## Wound Care and Skin Tone

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## Introduction

Evidence shows that in many areas around the world, there are discrepancies in wound care due to variations in skin tone. The need for information in this area resulted in the international consensus document Wound Care and Skin Tone (Dhoonmoon et al, 2023). This Made Easy provides an overview of the full document, which is available via Wounds International. Skin changes in people with dark skin tones are not observed quickly enough on a global scale. This is often due to a lack of accurate assessment and early identification. For example, the initial 'redness' seen on light skin may not be present in dark skin. Assessment and diagnosis that considers varying skin tone and the use of clear language to ensure proper patient communication, will improve outcomes for all patients.

#### Assessment and diagnosis

Wound assessment should be holistic, considering the entire patient and including their:

- Overall health
- Environment
- Wound or skin condition
- Individual needs.

Consideration of the patient's skin tone should also be included in this holistic assessment as different skin tones respond differently to injury and treatment.

#### **Establishing skin tone**

The skin tone tool (adapted from Ho and Robinson, 2015; Figure 1) can be used to establish baseline skin tone. This has been found to be more effective than asking patients to choose a potentially subjective term to describe their own skin tone. The tone from the tool should be chosen based on the closest match to the patient's upper inside arm.

#### **Erythema**

Changes in skin colour caused by increased blood flow is called erythema (British Association of Dermatologists, 2021) and it is often used to detect infected or abnormal skin areas. These changes in skin colour may be referred to as 'redness', but erythema does not appear as redness in many skin tones [Figure 2], so clinicians should be vigilant for other changes.

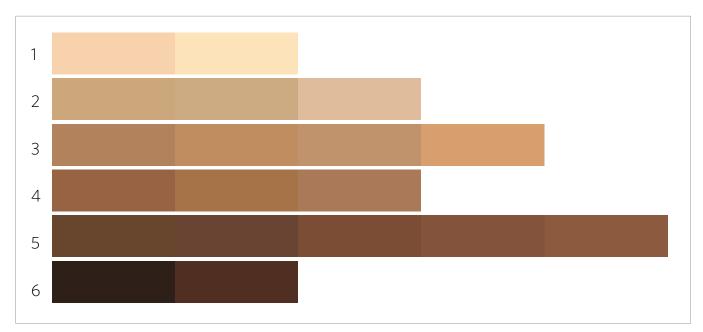


Figure 1: Skin tone tool (adapted from Ho and Robinson, 2015)

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Figure 2: An example of erythema in an surgical site incision that became infected (photograph courtesy of Ethel Andrews)

Figure 3: While there is no visible redness in the image, erythema was identified using cardinal signs. The patient complained of pain when the area was touched and it was warm and slightly swollen due to thrombophlebitis. (photograph courtesy of Simone McConnie)

In order to detect changes other than 'redness', it can be useful to compare the skin against another area of the body. For example, if one limb is affected, compare its appearance to that of the other limb.

When assessing a patient's skin, it is also important to note what is normal for that patient. For some patients, age-related pigmentation, for example, may be a natural occurrence.

### **Touch and temperature**

It can be easy to miss erythema in dark skin, so it is essential to use other signs as indicators, such as swelling and to ask the patients about symptoms that aren't immediately visible, such as pain or feeling generally unwell. This is particularly important when a serious diagnosis, such as cellulitis is suspected. In cellulitis, the skin will feel tighter when touched.

The temperature of the skin can also be a useful marker. Warmth can be detected by touch [Figure 3] or, if more accuracy is needed, by using an infrared thermometer.

#### Photography

Photography can be a useful tool for monitoring changes in the skin or to see the progression of healing.

When using photography in this way, it is essential that good, natural lighting is used. It is recommended that a calibrated colour chart is used when photographing a wound, to ensure that the colours captured are true (Institute of Medical Illustrators, 2019).

#### **Communication and language**

Good communication with patients is essential, both in terms of ensuring a healthy clinician-patient relationship and in improving patient outcomes. It is critical to understand the patient's perspective, as well as their thoughts and feelings about their wound and overall skin condition.

#### Box 1: Questions to consider as part of skin assessment (Wounds UK, 2021)

- What is the wound/periwound skin like in comparison to the surrounding skin?
- Are there any differences in colour?
- Does the skin feel warm or cool to touch? Are there any changes in temperature?
- Does the skin feel spongy or firm?
- Does the skin look or feel shiny or tight?
- Is there any swelling or inflammation?
- Are there any changes in the texture of the skin and underlying tissue?
- How is the overall condition/integrity of the skin?
- Is there any pain, itchiness or change in sensation?
- Have you moved the dressing? If yes, why?
- If compression therapy is used, how has the compression changed between the last skin assessment and now? Did you feel like you wanted to remove the bandages?
- Are you able to apply dressings at home with the guidance of a clinician?

