General practitioners' experiences of managing patients with chronic leg ulceration

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ABSTRACT

Objective: To understand general practitioners' experiences of managing patients with chronic leg ulceration, thus informing future strategies to improve leg ulcer care in general practice.

Design: Qualitative study using phenomenology and in-depth interviewing.

Participants and setting: Maximum variation sample of 12 GPs working in the Perth and Hills Division of General Practice between September and December 2004.

Main outcome measure: Themes in participants' experiences of leg ulcer care.

Findings: Participants regarded leg ulcer management as an integral part of general practice. They expressed a desire to maintain their involvement, yet relied on nursing assistance. They perceived that ulcer care was usually straightforward and successful. Approaches to management appeared to differ significantly from that outlined in current guidelines. Instead, participants valued accessibility of care for the patient, awareness of patient context and regular review. Occasional problems with non-healing ulcers were experienced, and, in these situations, specialist opinion was appreciated.

Conclusion: This study highlights fundamental differences between GP and specialist conceptualisation of leg ulcer care. For GPs, it identifies key areas of ulcer management that could be improved. For specialists, it suggests that widespread implementation of traditional guidelines may not be appropriate or acceptable. New approaches to leg ulcer management in general practice are likely to need a combination of education, human resources and practical support.

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Chronic leg ulceration affects 1% of the Australian population.[1] It significantly impairs quality of life and is responsible for about $400 million annually in health care costs.[1,2] Most patients with leg ulcers are managed in primary care, where wound dressings represent the second most frequent procedural treatment.[3]

International guidelines for treatment of leg ulcers recommend evaluation of ulcer aetiology, treatment of the underlying cause, management of the wound, and ongoing monitoring of healing.[4-6] As venous disease is a sole or contributory cause of many leg ulcers, optimal treatment frequently includes compression therapy.[7]

Several studies have identified deficiencies in general practice management of leg ulceration, specifically the underuse of ankle–brachial pressure measurements, over-reliance on dressings, and lack of understanding of compression therapy.[8,9] Specialists attribute these problems to practitioner disinterest[10,11] and uncertainty as to whether leg ulcer care is a medical or nursing responsibility.[12] However, general practitioners' perspectives have not been articulated.

This study aimed to understand GPs' experiences of managing patients with leg ulceration, thus informing future strategies to improve leg ulcer care in general practice.

METHODS

This study used the qualitative approach of phenomenology. A glossary of qualitative research terms is shown in Box 1. In-depth interviews were conducted with a maximum variation sample of GPs in the Perth and Hills Division of General Practice.[15] An initial list of potential participants was created from expressions of interest canvassed in a GP survey on leg ulcers[16] and from discussions with stakeholders. Potential participants were contacted by mail, then telephoned by the principal investigator (G M S, a registrar working in a tertiary hospital leg ulcer clinic). Additional participants were identified through snowball sampling.

Data were collected in semi-structured interviews based on an interview guide. Interviews were conducted by G M S between September and December 2004 and took place in the GP's surgery. They continued until the investigator had gained a clear understanding of the participant's experience, lasting 45–60 minutes. Interviews and field notes were audiotaped and transcribed verbatim.

Transcript data were coded and connected using the computer program QSR N6 (Qualitative Solutions and Research, La Trobe University, Melbourne, VIC, 1997) and further explored using an immersion–crystallisation technique.[13] Throughout the analysis, G M S regularly met with an academic family practitioner (G M R) to discuss emerging themes. Several additional techniques reinforced the trustworthiness of the findings. Interviews were led by the participants rather than the interviewer. While theme saturation was reached at the 10th interview, two additional interviews allowed for member checking, and all participants were invited to respond to an interview summary. The analysis team (G M S and G M R) independently reviewed transcripts and explicitly reflected on their pre-existing and evolving perspectives of the topic.

The Curtin University Human Research Ethics Committee approved the study. Participants were reimbursed $75 for time spent in the interview.

FINDINGS

Participants

The 12 participants represented maximum variation in terms of clinical experience (12–38 years), practice size (1–12 GPs) and practice location (three inner metropolitan, nine outer metropolitan). Eight participants worked with practice nurses. Three described additional surgical interests (including part-time employment in a vascular centre, a skin cancer clinic and as an orthopaedic assistant). All described their patient population as diverse, with four also managing patients in aged care facilities.

Evolving perspectives

The principal investigator's understanding of leg ulcer management in general practice changed significantly during the study period. Preconceptions were that GPs struggled with management of non-healing leg ulcers. Conversely, study participants per-

1 Glossary of qualitative research terminology[13,14]

Phenomenology: Research tradition that aims to understand the essence of a lived experience. It involves methodologically capturing and describing how people experience a phenomenon — how they perceive it, feel about it, and make sense of it.

