DOMINICAN UNIVERSITY of CALIFORNIA

Scholarly & Creative Works Conference

2026

Presenter: Erlinda Sacche

Session & Time: E-Poster

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

Discipline: Nursing

Faculty Mentor: Olivia Catolico

Digital Portfolio URL:

Title: Protecting Tissue Integrity Through SanitationÂ

Abstract:

This poster illustrates the relationship between the concept of Tissue Integrity and UN SDG of Ensure Availability & Sustainable Management of Water & Sanitation for All. The effects of poor water quality and inadequate sanitation can significantly impact hygiene practices and increase the risk of infection, particularly in healthcare settings and vulnerable communities. Contaminated water can expose individuals to harmful pathogens and environmental contaminants that may enter the body through ingestion or through compromised skin integrity, such as surgical wounds, pressure injuries, or other forms of skin breakdown.

Populations at greater risk include older adults, individuals with chronic illnesses, people experiencing homelessness, and those living in low-resource settings where access to clean water and sanitation infrastructure may be limited. These conditions increase the likelihood of healthcare-associated infections, delayed

wound healing, and further deterioration of skin and tissue health. Poor sanitation also contributes to the spread of pathogens from fecal and urinary waste, creating additional transmission pathways that negatively affect overall health and tissue integrity.

Addressing water quality and sanitation through the objectives of the United Nations Sustainable Development Goals can help reduce these risks by improving access to safe drinking water, promoting proper waste disposal, and encouraging effective hygiene practices. Community-based actions such as maintaining hand hygiene, increasing sanitation awareness, and implementing educational programs focused on infection prevention and skin health can support healthier environments and improve outcomes for vulnerable populations. By strengthening access to clean water and sanitation, communities can better protect tissue integrity and reduce the burden of preventable infections.