#### Language

Language barriers can reduce the quality of healthcare. Interpreter services should be used when possible, tools such as Google Translate have been shown to increase patient satisfaction and healthcare delivery (AI Shamsi et al, 2020).

Ultimately, as clinicians, it is our responsibility to communicate in a way that the patient can easily understand. Consider your tone, speak slowly and use pictures or expressive gestures to help if language is an

#### Box 2: Inclusive language in health and care (adapted from the King's Fund, 2021)

It is essential to keep in mind that language, much like identity and culture, is constantly evolving. Not to mention that intersectionality reminds us of how these shifting elements can overlap and interact with one another. So, rather than simply memorising 'correct' terms, we should make time to reflect on the language we use. When thinking about language, we may ask ourselves some key questions.

- Where does this term come from and why am I choosing to use it?
- Does this terminology or phrasing capture the specific group or experience that I am referring to?
- Does this description share only the characteristics pertinent to this discussion?
- Is this terminology or phrasing used by the people concerned? If I'm not sure, have I verified it?
- Who is my audience? Is this language welcoming and accessible to that audience?
- Is this term or acronym widely understood, or would readers benefit from clarification?
- What are the implications of this language beyond this immediate piece of work?

As healthcare professionals, the language we use matters.

issue. Box 2 contains examples of questions to ask yourself and the patient as part of a skin assessment.

It is important to listen to the patient's family, caregiver and/ or relatives and involve them where possible, ensuring that everyone understands the treatment and their role in it [Box 2].

#### **Skin tone descriptors**

While language obviously varies across the globe, it is universally important to use clear and up-to-date language.

While there is currently no standardised approach for describing skin colours, clinicians' language must be respectful, simple, professional and neutral. If you don't know something, rather than making assumptions, ask the patient.

There is a difference between skin tones and ethnicity; not all black people have dark skin tones. Use terms like 'brown' or 'black' to describe skin tones rather than 'darker', which implies that white skin is the baseline or norm.

Avoid using metaphors or similes when describing skin tone, such as comparing skin tones to foods. Instead, use a validated classification tool such as the skin tone tool (Wounds UK, 2021).

#### The importance of inclusive care

All healthcare should be inclusive of all patients and individualised to suit them. To be inclusive, all clinicians should be as culturally aware and educated as they can be so that they are well-equipped to help all people individually. All patients need to feel supported and able to ask for help (World Union of Wound Healing Societies [WUWHS], 2020).

The UK General Medical Council (UK GMC; 2019) emphasises the importance of good communication, compassion and

## Box 3: If things do go wrong, the UK GMC (2019) states that healthcare professionals must:

- Tell the individual (or their carer) that something has gone wrong
- Apologise
- Offer a remedy
- Explain the short- and long- term effects.

trust, as well as practical strategies for when things go wrong [see Box 3 for further advice].

#### **Patient education**

Communication should be tailored to the patient, taking into account their capacity and understanding. Sometimes, myths around wounds and treatments might need to be dispelled, for example, that a wound 'needs air' and shouldn't be covered).

Patient outcomes are improved when patients understand their treatment and the rationale behind it (Sandy-Hodgetts et al, 2022). For some individuals, care has to be a compromise and realistic goals must be set.

It is important to remember that with some therapies (e.g. compression) 'some care is better than no care'. Not every element of treatment can be controlled and we may need to expect some deviation from ideal plans (WUWHS, 2020).

#### Multidisciplinary team approach

It is important to take a multidisciplinary approach, to ensure that the patient receives access to the best care. Making referrals, or involving other care teams or experts where necessary, should be seen as best practice. In patients with wounds, it is important to identify and manage underlying causes. Departments such as dermatology, vascular services or diabetes care (as well as others) may be relevant in ensuring that the patient receives the best care for their overall health and wellbeing.

#### **Global geographical considerations**

In some areas of the world, there may be specific considerations to make regarding wound care. There may be differences in climate, culture, healthcare systems and resources that can all impact patient care.

Different wound types may also be more prevalent in different parts of the world. For example, diabetes is expected to increase most rapidly in the Western Pacific and Southeast Asia regions (Nair et al, 2020) making diabetic foot ulcer (DFU) care a particularly urgent issue in these areas.

