

Invited commentary on “Greening the office: Saving resources, saving money, and educating our patients”

Loren C Shkolnik, FNP, David P Fivenson, MD*

Fivenson Dermatology, 3200 W. Liberty
Rd, Suite C5, Ann Arbor, MI, USA

*Author for correspondence:
Email: dfivenson@
fivensondermatology.com

Received date: January 17, 2021
Accepted date: April 30, 2021

Copyright: © 2021 Shkolnik LC, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

This commentary highlights the key points in the recent article by Blum et al. [1] that advocates for medical practices to adapt conservation measures to reduce waste and lower their carbon footprints. Healthcare in the United States produces considerable amounts of pollutants into the air, water, and soil. It is both a significant challenge and an opportunity for healthcare to reduce its carbon footprint. Medical offices, surgical centers and hospitals are responsible for 10% of chemicals that produce smog and 10% of greenhouse gasses [2]. Estimates show that the amount of greenhouse gasses and smog production from healthcare, among other factors, contributes to 405,000 years of disability-adjusted lives lost annually in the United States [2].

In the recent report entitled “Greening the office: Saving Resources, Saving Money, and Educating Our Patients” Blum et al. [1] outline conservation measures that could be undertaken by small practices to large hospital systems. These simple sustainable steps help practices become more environmentally conscious and less polluting.

A common question that arises among healthcare professionals is what does it mean to “go green” or to have a “green office”. Going green means implementing systems within your office (also home, hospital, school, etc.) that foster sustainability like preserving or optimizing the use of natural resources, reducing waste and pollution, and, ultimately, help mitigate climate change. The United Nations World Commission on Environment & Development defines environmental sustainability as “meeting the needs of the present without compromising the ability of future generations to meet their own needs” [3].

Medical practices can easily incorporate simple measures in order to reduce their climate and pollution impacts. Blum et al. [1] review some of the practices that can conserve energy including: powering-down electronics, lights and computers at night, using sleep or low-power modes when electronics are not in use, changing old light bulbs and/or fixtures in favor of high efficiency light-emitting diode (LED) light bulbs, keeping air conditioning systems set $\geq 74^{\circ}\text{F}/24^{\circ}\text{C}$ and heat $-68^{\circ}\text{F}/20^{\circ}\text{C}$ in the winter, and implementing smart plug strips to prevent power draining from machines that need to be continuously plugged in. They also mention improving existing office space by installing black-out blinds, motion sensor switches for lights and sinks, and low flush toilets/urinals. Practices can consider mitigating carbon emissions by installing bike racks and electric vehicle charging ports to encourage bike and electric vehicle usage, lessen local travel for meetings by using telecommunication, and purchase carbon offsets for essential travel. Additional energy savings strategies include solar panel and solar water heater installation, using cold water hand-washing, and speaking to your local power company to see if there are any options to purchase a plan using renewable energy sources [1].

There are many benefits to becoming a “green office”. One of the most immediate advantages is the monetary savings by implementing the aforementioned measures (MyGreenDoctor.com [4]). Beyond financial gains, “greening your office” results in a more responsible use of resources, fosters a healthier office environment, strengthens team-work and camaraderie among staff who together reduce energy consumption and waste in the office [1,5,6]. Additionally, healthcare professionals are seen as leaders in the community. Recycling, riding a bicycle to work, choosing hybrid or electric vehicles, and eating an environmentally sustainable diet low in meats, sets a great example

Citation: Shkolnik LC, Fivenson DP.
Invited commentary on “Greening the office: Saving resources, saving money, and educating our patients. Dermatol J. 2021; 1(1):1-3.

to the community on how to decrease their carbon footprint.

Starting the path to becoming a “green office” may seem like a daunting task. There are however multiple resources to make this an easy transition (see Table 1). One of the most simple ways is through the My Green Doctor website (www.mygreendocor.org). The website features prompt for 5 minute meetings that focus on small changes that can be made in the office. Each meeting is led by the “green team leader” and is outlined in an easy to follow guide. There are also many educational resources for staff and patients, such as waiting room brochures, handouts and posters. Once the meetings are completed and efforts are made to educate staff and patients, the office will be less polluting and eligible to become certified through My Green Doctor.

The deleterious effects of healthcare emissions on our environment and our climate are well-known. By actively choosing to preserve resources and reduce their carbon footprint, healthcare providers greatly advocate for the health of patients and the community. Collectively making these small changes in medical offices and hospitals can amount to significant benefits for all. The climate crisis has become the existential threat to humanity with its myriad of healthcare complications related with global warming. The Medical Society Consortium on Climate & Health has emphasized the mantra that ‘Climate Solutions are Health Solutions. We healthcare providers need to do whatever we can to reduce our carbon footprints while we care for those most vulnerable to this crisis.

