

LETTER TO THE EDITOR

Characterizing global dermatologic engagement and needs: A cross-sectional study from 83 countries

Dear Editor,

Despite the rising global burden of skin disease, there is a dearth of dermatology-trained clinicians, and access to care varies significantly.^{1,2} Few studies have characterized the needs of dermatology providers in under-resourced settings. We aimed to assess how dermatology providers care for underserved populations worldwide and identify regional needs.

In this cross-sectional survey, attendees who visited an exposition booth at three major international dermatology conferences and self-identified as *currently* providing care to underserved populations were offered an eight-question digital data collection tool. No incentives were offered. Respondents provided their country, professional role, frequency and volume of care for underserved populations, population(s) served, outreach method(s), unmet needs and desired interventions. Country data were subcategorized by World Bank Income (WBI) level and World Health Organization (WHO) regions.^{3,4} Chi-squared and Fisher's exact tests were utilized.

A total of 724 attendees self-identified as interested or involved in engaging with underserved communities, and 537 respondents (74%) from 83 countries endorsed *current* involvement. Of 537 respondents, most were dermatologists (84%). Frequently served populations were low-income (60%), elderly (54%) and rural/remote/urban underserved (44%). The most common outreach methods were provider (73%) and patient education (66%), followed by outreach clinics (40%). The most frequently reported needs were affordable care (75%), more dermatologists (50%) and educational resources for providers (43%). Desired interventions included financial support through grants, sponsorships, and career development awards (62%), patient education (48%), provider training materials (47%), access to artificial intelligence (AI) tools (42%), product donations (42%) and leadership training (37%).

In the context of WBI classification, LMIC respondents were more likely to reach rural/remote/urban underserved populations ($p < 0.01$) via outreach clinics ($p < 0.01$) and teledermatology ($p < 0.01$). Needs included training ($p < 0.01$) and educational resources for providers ($p < 0.01$) and

patients ($p < 0.01$). Desired interventions included financial support ($p < 0.01$), educational materials ($p < 0.01$) and leadership training ($p = 0.01$) (Figure 1). The WHO African region reported the highest number of needs and interventions, including educational resources for providers ($p < 0.01$) and patients ($p < 0.01$), more dermatologists ($p < 0.01$), leadership training ($p < 0.01$) and product donations ($p < 0.01$).

'High-frequency' engagers, defined as engaging at least once weekly with underserved patients, comprised 60% of respondents (Figure 2). They were more likely to work or reside in LMIC ($p = 0.03$) and care for elderly ($p < 0.01$), unhoused ($p < 0.01$) and LGBTQIA+ ($p < 0.01$) populations. Desired interventions were more trained dermatology providers ($p = 0.01$), provider education ($p = 0.04$) and leadership training ($p = 0.05$) (Figure 1).

'High-volume' engagers, defined as reaching over 1000 underserved patients annually, comprised 14% of respondents (Figure 2). Primary outreach methods were patient education ($p < 0.01$), outreach clinics ($p < 0.01$), and teledermatology ($p = 0.01$). Similar to high frequency engagers, high volume engagers reported the highest need for leadership training ($p < 0.01$), provider and patient education ($p < 0.01$) and more trained dermatology providers ($p < 0.01$) (Figure 1).

Study limitations include self-selection bias, reliance on self-reporting, which can be affected by social desirability bias, and English-only availability. The respondent subset may not reflect the broader community and scope of engagement. Additionally, geopolitical factors may impact disclosure of serving certain underserved communities due to legal or societal repercussions.