#### **Care in low-resource areas**

In resource-poor regions of the world where there is no or limited access to water, sanitation procedures or standards of wound care (Toppino et al, 2022), healthcare systems face significant challenges.

Treatable injuries and wounds are the leading cause of death and disability in those under the age of 60 in developing countries (MacKenzie, 2000). The fundamental principles of assessment are therefore vital, particularly in the early identification of infection, focusing on awareness of signs and symptoms in all skin tones, such as pain, heat and erythema.

#### **Community and traditional medicine**

In all patient groups, it is important that respect is given to the patient's individual cultural beliefs and that care is tailored appropriately whenever necessary. In some cultures, there may be mistrust of 'mainstream' medicine, so it is necessary to work with the patient at a level that feels comfortable for them (Sandy-Hodgetts et al, 2022).

It is important to be culturally sensitive and mindful of all patients' belief systems. In some cases, it may be necessary to work alongside 'traditional' healers or other leaders within the patient's community (Sandy-Hodgetts et al, 2022).

#### The effect of climate

Climate can have an effect on wounds and dressings.

Hot and/or humid climates can affect dressing adhesion and potentially affect dressing selection. Additionally, this may increase the risk of maceration of the periwound skin, necessitating monitoring and protection (Sandy-Hodgetts et al, 2022).

Humid climates may also increase the risk of fungal infections. Fungal skin infections appear differently on different skin tones. Fungus overgrowth causes small patches of skin to become lighter or darker than the rest of the skin. On light skin tones, patches of skin can usually appear as pink, yellow, red or pale brown. On dark skin tones, discoloured patches of skin can usually appear lighter than the skin tone, or appear white or grey.

Many hot and humid countries have a barefoot culture. Practices such as walking barefoot on hot surfaces such as sand (Harkin, 2010) puts people at risk of injuring their feet and developing foot ulcers, particularly in people with diabetes.

Diagnosis of infection or ischaemia in people with DFUs and dark skin tones can be difficult due to the lack of colour change and the inability to assess for lymphangitis. When assessing DFUs, any changes in colour should be noted, not only the 'redness' commonly seen in light skin tones. Clinicians should also check for swelling, warmth and pain (Wang et al, 2020). Severe DFUs in patients with dark skin tones may present with black or brown eschar overlying the ulcer.

Where access to a clinician may not be readily available, particularly in rural and remote areas, clinicians must advise patients and people with diabetes to check their entire foot, including the underside, with a mirror on a regular basis, noting any swelling, changes in colour or bleeding between their toes (Khunkaew et al, 2019).

It is also important to encourage patients to wear appropriate, properly fitted footwear, to avoid shoes that are too small, tight or rub against a specific area of the foot and to avoid walking barefoot (Gulf Diabetic Foot Working Group, 2017).

Cold climates can also have an effect on wounds and dressings, leading to issues such as dry and cracked skin, with low humidity levels resulting in dry air that draws moisture away from the skin.

#### Sunburn

In some climates, sun damage is a major issue.

There is a misconception that people with dark skin do not need to protect themselves from the sun, do not get sunburned and do not develop skin cancer. This is not the case.



Melanin, a brown pigment, is what gives skin its colour. Melanin absorbs ultraviolet (UV) radiation from the sun and protects the skin. Dark skin produces and concentrates more melanin in the epidermis, thus absorbing UV rays more effectively than light skin (Ho and Robinson, 2015; Gupta and Sharma, 2019), but this does not mean that people with dark skin are completely UV resistant.

Skin cancer, sunburn and skin peeling do occur in people with dark skin, albeit at a lower rate compared with light skin (Battie et al, 2013). Although the discrepancy in skin cancer rates is largely believed to be due to delayed diagnosis.

Clinicians should educate people of all tones about the risks of excessive sun exposure and the importance of sun protection (clothing and sunscreen).

Clinicians should also be aware of how skin cancer manifests itself in different skin tones to avoid late diagnosis.

### Skin bleaching

Skin bleaching is a popular practice that affects many people all over the world, particularly women in Africa, North America, Europe, Asia and the Middle East (Masub and Khachemoune, 2022), who want to artificially achieve a lighter skin tone or improve the appearance of blemishes. It can entail using skin creams, soaps and injections that contain unregulated chemicals, which can be unsafe to use.

In some areas and cultures, there can be a stigma associated with these complexion-altering practices and people may not admit to them during skin tone assessments. Clinicians should create an environment in which the patient feels supported and comfortable in reporting any changes to their own skin, including the use of skin bleaching or complexion-altering practices. Additionally, clinicians should use neutral and nonjudgmental language to educate patients about the risks of skin bleaching while keeping cultural practices in mind.

