

PAIN – The blessing and the curse

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CHRONIC WOUND-RELATED PAIN

Significant unmet clinical need, impact on all aspects of the life.

The pain associated with their chronic wound that has the most significant and detrimental impact and is the main area where they wish to see more intervention, invention and research

Blessing: “god’s gift”

Serves an essential physiological function, warning against potential damage and danger.

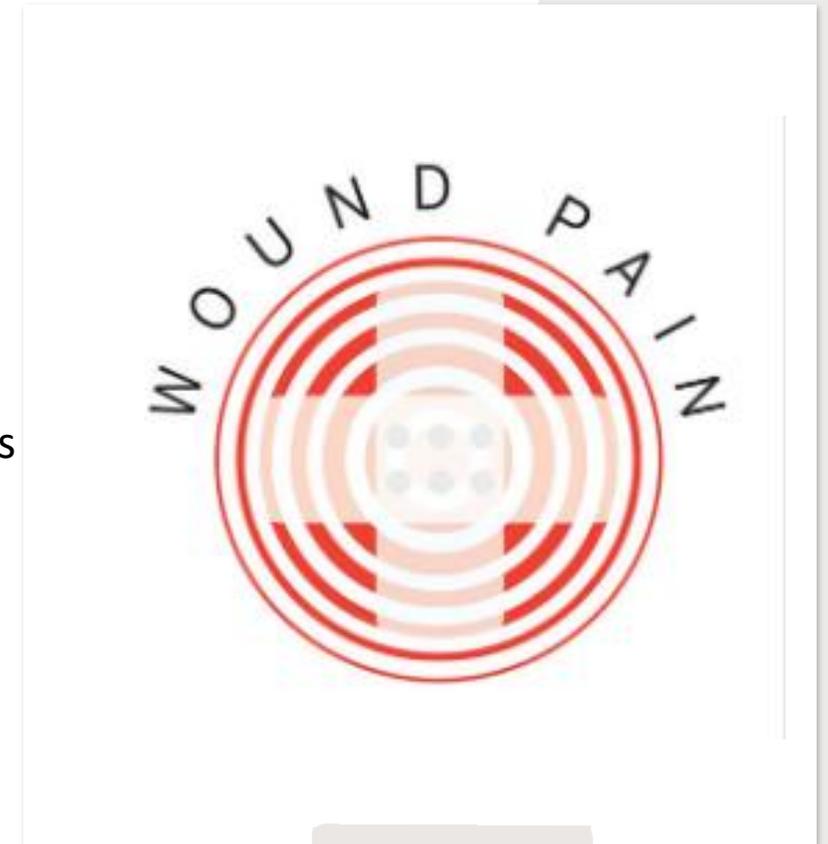
Maladaptive alterations in central and peripheral nervous system components relating to the pain experience can lead to a pathological state of persistent pain.

Can be acute, chronic, nociceptive or neuropathic

Depending on aetiology - common to experience multiple types of pain, making ulcer pain challenging to diagnose and treat.

Up to 80% of individuals with lived experience of chronic wounds suffer from persistent pain **between** dressing changes

Up to 46% of patients reporting moderate to severe pain



HOLISTIC MANAGEMENT OF WOUND-RELATED PAIN

AN OVERVIEW
OF THE EVIDENCE
AND
RECOMMENDATIONS
FOR CLINICAL
PRACTICE



Evidence included in the document:

- 38 systematic reviews
- 27 additional articles
- Total = 65 individual pieces of evidence

THEME/PROJECTS	No. of Articles
Pain Assessment	25
Physical Therapies	8
Patient Education	12
Psychological Therapies	2
Complementary and Alternative Approaches	18

Each chapter provides a summary of recommendations based on evidence



2. Multidimensional Nature of pain

Categories and description of pain

- Acute pain: 4 x physiological stages
- Chronic pain:
neuropathic wind up, sensitisation, neuroplasticity
- **bio-psycho-social** understanding of pain

Pain is a normal sign in the inflammatory phase of wound healing, so all wounds have the potential to be painful.

In combination with other intrinsic and extrinsic factors pain can be exacerbated.

