

Skin of Colour: The *IJDVL* View

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In this issue we have three articles which have ‘skin of colour’ as their direct context: one is a letter titled ‘Evaluating skin colour representation in the *Indian Journal of Dermatology, Venereology and Leprology*’ by a group of authors based in the West;¹ another is a ‘history of hydroquinone’ providing a background of the rise of colourism as an ideology concomitant to the rise of the multibillion dollar skin whitening market;² and, the last one, a touching poem, ‘The Mirror’ by Feroze Kaliyadan, one of our Associate Editors, depicting the irony of onset of patches of vitiligo on the skin of a dark-hued girl who has been longing for all her life to lighten her colour.³

The authors of the letter make a recommendation to the *IJDVL* for standardising ‘presenting patients with Fitzpatrick’s skin type and using the keyword “skin of colour” when applicable.’¹ This gives us an opportunity to clarify the *IJDVL* policy regarding these and related issues.

IJDVL, over the years, has positioned itself as a reliable medium for transmission of dermatological knowledge by contributors from all over the world, particularly from countries or regions which are primarily non-English speaking. The countries that have contributed the highest number of papers in this journal during the last three years include China, Spain, South Korea, Taiwan, Egypt, Italy and Turkey, apart from India.⁴ Other than being non-English speaking, the population in most of these countries, incidentally, have skins that are colour-rich. It is but natural that most of the articles published in *IJDVL* would represent conditions relevant to such skin.

That being the case, why have we not made it a mandatory practice for the authors: a) to provide Fitzpatrick skin types of the patients included in their studies or reports, and b) to include the phrase ‘skin of colour’ in the titles or keywords whenever a study or a report deals with the segment of the

population having such skin, or in other words, a very large proportion of studies or reports that is published in *IJDVL*? After all, incorporation of such a practice in our editorial policy could lead to a windfall for the Journal Impact Factor! These are important issues which, we realize, we have to clarify to our readers and contributors.

IJDVL is a scientific journal engaged in dissemination of scientific knowledge in the fields of dermatology, venereology and leprology. Being in the business of generating scientific data, we define science as the act of asking specific, testable questions and answering those. Going by this definition, we need to answer whether, by not applying the two points mentioned above in our instructions to the authors in a blanket fashion, we are exposing ourselves to the risk of missing significant scientific data in our publications, or we are doing to the scientific world a service by eliminating some noise and spin from published data.

Regarding presentation of data by means of Fitzpatrick’s skin types, we submit that we view the widely prevalent practice of using these types as surrogates for degree of constitutive skin colour to be inaccurate, erroneous even. In fact, Fitzpatrick saw the need of typing skin because of differential reactivity to light in different ‘white’ populations, for accurate dosing of ultraviolet A in oral photochemotherapy in patients with psoriasis.⁵ Originally, there were four skin types, all of whom characterized by Fitzpatrick as white. Later on, somewhat as an afterthought, two more skin types were added to encompass the brown and black-skinned populations as well.⁶ Skin type V was added for individuals with brown skin of Asian and Latin American origin, and skin type VI for dark skin of African extraction. Skin types I–IV are thus based on clinical response to sunlight, whereas classification into types V–VI is based on constitutive pigmentation or ethnic origin. Other than exposing the methodological error of mixing phototypes and constitutive skin colour phenotypes in the

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same typing system, the original Fitzpatrick papers (including one editorial in which the state of the art of skin typing was enunciated in great detail⁷) lay bare the inbuilt arbitrariness of the typing system where a single type was considered enough for the brown and black skins, respectively, when the white-skinned population needed to be subdivided into four phototypes. Fitzpatrick himself reckoned with the possibility that his skin typing might be misused in future as shorthand for skin colour, and thus, ethnicity, or the non-biological categorisation of race, and had warned against the same.⁷ In this background, it is our position that the continued usage of Fitzpatrick's skin types in dermatological literature simply as basic skin phenotypes is, strictly speaking, not scientific, without submitting the subject populations in such studies through the rigours of immediate and delayed sun reactivity responses. We consider the same as bad practice and symptomatic of wrong methodology.