Access to dermatologic care remains a multi-faceted challenge. Solutions aimed at increasing the dermatologic workforce and enhancing leadership skills were prioritized by high-impact groups. Exemplar solutions exist; for example, the Regional Dermatology Training Centre (RDTC) is a flagship dermatologic training programme for clinicians from 17 African nations. On a programmatic level, the International Foundation for Dermatology supports education (RDTC, Pacific Dermatology Training Centre), grant funding (DermLink) and leadership training (GLODERM).^{5,6} The recent adoption of a resolution on 'Skin diseases as a global

This is an open access article under the terms of the [Creative Commons Attribution-NonCommercial-NoDerivs](https://creativecommons.org/licenses/by-nc-nd/4.0/) License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

© 2025 The Author(s). *Journal of the European Academy of Dermatology and Venereology* published by John Wiley & Sons Ltd on behalf of European Academy of Dermatology and Venereology.

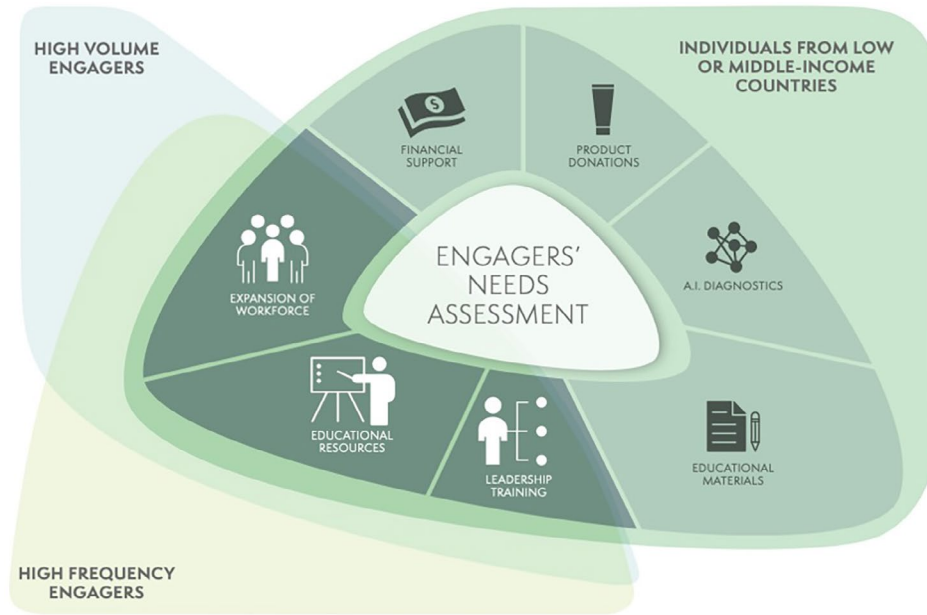


FIGURE 1 Reported needs from healthcare providers delivering care to medically underserved populations: needs from high-volume engagers, high-frequency engagers and individuals from low- and middle-income countries.

