

Climate change, human health, and the future of naturopathy and herbal medicine

Susan Arentz PhD, BHSc (Hons)

Editor, *Australian Journal of Herbal and Naturopathic Medicine*

PO Box 696, Ashfield, NSW 2131, Australia

Email journal@nhaa.org.au

For referencing Arentz S. Climate change, human health, and the future of naturopathy and herbal medicine. The Australian Journal of Herbal and Naturopathic Medicine. 2026;38(1):8-9.

DOI <https://doi.org/10.33235/ajhnm.38.1.8-9>

Human societies have always adapted to environmental change, but adaptation depends on how challenges are framed. Climate change is now often presented in apocalyptic terms, a crisis so vast and irreversible that meaningful response feels futile. While intended to provoke urgency, this doomsday narrative often has the opposite effect. Fatalism paralyzes action, narrowing professional judgement and undermining agency at precisely the moment it is most needed.

Rejecting fatalism does not mean denying risk. History shows that when risks are named clearly and addressed pragmatically, human health outcomes tend to improve, not because threats disappear, but because knowledge, technology, and clinical practice evolve in response.¹ Climate change is real, accelerating, and consequential. A child born today will experience a world that is substantially warmer than the pre-industrial average, with climate shaping health risks across the lifespan.² The error lies not in recognising danger, but in assuming inevitability instead of responsibility.

For naturopaths, climate change is not an abstract environmental concern. Its effects are already visible in practice, through heat stress, respiratory and cardiovascular strain, pregnancy complications, psychological distress and displacement.^{3,4} In regions such as the Northern Rivers of NSW and parts of country Victoria, these impacts are lived realities. The question is no longer whether climate change affects health, but how clearly and competently we respond.

What receives less attention is how climate change affects the foundations of naturopathic practice itself. Herbal and other natural medicines depend on ecological stability. Shifts in temperature, rainfall, soil quality and biodiversity influence plant distribution, phytochemical composition, harvesting viability and supply continuity. Extreme weather disrupts cultivation and wildcrafting, while altered growing conditions can change the concentration of active constituents, with implications for safety, efficacy and consistency.⁵

This matters clinically. As environmental conditions become less predictable, so too does the material basis

of our medicines. Quality assurance, traceability and sustainability, already pressing concerns in herbal medicine, are intensified by climate stressors.⁶ These are practical issues that directly affect prescribing confidence and patient outcomes.

Climate change also shapes how illness is experienced and expressed. Emerging clinical presentations of climate-related distress and disease, including anxiety, grief, physiological stress responses, and exacerbation of chronic illness are increasingly recognised across healthcare settings.⁷

A pragmatic clinical response therefore requires a translational research agenda that matches the complexity of the problem. Mixed-methods approaches combining environmental data, biological sampling, psychological instruments, ethnographic insight, and practice-informed policy work, allow climate-related health effects to be understood as lived, clinical and contextual phenomena, rather than abstract trends. Naturopaths are well placed to contribute to this agenda, drawing on clinical observation, longitudinal patient relationships, and whole-systems thinking to inform research, education, and policy development. This approach supports workforce readiness and clinical education by equipping practitioners to recognise, communicate and respond to emerging patterns of climate-related distress and disease. Ecological loss is not only material, it is emotional, cognitive and collective, shaping how people experience health, threat and recovery.⁸

A doomsday narrative hinders the adaptive work now required. In contrast, careful, data-driven observation of environmental change supports professional agency. It allows clinicians to model informed, proportionate responses for patients—responses grounded in evidence, prevention and adaptation rather than despair.

Naturopathy has long recognised the inseparability of human health and the natural world. *Vis Medicatrix Naturae* assumes a functioning environment capable of supporting both physiological resilience and medicinal resources. Clean air, safe water, fertile soil and ecological continuity are not ideals, they are prerequisites for care grounded in nature.

The professional response, then, is not ideological but practical. If naturopathy is to remain credible and effective in a changing environment, we must be able to say clearly, “this is how climate change affects human health, and this is how it affects our medicines.” Doing so preserves clinical rigour, supports patient care and ensures the profession not only adapts to change, but participates in shaping the research, education and policy responses required for the future.

