

Tap Water : An effective alternative to Normal Saline in the Community?

In a community and primary health setting wound management and care is a major health problem that effects many patient groups. The initial cleaning of a wound is extremely important as it sets up the wound with an adequate environment to begin the healing process. Providing the water is safe to drink, **tap water** is a cost effective, readily available and safe alternative to saline when preparing a wound bed with an optimal healing environment (Bee et al, 2009).

Benefits Using Tap Water

Tap water is **readily available** to people in the community and general practises.

Several studies have come to the conclusion that using tap water to cleanse soft tissue wounds results in **reduced infection rates**. Weiss (2013) study find that out of 625 people, 20 participants treated with saline suffered infections vs 11 participants treated with tap water.

For chronic wound suffers in the community the use of tap water meant people have more **independence over their wound management**. For example, showering could be possible for people suffering from ulcers. Selim (2001) interviewed such people who claimed they "felt better" and "clean".

Using tap water for appropriate wounds **reduces the cost** to general practices and clients. Weiss (2013) estimating a \$10million US saving to the healthcare system per year.

Using tap water over saline can aid in **reducing our carbon foot print** by reducing the amount of waste that comes for discarding the saline containers.

Considerations when deciding to Utilise Tap Water

Studies throughout the literature excluded people with, major wounds with bones or tendons directly involved or, people with underlying immune deficiency syndromes and diabetes suffers who presented with wounds either chronic or acute. These clients were treated with the traditional normal saline suggesting that the normal saline and the sterile technique remains the superior solution in wound cleansing.

Nurse's when working with people need to consider if the patient is an appropriate candidate for using tap water.



What this means for Nurse's

Literature supports nurses to effectively work with clients in the community/general practice setting. Having available tap water **allows nurses to work alongside the client and educate best practice** of how to use tap water effectively to irrigate soft tissue wounds or lacerations safely, thus **creating a safe and independent environment for maintaining the client's own health**. Example, assisting the elderly in their own homes to preserve their independence by utilising the clean tap water method for ulcers or skin tears they may obtain from everyday activities.

Selim, P & Bashford, C & Grossman. (2001). Evidence - Based Practice: Tap Water Cleansing of leg ulcers in the Community. Journal of Clinical Nursing. Weiss, E, A & Oldham G & T & Lin, M & Foster, T & Quinn J V. (2013). Water is a safe and effective alternative to sterile normal saline for wound irrigation prior to suturing: a prospective, double-blind, randomised, controlled clinical trial. Division of Emergency Medicine.