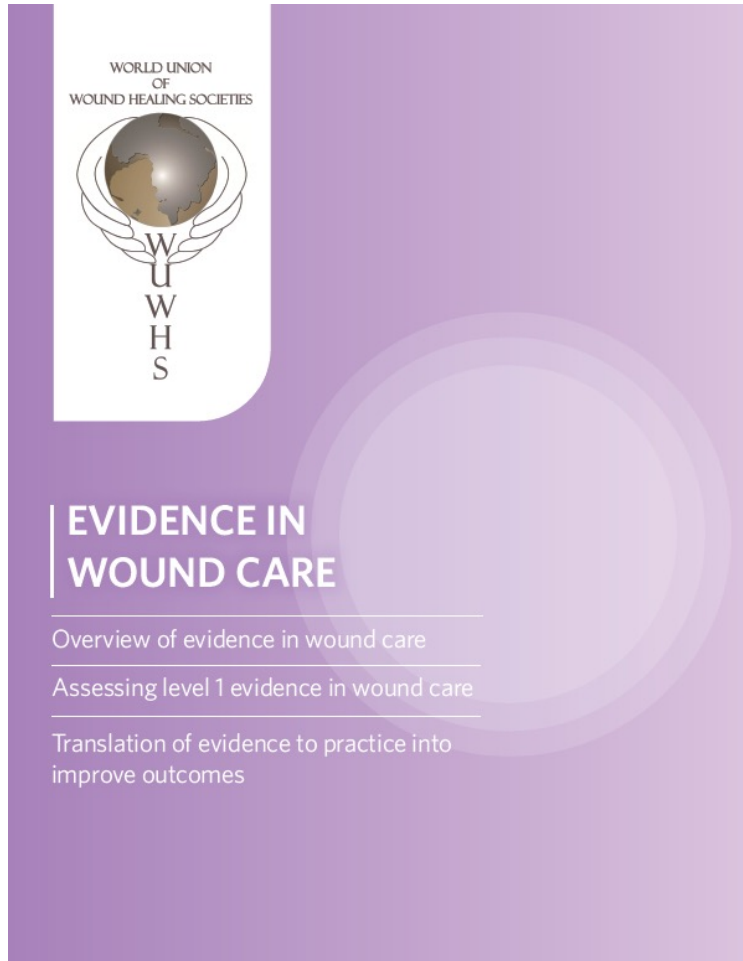


# WOUND EDUCATION

CLINICAL TRAINING MADE EASY<sup>©</sup>

TRAINING SESSION 12  
RECOMMENDED READINGS

# Recommended Readings



World Union of Wound Healing Societies  
(2020) Evidence in wound care. London:  
Wounds International. Available at:  
[www.woundsinternational.com](http://www.woundsinternational.com)

## Clinical practice

### Ten top tips: myth-busting wound care



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A long as people have had wounds, there have been theories about the best ways to help them heal. These ways have resulted in adages, what's best, mother-knows-best and other theories of how to manage and promote healing, however, some of which have stood the test of time and are supported by research. Some have been abandoned due to better evidence emerging, others have been lost to better products, while others have been derided due to a better understanding of human anatomy and physiology. While it would be wonderful to say that all clinicians are practicing with the most up-to-date science, we know that is not true. This article is going to discuss 10 of the biggest myths in wound care that have perpetuated, despite significant improvements in current science and research to disprove their effectiveness.

**1 Myth 1: All wounds should be cleansed with normal saline.** The practice of wound cleansing has made substantial improvements over the past 10 years. The purpose of wound cleansing is to use enough pressure, fluid and chemicals to remove the microscopic biofilm and other debris on the surface of the wound. Normal saline has been the most common solution used due to its lack of harm to the wound bed cells. However, normal saline does not contain any properties to reduce the bioburden within the wound bed. When the volume and pressure of saline is low, there is also no force to remove debris from the wound. Unfortunately, clinicians still use saline 'bullet' for wound cleansing. The pink container of normal saline is used for rebuffer treatments and does not contain any antimicrobial chemicals, nor enough pressure or volume to effectively cleanse a wound. Pressurized saline works to clean a wound, but again, there is no antimicrobial function in saline.

The use of hypochlorous acid (HOCI) as a wound cleanser appeared in the 2019 pressure injury prevention and treatment guidelines (European Pressure Ulcer Advisory Panel et al., 2019). HOCI is gaining in use by clinicians because it has been shown to be an effective agent in reducing wound bacterial counts in open wounds. HOCI has also been shown to retard biofilm formation. In a study comparing wound irrigation with saline versus HOCI using an ultrasonic system in adults with full-thickness

wounds (Hebert et al., 2016), bacterial counts were lowered by 4 to 6 logs initially. By the time of definitive wound closure a week later, the bacterial counts were back up to 10<sup>7</sup> logs for the saline solution-irrigated control wounds but remained at 10<sup>7</sup> logs or lower for the HOCI-irrigated wounds. Postoperative closure failure occurred in more than 80% of patients in the saline solution group versus 25% of those in the HOCI group.

Hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>) is a chemical designed for bleaching, oxidizing and as an antiseptic, but only when diluted in water. While many a parent has used hydrogen peroxide to clean dirty scrapes and cuts from outside, there is no indication to continue using it once the wound has been cleaned. In fact, the aggressive chemical destroys all tissues, both malicious and beneficial, and will never allow any wound to heal. The authors only have hydrogen peroxide to induce vomiting in a dog who has consumed a toxic substance (Shan et al., 2012).

**2 Myth 2: All wounds need 'fresh air' to dry out.** Wounds do not need fresh air and fresh air can, in fact, expose the wound to environmental contaminants. At times, when wounds have large volumes of exudate, drying the wound seems to make sense, but the exudate should be absorbed by dressing and the reason for all the drainage should be addressed. A common reason for excess exudate is inflammation from biofilm, edema, or pressure on the wound. Additionally, wounds that are exposed to air dry out have impaired formation of granulation tissue and epithelialization. Granulation tissue is capillary beds, fibrin and collagen, which requires a moist, but not wet, environment.

**3 Myth 3: Every wound can benefit from a hydrocolloid dressing.** Next to gauze and band-aids, hydrocolloid dressings are one of the oldest wound care products. They were introduced for the attachment of the ostomy appliances; therefore, initially designed to be placed on intact skin. They were also designed to be very adhesive. Hydrocolloids were moved into wound care decades ago and can be used today on a clean, healing, shallow wound. The dressing is created to be removed every 3-7 days, so they cannot be placed on a high-risk wound with odour or necrotic

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