

Underrepresentation of Climate Change and Sustainability Manuscripts in High Impact Dermatology Journals

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Dear Editor, Earth's changing climate is impacting the health of people worldwide. The projected health consequences of climate change will be worse than previously expected, as it is extremely likely that the 1.5°C Paris Climate Agreement will be missed and the world is destined for 2.3°C warming at its current pace.¹

1 Dermatology is particularly impacted by climate change due to the skin's direct contact
2 with the environment. Effects include exacerbation of pre-existing dermatoses, heat-
3 related dermatoses, increased UV-induced cancers, expanded vector-borne diseases
4 and disaster-related dermatoses.² Despite these challenges, the majority of physicians
5 do not feel prepared to address climate change's impact on health or to take action.³

6 One possible reason for this lack of preparedness is the scarcity of climate change
7 literature in academic journals. This study aims to evaluate the representation of climate
8 change and sustainability topics in the three highest-impact dermatology journals and
9 compare their publication volume and impact factor to those in other medical
10 specialties. Details of the methodology, including the retrieval and selection process for
11 manuscripts, are available through an open-access link provided in the Data Availability
12 Statement. In brief, impact factor was obtained from Journal of Citation Reports (2023).
13 Manuscripts with the following keywords "global warming", "climate change", "carbon
14 footprint", "lifecycle assessment", "sustainability", "greenhouse gases" and
15 "environmental impact" were retrieved from MEDLINE via PubMed, restricted to English
16 and years 1991 to 2024. 1991 was selected as the starting point for the literature
17 review, providing a one-year buffer following the release of the first IPCC report in 1990.

18 The key finding of this study is that dermatology ranked the lowest amongst medical
19 specialties (tied with Haematology) in their representation of climate change-related
20 manuscripts in high-impact journals (Figure 1). Despite this, dermatology ranks third in
21 total publications, highlighting a notable lack of focus on climate change within the
22 specialty. In comparison, specialties like Anaesthesiology, General Practice, General
23 Surgery, Paediatrics, and Geriatrics, with comparable impact factors, demonstrate a
24 proportionally greater emphasis on climate change literature.

25 The first climate change-related article appeared in a medical journal only one year after
26 the first IPCC report,⁴ whereas it took 17 years for a similar article to be published in a
27 dermatology journal.⁵ Most manuscripts (n=10, 83%) were published in the last 5 years,
28 with the remaining two (17%) published in the 7 years prior. One possible explanation
29 for this delay is a lack of awareness regarding the impact of climate change on the skin.
30 Other factors may include less research on climate change among dermatologists,
31 lower quality of research on the topic, or a perceived lack of interest from readers,
32 editorial teams, and reviewers. However, there is evident interest among readers - two
33 out of the three climate change-related manuscripts published in the *British Journal of*
34 *Dermatology* were frequently cited,^{6,7} and one ranks in the top 5% of dermatology
35 research with an Altmetric attention score of 51⁷ indicating that it is widely discussed,
36 shared and referenced in public and academic spheres. Interestingly, the publication
37 dates of these manuscripts coincide with the release of sustainability statements by the
38 American Academy of Dermatology and the British Association of Dermatologists. This
39 alignment suggests that these statements may have encouraged submissions of climate
40 change-related manuscripts. However, without access to journal submission data or an

analysis of peer review and editorial decisions, further exploration of this delay remains limited.

If no proactive strategies are taken, climate change-related manuscripts will likely remain scarce in leading dermatology journals. To address this, possible actions that could be taken by journals include calls for submissions on topics pertaining to climate change, along with editorial policies that prioritise such manuscripts and/or creating a dedicated section on climate change and its associated issues. High-impact journals have a vital role to play as their wide readership helps raise awareness, influence behaviour, promote collaboration and shape policy decisions - key elements needed to confront a problem as complex as climate change.