WORLD REGIONS & ENGAGERS

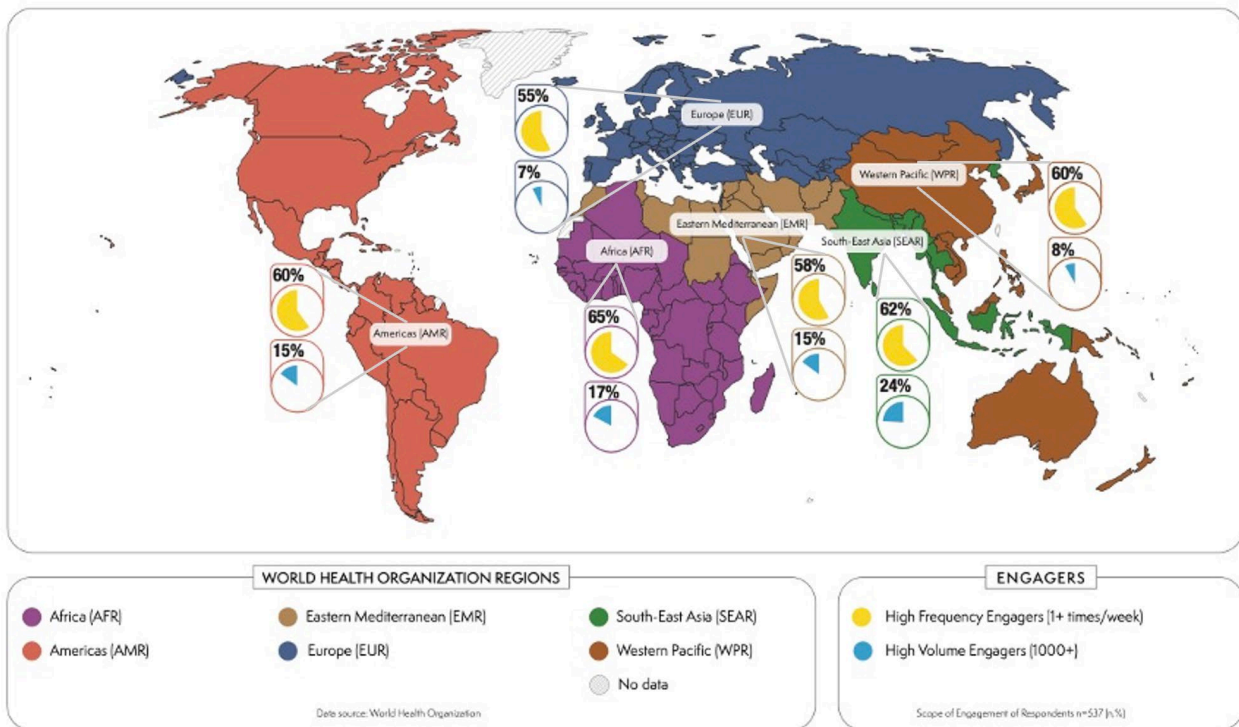


FIGURE 2 High-frequency and high-volume engagers with medically underserved communities in dermatology, by World Health Organization region.

public health priority’ at the World Health Assembly may further catalyse global investment and coordinated efforts to expand access to dermatologic care worldwide.

This assessment highlights gaps and priorities in dermatologic care provision by high-impact groups serving underserved populations worldwide. Targeted interventions,

guided by high-engagement groups, will be essential to improving access to dermatologic care.

FUNDING INFORMATION

Distribution of the data capture instrument involved employees of CeraVe. The authors received no grant support for this project.

KEYWORDS

barriers to care, global health, low- and middle-income countries, low-resource settings

CONFLICT OF INTEREST STATEMENT

Esther Freeman receives royalties from UpToDate and grant support from the ILDS and from the NIH (not related to this project); she is a section editor for the British Journal of Dermatology. Esther Freeman is the L'Oréal Dermatological Beauty/CeraVe Endowed Chair in Global Health Dermatology. Esther Freeman, Claire Fuller and Kari Wanat serve on the CeraVe Care for All philanthropic advisory board. Esther Freeman, Wendemagegn Enbiale, Wingfield Rehmus, Claire Fuller and Kari Wanat serve on the executive committee of the International Alliance for Global Health Dermatology (GLODERM) (unpaid). Maud Guérin, Tom Allison, Gene Colón, Jehireh Peraza-Williams and Olyvia Zarchin are employees of CeraVe. Jadesola Akinwuntan was supported by the American Academy of Dermatology and Society of Investigative Dermatology Gap Year Fellowship Award. Marlous Grijzen is supported by the Wellcome Africa Asia Programme Vietnam core grant (106680/Z/14/Z). Wingfield Rehmus has served as an investigator for UCB, advisory board member for LEO, Incyte and Pfizer, and speakers bureau member for CeraVe, Pfizer, Sanofi and Novartis; she receives grant support from Pfizer (not related to this project). Alexis Strahan, Morvarid Zehtab, Ann Pacheco, Shivani Jain and Christine Li have no disclosures to report.

DATA AVAILABILITY STATEMENT


The data that support the findings of this study are available from the corresponding author upon reasonable request.




