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Healthcare practitioners' views on the assessment and management of pain in chronic lower limb wounds

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ABSTRACT

Wound-related pain in people with chronic lower limb wounds is often underestimated and undertreated by clinicians[1,2] (Briggs, Bennett, Closs, & Cocks, 2007; Coutts, Woo, & Bourque, 2008). This paper provides an overview of the findings from a mixed methods study exploring the perceptions and experiences of healthcare practitioners (HCP) on the assessment and management of wound-related pain, in an effort to provide insights into the above deficit.

Aim

The aim of this study was to explore whether assessments of wound pain are undertaken and what the barriers are to wound pain management, from the perspectives of HCP.

Method

This study encompassed two research activities (an HCP survey and focus groups). An explanatory, sequential mixed method design combining data from the survey and the focus groups was used for the study.

Results

At present, there is no consistent method for the assessment and management of wound-related pain. The key barriers to effective management of pain identified here are pain language, the attitudes and beliefs of HCP in relation to pain assessment and a lack of knowledge and skills in evidence-based practice in wound-related pain.

Conclusion

There is a need for a universal clinical multidimensional wound pain assessment tool that incorporates clinical guidelines and prescriptive pathways for managing wound-related pain.

INTRODUCTION

Healthcare practitioners often underestimate wound-related pain, as they do not perceive chronic wounds as a medical priority or life-threatening condition.[3,4] The presence of wound pain can be an indicator of ineffective wound management where the underlying causal pathology has not been identified or treated, or infection is present.[5-7] Inadequate or inappropriate interventions can contribute to persistent painful sensory inputs, which can result in delayed healing and a lack of patient compliance.[8,9] Up to 80% of people with chronic wounds experience pain all the time, and half of them rate their pain as 'moderate' to 'the worst possible'; they report that it is inadequately managed and, consequently, affects their quality of life.[5,10-12] Pain in lower limb wounds has been shown to be associated with decreased energy levels, decreased mobility, sleep disturbance, depression, social isolation and decreased ability to manage normal daily work or activities.[8,9,13]

The complexity of pain is influenced by many factors, including emotions, social background and the meaning of pain, along with beliefs, attitudes and expectations of both health practitioners and patients.[14,15] Attitudes and beliefs are key determi-

nants of wound pain assessment and management. Generally, people with chronic pain are frequently stigmatised, and most do not gain access to appropriate assessment and treatment of their pain.[16] Healthcare practitioners often have preconceived ideas and place value their own judgements about the degree of wound pain a person is likely to experience[17,18], and there are often differences among people's perceptions of the state of a wound and pain, with pain levels being underestimated.[12,19,20] Furthermore, healthcare practitioners' avoidance behaviours or denial of patients' pain impacts some patients' views that wound pain is something they have to suffer or manage themselves.[21] Identifying healthcare practitioners' attitudes and beliefs that may contribute to poor clinical outcomes is relevant and integral for improving the quality of patient care.[22]

Knowledge and understanding of pain are an important part of what influences effective pain management. A number of studies have indicated that healthcare practitioners do not feel confident managing patients' pain due inadequate training[(23-26)], so they use denial to compensate for their lack of knowledge of wound pain management[12], or they do not acknowledge the existence of patients' wound pain.[25,27] Improved understanding of wound-related pain, including the multidimensional aspects of pain, is critical for ensuring effective management. To date, there is a lack of insight into the reasons for poor compliance by healthcare practitioners related to pain assessment and the management of wound-related pain in clinical practice.

AIM OF THE STUDY

This paper reports the integration of findings of a mixed-methods study that aimed to explore what the barriers were for the assessment and management of wound-related pain, from the perspective of healthcare practitioners.

METHODS

An explanatory, sequential design using the mixed methods framework of integration through the connection of data was used for this study. The sequential models involved carrying out components of studies to inform subsequent phases. Both quantitative and qualitative approaches were applied to explore healthcare practitioners' assessment and management of chronic wound pain. Two phases of data collection and analysis were undertaken to explore the research question. This study followed the framework described by Creswell and Plano Clark[28] of integrating data by building on the results obtained from one approach to inform the data collection of the other approach. Then, a triangulation method was applied to integrate and synthesise the data. The study began with a quantitative survey to identify current practices in wound pain assessment. The data and findings from this phase of the study highlighted several barriers to wound pain assessment that required further exploration and which informed the development of a qualitative method in Phase Two of the study. The quantitative data guided the approach and interview questions when conducting focus groups to explore healthcare practitioners' views in greater depth and to identify the key themes of enablers and barriers to wound pain assessment and management.

