

## The frequency of reporting race, ethnicity, and skin phototypes in dermatology case reports



*To the Editor:* Reporting race and ethnicity in the medical literature is controversial.<sup>1</sup> Race and ethnicity are social constructs that do not represent human genetic variation. Nevertheless, some disorders are more frequently/exclusively reported in specific groups. For example, lipodystrophy centrifugal abdominalis infantilis and acquired nevus of Ota-like macules occur mainly in Asian individuals,<sup>2,3</sup> and foot pigmentation is primarily reported in Black populations.<sup>4</sup> Race/ethnicity may provide essential clues, improving diagnostic accuracy. With increasing global migration, nationality cannot be assumed to represent race/ethnicity. The US Census data and Statistics Canada confirm increasing racial/ethnic diversity in North America. We evaluate trends in reporting race/ethnicity in dermatology case reports. Additionally, we suspect that some authors provide skin phototype in lieu of race/ethnicity. Although not equivalent concepts, providing the phototype at least allows for grouping of diseases/outcomes into lightly, medium, and richly pigmented skin types. Thus, although imperfect, we also evaluated the reporting of this data point.

We reviewed all case reports/series published in *JAAD Case Reports*, *Journal of the European Academy of Dermatology and Venereology*, *JAMA Dermatology*, and the *British Journal of Dermatology*, between January 1, 2021 and June 30, 2022. The study included 1249 cases as follows: *JAAD Case Reports* (1028), *Journal of the European Academy of Dermatology and Venereology* (140), *JAMA Dermatology* (49), and *British Journal of Dermatology* (32). Race/ethnicity was reported in only 250 (20.0%) of 1249 of cases (Table I). The most commonly reported race/ethnicity was White, followed by Asian, Black, and Hispanic/Latinx. Skin phototype was infrequently mentioned (46/1249 [3.7%]). Frequency varied by global region of origin: Latin America/Caribbean (35/56 [62.5%]); Oceania (6/18 [33.3%]); Asia (44/148 [29.7%]); North America (189/821 [23.0%]); Europe (16/200 [8.0%]); Africa (0/6 [0%]). We hypothesized that authors might not mention race/ethnicity/phototype because clinical photographs substituted for this information. In 25.1% of reports, photographs were not included,

or failed to provide indicators (eg, mucosa). Overall, 19.4% of cases lacked information about ethnicity/race/skin phototype, although omitting photographs. We further evaluated 59 reports of heritable diseases, as these may have particular racial/ethnic predilection. Overall, 78% did not mention race/ethnicity. We found that *Journal of the European Academy of Dermatology and Venereology* had the highest frequency of reporting (38.6%) followed by *JAAD Case Reports*, *British Journal of Dermatology*, and *JAMA Dermatology* (Table II). Journal guidelines for reporting race/ethnicity were also examined and varied in their requirements (Table II).

In 2004, Unaeze et al<sup>5</sup> reviewed 186 cases reported in *JAAD* and found that 40.8% of cases reported race/ethnicity. Reporting differences between 2004 and 2021 to 2022 were analyzed with  $\chi^2$  test, revealing a statistically significant decline in the frequency of reporting race/ethnicity in leading dermatology journals (40.8% vs 20.0%;  $P < .00001$ ). The importance of reporting race/ethnicity may be best stated by understanding an important feature of case reports/series. These studies describe new, rare, or exceptional diseases/treatments, and large population studies are often unavailable. At the time of reporting individual cases, the value of race/ethnicity may be overlooked. Its importance in diagnosis, treatment response, health care disparity, or disease prognosis may only become evident retrospectively, as more cases are reported. The absence of this data point could impede the recognition of important trends. We suggest that journal author instructions/editors encourage the inclusion of race/ethnicity in case reports if deemed relevant, with detailed guidelines on how to do so.

