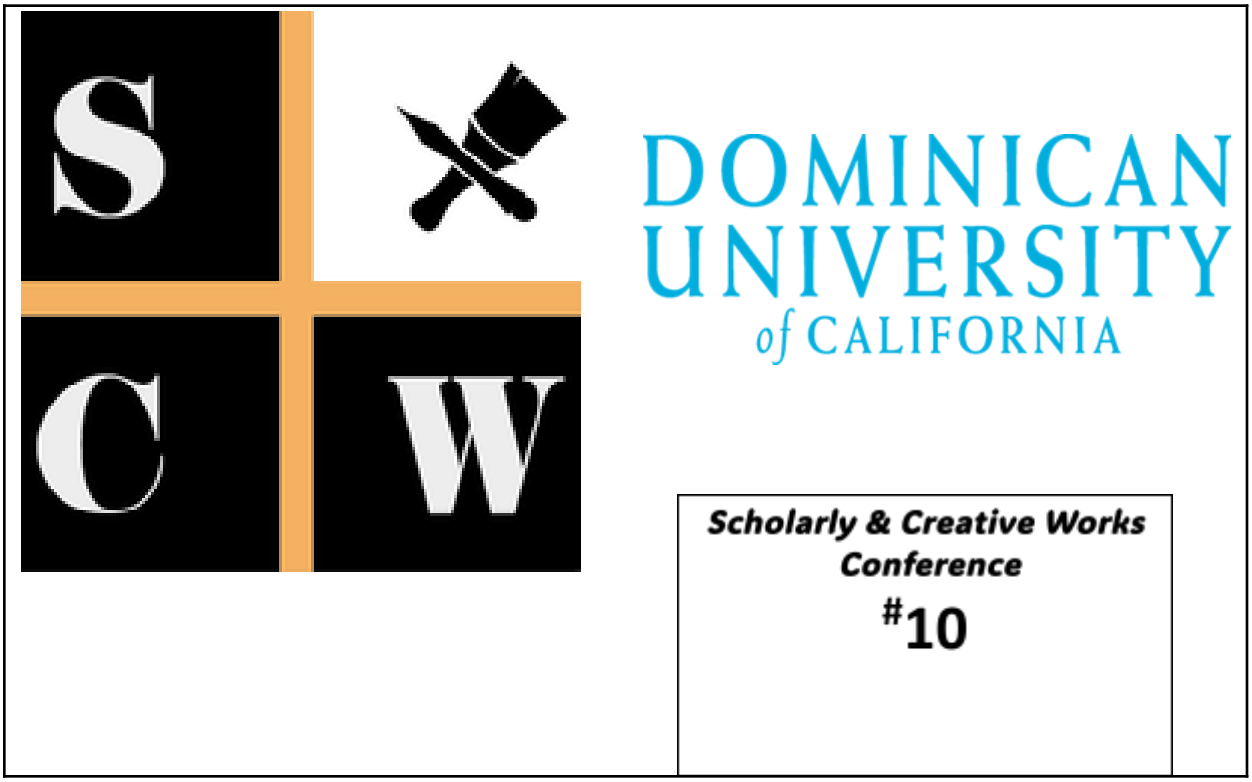

Presenter: Andrew Hom

Session & Time: Oral_I / 11:20 to 11:40am

Room: Guzman 110

Discipline: Nursing

Faculty Mentor: Luanne Linnard-Palmer

ZOO link: https://us05web.zoom.us/j/84964660990?pwd=1wa6n6OAJ5SctuLhXdYYbX5j9Rqbjx.1
ZOOM Passcode: DUC

Digital Portfolio URL:

Title: The correlation between consecutive hours worked and medical errors in nursing practice.

Abstract:

Abstract

The relationship between extended nurse work hours and increased clinical errors is a growing concern in nursing and healthcare systems. This issue has only grown more pronounced since the pandemic, which exacerbated staffing shortages and placed unprecedented demands on the nursing workforce. Longer shifts often lead to fatigue, impaired decision-making, and

decreased cognitive performance, creating challenges for both nurses and patients. Nurses serve as essential frontline providers, and the conditions under which they work can significantly influence care quality and patient outcomes. This thesis examined the correlation between consecutive hours worked and the frequency of errors made by nurses, while also exploring the broader impacts on clinical performance, occupational health, and patient safety. A comprehensive review of existing literature, including large-scale surveys, observational studies, and regression analyses, was conducted to better understand this issue. The objective was to synthesize current findings and communicate them effectively to nurses, healthcare administrators, and policymakers to inform staffing decisions and workplace reforms. Key findings indicated a strong association between workweeks exceeding 40 hours and increased rates of medication errors, needlestick injuries, and patient falls. Voluntary overtime was also significantly linked to adverse events, particularly medication errors. These patterns held true even when controlling for nurse experience, education, and hospital staffing levels. In addition, this thesis proposed a future descriptive cross-sectional study involving a survey distributed to hospital-based nurses to assess the relationship between self-reported fatigue, error frequency, and near misses as well. The goal of this proposed research is to identify gaps in education and institutional policy regarding overtime, support evidence-based recommendations, and promote nurse-centered scheduling practices that protect both worker well-being and patient safety.