In Phase One (quantitative), a cross-sectional survey was conducted among healthcare practitioners involved in wound care. The self-administered survey tool consisted of structured questions with pre-coded responses, though some questions provided an open option for comments. There were three sections in the survey: (i) general characteristics, (ii) wound pain assessment and (iii) wound pain management. The survey was sent to healthcare practitioners who were members of an Australian wound care organisation. Descriptive analysis was conducted using absolute (n) and relative (%) values for categorical data. Differences among health professionals' approaches to when and how wound pain was assessed were explored using chi-square statistics. Detailed information about the methods and results of this study phase have been published previously.[29] The findings of this study phase informed the subsequent phase of the study by determining how and when wound pain assessment was undertaken and whether there was consistency in professionals' approaches to the assessment and management of wound pain.

To attain a contextual understanding of wound pain assessment and management practices, Phase Two (qualitative) of the study used focus groups of healthcare practitioners and enabled a purposive sampling of clusters of focus group participants representing various professions working in wound care and in different work settings (community, domiciliary, acute and tertiary hospitals) to further illustrate elements of their wound pain practices. Guided in-depth interviews with four focus groups were conducted to explore the healthcare practitioners' views in greater depth and to identify and describe key themes of

the enablers and barriers to wound pain assessment and management. This allowed for the identification and bridging of the gap between the results of Phase One and the comparison of practices reported by participating clinicians. A total of 40 healthcare practitioners participated in the focus groups; 53% were nurses, 27% were podiatrists and 20% were wound care specialists.

Ethical approval for the two phases of the research was obtained from the Human Ethics Committees at each of the participating organisations and complied with the ethical guidelines of the Declaration of Helsinki (2013). Written informed consent was obtained from all participants.

RESULTS

The following reports the integration and interpretation of the combined results of the study's two phases. The survey of healthcare practitioners found no uniform process among them concerning how or when wound-related pain is assessed.[27] A combination of assessment tools and methods was applied based on the patient's cognitive and language abilities. The most frequent approach to identifying pain was talking to the patient about their wound pain experience, while the most commonly used pain assessment tool was the Numerical Rating Scale.[47] Wound pain assessments were conducted during the initial assessment of the patient, but subsequent assessments at review appointments or wound dressing changes were inconsistent, as were the assessment methods. In most healthcare settings, pain assessments were aimed at minimising procedural pain associated with chronic wounds, but assessments were often not performed for persistent wound-related pain.

Three themes emerged from the focus groups comprising all types of healthcare professionals: pain language, workplace behaviours and knowledge and skills.

The language used by healthcare practitioners to ascertain patients' pain intensity and experiences was identified as a barrier to assessing and managing wound pain. How healthcare practitioners and patients talk about pain was reported by participants as having a significant impact on the communication of pain. Participants reported that the language used, the interpretation of pain scales and pain descriptors all varied among healthcare practitioners, patients and carers. Patients' understanding and interpretation of pain levels were identified as a fundamental problem. Further, healthcare practitioners reported that determining how to use the pain scale was quite arbitrary, as the meanings of words vary among people. The challenge was even greater with cognitively impaired patients and those who for whom English is a second language.

A diversity of assessment methods was associated with variations among healthcare delivery systems, staff attitudes and beliefs and a lack of knowledge of the importance of the identification and management of pain in wound healing. Workplace behaviours, such as workload requirements, work protocols and work cultures, determine when and how wound pain assessment procedures occur. Many participants reported that they do not regularly assess pain, as they cannot treat it; this was commonly reported as a reason for the lack of pain management by nurses and podiatrists in general. The inability to manage wound-related pain was reported to be a result of participants' limited scope of practice and lack of knowledge on how to manage pain. Some reported lacking knowledge about the characteristics of chronic pain and the confidence to determine the cause of pain, including distinguishing between physical and emotional pain, and the appropriate use of pain medications, particularly in older populations. One notable reported influencing factor was the lack of clinical guidelines and prescriptive pathways for managing pain within their scope of practice.