Hye Jin Chung, MD, MMSc,<sup>a,b</sup> Kelli Jablon, BS,<sup>c</sup> Orchid Dawkins, MBBS,<sup>d</sup> Mikaela Richardson, BS,<sup>d</sup> and Jonathan Dale Ho, MBBS, DSc, Dip. Dermatopath<sup>d,e</sup>

From the Department of Dermatology, Beth Israel Deaconess Medical Center, Boston, Massachusetts<sup>a</sup>; Department of Dermatology, Harvard Medical School, Boston, Massachusetts<sup>b</sup>; Renaissance School of Medicine at Stony Brook University, Stony Brook, New York<sup>c</sup>; Section of Dermatology, Department of Medicine, The University of the West Indies, Mona Campus, Kingston, Jamaica<sup>d</sup>; and the Department of Pathology, The University of the West Indies, Mona Campus, Kingston, Jamaica.<sup>e</sup>

Funding sources: None.

**Table I.** The frequency of reporting race/ethnicity/skin phototype in case reports of leading dermatology journals

Characteristics	Category	No. of Cases, n (%)
Race/ethnicity	Reported	250 (20.0)
	Asian	47 (3.8)
	Black	38 (3.0)
	Hispanic/Latinx	22 (1.8)
	Middle Eastern	6 (0.5)
	White	132 (10.6)
	Others (multiracial)	5 (0.4)
	Not reported	999 (80.0)
SPT	Reported	46 (3.7)
	I	0 (0)
	II	6 (0.5)
	III	3 (0.2)
	IV	26 (2.1)
	V	9 (0.7)
	VI	2 (0.2)
Clinical photos with clues to Race/ethnicity/skin type	Not reported	1203 (96.3)
	Present	936 (74.9)
	Race/ethnicity/SPT reported	219 (17.5)
	Race/ethnicity/SPT not reported	717 (57.4)
	Absent	313 (25.1)
Genodermatosis/hereditary syndrome (n = 59)	Race/ethnicity/SPT reported	71 (5.7)
	Race/ethnicity/SPT not reported	242 (19.4)
	Race/ethnicity/SPT reported	13 (22.0)
	Race/ethnicity/SPT not reported	46 (78.0)

SPT, Skin prototype.

**Table II.** The frequency of reporting race/ethnicity/skin phototypes and journal's guidelines in leading dermatology journals

Journals (Total Case, n)	Race/Ethnicity/Skin Phototype, n (% of Reported Case)	Journal's Recommendation for Reporting Race/Ethnicity/Skin Phototype
JEADV (140)	54 (38.6)	No specific recommendations
JAAD Case Reports (1028)	227 (22.1)	"Avoid the use of descriptors that refer to personal attributes such as age, gender, race, ethnicity, culture, sexual orientation, disability, or health condition unless they are relevant and valid"
BJD (32)	6 (18.8)	No specific recommendations
JAMA Dermatology (49)	3 (6.1)	"Clinical challenge: Do not include the patient's race, ethnicity, or country of origin in the title or the first line of the article. If this information is clinically relevant and necessary, it can be included in the case description." "Research article: Race and ethnicity of the study population should be reported in the Results section"

BJD, British Journal of Dermatology; JEADV, Journal of the European Academy of Dermatology and Venereology.

IRB approval status: Not applicable.

Key words: case reports; ethnicity; race; skin type; skin of color.

Correspondence to: Jonathan Dale Ho, MBBS, D.Sc, Dip.DermPath, Department of Pathology The

University of the West Indies, Mona Campus, Kingston 7, Kingston 7, St Andrew 00000 Jamaica

E-mail: [jdho@bu.edu](mailto:jdho@bu.edu)

**Conflict of interest**

None disclosed.

**REFERENCES**

1. Breathett KK, Spatz ES, Nallamotheu BK. Reporting of race and ethnicity in medical and scientific journals. *JAMA*. 2021;326(7):673-674.
2. Tiao J, Shin G, Al Janahi S, et al. Skin diseases in Asian individuals that you do not want to miss: A selection of unique or relatively more common conditions in Asian populations. *Clin Dermatol*. 2021;39(5):879-886.
3. Chan IL, Cohen S, da Cunha MG, Maluf LC. Characteristics and management of Asian skin. *Int J Dermatol*. 2019;58(2):131-143.
4. Freinkel AL, Rippey JJ. Foot pigmentation in Blacks. *S Afr Med J*. 1976;50(55):2160-2161.
5. Unaeze J, Bigby M. The frequency of reporting of race/ethnicity in case reports. *J Am Acad Dermatol*. 2006;54(6):1067-1070.

<https://doi.org/10.1016/j.jdin.2023.04.001>