Assessing skin tones in practice: Results of an international survey

Authors: Luxmi Dhoonmoon and Jacqui Fletcher Following the publication of the *Wounds UK* Best Practice Statement 'Addressing skin tone bias in wound care: assessing signs and symptoms in people with dark skin tones' (Dhoonmoon et al, 2021), we conducted an international survey of healthcare professionals (HCPs) to learn more about everyday practice, how skin tones are assessed and where more education is needed. The survey highlighted the discrepancies and gaps in practice, and the need for greater education. The survey also showed the need for an increased range of images showing varying skin tones (i.e. showing darker skin tones, not just white skin) in educational materials, so that HCPs can see the different ways in which different wounds and skin conditions may present in a range of skin tones.

he survey was completed by 266 HCPs, from a mixture of disciplines: primarily tissue viability nurses, with some staff, practice and community nurses, plus podiatrists and doctors and other HCPs. The majority of respondents (72%) were from the UK, but the survey was completed globally, including respondents from mainland Europe, South Africa, Australia, North America and the Middle East.

Respondents were asked to assess their own skin tone using the colour bar tool [Figure 1]. The majority of respondents (68%) assessed their

skin as 1 on the colour bar chart. When asked what approximate percentage of their patients in practice had a different skin colour to their own, results varied [Table 1].

Current assessment in practice

Asked about current assessment of skin tones, 87% of respondents stated that recording the patient's skin tone was not a part of current wound assessment. Where skin tone is assessed, 83% of respondents made an assessment of the patient's skin tone themselves, with 17% asking the patient

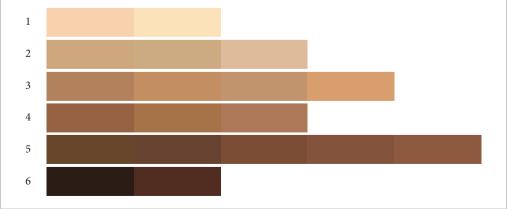


Figure 1. Colour bar tool (Ho and Robinson, 2015).

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Table 1. What approximate percentage of patients who you care for have a different skin tone to your own?	
Percentage of patients with a different skin tone	Number of respondents
0–25%	37%
25–50%	30%

20%

13%

to self-identify their own skin tone. The parts of the body used to assess skin tone varied widely.

50-75%

75-100%

Asked about assessment tools for skin tone, 70% of respondents do not use any assessment tool in their practice. Tools used included the colour bar tool, the Fitzpatrick classification tool and the Munsell colour chart.

Where clinicians do not regularly see patients with a variety of skin tones, it is even more important to teach the differences that may be seen between varying skin tones, as they may not have the opportunity to learn this in practice placements.

Tips for assessment Best Practice;

- Assessment should include awareness of skin tone in order to monitor any changes to the patient's skin
- The colour bar tool should be used to record baseline skin tone for monitoring purposes; the tone can be selected that most closely matches the patient's inside upper arm. It has been found that using the colour bar chart is more effective than asking the patient to select what may be a subjective term to describe their own skin tone. Particularly in cultures where there is a light skin bias, or colourism is an issue, this may affect how patients view and describe their own skin tone (Everett et al, 2012)
- When assessing the skin for changes, compare similar anatomical locations (e.g. the heels)
- The senses especially touch should also be considered as part of skin inspection and assessment [Box 1].

Wounds and skin conditions in a range of skin tones

Asked which conditions may be challenging to assess in patients with dark skin tones, the conditions that were primarily mentioned by respondents were:

- 'Red legs' (51%)
- Cellulitis (48%)
- PUs (48%)

Box 1. Questions to consider as part of skin assessment

- What is the wound/periwound skin like in comparison to the surrounding skin?
- Are there any differences in colour?
- Does the skin feel warm/ cool? Are there any changes in temperature?
- Does the skin feel spongy or firm to the touch?
- 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?

- Wound infection (39%)
- Moisture-associated skin damage (31%).

The same conditions were mentioned when respondents were asked which conditions they found challenging to manage and treat in patients with dark skin tones. Other wound types mentioned included venous leg ulceration, diabetic foot ulceration, burns and scarring.

It should be highlighted that terminology in some skin conditions can add to the confusion around assessment and management in a range of skin tones. For example, the term 'red legs' is often used, and 'redness' is often used as a sign to look out for to aid diagnosis, but these conditions may not present as red in all skin tones, which means that crucial signs can be missed, particularly in patients with dark skin tones.

One respondent also mentioned difficulty in assessing and diagnosing critical limb ischaemia as, similarly, 'pale' is used as a descriptor and a sign to observe for in the patient's limb; however, a patient with dark skin may not present as 'pale', causing issues with accurate diagnosis.

Lower limb assessment, such as assessing haemosiderin staining and early signs of venous issues can be quite difficult in patients with dark skin tones, which was reported by district nurses, but they have found that this becomes easier with experience of knowing which signs and symptoms to look for in different skin tones, emphasising the importance of education. Some Trusts are introducing education on different signs and symptoms of venous leg ulceration in different skin tones to increase staff confidence.