DISCUSSION

This study confirms that healthcare practitioners do not consistently assess wound-related pain in chronic lower limb wounds; this is directly linked to the barriers identified related to the inability to manage wound pain effectively. No standardised assessment tool exists among wound practitioners as to how the assessment of wound-related pain is undertaken. This supports the findings of a scoping review that determined that multiple pain assessment instruments are used for pain caused by lower extremity wounds, but, at present, there is no validated assessment tool suitable for wound-related pain.[30]

Pain language was identified as a key issue in the assessment and understanding of patients' wound pain. Pain terminology and word descriptors are subjective and open to interpretation, as the meanings of words differ among people.[31,32] How healthcare practitioners and patients talk about pain impacts

their communication about pain. Studies have shown that asking the right question may elicit information on the presence of pain[33], and when using validated assessment tools, patients' reports of pain prevalence increase, compared to a single question about the presence of pain.[31,32]

While many healthcare practitioners are aware of wound pain and related issues, there are considerable variations in practices for assessing pain in the primary care setting, and the importance of persistent wound related pain is under-estimated.[6,7,23] In this study, participants indicated that most healthcare settings have no uniform process for how and when wound-related pain is assessed, and regular assessments for persistent wound related pain are not consistently performed. Variations in assessment practices were attributed to workplace behaviours such as workload requirements, work protocols, attitudes and beliefs about pain and a lack of knowledge and skills to manage the pain. These explanations are in concordance with the theory proposed by Smith et al.[34] of habituated behaviours of health professionals, which suggests that health professionals' behaviours are shaped by beliefs or contextual factors, such as the characteristics of a condition or illness, external policy and organisational support and a lack of knowledge. In addition, the effectiveness of organisational infrastructure recognised how difficult it is for health professionals to implement evidence-based practices into their daily practice when organisational barriers exist.[34]

The focus group results demonstrate that gaps in health systems' performance and resources were contributing factors for the lack of chronic wound pain assessments. Time constraints and demanding workloads were also barriers to conducting pain assessments. This is in line with a recent survey which noted the reasons why nurses do not conduct pain assessment, such as not having time, not thinking it is important and a lack of knowledge on rating scales.[26]

Healthcare practitioners' avoidance behaviours or the ignoring of patients' pain impacts patients' perceptions that wound pain is something they have to suffer or manage themselves.[12,21,25] Avoidance behaviours result in poor practices, as these are also used as coping mechanisms for practitioners' inability to manage pain.[35-37] Young12 states that denial is used to compensate for nurses' lack of knowledge of wound pain management and as a means of not acknowledging the existence of patients' wound pain. Another perspective on ignoring pain, especially during wound dressing changes, is that some healthcare practitioners use social defences, such as emotional distancing and denial, to protect themselves from feeling overwhelmed by inflicting pain on their patients. There are controversies in the literature concerning whether emotional distancing is positive or negative.[38,39] Emotional distancing is described as a coping strategy to protect oneself, but some argue that it might produce an artificial or inappropriate relationship between healthcare practitioners and their patients, hindering healthcare.[40]

Attitudes and beliefs are key determinants of wound pain assessment and management. Value judgements by healthcare practitioners influence whether pain assessment and management are implemented. The disparities between healthcare practitioners' interpretations of pain and the patients' own reporting are based on personal and individual judgements[41]; this implies that healthcare practitioners have preconceived ideas about the pain patients experience.[12,14] These assumptions, estimates and value judgments are based on the appearance and size of the wound, a wound's aetiology and the patient's behaviour.[1,42,43]

Finally, the lack of education and knowledge is a significant determining factor of poor pain management practices.[18] Although the assessment of pain is one element of the problem, the root problem is frustration with not knowing what to do with assessment results. While healthcare practitioners have knowledge of wound care, many studies on wound pain have concluded that practitioners involved in wound management often lack knowledge and understanding of pain in wound healing.[12,23,32] Many do not feel confident managing pain and, in particular, implementing pharmacological interventions, due to what they believe to be inadequate training.[4,18,25,44,45] The results of the present study support these conclusions. Furthermore, although several international guidelines exist on persistent wound pain management, the scope of practice for most healthcare professionals working with chronic wounds, such as nurses and allied health professionals, is limited by legislation and access to pain-relieving treatments or medications, which often must be prescribed by a medical practitioner.

In summary, to improve the practices of healthcare professionals and change their habituated behaviours,

it is necessary to apply an educational paradigm that consists of the triad of knowledge gain, skills acquisition and behaviour change.[46] In addition, further research is required to develop a universal clinical multidimensional wound pain assessment tool that incorporates clinical guidelines and prescriptive pathways for managing wound-related pain.

CONCLUSION

The findings of this study support the concerns expressed in the literature about the inadequate assessment of wound-related pain in patients with chronic lower limb wounds. Several barriers to the assessment and management of pain have been identified. From the healthcare practitioners' perspective, these include the use of appropriate assessment tools, a lack of knowledge regarding pain and attitudes regarding pain management. Whilst this study has demonstrated a clear need for a systematic and universal approach to pain assessment, obtaining a consistent approach to pain management for this vulnerable client cohort will require more substantial re-engineering of the healthcare system.