This quarter we present four original research articles that demonstrate how naturopathic research is contributing to the evidence base shaping contemporary clinical practice. Three focus on musculoskeletal conditions, an area in which pain and symptom burden have been shown to fluctuate with climatic variations,⁹ reinforcing the relevance of adaptive, whole-person approaches to care.

The first is a randomised controlled trial involving 60 people with rheumatoid arthritis, evaluating the effects of steam bathing over two weeks. The intervention resulted in reductions in pain, the primary outcome, alongside improvements in motor function and mental health. The second is a case report describing the healing journey of an individual with a bulging disc following an integrated naturopathic and yoga-based approach. The third is a clinical observational study examining biochemical changes in people with musculoskeletal disorders following naturopathic interventions and a plant-based diet.

The fourth article, a systematic review of pre-clinical and clinical evidence for *Juglans regia* (walnut) in diabetes, prompts reflection on both the potential influence of climatic change on the constituents and production of walnut plantations,¹⁰ and the clinical management of diabetes during and as a result of weather extremes, when physical activity may be reduced.^{11,12}

Alongside our regular summaries of published evidence for herbal medicine and naturopathic healthcare, and continuing professional education content, we hope you enjoy this first issue of 2026.

References

1. Pinker S. *Enlightenment now: The case for reason, science, humanism, and progress*. Penguin UK; 2018.
2. Watts N, Amann M, Arnell N, et al. The 2019 report of The Lancet Countdown on health and climate change: ensuring that the health of a child born today is not defined by a changing climate. *The Lancet*. 2019;394(10211):1836–1878. doi: 10.1016/S0140-6736(19)32596-6
3. Segal TR, Giudice LC. Systematic review of climate change effects on reproductive health. *Fertility and Sterility*. 2022;118(2):215–223. doi: https://doi.org/10.1016/j.fertnstert.2022.06.005
4. Khraishah H, Alahmad B, Ostergard Jr RL, et al. Climate change and cardiovascular disease: implications for global health. *Nature Reviews Cardiology*. 2022;19(12):798–812. doi: 10.1038/s41569-022-00720-x
5. Patni B, Bhattacharyya M, Kumari A, Purohit VK. Alarming influence of climate change and compromising quality of medicinal plants. *Plant Physiology Reports*. 2022;27(1):1–10. doi: 10.1007/s40502-021-00616-x
6. Mykhailenko O, Jalil B, McGaw LJ, Echeverría J, Takubessi M, Heinrich M. Climate change and the sustainable use of medicinal plants: a call for “new” research strategies. *Frontiers in Pharmacology*. 2025;15:1496792. doi: 10.3389/fphar.2024.1496792
7. Vela Sandquist A, Biele L, Ehlert U, Fischer S. Is solastalgia associated with mental health problems? A scoping review. *BMJ Mental Health*. 2025;28(1):e301639. doi: 10.1136/bmjment-2025-301639.
8. Marques LM. Solastalgia and mental health in the climate era: a perspective on ecological suffering. *Climate and Development*. 2025:1–8. doi:10.1080/17565529.2025.2610701
9. Smedslund G, Mowinckel P, Heiberg T, Kvien TK, Hagen KB. Does the weather really matter? A cohort study of influences of weather and solar conditions on daily variations of joint pain in patients with rheumatoid arthritis. *Arthritis Care & Research*. 2009;61(9):1243–1247.
10. Tyrgotov A, van der Maaten E, Gradel A, van der Maaten-Theunissen M. Growth responses of Persian walnut (*Juglans regia* L.) to climate variation along its full elevational range in Kyrgyzstan. *Dendrochronologia*. 2024;85:126203. doi: 10.1016/j.dendro.2024.126203
11. Frank LD, Adhikari B, White KR, et al. Chronic disease and where you live: built and natural environment relationships with physical activity, obesity, and diabetes. *Environment International*. 2022;158:106959. doi: 10.1016/j.envint.2021.106959
12. Ratter-Rieck JM, Roden M, Herder C. Diabetes and climate change: current evidence and implications for people with diabetes, clinicians and policy stakeholders. *Diabetologia*. 2023;66(6):1003–1015. doi: 10.1007/s00125-023-05901-y