The experience of wound-related pain is complex and needs to take into consideration the psycho-social factors contribute to the pain experience, particularly emotional (psychological) factors which can also act as modulating factors and can impact on QoL.

3. Wound-related pain assessment

Explores the evidence related to pain assessment to establish what assessment tools are being used in research and clinical practice.

- Unidimensional: acute/chronic pain NRS, VAS, VRS, Faces
- Special Population: Abbey, PAINAD
- Multidimensional: QoL/Intensity
- Frameworks & Models: TSAS-T, WAP

Consider an individual's ability to respond to the assessment - active listening and attending to verbal and non-verbal cues.

Adapt assessment techniques to socially, culturally and linguistically diverse populations

“One size does not fit all”



4. Physical therapies for Wound-Related Pain Management

- Physical therapies/physical activities –VLU
- Procedural pain:
- Topical analgesics/Local Anaesthesia
 - Dressings: non adherent; impregnated; antimicrobials
 - Peri-wound moisture balance
- Debridement mechanisms:
- Extra corporeal shock wave therapy
 - LFUS
 - Ultrasonic mist therapy
 - The role of interventions to manage anticipatory and procedural pain as well as inflammation

5. Role of patient education

Examines evidence related to patient education

- including determinants of non-adherence,
- tailored treatment regimes,
- the role of social models of care,
 - *The leg club*
 - *PUPP*
- the importance of listening to individuals



6. Role of Psychological approaches

Evidence is sparse

there may be a role for social models of care and motivation enhancement programs
 Focused on individuals with leg ulcers

Holistic Management of Wound-Related Pain

The experience of wound-related pain is complex and needs to take into consideration the psychological and social factors that can impact on an individual's quality of life to ensure a holistic approach.

Pain is a multidimensional phenomenon that is predisposed by biological, psychological and social factors which influence how pain is experienced and how it should be managed (Lorenz 2019; Faculty of Pain Medicine 2021). Additionally, individuals learn the concept of pain through the experiences (Linton & Shaw 2011; Caley & Mackenzie 2021). Pain, particularly chronic / persistent pain can also have adverse effects on function and on social and psychological well-being (overall quality of life), therefore understanding pain and its management is essential to providing effective pain management.

Assessment of wound-related pain is complex and multidimensional. Health care providers must determine what the most suitable assessment tool is for their patients and in doing so consider an individual's ability to assess their own pain. Unidimensional measures of pain intensity are not appropriate as stand-alone tools for pain assessment. Information from these scales must be considered in conjunction with a functional and psychosocial assessment. The assessment of chronic pain requires the use of multidimensional tools that incorporate quality of life measures.

Management of wound-related pain needs to consider the impact of:

- Anticipatory pain
- Procedural pain (i.e. related to the nursing interventions and care -- debridement procedures)

Interventions (as adjuncts to pharmacological approaches) might include:

- Physical activity / exercise - active and Physical activity - passive and repositioning
- Manage moisture to prevent maceration and reduce risk of pain from periwound skin irritation (dermatitis)
- A combination of non-pharmacological interventions may be needed
- Aromatherapy and music therapy may also be helpful in providing a distraction for anticipatory and procedural related pain
- Topical impregnated dressings and topical anaesthetics for pain relief
- Honey impregnated dressings appear to have an analgesic action related to its anti-inflammatory properties
- For individuals with leg ulcers social models of care and motivation enhancement programmes may be helpful

Patient Education approaches for wound-related pain should include information on:

- Aetiology of the wound and causes of pain (based on OPIQST framework)
- Non-pharmacological and pharmacological methods for pain relief
- Ways and means of judging the effectiveness of interventions to manage wound-related pain
- Impact of pain on quality of life
- Patient education may include: theoretical and goals of treatment (particularly expectation setting)

Psychological approaches need to consider the factors associated with pain i.e., attention, cognitions, emotions, emotion regulation and overt behaviour. Interventions may include:

Distraction - Interceptive Exposure - Cognitive Restructuring - Cognitive Behavioural Therapies
 Activation - Relaxation - Positive Psychology Techniques - Coping Strategies

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Decision-aid to support the holistic management of wound-related pain

Assess for the presence of pain

Acute pain (including procedural pain) → Apply the OPIQST framework as an initial assessment → Chronic pain (influencing Quality of Life)

