

The Cleansing Power of Tap Water

Professor Rhonda Griffiths and Dr Ritin Fernandez, of the School of Nursing and Midwifery along with Associate Professor Mary-Louise McLaws of the University of New South Wales, Associate Professor Geoffrey Sussman of Monash University and Dr Jeff Rowland from Prince Charles Hospital Brisbane are investigating whether tap water can be used as an alternative to packaged saline solution for cleaning wounds in community health care settings. This research is funded by the National Health and Medical Research Council of Australia.

'Wound care is a fundamental part of health care in hospital, community and nursing home environments,' says Professor Griffiths. 'Saline solution is commonly used to clean wounds and help prevent infections, but pre-packaged solution is very expensive and large quantities are used in today's health care practices. Surprisingly, very little research has been done on using good-quality potable tap water instead of commercial saline solution for wound cleansing, particularly in the community health care setting where many wounds are of a chronic type - e.g. skin ulcers. The previous research has very limited generalisability to limitations in the research methodologies. Studies comparing water and packaged saline solution have shown various results - from no difference to the occurrence of less infection when using potable tap water. A thorough and comprehensive study may determine if tap water can be used more commonly for wound cleaning, saving time and money in the process.'

A double-blind randomised controlled trial will be conducted in the Sydney South West Area Health Service. Close to 1500 adult participants with acute or chronic wounds of varying degrees of damage will be recruited from community health care services and nursing homes. Participants with very



deep or infected wounds will not be considered, nor will those who have conditions suppressing their immunological system – body defences or other health problems. An assessment of the wound will be made over a four-week period.

Good results using tap water for wound cleaning will have major cost and time benefits in Australian community health care settings. The research may have wider application anywhere in the world where the water available for wound care is of high-quality.

Project Title: RCT comparing the effects of tap water vs normal saline on the infection and healing rates of wounds

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