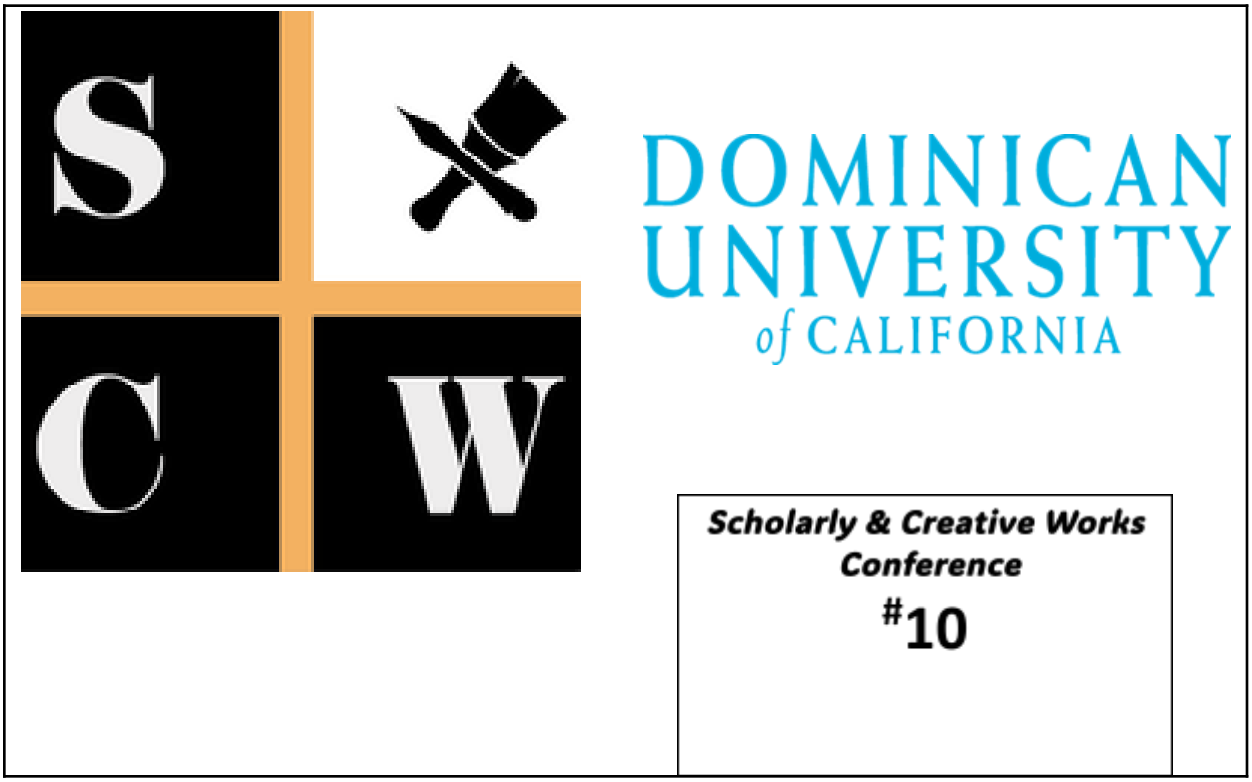


Presenter: Andrew Golonka

Session & Time: Poster_IV / 3:00 to 3:50pm

Room: Guzman Lecture Hall

Discipline: Nursing

Faculty Mentor: Kendra Hoepper

Digital Portfolio URL:

Title: Medical-Grade Honey and Standard Dressings in Burn Wound Care: Evaluating Effectiveness, Cost, and Patient Outcomes

Abstract:

Abstract

Background: Burn injuries burden the healthcare system globally as silver sulfadiazine (SSD) is the standard treatment even though it delays healing and is highly costly. Medical-grade honey (MGH) demonstrates superior antimicrobial and anti-inflammatory properties, however, there are still evidence gaps when comparing effectiveness, cost efficiency, and patient centered outcomes.

Purpose: This study aims to compare MGH and SSD amongst these gaps to inform evidence based burn care. **Methods:**A randomized controlled trial will enroll 100 people between 25-50 years of age with first and second degree burns, <20% total body surface area within two hospital burn units. Participants will be assigned to either MGH or SSD treatment. The study will be a single blind design where dermatologists evaluating the wound photographs will not know the treatment given. Primary outcomes include wound healing time, infection rates, and patient reported pain scores. Secondary outcomes will focus on cost effectiveness analyses and patient quality of life. Standardized protocols will be implemented for data collection, wound assessment, and safety monitoring. **Results:** We anticipate that MGH will have lower infection rates, promote faster wound healing, improved outcomes from patient reports, and better cost effectiveness through shorter hospital stays and reduced medical treatments compared to SSD. **Conclusion:** This study will provide evidence comparing MGH and SSD across economic, clinical, and patient centered outcomes. If our hypothesis aligns with the results, MGH could be a new evidence based standard in burn care as it offers many advantages over SSD in patient comfort, healing efficiency, and medical costs. The findings will provide areas for future research, especially long term outcome and a bigger patient population.
Key Words: burn injuries, medical-grade honey, 1st degree burns, superficial burn injuries, 2nd degree burns, partial thickness burn injuries, standard burn dressings, and silver sulfadiazine.