Now, let us come to the term 'skin of colour'. In our view, the phrase is etymologically incomplete and unsatisfactory, as it immediately raises the question: 'Which colour'? Every human being, except albinos, are endowed with 'some' colour. As we know, however, 'skin of colour' is an omnibus category that lumps all colours of skin, except white - yellow, red, brown, black - together. And, therein lies a problem. However much the proponents of this phrase would protest, it does nothing but reinforce the category of 'others' vis-à-vis white skin. In our view, that promotes nothing but a racial categorisation, as opposed to anything related to science.

Also, what purpose does it serve? Should a yellow-skinned individual have the same degree of concern regarding cosmetic disability caused by vitiliginous patches on exposed areas compared to someone with a deep brown or black skin? Or, do we really need to treat acne differently depending on someone's skin colour? As the authors battling for 'skin of colour' point out: "Several conditions, such as acne keloidalis nuchae and pseudofolliculitis barbae, are more common in darker skin types."¹¹ We agree. We might also venture to add that we have noticed that out of hundreds of dermatoses, western authors always mention these two hugely important global public health disasters while underscoring the relevance of the phrase. As a counterpoint, may we also point out that there are variables in the epidemiology of skin diseases that are frequently more important than skin colour? These may be in the forms of cultural/religious practices, food habits, occupation, sexual orientation, et cetera et cetera. Will we not be amiss if we fail to mention these too in the titles of all our future articles? Here is an example of how an article title may sound if we apply this logic in its entirety: "Lichen planus in Hindu, vegetarian, heterosexual, skin of colour young men of eastern India".

Scientifically speaking, the category 'skin of colour' promotes unnecessary and inefficient aggregation that might pose problematic in quantitative analysis as it encompasses a hugely heterogeneous segment of population, likely to have wholly

divergent health concerns regarding their skin. However, from the standpoint of 'race', it does a very efficient job in separating the 'others' from the 'white'. *IJDVL* has no doubts whatsoever which side it should stand here – science or race.

So, is *IJDVL* a 'colour blind' journal then? Nothing can be farther from truth. We hold that the pigmentation of every individual is an integral component of their skin. We find it unnecessary either to downplay or to overstate it. As Bill Bryson quotes the surgeon Ben Ollivere in his book: "That is where all your skin color is ... a sliver of epidermis."⁸

Other than providing pigmentation, the melanocyte-keratinocyte complex of epidermis has certain biological functions. There has been a modicum of evidence that suggests that heavily pigmented skin biologically differs in its response to a variety of inflammatory stimuli compared to less pigmented skin, though this claim remains controversial.⁹ Individuals with light skin form more pre-vitamin D3 from a given amount of ultraviolet B than do individuals with darker skin.¹⁰ The current evolutionary hypothesis for skin colour diversity is that a compromise may exist between the requirements for photoprotection on one hand and vitamin D3 synthesis, on the other.¹¹ Dark skin would have a biological advantage under high ultraviolet radiation to protect from UV-induced sunburn, skin cancer and immune suppression, while light skin would have a biological advantage in regions far from the equator exposed to lower levels of UV radiation where UVB corresponds to the effective wavelengths for transformation of 7-dehydrocholesterol to vitamin D3 in the skin, and results in multiple effects on health, ranging from bone metabolism, innate immune response and cell proliferation.¹² Thus, the lower incidence of nonmelanoma skin cancer and malignant melanoma in exposed darker skin compared to that in poorly coloured skin. So, stating the basic or facultative skin colour of individuals or groups while describing diseases or attributes of the skin keeping the above background in mind is entirely justified. Our humble submission is that the phrase 'skin of colour' is very much inadequate for such a description, as it sacrifices the power of scientific accuracy at the altar of political 'correctness'.

