

## Continuing professional development

# Equality of outcome for people with darker skin

June Jones MSc PhD

Senior Lecturer in Biomedical Ethics, College Lead on Religious and Cultural Diversity, University of Birmingham, Birmingham, UK

### Introduction

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There is a large body of literature about ethnicity and health, mainly concerning diseases such as diabetes, heart disease and mental health. Whilst these diseases affect the internal organs, skin colour, which is the most obvious difference, is less researched. There is a degree of hesitation in even approaching the health differences that skin colour may raise, for understandably good reasons. Historically, people of colour have deliberately been given less effective standards of healthcare in many nations. The continuing desire to avoid causing offence can, ironically, lead to further discrimination because specific health needs go unrecognised and unmet. Here I want to examine whether differences in skin tone matter to health, and if they do, what can be done to close the health inequality gap. I shall primarily focus on dermatology, but, where relevant, will incorporate other areas of healthcare.

### Does skin tone matter?

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If patients have problems with their skin there are two groups of specialists whom they may see. The initial contact is most commonly with a GP, but the condition may warrant referral to a dermatologist at some point in the treatment process. There are a small number of GPs with a special interest in dermatology, but they are more likely to specialise in a particular range of skin conditions, rather than skin tones. Unless their practice is based in a locality with a high percentage of patients with darker skin, most GPs will be inexperienced at diagnosing and treating their skin problems. If skin conditions had a similar appearance irrespective of the background colour, this would not cause a problem, but this is not the case. Dermatological conditions present differently across a range of skin tones, making pattern recognition difficult. For instance, the meningitis rash on darker skin may be

very difficult to detect. The darker the skin tone, the harder it is to detect redness, which is a major feature of many dermatological conditions. Melanoma, which tends to present as a dark raised irregular discolouration on pale skin tones, is more likely to be mistaken for an innocent mole on darker skin tones, leading to delayed consultation and poorer prognosis (Hu *et al*, 2006). Melanoma in pigmented skin tends to occur at unusual locations, such as the palms and soles, or the nails, and can sometimes present at an advanced stage because it is not suspected (Kabigting *et al*, 2009).

### Equality of access versus equality of outcome

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Although there is much talk within the health service of the importance of equality, little consideration is given to what type of equality the health service ought to aim for. Two types of equality are relevant to the issue of dermatology provision for patients with darker skin, namely *equality of access* and *equality of outcome*. Ethnicity by itself may not be the most significant factor in determining equality of access to healthcare services. Problems with housing, diet, stress, public transport and language barriers may all play a part. However, even if inequalities in health could be levelled so that access became equal for all, inequality of outcome would continue for patients with darker skin.

Part of the problem lies in the way in which healthcare professionals are educated. Dermatology textbooks and online searchable databases of images tend to focus on white, pale skin, rather than allowing a comparison of a disease across skin tones which would improve the likelihood of making an early and accurate diagnosis and treatment plan. Improving

health education and teaching materials for medical students and doctors would lead to improved equality in outcome. Recent attempts to tackle this issue include Channel 4's programme, *Embarrassing Bodies*, which has developed an app, My SelfChecker ([www.channel4embarrassingillnesses.com](http://www.channel4embarrassingillnesses.com)). This is specifically designed to enable people to store images of their skin conditions on their mobile phone and monitor any changes in size or irregularity; prompts for taking the images at regular intervals and details of local health services are included. *Embarrassing Bodies* is currently collaborating with the University of Birmingham to create a searchable image bank of diverse skin tones in relation to a range of dermatological conditions. Following on from this there will be an interactive education package, incorporating OSCE style questions and communication expertise, for medical students and doctors undertaking post-qualifying education.

## What should healthcare staff be aware of?

There is a limited amount of research which deals specifically with the difference skin tone makes to clinical presentation, diagnosis and treatment. The literature suggests that there are a number of conditions and situations of which healthcare staff should be aware:

- Sites for melanoma differ across skin tones. In darker skin, melanoma may occur on the palms of the hands, the soles of the feet or the nail bed (Kabigting *et al*, 2009).
- Pressure sores can present differently. If redness cannot be easily detected on darker skin, ulceration may present as the first clinical indicator that a pressure sore has developed (Anthony *et al*, 2002).
- The side-effect profile of medication may present differently (Burroughs *et al*, 2002). For example, skin rashes may present differently; what would appear as a red rash on pale skin can present as a dark or purplish rash on darker skin. There are specific drugs for which this profile is more common, including Prinivil (lisinopril), where black patients are more at risk of having angioedema, which can be life-threatening ([www.rxlist.com/prinivil-side-effects-drug-center.htm](http://www.rxlist.com/prinivil-side-effects-drug-center.htm)).
- Topical medication should be adapted to the individual patient, taking into account the depth of skin pigmentation (Halder, 2005).
- Some hypopigmentation can be a result of chemical peeling agents that a patient has used at home to lighten their skin. Asking patients about their use of chemical peels or other types of skin-lightening creams needs to be done sensitively, but is an

important aspect of achieving an accurate diagnosis.

- In critical care, pulse oximetry may be less accurate in patients with dark skin (Feiner *et al*, 2007). This issue has not been resolved with the use of near-infrared spectroscopy (Fluhr *et al*, 2008).

## Conclusion

Patients with darker skin tones do not have the luxury of friends, colleagues and relatives noticing skin disorders when they first develop and prompting them to visit a doctor to get the skin condition checked. Therefore it is vital that doctors are vigilant and consider referral to a specialist dermatologist if they are in doubt about appropriate diagnosis or treatment. Doctors should consider their training needs and attend specialist workshops in dermatology for darker skin tones. They should also be able to educate their patients about signs and symptoms which need to be acted upon. Where ethnicity is compounded by language barriers, a qualified interpreter is vital to optimise health outcomes. Where equality of access does not address a health inequality satisfactorily, equality of outcome should become the priority for localised healthcare provision.

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## ONLINE DERMATOLOGICAL IMAGE BANKS

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## ADDRESS FOR CORRESPONDENCE

Dr June Jones, Medicine, Ethics, Society and History (MESH), College of Medical and Dental Sciences, Room 128, 90 Vincent Drive, University of Birmingham, Edgbaston, Birmingham B15 2TT, UK. Tel: +44 (0)121 414 2532; email: [j.jones.1@bham.ac.uk](mailto:j.jones.1@bham.ac.uk)