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Figure legend

Figure 1. Proportion of manuscripts on Climate Change in the Top 3 Journals in relation to Total Publications and Impact Factor. The size of the bubble is related to the percentage of manuscripts (also labelled) discussing climate change – a larger bubble has a larger percentage of manuscripts. The three highest-impact dermatology journals representing the dermatology bubble are Journal of the American Academy of Dermatology [Impact Factor (IF) = 12.8], the Journal of the American Medical Association Dermatology (IF = 11.5), and the British Journal of Dermatology (IF =11.0).

(Note: Oncology and Internal Medicine were not included due to their extreme outlier status rendering other bubbles unviewable. A chart representing these two specialities is available online)

§Total publications since 1991

*Average Impact factor from the Top 3 journals from each speciality

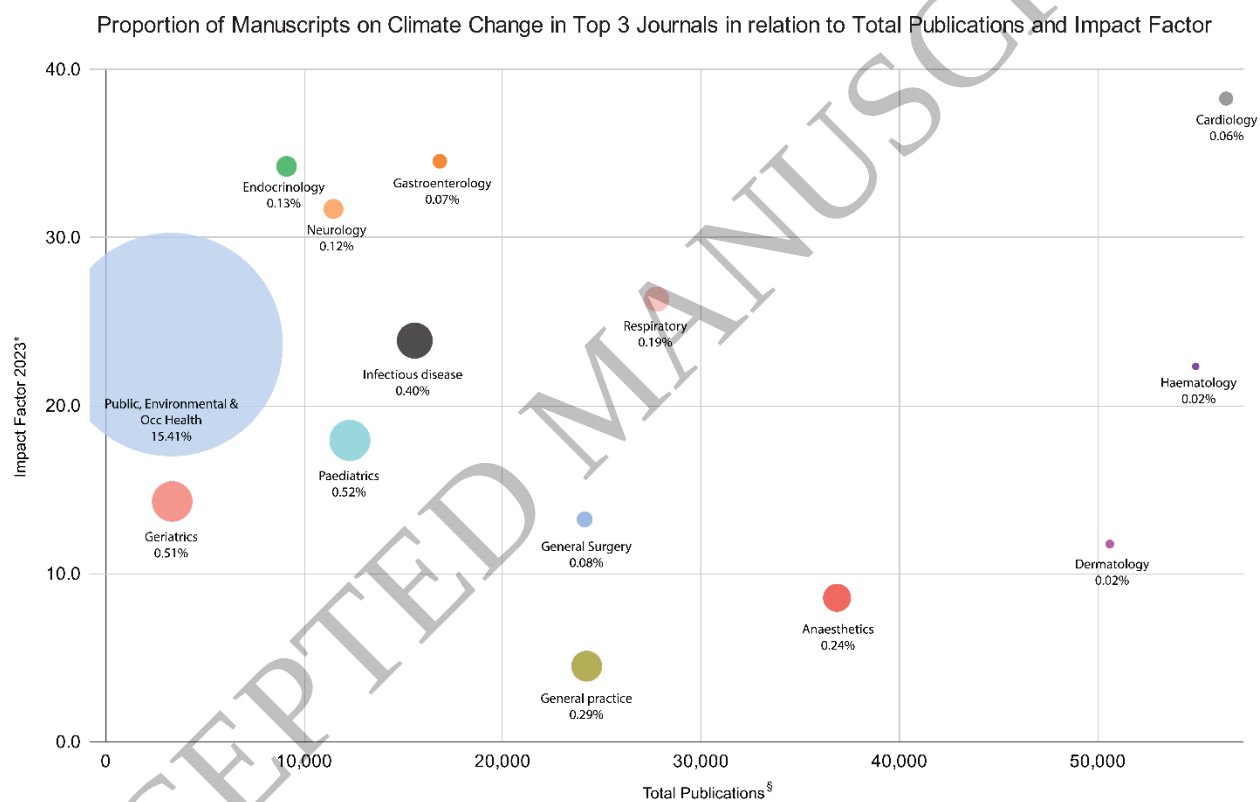


Figure 1
392x248 mm (DPI)