Our understanding of human skin colour is that it is a continuous spectrum comprising white, yellow, brown and black, where the borders mingle with each other rather than being rigid partitions. Thus, any typing based on human skin colour is bound to be somewhat arbitrary and artificial.¹³ This is because, over a fairly long natural history, dark and light skin have been adaptations to environments of high and low ultraviolet light exposure, respectively, among members of the species *Homo sapiens*, who share a common ancestry.¹⁴

It is another common pitfall in our scientific literature to identify the phrase 'skin of colour' with people of fixed ethnicity or ancestry from a common geographical origin. Fitzpatrick cautioned against such oversimplification long back when he said: "Some Indians in southern Asia who are Caucasian have black skin, and there are blacks in North

America who have light brown skin.⁷⁷ Ironically, it was the methodological laxity or incompleteness of Fitzpatrick's skin typing system that made the confusion worse confounded by mixing up phototyping and skin colour phenotyping, rendering the part of the classification based on ethnic origin particularly irrelevant for non-white skin types, as well as for multi-ethnic populations.¹⁵ The artificiality of mechanical skin colour classification gets more pronounced in the description of the borderline types in the literature. While Fitzpatrick himself classified type IV skin as being white, a recent review mentions types IV-VI as being skin of colour and types I-III as being of light skin tones.¹⁶ The application of such typing in genetic melting pots such as India is unreliably heterogeneous. A recent typing study, done in North India, that modified the original Fitzpatrick questionnaire by removing a couple of questions not deemed relevant for the Indian skin by the researchers, found the spectrum of skin types to range from II to VI,¹⁷ whereas earlier studies mostly limited the Indian phototypes to IV and V.¹⁸ These findings are similar to the more modern individual typology angle-based skin colour classification system findings, using colorimetric values, that has recorded wide variation in Indian skin, ranging from light to dark, in a six-group classification system (very light, light, intermediate, tan, brown and dark).¹⁹

Should we entertain the idea of using the term 'skin of colour' in a standard manner in our journal when its proponents are not even sure about the definition: Is it related to reaction to UV, race, or ethnicity? Just take a look at the multifarious definitions abounding in the literature:

- a. 'Skin of color traditionally refers to that of persons of African, Asian, Native American, Middle Eastern, and Hispanic backgrounds.'²⁰
- b. 'Dermatologic health care disparities disproportionately affect patients with skin of color (SoC) (defined as Fitzpatrick skin phototypes IV-VI),...'²¹
- c. 'People with skin of color constitute a wide range of racial and ethnic groups—including Africans, African Americans, African Caribbeans, Chinese and Japanese, Native American Navajo Indians, and certain groups of fair-skinned persons (e.g., Indians, Pakistanis, Arabs), and Hispanics.'²²
- d. 'The term skin of color identifies individuals of racial groups with skin darker than Caucasians, such as Asians, Africans, Native Americans, and Pacific Islanders.'²³

'Caucasians', really? Why should anyone be allowed to use such archaic and outdated concepts and terms in modern dermatology?²⁴ Should we, then, use a device to colorimetrically classify the skin types based on individual typology angle? Until we have a consensus on the definition and a more appropriate phrase, we cannot agree to the regular use of 'skin of colour' in scientific literature.

In the light of these facts, the *IJDVL* editorial policy, as of now, is neither to employ Fitzpatrick's skin typing as a marker

of basic skin phenotypes, particularly as most of the cases and studies published in the journal belong to people who are rich in skin colour, nor to use the term 'skin of colour' in every report pertaining to the non-white population, as we find employment of the term to be scientifically inaccurate and unhelpful in enhancing the clarity of scientific reporting. Finally, we find the use of both the terms in the literature to be useful in the practise of racial profiling and stereotyping, a practise not endorsed by *IJDVL* as a matter of editorial policy.