Maximum variation sample: Purposeful sampling technique that selects a wide range of cases to gain broad perspectives. The emphasis is on finding information-rich cases, from which one can gain greatest insight into the topic.

Snowball sampling: Participants identify potential new cases for inclusion in the study.

In-depth interviews: Data collection tool using open questions to elicit detailed and vivid narratives.

Interview guide: Outline of topic areas to be explored in the interview. In our study, this was informed by the investigators' experience, a literature review and two pilot interviews.

Study stakeholders: Key organisations in our study were the Silver Chain nursing association, Perth and Hills Division of General Practice and University of Western Australia's Primary Health Care Research, Evaluation and Development Unit.

QSR N6: Computer program facilitating coding and connection of qualitative data.

Immersion–crystallisation: Analysis technique in which thorough reading of the data, reflection and intuition produce insight into the research topic.

Themes: Core meanings and consistencies in qualitative data.

Theme saturation: Point at which new information fails to emerge from interviews, signalling that an adequate sample size has been reached.

Member-checking: Process of confirming findings with participants. ◆

ceived they were generally succeeding with leg ulcer care. Indeed, participants seemed surprised that someone wished to discuss leg ulcers in such depth. Findings are summarised in Box 2.

Major themes

"Part of the job"

Participants saw leg ulcer management as just part of their job; while rarely relished, it was not avoided. These GPs were protective of their role in patient care:

> It's an area that I wouldn't want to see completely removed from my practice. I don't want to be sitting here saying "you've got an ulcer, go and see the nurse", "you've got a rash, go and see the dermatologist".

Some viewed their involvement as a way of maintaining clinical competency, and others felt that it was part of their overall obligation to their patients. The benefits of general practice to wound care were repeatedly discussed:

> General practice is the ideal place. The patient is known, it is usually close to their home, and hopefully the repository of skills there is as good as anywhere else … It is cost effective, it is early interventionist, and it should prevent people from going into hospitals.

Nursing assistance valued

Nursing assistance seemed fundamental to patient management. Nurses were valued for their expertise and practical assistance:

> If I didn't have a nurse, my day would become miserable. I'd spend all my time doing dressings.

Most participants working with a practice nurse preferred to manage patients within the surgery, perceiving that close supervision of leg ulcer treatment was vital. They seemed wary of community nurse assistance, discussing at length concerns with losing control of patient care:

> If [the community nursing service] is dealing with it, I'm not going to see it unless I'm going to do two house calls a week. I don't know what's happening and I don't like that. I'm sure they are well trained and well-meaning. But, ultimately, the doctor looking after them is responsible.

In contrast, GPs without a practice nurse appeared more comfortable in devolving care to community nurses as long as "you have a system in place where you know that you will be notified if things worsen".

Successful care

Participants found leg ulcer care to be generally straightforward. They rarely encountered difficulties and repeatedly spoke of situations in which they experienced success. Their model of care balanced accessibility of medical care for the patient, awareness of patient context and regular review:

> The majority are the oldies with traumatic ulcers, and it is a question of developing treatment methods that fit in with their lifestyle, are non-invasive, are comfortable and can allow them to function normally and not spend too much time with us.

As one mentioned:

> It is not just an ulcer in isolation. [Most patients are] frail and elderly, and we need to look at their other medical illnesses and social problems.

Different management plans

Participants described management plans that differed widely from the stepwise approach outlined in leg ulcer guidelines.[4-6] They clearly reserved investigation, diagnosis and specific treatments for more troublesome cases:

> [Ulcers] will just heal up, and you don't have to get carried away doing other stuff. It depends on the severity of it and how it improves. Commonly, I'd use a very simple approach initially, and it would be the ones that don't settle or get worse that I'll need to follow up.

Many GPs seemed preoccupied with wound dressings, and product choice caused uncertainty. One GP described this as "fly by the seat of your pants sort of stuff". Although most expressed a desire to avoid unnecessary antibiotic use, it became inevitable for some:

> I've found when it's inflamed and not healing and growing staph or whatever, put them on antibiotics and they'll be back next week, and it will have reduced in size by one third.

Compression bandaging was rarely mentioned without prompting and, even then, was not advocated:

> I think the value of compression has never been sold sufficiently for us to say it is really essential. And most people get better anyway.

