

This is an Open Access document downloaded from ORCA, Cardiff University's institutional repository: <https://orca.cardiff.ac.uk/id/eprint/161701/>

This is the author's version of a work that was submitted to / accepted for publication.

Citation for final published version:

Arents, Bernd W. M., van Zuuren, Esther J., Hughes, Olivia, Fedorowicz, Zbys and Flohr, Carsten 2023. The future is now: the Global Atopic Dermatitis Atlas (GADA). *British Journal of Dermatology* 189 (6) , pp. 761-763. 10.1093/bjd/ljad286

Publishers page: <http://dx.doi.org/10.1093/bjd/ljad286>

Please note:

Changes made as a result of publishing processes such as copy-editing, formatting and page numbers may not be reflected in this version. For the definitive version of this publication, please refer to the published source. You are advised to consult the publisher's version if you wish to cite this paper.

This version is being made available in accordance with publisher policies. See <http://orca.cf.ac.uk/policies.html> for usage policies. Copyright and moral rights for publications made available in ORCA are retained by the copyright holders.



The future is now: the Global Atopic Dermatitis Atlas (GADA)

<https://doi.org/10.1093/bjd/ljad286>

These are exciting times for advancements in treating atopic dermatitis (AD), which is the most prevalent chronic skin condition, affecting approximately 225 million people worldwide, particularly children.^{1–3} Various topical and systemic therapies have recently been approved. In addition to these therapies, fundamental research into the pathogenesis of AD is being conducted. However, these projects are often undertaken in Europe or North America, and we are only starting to understand the potential differences in the immune profiles underlying the different clinical phenotypes of people with pigmented skin.⁴ So, what is the current state of AD worldwide?

In 2020, the Global Burden of Disease project published data on the prevalence, incidence and disability-adjusted life years for AD.^{2,3} Contrary to common perception, AD is not limited to Western or industrialized countries. Regions such as Andean Latin America and sub-Saharan Africa have also demonstrated a high disease burden,^{2,3} and AD is becoming increasingly common in middle- and low-income countries owing to urbanization and lifestyle changes associated with higher socioeconomic status. In 2022, the World Health

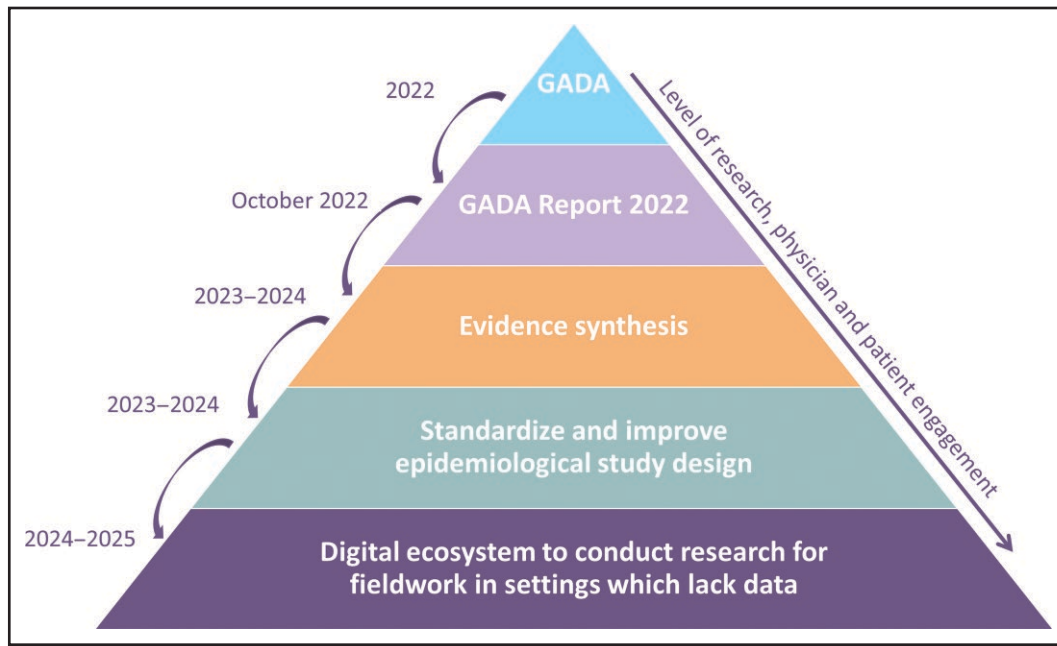


Figure 1 The start and future of the Global Atopic Dermatitis Atlas.