Unidimensional pain scales (VAS, NRS, FRS) → Non pharmacological methods and approaches (same as acute) → Pharmacological methods and approaches based on the World Health Organization (WHO) Analgesic Ladder → Multidimensional pain tools (e.g. RFL Pain Inventory, PAINAD)

Improvement in pain observed? (Yes/No) → Consider a change in pain management strategy → Reassess for the presence of pain (based on the last method used and advise before the procedure/intervention) → Refer to specialist as appropriate

Develop and agree long-term pain management strategy with individual: Patient history - affects pain management strategies in the past; Psychosocial (beliefs); Ongoing assessment strategy (goal pain related to the local signs); Review: Apply principles of TENS (Coley et al 2017) and TENS CBT (Waller et al 2019); Self care management and patient education; IMPORTANT NOTE: always consider related needs based on age, maturity, experience with pain and previous care (cognitive functioning)

Mnemonic tool for wound-related pain management

- Awareness** Be aware of wound-related pain in any context (acute, chronic, procedural)
- Definition** Properly identify the pain (acute, chronic, procedural)
- Assessment** Use appropriate tools for pain assessment (based on the type of pain and patient history)
- Develop** Plan and agree long-term pain management with individual (consider individual needs based on age, maturity, experience with pain and previous care (cognitive functioning))
- Evaluate** Monitor the pain regularly, check the effect of non-pharmacological and pharmacological strategies (based on age, maturity, experience with pain and previous care (cognitive functioning))
- Reassess and refer** Regularly assess for the presence of pain, if there is no improvement (or for chronic pain) refer the individual to the specialist - timely consult the specialist (geriatrician)

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7. Role of Complimentary and Alternative Therapies

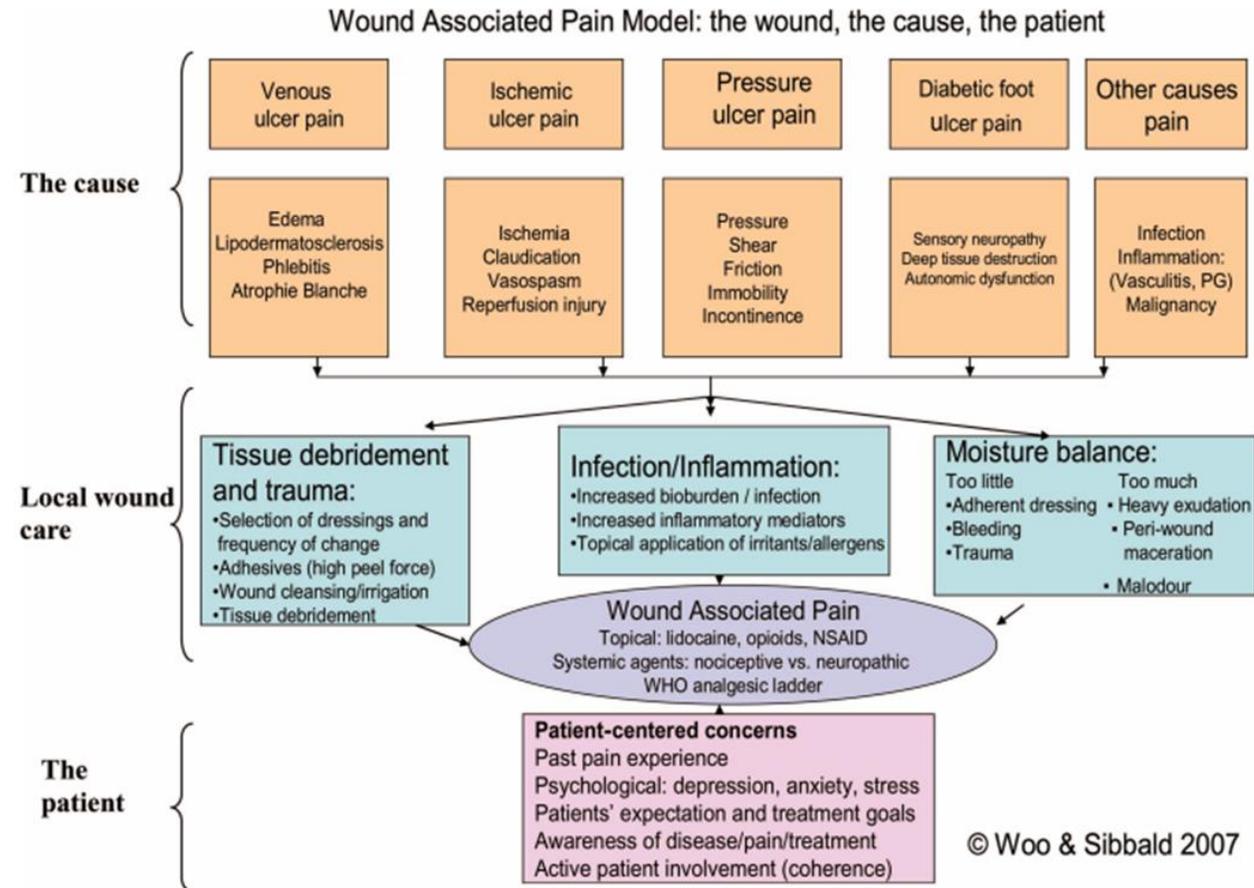
- Honey
- Chinese Traditional Medicine
- Aromatherapy
- Plant therapies
- Low level laser therapy