References

1. Ohri S, Sun M, Wilson BN, Murrell DF, Murase JE. Evaluating skin colour representation in the *Indian Journal of Dermatology, Venereology and Leprology*. *Indian J Dermatol Venereol Leprol* 2022;88:678–9.
2. Banodkar PD, Banodkar KP. History of hydroquinone. *Indian J Dermatol Venereol Leprol* 2022;88:696–9.
3. Kaliyadan F. The mirror. *Indian J Dermatol Venereol Leprol* 2022;88:700–1.
4. Clarivate. *Journal Citation Reports* 2022.
5. Fitzpatrick TB. Soleil et peau. *J Med Esthet* 1975;2:33–4.
6. Fitzpatrick TB: Ultraviolet-induced pigmentary changes: Benefits and hazards. *Curr Probl Dermatol* 1986;15:25–38.
7. Fitzpatrick TB. The validity and practicality of sun-reactive skin types I through VI. *Arch Dermatol* 1988;124:869–71.
8. Bryson B. *The Body: A Guide for Occupants*. Doubleday 2019.
9. Nordlund JJ. How complicated are black and white? *J Am Acad Dermatol* 2005;54:1071–2.
10. Clemens TL, Henderson SL, Adams JS, Holick MF. Increased skin pigment reduces the capacity of skin to synthesize vitamin D3. *Lancet* 1982;1:74–6.
11. Jablonski NG, Chaplin G. Human skin pigmentation as an adaptation to UV radiation. *Proc Natl Acad Sci USA* 2010;107:8962–8.
12. Holick MF. Vitamin D: A D-Lightful health perspective. *Nutr Rev* 2008;66: S182–94.
13. Cohn BA. Skin color—in perspective. *J Am Acad Dermatol* 2005; 54:1072–3.
14. Cohn BA. The vital role of the skin in human natural history. *Int J Dermatol* 1998;37:821–4.
15. Del Bino S, Duval C, Bernerd F. Clinical and biological characterization of skin pigmentation diversity and Its consequences on UV impact. *Int J Mol Sci* 2018;19:2668.
16. Taylor SC, Alexis AF, Armstrong AW, Chiesa Fuxench ZC, Lim HW. Misconceptions of photoprotection in skin of color. *J Am Acad Dermatol* 2022;86:S9–17.
17. Sharma VK, Gupta V, Jangid BL, Pathak M. Modification of the Fitzpatrick system of skin phototype classification for the Indian population, and its correlation with narrowband diffuse reflectance spectrophotometry. *Clin Exp Dermatol* 2018;43:274–80.
18. Tejasvi T, Sharma VK, Kaur J. Determination of minimal erythral dose for narrow band-ultraviolet B radiation in north Indian patients: comparison of visual and DermoSpectrometer readings. *Indian J Dermatol Venereol Leprol* 2007;73:97–9.
19. Hourblin V, Nouveau S, Roy N, de Lacharriere O. Skin complexion and pigmentary disorders in facial skin of 1204 women in 4 Indian cities. *Indian J Dermatol Venereol Leprol* 2014;80:395–401.
20. Kundu RV, Patterson S. Dermatologic conditions in skin of color: Part I. Special considerations for common skin disorders. *Am Fam Physician* 2013;87:850–6.
21. Fenton A, Elliott E, Shahbandi A, Ezenwa E, Morris C, McLawhorn J et al. Medical students' ability to diagnose common dermatologic conditions in skin of color. *J Am Acad Dermatol* 2020; 83:957–8.
22. Taylor SC. Skin of color: Biology, structure, function, and implications for dermatologic disease. *J Am Acad Dermatol* 2002;46:S41–62.
23. Taylor SC, Kelly PA, Lim H, Serrano AMA. *Taylor and Kelly's Dermatology for Skin of Color*. McGraw Hill/Medical 2016.
24. Holubar K. What is a Caucasian? *J Invest Dermatol* 1996;106:800.