KEY MESSAGES

- This paper describes the perceptions and experiences of healthcare practitioners and patients concerning the assessment and management of wound-related pain.
- The aim was to explore whether assessments of wound pain are undertaken and what the barriers are to wound pain management, from the perspectives of healthcare practitioners.
- There is inconsistency among healthcare practitioners regarding how and when wound-related pain assessments are undertaken, and regular reassessments are often not conducted.
- The identified barriers to effectively assessing and managing wound pain were healthcare delivery systems, staff attitudes and beliefs and a lack of knowledge of the importance of the identification and management of pain in wound healing.

REFERENCES

1. Briggs M, Bennett MI, Closs SJ, Cocks K. Painful leg ulceration: A prospective, longitudinal cohort study. Wound Repair Regen 2007; 15(2):186–91.
2. Coutts, P., Woo, K., & Bourque, S. (2008). Treating patients with painful chronic wounds. Nursing Standard, 23(10), 42-46.
3. Phillips T, Stanton B, Provan A, Lew R. A study of the impact of leg ulcers on quality of life: Financial, social and psychological implications. J Am Acad Dermatol 1994; 31(1):49–53.
4. Gorecki C, Closs SJ, Nixon J, Briggs M. Patient-reported pressure ulcer pain: A mixed-methods systematic review. J Pain Symptom Manag 2011; 42(3):443–59.
5. Nemeth KA, Graham ID, Harrison MB. The measurement of leg ulcer pain: Identification and appraisal of pain assessment tools. Adv Skin Wound Care 2003; 16(5):260–7.
6. Price PE, Fagervik-Morton H, Mudge EJ, Beele H, Ruiz JC, Nystrøm TH, et al. Dressing-related pain in patients with chronic wounds: An international patient perspective. Int Wound J 2008; 5(2):159–71.
7. Moffatt C, Franks PJ, Hollinworth H. Understanding wound pain and trauma: An international perspective. EWMA Position Document: Pain at wound dressing changes.2002; 2.
8. MoÐcicka P, Cwajda-Białasik J, JawieÐ A, Sopata M, Szewczyk MT. Occurrence and severity of pain in patients with venous leg ulcers: A 12-week longitudinal study. J Clin Med 2020; 9(11):3399.
9. Woo K. Exploring the effects of pain and stress on wound healing. Adv Skin Wound Care 2012; 25(1):38–44.
10. Meaume S, Teot L, Lazareth I, Martini J, Bohbot S. Reducing pain: The importance of dressing selection in routine wound management: The MAPP study. J Wound Care 2004; 13(10):409-413
11. Franks PJ, Moffatt CJ, Doherty DC, Smithdale R, Martin R. Longer-term changes in quality of life in chronic leg ulceration. Wound Repair Regen 2006; 14(5):536–41.
12. Young T. Assessment of wound pain: Overview and a new initiative. Br J Nurs 2007; 16(8):456–61.
13. Edwards H, Finlayson K, Skerman H, Alexander K, Miaskowski C, Aouizerat B, et al. Identification of symptom clusters in patients with chronic venous leg ulcers. J Pain Symptom Manag 2014; 47(5):867–75.
14. Moore L, Britten N, Lydahl D, Naldemirci Ö, Elam M, Wolf A. Barriers and facilitators to the implementation of person-centred care in different healthcare contexts. Scand J Caring Sci 2017; 31(4):662–73.
15. Brown A. Wound management 3: The assessment and treatment of wound pain. Nurs Times 2015; 111(47):15–7.
16. Cousins MJ, Lynch ME. The Declaration Montreal: Access to pain management is a fundamental human right. LWW; 2011.
17. Douglas V, Way L. The assessment of wound pain: A review. Pract Nurs 2006; 17(11):532–42.
18. Horbury C, Henderson A, Bromley B. Influences of patient behavior on clinical nurses' pain assessment: Implications for continuing education. Journal Contin Educ Nurs 2005; 36(1):18–24.
19. Hyland ME, Ley A, Thomson B. Quality of life of leg ulcer patients: Questionnaire and preliminary findings. J Wound Care 1994; 3(6):294–8.
20. Hollinworth H. Nurses' assessment and management of pain at wound dressing changes. J Wound Care 1995; 4(2):77–83.
21. Flanagan M. Managing chronic wound pain in primary care. Pract Nurs 2006; 31(12):34–8.
22. Beetsma AJ, Reezigt RR, Paap D, Reneman MF. Assessing future health care practitioners' knowledge and attitudes of musculoskeletal pain: Development and measurement properties of a new questionnaire. Musculoskel Sci Pract 2020; 50:102236.
23. Newbern S. Identifying pain and effects on quality of life from chronic wounds secondary to lower-extremity vascular disease: An integrative review. Adv Skin Wound Care 2018; 31(3):102–8.
24. Tellier P-P, Bélanger E, Rodríguez C, Ware MA, Posel N. Improving undergraduate medical education about pain assessment and management: A qualitative descriptive study of stakeholders' perceptions. Pain Res Manag 2013; 18(5):259–65.
25. Hadjistavropoulos TP, Herr KP, Turk DCP, Fine PGMD, Dworkin RHP, Helme RMP, et al. An interdisciplinary expert consensus statement on assessment of pain in older persons. Clin J Pain 2007; 23 Supplement(1):S1–43.
26. Toma E, Veneziano ML, Filomeno L, Villa A, Rosato E, la Torre G. Nursing assessment of wound-related pain: An Italian learning survey. Adv Skin Wound Care 2020; 33(10):540-8
27. Bowers K, Bennett S. Wound-related pain: Features, assessment and treatment. J Prim Health Care 2009; 19(10):37–45.
28. Creswell JW, Plano Clark VL. Designing and conducting mixed methods research. 2nd ed. Los Angeles: SAGE Publications; 2011.
29. Frescos N. Assessment of pain in chronic wounds: A survey of Australian healthcare practitioners. Int Wound J 2018; 15(6):943–9.
30. Frescos N. Pain assessment tools for chronic lower limb wounds: A scoping review. Wound Pract & Res: 2019; 27(1):27–35.
31. Dickinson AM, Frescos N, Firth JC, Hamblin PS. The characteristics of wound pain associated with diabetes-related foot ulcers: A pilot study. Wound Pract Res 2016; 24(3):138–48.
32. Bengtsson L, Jonsson M, Apelqvist J. Wound-related pain is underestimated in patients with diabetic foot ulcers. J Wound Care 2008; 17(10):433–5.
33. Fowler E. Plain talk about wound pain. Ostomy Wound Manage 2005; 51(11A (Suppl)):4–6.
34. Smith SK, Ashby SE, Thomas L, Williams F. Evaluation of a multifactorial approach to reduce the prevalence of pressure injuries in regional Australian acute inpatient care settings. Int Wound J 2018; 15(1):95–105.