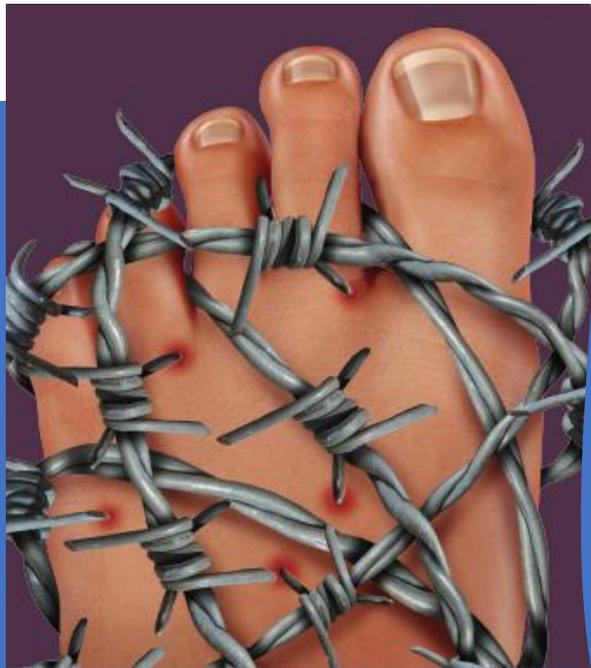




Models and Frameworks

- “Heal not hurt”
- Toronto Symptom Assessment System for Wounds (TSAS-W)
- Wound Associated Pain model (WAP)
 - integrates principles of wound pain assessment and management into the principles of wound bed preparation





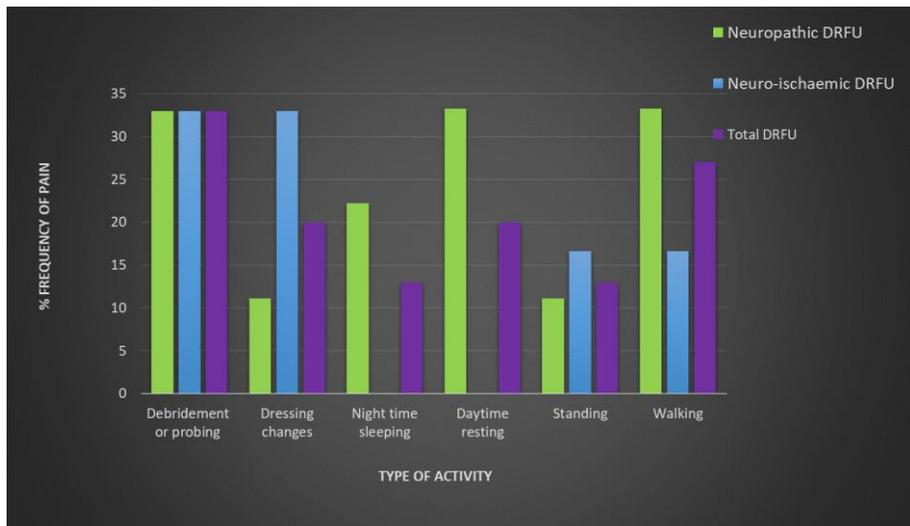
Myth of no pain.