#### Conclusion

A thorough, holistic inspection and assessment of the patient's skin that takes into account skin tone is vital in ensuring good patient outcomes.

Clinicians should be mindful that traditional descriptors of skin changes, such as 'redness', do not apply to all skin tones and so should be vigilant for alternative signs, such as changes in skin temperature or sensation.

Patient needs may vary across geographical regions with different climates, cultures and levels of healthcare resourcing all having an impact on wound treatment.

#### Summary of key points:

- Do not look only for 'redness' but for any skin changes
- Assess for warmth and use a thermometer if necessary
- Use clear, simple language when talking to patients
- Be respectful and professional when describing skin tones
- Tailor communication and patient education to the individual
- Consider the impact that geographical location, including differences in climate, may have on treatment
- Be sensitive to cultural differences and be prepared to work alongside 'traditional' treatments.

The full international consensus document Wound Care and Skin Tone: Signs, symptoms and terminology was developed by the following expert panel:

- Luxmi Dhoonmoon (Co-chair), Tissue Viability Nurse Consultant, Central and North West London NHS Foundation Trust, UK
- Harikrishna K.R. Nair (Co-chair), Head and Consultant of Wound Care Unit, Department of Internal Medicine, Kuala Lumpur Hospital, Malaysia; Professor, Faculty of Medicine, Lincoln University Malaysia; Professor, Institute of Health Management; Austria, Adjunct Professor, Department of Surgery, Institute of Medical Sciences, Banares Hindu University, India; Executive Director, College of Wound Care **Specialists**
- Zulfiqarali Abbas, Endocrinologist, Department of Internal Medicine, Muhimbili University of Health and Allied Sciences, Dar es Salaam; Abbas Medical Centre, Dar es Salaam, Tanzania
- Ethel Andrews, Wound Specialist, Life Brenthurst Hospital/ Netcare Mulbarton Hospital, Johannesburg, South Africa; Visiting Lecturer, University of Witwatersrand; Past President, South African Burn Society; International Burns Society Nurse Award recipient 2022, South Africa
- Simone McConnie, Diabetic Footcare Specialist Podiatrist, Comfeet Foot Care Clinic, Barbados
- Jennifer Pearson, Head of Nursing Royal Orthopaedic Hospital Birmingham; BAME Nurse of the Year 2022; Regional Lead Chief Nursing Officer (England), Black Minority Ethnic Strategic Advisory Group, UK
- Mohamed Waheed, Plastic Surgeon, Head of the Department of Surgery, Indira Gandhi Memorial Hospital, Maldives
- Mandika Wijeyaratne, Head of the Department of Surgery, Faculty of Medicine, University of Colombo, Sri Lanka

#### Authors

Luxmi Dhoonmoon (Co-chair), Tissue Viability Nurse Consultant, Central and North West London NHS Foundation Trust, UK

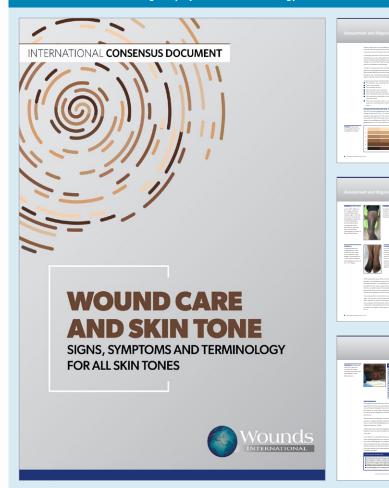
Harikrishna K.R. Nair (Co-chair), Head and Consultant of Wound Care Unit, Department of Internal Medicine, Kuala Lumpur Hospital, Malaysia; Professor, Faculty of Medicine, Lincoln University Malaysia; Professor, Institute of Health Management; Austria, Adjunct Professor, Department of Surgery, Institute of Medical Sciences, Banares Hindu University, India; Executive Director, College of Wound Care Specialists

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#### Wound Care and Skin Tone: Signs, symptoms and terminology for all skin tones (2023)



The full international consensus document Wound Care and Skin Tone: Signs, symptoms and terminology for all skin tones is available to download from Wounds International.

This international consensus document aims to:

- Provide practical guidance on accurate assessment and diagnosis in all skin tones
- Provide guidance on language and descriptors to use, aiding clear patient communication
- Discuss different geographical and cultural considerations across the globe
- Dispel myths relating to skin tones
- Focus on the future, the need for education and how outcomes can continue to improve.





Scan the QR code above to access and download the consensus document

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