The difficult cases

Participants suggested that "It's the few that we get stuck on that cause all the grief". Many recalled bad experiences with ulcers that were large, infected or arising on a "dodgy-looking leg". Such care was disheartening:

> She just had a hideous ulcer. It was chronically infected with *Pseudomonas*. It was awful. We'd think, "Ah, it's almost going to heal, you beauty". Then it would all fall apart again. Dreadful!

Most became concerned if there was no evidence of healing after several weeks, although many noted that this was an arbitrary time frame, and it was sometimes

difficult to monitor. While acknowledging the potential for ongoing wound dressings to become burdensome for the practice, most participants were willing to be patient:

> If it's just gradually getting towards being right, then I'm prepared to plug on.

Specialist opinion was valued, but only for difficult cases. Participants viewed referrals as a way to "make sure we are not missing something". Some found it difficult to access appropriate advice:

> It would be useful to have an ulcer clinic close to where we are here. There are some times when you feel not quite sure who to refer to. I mean, we usually refer to the general surgeon. But they may not be particularly interested in these kind of cases.

In the experience of these GPs, specialists rarely suggested major treatment changes.

2 Contrast between specialists' perspective on leg ulcer care and general practitioners' experience

Specialists' perspective	General practitioners' experience
• Note problems with community-based leg ulcer care[8,9]	• Find management of leg ulcers is generally straightforward • Rarely encounter problematic ulcers, although dressing products can cause confusion, and monitoring of progress can be difficult
• Express concern about pervasive apathy to wound management[10-12]	• View leg ulcer management as an integral part of general practice • Want to maintain their involvement in patient care • Consider nursing assistance to be fundamental • Value specialist referral for certain cases
• Base ulcer management on sequential steps of current guidelines:[4-6] investigate (eg, ankle–brachial index); diagnose aetiology; use specific treatment (eg, compression for venous ulcers)	• Consider dressings the focus of treatment, with investigation reserved for problematic cases; use of compression appears limited • Favour a patient-centred model of care that balances several considerations

DISCUSSION

This is the first study, to our knowledge, that explores GPs' experiences of dealing with leg ulceration. The findings support interventions based on primary care: GPs are keen to be involved, benefits of community care are highlighted, and scope for improvement is evident. The challenge is the fundamental difference between GPs' attitudes and those previously articulated by specialists.[10,11] Future strategies will need to bridge the gap between what is practical and what is ideal.

Study participants appeared to risk losing track of certain aspects of ulcer management as they balanced diverse treatment goals. Better appreciation of the healing times achievable with optimal treatment and close monitoring may clarify expectations for acceptable patient outcomes. GPs could be reassured that selecting the type of dressing is only one part of ulcer management, leaving attention to be focused on ulcer aetiology. The lack of confidence in compression therapy is of special concern, given strong evidence that compression improves venous ulcer healing.[7] These specific areas for improvement in leg ulcer care warrant reiteration.

However, broad implementation of traditional leg ulcer guidelines may be neither appropriate nor acceptable in general practice. Participants perceived that most patients progressed smoothly towards healing, suggesting that their patient population differed from that in specialist clinics. They also embraced a "gatekeeper" role of protecting patients from the risk and discomfort of unnecessary interventions.[17] It would be an oversimplification to assume guideline dissemination alone will improve community leg ulcer care.

Our findings suggest three areas for future intervention:

Education programs: Participants' satisfaction with ulcer care may be underpinned by low expectations for healing and lack of knowledge about optimal treatments. Ongoing education is warranted, and needs to be interdisciplinary (to incorporate the pivotal role of the nurse) and tailored to the general practice environment.

Human resources: Strengthening the Medicare Plus initiatives that support the role of practice nurses could further facilitate quality ulcer management. Adequate specialist support may be strengthened through clarification of referral pathways[18] or formation of local leg ulcer clinics.[19]

Practical tools: Tools that define optimal therapy and the clinical indicators of poor prognosis (eg, ulcer duration, ulcer size and arterial disease[20]) could prompt GPs to implement more appropriate routine treatment, as well as early identification of problem wounds.

It is likely that a combination of interventions will be required to significantly improve community leg ulcer care.

The main limitation of this study is the transferability of its findings. We sampled GPs in a range of practices, and our study design acknowledged the need to seek alternative and disconfirming cases; however, different attitudes may be shared by GPs who were not involved in this study. Further, the method of in-depth interviews, although ideally suited to the exploration of experience, does not capture participant behaviour.

Despite these limitations, our study highlights the scope for optimising leg ulcer management, while it also suggests that traditional ulcer guidelines may not be appropriate or acceptable in general practice. Both GP and specialist perspectives will need to be considered when developing leg ulcer management strategies.

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COMPETING INTERESTS

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