ETHICAL APPROVAL

Reviewed by the Massachusetts General Hospital Institutional Review Board; granted exemption due to de-identification of data.

ETHICS STATEMENT

Not applicable; no patients were involved.

Alexis G. Strahan¹
Christine Li^{1,2} 
Maud Guérin³
Tom Allison³
Gene Colón³
Jehireh Peraza-Williams³
Olyvia Zarchin³

Morvarid Zehtab¹
Ann M. Pacheco^{1,4}
Jadesola Akinwuntan^{1,5}
Shivani Jain⁶
Marlous L. Grijzen^{7,8} 
Wendemagegn Enbiale⁹
Wingfield Rehmus¹⁰
L. Claire Fuller^{11,12}
Karolyn Wanat¹³
Esther E. Freeman^{1,11,14}  

¹Department of Dermatology, Massachusetts General Hospital, Boston, Massachusetts, USA

²University of Massachusetts Chan Medical School, Worcester, Massachusetts, USA

³CeraVe Global - L'Oréal Groupe, New York, New York, USA

⁴University of Toledo College of Life Sciences, Toledo, Ohio, USA

⁵University of Kansas School of Medicine, Kansas City, Kansas, USA

⁶Louisiana State University Health Sciences Center-New Orleans, New Orleans, Louisiana, USA

⁷Oxford University Clinical Research Unit Indonesia, Faculty of Medicine, Universitas Indonesia, Jakarta, Indonesia

⁸Centre for Tropical Medicine and Global Health, Nuffield Department of Medicine, University of Oxford, Oxford, UK

⁹Bahir Dar University, College of Medicine and Health Sciences, Bahir Dar, Ethiopia

¹⁰Division of Dermatology, BC Children's Hospital, University of British Columbia, Vancouver, British Columbia, Canada

¹¹International Foundation for Dermatology, London, UK

¹²London Bridge Hospital, London, UK

¹³Department of Dermatology and Pathology, Medical College of Wisconsin, Milwaukee, Wisconsin, USA

¹⁴Medical Practice Evaluation Foundation, Massachusetts General Hospital, Boston, Massachusetts, USA

Correspondence


Esther E. Freeman, 55 Fruit St, Bartlett Hall 6R, Boston, MA 02114, USA.

Email: efreeman@mgh.harvard.edu

Alexis G. Strahan and Christine Li are co-first authors. Both authors contributed equally to this work.

ORCID

Christine Li  <https://orcid.org/0000-0002-2494-2620>

Marlous L. Grijzen  <https://orcid.org/0000-0002-7335-7313>

Esther E. Freeman  <https://orcid.org/0000-0001-7751-9466>

TWITTER

Esther E. Freeman ✉ DrEstherFreeman

REFERENCES

1. Hay RJ, Johns NE, Williams HC, Bolliger IW, Dellavalle RP, Margolis DJ, et al. The Global Burden of Skin Disease in 2010: an analysis of the prevalence and impact of skin conditions. *J Invest Dermatol.* 2014;134(6):1527–34.
2. Yakupu A, Aimaier R, Yuan B, Chen B, Cheng J, Zhao Y, et al. The burden of skin and subcutaneous diseases: findings from the Global Burden of Disease Study 2019. *Front Public Health.* 2023;11:1145513.
3. Hamadeh N, Van Rompaey C, Metreau E, Eapen SG. New World Bank country classifications by income level: 2022–2023. *World Bank Blogs.* 2022. Available from: <https://blogs.worldbank.org/en/opendata/new-world-bank-country-classifications-income-level-2022-2023>.
4. World Health Organization. Countries Overview. 2024. Available from: <https://www.who.int/countries>.
5. Freeman EE. A seat at the big table: expanding the role of dermatology at the World Health Organization and beyond. *J Invest Dermatol.* 2014;134(11):2663–5.
6. International League of Dermatological Societies. IFD: Our Foundation. 2024. Available from: <https://www.ilds.org/what-we-do/our-foundation/>.