Preconceived presumptions about a patients' pain based on assumptions related to wound aetiology.

Misconception that patients with DFU do not experience wound related pain.

Prevalence studies show 86% with peripheral neuropathy reported wound-related pain

“Do you have pain in your wound?” 33%
Using a formal pain assessment tool 53%



Accurate diagnosis of the wound pain may be missed – due to the complexity of diabetes foot disease

Understanding that there are layers of pain in DFU is central to effective assessment and management

Need to discriminate neuropathic and non-neuropathic pain in patients with sensory neuropathy

Nociceptive /neuropathic /anticipatory /background /chronic /ischaemic /infection

The consequences of misdiagnosing or ignoring the pain associated with DFU is perilous.

ALWAYS ASSESS PAIN IN DIABETIC FOOT ULCERS!



Barriers to wound pain assessment and management



Habituated Behaviours

“Health professionals’ behaviour is shaped by beliefs or contextual factors such as the characteristics of a condition or illness, external policy and organisational support, and lack of knowledge” (Smith et al 2018)



Systems related factors

Variations in assessment practices were attributed to workplace behaviours such as workload requirements, time pressure and resources.

Lack of clearly defined standards and pain management protocols, for how and when wound-related pain is assessed, and regular assessments for persistent wound related pain are not consistently performed

Limited access to pain specialists

“.....You’ve got so many people to see and asking them the quick basic question sometimes you think ”oh that will do for now I don’t have time to do a 2-page pain assessment”

Delayed referrals to GP, the lack of resources to refer to other services or lack of referral pathways to specialist clinics

Health policy and economics preventing access to analgesia

“it’s not always easy referring them in,....being an allied health practitioner is the challenge or barrier that I find....It’s a lot easier if the referral comes from medical.”

The scope of practice for most healthcare professionals working with chronic wounds, is limited by legislation and access to pain-relieving treatments or medications, which often must be prescribed by a medical practitioner



Attitudes and Beliefs

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

Healthcare practitioners have preconceived ideas about the pain patients experience

Disparities between healthcare practitioners' interpretations of pain and the patients' own reporting are based on personal and individual judgements

“They’re neuropathic, they’re diabetic, there is nothing we can do about it. Control your sugars, take a few Panadol, off you go”

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

“They pop in and they’ve got pain coming from everywhere and you are just not sure whether it is real or not it is hard to take seriously”



Avoidance Behaviours

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.

Denial is used to compensate for lack of knowledge of wound pain management and as a means of not acknowledging the existence of patients' wound pain

“Brushed aside”

Avoidance behaviours result in poor practices, as these are also used as coping mechanisms for practitioners' inability to manage pain.

Some healthcare practitioners use social defences, such as emotional distancing and denial, to protect themselves from feeling overwhelmed by inflicting pain on their patients

Emotional distancing is described as a coping strategy to protect oneself, might produce an artificial or inappropriate relationship between healthcare practitioners and their patients, hindering healthcare.

“if pain is really complex, so they're probably are a bit like I'm not going to ask. It's a don't ask, don't tell policy.”



Education and Knowledge

Many do not feel confident managing pain, in particular, implementing pharmacological interventions, due to what they believe to be inadequate training.

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

"..we don't learn much about pain. We might in Physiology 101 or whatever. I don't remember it"

I think it's why our pressure assessment tool works well, You have those initial sort of questions at the beginning of the assessment and then in leads onto much more comprehensive assessment where it is warranted followed by the management

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.

Limited scope of practice



“I can’t do anything about it so why bother”

- Barriers to effective pain assessment and management may be influenced by attitudes, beliefs, culture, sensitivity → knowledge and understanding
- Pain is not always assessed and managed effectively and referral to pain services is often slow / lacking
- **Lack of formal education on pain theory and practice**
- **HCPs and Patients lack of knowledge on pain analgesia**

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