35. Briggs M, Torra I, Bou J. Pain at wound dressing changes: A guide to management. European Wound Management (EWMA) Position Document Pain at wound dressing changes MEP; 2002.
36. Clay CS, Chen WYJ. Wound pain: The need for a more understanding approach. J Wound Care 2005; 14(4):181–4.
36. Bowers K, Barrett S. Wound-related pain: Features, assessment and treatment. Nurs Stand 2009; 24(10):47–60.
38. Michaelsen JJ. Emotional distance to so-called difficult patients: Emotional distance to 'difficult' patients. Scand J Caring Sci 2012; 26(1):90–7.
39. Harris B. Therapeutic boundaries or barriers: Thoughts on emotional distance in psychiatric mental-health nursing. Issues Ment Health Nurs 2014; 35(6):492–4.
40. Kim J, Kim S, Byun M. Emotional distancing in nursing: A concept analysis. Nurs Forum 2020; 55(4):595–602.
41. Hollinworth H, Collier M. Nurses' views about pain and trauma at dressing changes: Results of a national survey. J Wound Care 2000; 9(8):369-373
42. Guarnera G, Tinelli G, Abeni D, Di Pietro C, Sampogna F, Tabolli S. Pain and quality of life in patients with vascular leg ulcers: An Italian multicentre study. J Wound Care 2007; 16(8):347–51.
43. Taverner T, Closs SJ, Briggs M. The journey to chronic pain: A grounded theory of older adults' experiences of pain associated with leg ulceration. Pain Manag Nurs 2014; 15(1):186–98.
44. Husband L. Venous ulceration: The pattern of pain and the paradox. Clin Eff Nurs 2001; 5:35–40.
45. Manias E, Botti M, Bucknall T. Observation of pain assessment and management–The complexities of clinical practice. J Clin Nurs 2002; 11(6):724–33.
46. Harding K, Queen D. Education and improved clinical outcomes. Int Wound J 2017; 14(2):299–299
47. Karcioglu, O., Topacoglu, H., Dikme, O., & Dikme, O. (2018). A systematic review of the pain scales in adults: Which to use? American Journal of Emergency Medicine, 36(4), 707-714. doi:10.1016/j.ajem.2018.01.008.