



Medical Grade Honey As An Effective Tool In Chronic Wound Care

Based on the research question... "What therapeutic effects does medical grade honey have on chronic wound healing in comparison to alternative wound therapies?"

Introduction:

Chronic wounds are generally characterised as a wound failing to heal within the expected healing outcome, over 3 months. Normal wound healing is a process in which damaged tissue is removed, replaced, and overlapped by restorative tissue (Tonks, Cooper, Jones et al, 2003). Medical grade honey facilitates normal wound healing, allowing the best healing outcomes to occur, in a cost efficient and pain-free way.

I became interested in medical grade honey as a treatment for chronic wound healing, following a general practice placement and saw first hand the effects of chronic wounds and how destructive they are to a person's lifestyle. My research taught me that medical grade honey is a suitable treatment for chronic wounds, and the impact of this efficient method of treatment allows quality of life to improve in patients, and allows them to get back to their normal lives as they once were.

Literature Review:

Medical grade honey has been described to have five modes of action in wound healing to address and promote chronic wound healing and management successfully (Acton, & Dunwoody, 2008).

- Anti-inflammatory - prolonged inflammatory response can actually cause the wound to stop healing and can cause further damage to tissues, including increased exudate, intense pain, and scarring. Medical grade honey inhibits the inflammation pathway and leukocyte inhibition.
- Anti-microbial – The low acidic and high osmotic properties of medical grade honey create an environment in which micro-organisms can not thrive.
- Promotion of a moist wound environment – Exudate in chronic wounds helps debride necrotic tissue, as well as assisting in the healing process such as providing essential nutrients for cell metabolism.
- Promotion of debridement in necrotic/sloughy wounds – enzymes in honey disintegrate necrotic tissue. This is helpful for nurses so the physical process of debridement is easier and also less painful for the patient.
- Reduces malodour – the anti-microbial properties of honey aid in the eradication of odour. Important as individuals can be very self-conscious of the odour.

Recommendations:

- Patients presenting with acute wounds must be treated effectively, as preventing chronic wounds is easier than healing.
- Educate patients around how to promote a good "healing" environment – such as smoking cessation, eating well, and regular physical activity. Also education around how to look after wounds properly eg when to shower etc.
- Nurses must remain educated regarding products on the market for use in chronic wound care as there is a large variety of products available, and selecting the wrong product is potentially catastrophic for the healing of a chronic wound.

(Craft, Gordon, & Tiziani, 2013).

References:

- Acton, C., & Dunwoody, G. (2008). *The use of medical grade honey in clinical practice*. British Journal of Nursing: Vol. 17, No 90. Retrieved from: ProQuest & Allied Health Nursing Journal
- Craft, J., Gordon, C., & Tiziani, A. (2013). *Understanding pathophysiology*. Elsevier Australia. Chatswood: Australia.
- Tonks, A.J., Cooper, R., Jones, K., Blair, S., Parton, J., & Tonks, A. (2003). *Honey stimulates inflammatory cytokine production from monocytes*. University of Wales College of Medicine. Cardiff: Wales. Elsevier Science Limited. Retrieved from: CINAHL



I decided to investigate the topic of chronic wound care and the use of medical honey products because I find it incredibly interesting, and believe there is always a lot to learn and share when it comes to chronic wounds. There are a large variety of products available in New Zealand, but I wish to bring attention to medical honey because as the literature states, it is a very reliable and useful product. I decided to formulate a poster as I believe it is a great way to inform members of the general public, as well as health professionals, about wound healing and the importance of proper techniques. Because many people are visual learners, I think a poster is an appropriate format for them to utilize as it is presented in a way which is easy to read and follow. The following is the PECOT model based on the research question "What therapeutic effects does medical grade honey have on chronic wound healing in comparison to alternative wound therapies?"

PECOT Category	Information related to the Question	Explanation
Population	People who have a chronic wound (wounds lasting >3 months).	Chronic wounds take the longest to heal and need the most intervention.
Exposure (Intervention)	People with chronic wounds who have used a medical grade honey product (gel or dressing) to influence chronic wound healing.	I will search articles that describe the use of medical grade honey and the therapeutic effects the honey provides for chronic wounds.
Comparison/Control	People with chronic wounds who have not used a medical grade honey product to influence wound healing, but who have used an alternative therapy, or different type of dressing or gel.	I am interested to see if any differences arise in the wounds that have been treated with treatments other than medical grade honey.
Outcome	What chronic wound therapy had better results?	I would like to discover if medical grade honey would be a better product to use on chronic wounds than other therapies. I want to see if it holds better healing properties and see if healing time is decreased.
Time	From time of initiation of intervention for chronic wound care, until wound is healed or noticeable improvement in results are seen.	Wound healing differs per person and stage of wounds. I am interested to see if more medical grade honey wounds heal faster generally, compared to other initiations.

Schneider, Z., Whitehead, D.(2013). *Nursing and midwifery research: Methods and appraisal for evidence-based practice*. (4th ed.). Sydney, NSW, Australia: Mosby.