Organization (WHO) acknowledged this with a strategy framework document on skin-related neglected tropical diseases, including noncommunicable skin diseases, such as AD.⁵

Therefore, the International League of Dermatological Societies (ILDS) initiated the Global Atopic Dermatitis Atlas (GADA) in collaboration with the International Society of Atopic Dermatitis (ISAD), the International Eczema Council (IEC), the European Taskforce for Atopic Dermatitis (ETFAD) and the International Alliance of Dermatology Patient Organizations (GlobalSkin).

To establish a baseline for GADA, a Global Report on Atopic Dermatitis was published in October 2022.¹ It illustrates the high prevalence and immense impact of AD across the globe. The disease burden crosses geographic boundaries, affecting people in both developed and developing nations. Its impact extends beyond physical symptoms, including a range of psychosocial and economic burdens for patients and their families. Significant disparities in disease burden and care provision have been identified, giving witness to unmet needs and suboptimal patient outcomes. Treatment innovations have not solved the existing inequalities, and paradoxically could have increased them owing to lack of access and affordability. It would be helpful for the WHO essential medicines list to be updated to include moderately potent topical corticosteroids, and preferably some novel systemic medications, in addition to methotrexate. Governments and other stakeholders should take a proactive role in addressing pressing issues of accessibility and affordability of current and future treatments. Public awareness should be increased to reduce stigma and discrimination. To ensure such approaches are inclusive and patient-centred, patient organizations should be acknowledged and involved.

To improve care and management of AD, it is recommended that dermatological societies develop clinical practice guidelines in collaboration with patients.⁶ Such societies

could also provide (online) training for physicians in low- and middle-income countries to facilitate diagnosis and treatment, and implement innovative healthcare delivery strategies, e.g. teledermatology, to address barriers such as lack of capacity and travel distances.

The lack of epidemiological data has also been highlighted in the report. Importantly, the Global Burden of Disease data is typically released with a delay of several years, and an up-to-date *living* platform providing the latest available evidence is therefore needed. In addition, there is considerable diversity in the methodologies employed by epidemiological studies, hampering direct comparisons between settings. Therefore, efforts should be made to harmonize epidemiological data collection to enable a more accurate understanding of the prevalence, severity and treatment needs of AD worldwide, in addition to the contributing environmental risk factors. These data, combined with projects on the pathogenesis of AD, could be synergistic in offering improvements in care for people with AD.

The report reflects the state of AD worldwide in 2022, but where do we go from here? GADA will address the gaps in epidemiological data through: (i) a systematic evidence synthesis of current epidemiological data; (ii) an international consensus exercise to standardize and improve epidemiological study designs; and (iii) the development of a digital ecosystem to conduct research for fieldwork in settings that lack data (Figure 1). Original fieldwork with the developed methodologies will follow suit.

There is a need to address these inequalities faced by patients with AD and to commence a joint research effort to benefit patients and their families worldwide. To quote the people with AD featured in our report: *“If you care, make it so that people can get the care they need. Do something right now. You have the power to change our lives.”* We ask you to join the future of research into the global burden of AD at www.atopicdermatitisatlas.org, where our findings will be published regularly.