Tips for best practice in a range of wounds and skin conditions:

- In all wound types and skin conditions, it is important to be aware of how signs and symptoms may present in a range of skin tones
- Clinicians must be aware of all signs and symptoms of pressure ulcer development

Clinical practice

- and how these may present across skin tones
- In assessing the legs for ulceration, all changes in the skin (including colour and texture) should be thoroughly assessed
- In patients with dark skin tones, extra care should be taken to ensure that eschar or necrosis are not incorrectly diagnosed or missed altogether
- Care for patients at risk of moistureassociated skin damage should focus on prevention and early intervention to prevent progression and skin breakdown
- Patients at risk of skin tears should have a preventative regimen in place to preserve skin integrity
- Extra care should be taken to identify medical adhesive-related skin injury when it occurs, in patients with dark skin tones
- Extra care should be taken to prevent scarring in patients with dark skin
- tones, as dark skin tone constitutes an elevated risk factor for keloid scarring
- Infection must be identified early by investigating signs and symptoms that do not rely on 'redness'.

Communication

The majority of respondents (65%) felt that it is sometimes important to talk about skin tone with patients, if it is relevant to their care. Conversely, 14% of respondents never talk to patients about their skin tone, and 6% believe that it is not necessary. Only 15% of respondents believe it is always necessary to talk to patients about their skin tone.

The majority of respondents (79%) report feeling comfortable talking about skin tone with patients who have a different skin tone to them. Of the 21% who reported feeling uncomfortable with talking about skin tone, their concerns included:

- Offending the patient (73%)
- Being politically incorrect (57%)
- Getting something wrong (51%)
- Being called racist (37%).

Recognising and addressing factors that hinder holistic assessment in patients with dark skin tones will help to improve patient and clinician relationships and have positive impact on healing. It is particularly important to identify the patient's individual concerns and, if possible, to address these on initial assessment to ensure good partnership working and remove any barriers and concerns. Skills, knowledge and attitudes of HCPs can have a major impact on

assessment and management, hence having the confidence to assess and address different skin tones is crucial. Literature (paper or digital) that is used within therapeutic conversations should have a good range of images with a broad representation of skin tones.

Tips for communication Best Practice;

- Clinicians should be aware that skin tone is separate to ethnicity and have the confidence to talk about this in a professional way, treating the patient as an individual
- It is important to listen to the patient's perspective and their views and feelings on their own wound and their overall skin condition. For example, asking the patient direct questions such as 'are any parts of your skin sore?' or 'have you noticed any changes to your skin?' can help to obtain information that might otherwise have been missed
- Clinicians should feel confident to talk about what they can physically see in front of them. This should give the patient confidence that their clinician is looking at them individually, and that any diagnosis will fit them as an individual, rather than being 'labelled'
- It is preferable to use terms that do not centre light skin tones or use light skin as the 'norm' or baseline for example, this would mean saying 'dark skin tones' rather than 'darker' (which raises the question 'darker than what?') or 'non-white'.

Education

Availability of educational resources is a clear issue: 64% of respondents were not aware of any educational resources on skin tone and wound care available in their Trust. Some educational resources that are available in respondents' Trusts included:

- Face-to-face educational sessions (16%)
- Online modules (14%)
- Guidelines (14%)
- Pathways (6%).

Only one HCP noted that education on skin tones was provided as part of standard tissue viability education, due to the diversity of the patient group; some respondents reported raising the issue themselves and conducting their own research and education around skin tones. Outside of respondents' individual Trusts, it was noted that most education around skin tones focuses on pressure ulcers (PUs) rather than any other wounds or skin conditions.

Within educational materials provided, it was noted that the vast majority of skin tones visually represented were white, with 87.5% matching type 1 on the colour bar chart [Figure 1].

As well as clinician education, it is of crucial importance to educate patients and their carers on good skin care to prevent early skin damage, particularly in dark skin tones. This may include moisturising and holistic/lifestyle measures, plus education on the overall importance of skin integrity. Where possible, this awareness should be included in all self-care plans and education provided by HCPs.

Education and awareness is also needed across healthcare disciplines, to maintain good skin care and skin integrity, reducing the risk of damage. For example, awareness regarding inappropriate use of equipment, which can lead to skin damage and can contribute to poor scarring outcomes at a later stage.

Patients with foot-related issues may have neuropathy due to diabetes, hence a focus on 'feeling' will not be helpful for these patients; therefore, we should encourage patients and their relatives or carers to visually check the patient's feet regularly if they at risk.

Tips for education Best Practice;

- Any tissue viability or wound care-related training must include pictures of different skin tones. This needs to be incorporated into all education — not just a specific section about skin tones
- Every educator should reflect on the inclusivity of their teaching and their own unconscious bias
- Regardless of patient demographics, clinicians must have the knowledge and awareness to provide optimal care for all.

Summary of the findings

This survey demonstrated some of the confusion and lack of consistency in assessment and management in a range of skin tones, particularly in knowledge around providing care to patients with dark skin.

While some HCPs and healthcare Trusts have a diverse patient population and have embedded knowledge and education around skin tones, there are variations and gaps in practice. It should be emphasised that, regardless of patient population and diversity, all HCPs should be informed about different skin tones and this knowledge should be incorporated in practice.

There is a need for change in terminology, as using language focusing on 'redness' or 'paleness' can be misleading. This can mean that crucial signs are missed, which may result in harm to the patient, particularly in patients with dark skin.

Above all, the language used in any clinical conversation should be appropriate to the patient. It is important to emphasis therefore that the use of the word 'red' or 'redness' is not banned or wholly inappropriate, and, for patients with light skin tones, it should still be flagged as an indicator of risk for pressure ulcers or sign of infection. In fact some dark skin tones do show areas of redness, so it is important not to discount this. Having a conversation with the patient about what happens to their skin and what it does look like is the most important element in ensuring the appropriate language is used.

There is an ongoing need for education, and for representation of a range of skin tones in educational materials, so that HCPs can be informed and confident in their own decision-making relating to assessment and treatment in people with a range of skin tones in practice.

References

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