Organization	Website	Key Services
American College of Physicians	www.acponline.org/advocacy/advocacy-in-action/climate-change-toolkit	Advocacy and toolkits to help doctors practice green
American Hospital Association	www.energytocare.org www.sustainabilityroadmap.org	Energy to Care: Tools to reduce energy usage. Ability to track energy data, awards for achievements in energy production Sustainability Roadmap: Reliable resources that can help organizations integrate sustainable practices
American Medical Association	www.ama-assn.org www.ama-assn.org/sites/ama-assn.org/files/corp/media-browser/public/ps2/transition-green-physician-practice.pdf	Short guide on how to adopt sustainable practices and save money
CDC- Climate and Health	www.cdc.gov/climateandhealth/	Supports state, tribal, local, and territorial public health agencies in preparation for specific health impacts of a changing climate. BRACE= Building Resistance Against Climate Effects.
Columbia University School of Public Health	www.mailman.columbia.edu/research/global-consortium-climate-and-health-education/courses-resources	Core competencies and resources for incorporating climate change education into health professional schools
Doctors for Climate Change	www.twitter.com/docsforclimate	Consortium of health care providers to share information about climate change and public health
Global Green and Healthy Hospitals Part of: Health Care Without Harm	www.Greenhospitals.net www.noharm.org	Environmentally responsible health care, works to transform health care worldwide, promote local community anchors for sustainability, environmental health and justice
IPCC- Intergovernmental Panel on Climate Change	www.ipcc.ch	Prepares comprehensive Assessment Reports on climate change
Medical Society Consortium for Climate & Health	www.medsocietiesforclimatehealth.org	Information for patients and health care providers, help with lobbying and advocacy
My Green Doctor	www.mygreendocor.org	A fully-scripted, free guide to “going green” that adds only 5 minutes to the office staff meeting
NASA	www.climate.nasa.gov	Collection of global warming resources for media, educators, weathercasters and public speakers
NOAA	www.noaa.gov/resource-collection/climate-change-impacts	Resource collection about climate change impacts, education and adaptation

Physicians for Social Responsibility	www.psr.org	Mobilizing healthcare professionals to get involved in global healthcare issues: Environment, Health and Nuclear Weapons
Practice Green Health	www.practicegreenhealth.org	Resources to practice green with focus on hospitals and large group environmental responsiveness and reducing footprints
Public Health Institute (PHI) - Center for Climate Change and Health	www.climatehealthconnect.org www.usclimateandhealthalliance.org	Building healthy and climate- resilient communities to mitigate and adapt to climate change.
Union of Concerned Scientists/Fight Climate Change	www.ucsusa.org	Fighting corporate and political attacks on science & combating global warming. Developing sustainable ways to food, power, and transportation resources
US Forest Service -Climate Change Resource Center	www.fs.usda.gov/ccrc	Resource center for climate change information and adaptation
US Global Change Research Program	www.health2016.globalchange.gov	Information on health risks of climate change, hub for information from multiple federal agencies and DOD, DOI, DOA, DOC, DOS, DOT, EPA, NASA, NSF, etc...
World Health Organization	www.who.int/globalchange/en/	Health care education and support in mitigation of climate related disease. Supports IPCC goals.

Table 1: Climate change resources for the health care professional.

References

1. Blum S, Buckland M, Sack TL, Fivenson DP. Greening the office: Saving resources, saving money, and educating our patients. *International Journal of Women's Dermatology.* Jan 2021;7(1):112-116.
2. Eckelman MJ, Sherman JD. Estimated Global Disease Burden From US Health Care Sector Greenhouse Gas Emissions. *American Journal of Public Health.* 2018 Apr;108(S2):S120-S122.
3. United Nations, World Commission on Environment & Development, “Our Common Future”, 1987;16, <https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf>
4. MyGreenDoctor.org. 2018. Big Savings Idea: Turn Off Your Hot Water Heater! <https://www.mygreendoctor.org/renewable-energy/>
5. Coates SJ, McCalmont TH, Williams ML. Adapting to the effects of climate change in the practice of dermatology-A call to action. *JAMA Dermatology.* 2019 Mar;155(4):415-416.
6. Fathy R, Nelson CA, Barbieri JS. Combating climate change in the clinic: Cost-effective strategies to decrease the carbon footprint of outpatient dermatologic practice. *International Journal of Women's Dermatology.* Jan 2021;7(1):117-121.