Bernd W.M. Arents¹, **Esther J. van Zuuren**²,
Olivia Hughes³, **Zbys Fedorowicz**⁴ and
Carsten Flohr⁵

¹Dutch Association for People with Atopic Dermatitis, Nijkerk, the Netherlands; ²Dermatology Department, Leiden University Medical Centre, Leiden, the Netherlands; ³School of Psychology, Cardiff University, Cardiff, UK; ⁴Veritas Health Sciences Consultancy, Huntingdon, UK and ⁵Unit for Paediatric & Population-Based Dermatology Research, St John's Institute of Dermatology, King's College London and Guy's & St Thomas' Hospitals, London, UK

Correspondence: Carsten Flohr. Email: carsten.flohr@kcl.ac.uk

Acknowledgements: the authors would like to thank the ILDS, especially Lars French (in his role as ILDS President) and his team, for their initiative and financial support, and the members of IEC, ISAD, ETFAD and GlobalSkin for their support and thorough peer review of our report. We also thank the Institute for Health Metrics and Evaluation School of Medicine at the University of Washington for the generation of figures and maps for the Global Burden of Disease project. The report could not have been this patient-centric without the contribution of patients, both in their testimonials and photographs (unedited, used with permission), for which we thank them wholeheartedly. We would also like thank Prakash Patel from Guy's & St Thomas' NHS Foundation Trust for his support throughout the project, David Webb for the graphic design of our report and Vahid Djamei and Anna Darzina from Swiss4ward for the design of the GADA website.

Funding sources: the Global Atopic Dermatitis Atlas (GADA) and its 2022 report featured in this article have been kindly and unrestrictedly funded by the International League of Dermatological Societies.

Conflicts of interest: B.W.M.A., E.J.v.Z., O.H. and Z.F. have received compensation from King's College London for their work on the GADA report featured in this article. B.W.M.A., E.J.v.Z. and O.H. are Associate Editors of the *British Journal of Dermatology*. C.F. is Director of the GADA project and Section Editor of the *British Journal of Dermatology*. He is also Chief

Investigator of the UK National Institute for Health Research-funded TREAT (ISRCTN15837754) and SOFTER (ClinicalTrials.gov: NCT03270566) trials, the UK-Irish Atopic Eczema Systemic Therapy Register (A-STAR; ISRCTN11210918) and a Principal Investigator in the EU Horizon 2020-funded BIOMAP Consortium. He also leads the EU Trans-Foods consortium. His department has received funding from Sanofi Genzyme and Pfizer for skin microbiome work. He has also received compensation from the *British Journal of Dermatology* (reviewer and Section Editor) and EuroGuiDerm (guidelines lead).

Data availability: no data were collected for this article or for the report referred to above.

Ethics statement: for the GADA report referred to in this article, written informed consent was provided by the patients, both for their testimonials and/or (unedited) photographs.

References

- 1 International League of Dermatological Societies; Arents BWM, van Zuuren EJ, Hughes O *et al*. Global Report on Atopic Dermatitis 2022. Available at: <https://www.atopicdermatitisatlas.org/en/explore-data/reports> (last accessed 6 August 2023).
- 2 Laughter MR, Maymone MBC, Mashayekhi S *et al*. The global burden of atopic dermatitis: lessons from the Global Burden of Disease Study 1990–2017. *Br J Dermatol* 2021; **184**:304–9.
- 3 Institute for Health Metrics and Evaluation; Global Burden of Disease Collaborative Network. Global Burden of Disease Study 2019 (GBD 2019) Results. Available at: <https://vizhub.healthdata.org/gbd-results/> (last accessed 6 August 2023).
- 4 Davis CM, Flohr C, Gupta MR, Koplin JJ. Managing atopic dermatitis in patients with skin of color. *J Allergy Clin Immunol Pract* 2023; **11**:1376–83.
- 5 World Health Organization. Ending the neglect to attain the sustainable development goals: a strategic framework for integrated control and management of skin-related neglected tropical diseases. Available at: <https://www.who.int/publications/item/9789240051423> (last accessed 6 August 2023).
- 6 Capozza K, Vastrup A, Proctor A *et al*. The sound of silence: where are the voices of patients in eczema guideline development? *Br J Dermatol* 2022; **187**:1005–6.