

# Venous Leg Ulcer Wound Healing with geko™: “I hope that my wound will heal faster”: A qualitative inquiry.

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## ABSTRACT

**Aim:** Qualitative study focusing on exploring individual's perspectives on using the muscle-pump activator - geko™ while living with a new or recurring venous leg ulcer.

**Methodology:** Using qualitative interviews, seven participants discuss their experiences with leg ulcers and use of the geko™. Research ethics and client consent were obtained. Using thematic analysis, themes emerged.

**Findings:** 1) Participants describe use of pain medications and stress when living with leg ulcers; 2) They describe the concept of time, from the time the ulcer forms to wound healing; and 3) Participants describe feeling hopeful and were optimistic the device would help the wound become smaller and heal faster.



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## Background

Chronic venous leg ulcers comprise approximately 70 to 80% of all lower limb ulcerations (Evans et al., 2019). Lower leg wound management is a burden to the health care system (CIHI, 2013). Most venous leg ulcers occur in a population where 30% already have three or more comorbidities; 85% live with leg ulcer pain, 53% have issues with mobility, 24% have problems washing or dressing, 58% had difficulty performing usual activities, of these, one-third report moderate anxiety or depression (Harrison et al., 2013).

Community nurses aim to provide person-centered care to patients living with leg ulcers (RNAO, 2015), and spend up to 50% of their time providing care to persons with venous leg ulcers (Simon et al., 2004).

### Patients are the Focus

For patients living with venous leg ulcers, the emotional and socio-economic burden is significant to the individual and the health care system (O'Donnell et al., 2014; Phillips et al., 2017). Xhu and Ryan (2017) report patient pain issues and how they lead to psychosocial issues (suicide risk, relationship distress, emotional crisis). Pain is one of the leading issues community nurses attend to with community clients. VanDenKerkhof et al. (2013), report 58% of patients living with venous leg ulcers experienced moderate to severe pain and did not regularly take pain medication(s) to ease their pain.

## Research Objective

This study sought to understand the perspectives of clients utilizing the geko™ device in the community. Ethical approval was granted from Homewood Health Centre Research Ethics Board & the Mississauga-Halton LIHN. **Funding:** Perfuse unrestricted educational grant.

## Methodology

**Method:** A qualitative descriptive interview method was used (Sandelowski, 2000). The approach aims to convey the rich, thick data accurately; this helps to understanding of individuals' lived experiences.

**Thematic Analysis:** The authors regularly met to listen to, discuss the data and field notes were kept by the authors (Braun & Clarke, 2013).

### Frameworks Guiding the Study

A naturalistic inquiry approach (Lincoln & Guba, 1985); and the RNAO (2015) person-centered care framed the qualitative questions and focused on the 'whole person' as a unique individual and not just on their illness or disease.

### Participants and Recruitment

This inquiry is part of a larger study; 7 participants consented and participated in phone conversations (Sandelowski, 2000). Participants of diverse backgrounds, 5 females, 2 males were purposively recruited from a local LIHN, Home and Community Care Program, ON (Braun & Clarke, 2013) (Table 1).

Table 1: Participants' Characteristics

*Pseudonyms	Age	Gender	Years with Ulcers	First ulcer	Repeat ulceration	Role
Carrie*	74	F	20 years	No	Yes	Works 35 hours per/wk
Peter	56	M	1-2 mos	Yes	-	Full time 40+ hours/wk
Arlene	74	F	20 years	No	Yes	Retired
Chantelle	67	F	-	No	Yes	At home.
Richard	67	M	5-6 years	No	Yes	Part-time 20 hours/wk
Betty	78	M	6-8 years	No	Yes	Retired
Darlene	75	F	-	No	Yes	Volunteer ministries 4-5 hours/wk

## Participants' Share: Findings

### 1) Participants describe use of pain medications and stress when living with leg ulcers.

**Peter stated:** *I took these pain and narcotic meds all the time, before using the geko™ device, and then during the time the geko™ was on my leg, I was not taking those meds, I was getting healed by the device working, and now after I stopped the device, I am great, I am feeling good"* (Research conversation, March 2020)



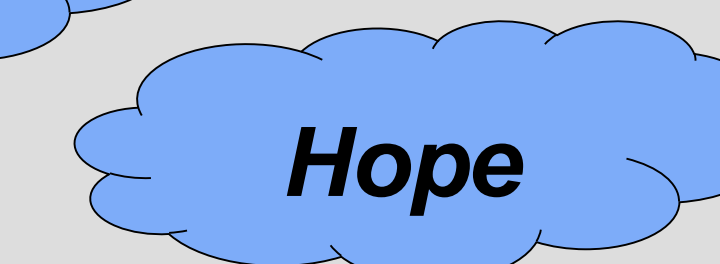
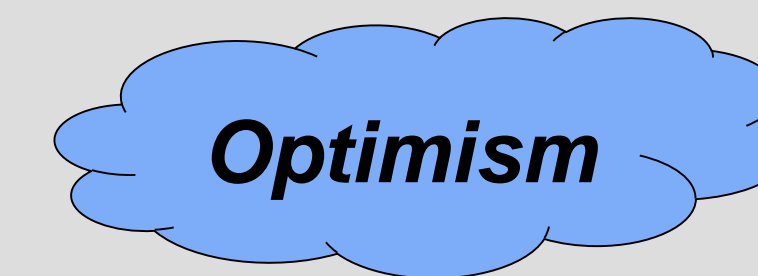
### 2) They described the concept of time, from the ulcer beginning to wound healing.

**Arlene, was normally a very social person, as this was not her first leg ulcer, she stated:** *"I adapted my life to the ulcer, you have to, and I stay positive over time"* (Research conversation, March 2020).



**Carrie, shared the following insights:** *Originally, I was in the hospital for a week. I normally work 30 plus hours a week, I went stir crazy when I got home, and I had to get back to work. I did not change the geko™ device, I go there to the nurses-three times a week, to the clinic, that is where they change my compression bandages. Whether I was wearing the device or not I still went three times a week... I just want the wounds to close."* (Research conversation, March 2020)

### 3) Participants described feeling hopeful and were optimistic the muscle-pump activator - geko™ would help the wound become smaller and heal faster.



**Richard stated, well, there was, like an optimism level, ah, in me. I wanted to hope it would help the ulcer close. But then, I'm not sure if it actually did help me...because of well, at the same time the doctor put me on a water pill, maybe a couple of months back, whatever it is. it overlapped with the ulcer and the geko™, either way I wanted this "thing" closed.** (Research conversation, March 2020)

## Clinical Implications

Hope was described by participants as growing when offered the geko™ device to support wound healing. Participants describe feeling valued.

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