

Letters to the Editor

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Responses to Article on Benefits of Slowing Global Warming

Original Article: Slowing Global Warming: Benefits for Patients and the Planet

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TO THE EDITOR: I write to object to the article on global warming by Dr. Parker. Publishing this blatantly biased piece under the guise of a scientific article is disappointing. After the first couple of paragraphs, I looked again at the author's name because I halfway expected it to be Al Gore. The author states that "humans are largely responsible for these climate changes." This is a pejorative and scientifically controversial claim, to say the least. Referencing the Global Humanitarian Forum's estimate of 300,000 deaths per year caused by climate change is just not worthy of a reputable scientific journal like *AFP*.

"Consensus" is not science. It remains to be seen whether the scientific consensus surrounding climate change suffers the same fate as the 1975 theory that the planet would soon enter another Ice Age.¹ If it does, will Dr. Parker and the American Academy of Family Physicians (AAFP) have the courage and integrity to retract their opinions?

Using the Strength of Recommendation Taxonomy (SORT) evidence rating system, recommendations to slow global warming would receive a "C" rating, hardly a strong scientific endorsement. Using the U.S. Preventive Services Task Force evidence rating system, these recommendations would likely receive an "I Statement" grade.² It disturbs me greatly that my Academy would publish an article with this low quality of evidence and pass it off as clinical medicine.

JOHN SEALANDER, MD

Madison, Va.

E-mail: Dux4susi@aol.com

Author disclosure: No relevant financial affiliations to disclose.

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TO THE EDITOR: As a Residency Program Director, I am disappointed with the quality and content of the article on global warming. I lead a residency that goes to great efforts to teach high-quality, evidence-based practice patterns. We teach residents to critically evaluate evidence and to avoid blindly adopting practice patterns based purely on an emotional understanding of science and politics. The politically-charged theory of "global warming" or "climate change" to recommend various behavior changes is only theoretical and not grounded in quality science.

Our specialty should pride itself on its ability to sift through the mass of information to find elements of truth rather than opinions and theories. We are then tasked with educating our patients on what treatments and behaviors are proven to be beneficial. Perhaps this article was published in *AFP* to encourage a heated debate, but I would be very disappointed if our journal becomes a springboard for political debates rather than a purely scientific journal. This article was a major setback.

DAVID CONGDON, MD

Bremerton, Wash.

E-mail: David.congdon@med.navy.mil

Author disclosure: No relevant financial affiliations to disclose.

TO THE EDITOR: As a family doctor and a scientist, I was disturbed by the global warming article. Statements such as "humans are largely responsible for these climate changes" are not widely accepted scientific facts. It is the opinion of myself and many others that the "experts" of the Intergovernmental Panel on Climate Change¹ are pushing a political agenda that is based on uncertain science.

I am not arguing against the importance of being good stewards of this planet or even against energy conservation. It is becoming

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more and more apparent that our resources are limited. However, physicians should not abuse their positions as patient advocates by giving unfounded advice. Rather, we should strive to provide information that is as scientifically valid as possible and would improve patients' health. Why propagate Level "C" recommendations from suspect experts when we have much better reasons to tell people to eat less red meat and to exercise more?

I can't state it better than Dr. S. Fred Singer (professor emeritus of Environmental Sciences at the University of Virginia, research professor at George Mason University, and president of the Science and Environmental Policy Project): "The nations of the world face many difficult problems. Many have societal problems like poverty, disease, lack of sanitation, and shortage of clean water. There are grave security problems arising from global terrorism and the proliferation of nuclear weapons. Any of these problems are vastly more important than the imaginary problem of man-made global warming. It is a great shame that so many of our resources are being diverted from real problems to this non-problem."²

CHRIS IMPERIAL, DO
College Station, Tex.
E-mail: Cimperial69@gmail.com

Author disclosure: No relevant financial affiliations to disclose.

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TO THE EDITOR: The article on global warming addresses many important issues for physicians and patients regarding this topic. An important separate "at-risk" category is our homeless population who are at high risk of complications from global warming and even death for a number of reasons. Because most of their time is spent outdoors, the immediate impact from higher temperatures is obvious. Even indoor facilities, often supported by donations, might have poor ventilation or lack of air-conditioning. I see many homeless people dressed inappropriately for the ambient climate. At either temperature extreme, this can be life threatening. During the hotter summer days, this problem is compounded by many antipsychotic medications that can limit an appropriate sweat response. The anticholinergic side effects and potential for loss of central thermoregulatory set-point place our homeless population at very high risk for death from heat stroke. Global warming is clearly a

contributing factor. Physicians can make a difference by appropriately advising their patients who take these medications, educating those who volunteer or work at shelters, and keeping a close eye on those at higher risk.

GREGORY SULIK, MD

Marquette, Mich.
E-mail: Gerg88@gmail.com

Author disclosure: No relevant financial affiliations to disclose.

TO THE EDITOR: I would like to thank the author of the global warming article, Dr. Parker, for eliciting a call to action among family physicians to address climate change. As a resident physician, it has been disheartening to observe my mentors often dismiss this issue as too distant, too complex, or too insurmountable to address in clinical practice. Although we would do well to implement the patient counseling and advocacy Dr. Parker recommends, it is also important for physicians to serve as role models by changing our own behaviors.

Physicians who adopt positive dietary and activity habits are more likely to encourage their patients to adopt similar practices, are more likely be considered "believable," and are, ultimately, more successful at changing patients' behaviors.¹⁻³ Physicians who lead healthy lifestyles will also become more familiar with relevant resources in their communities, such as safe bike routes or where to buy locally grown produce, and, in turn, better understand both structural barriers and opportunities. It would behoove us to go beyond making changes to our workplaces, and begin by transforming our own habits of consumption. To this end, limiting live attendance at national and international meetings can significantly reduce our carbon footprints via reduced air travel.⁴

Although the medical system's lack of financial sustainability has garnered recent attention, I hope and anticipate that a new generation of family physicians will take the reins in addressing what will likely be the most significant threat to public health in our lifetime.

DAVID M. LESSENS, MD, MPH
Madison, Wis.
E-mail: david.lessens@fammed.wisc.edu

Author disclosure: No relevant financial affiliations to disclose.

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IN REPLY: I appreciate the letters from Drs. Sealander, Congdon, and Imperial who assert that climate change is just a theory and will be proven wrong. I doubt there is anything I could say or any peer-reviewed literature I could present that would change their minds.

It is true the evidence may never be incontrovertible, as we do not have another planet Earth to use as the control for this experiment. But, the data are vast and far-reaching, coming from all science disciplines including biology, chemistry, meteorology, and public health. New studies are published weekly in respected, peer-reviewed journals indicating that the climate is changing much faster than originally thought as a result of human activity, hindering our opportunities to prevent catastrophic climate change.

With all this evidence, why is it that such an important issue threatening the environment has become a litmus test for political affiliation? An important part of the answer is "heuristics." Not one of us could make it through a day without the help of heuristics—mental mechanisms we use to simplify the wealth of data we constantly receive so we can navigate our daily lives without having to think everything through, risking doubt, fear, or mental paralysis. Heuristics are adaptive, but they can impair our ability to process new information.¹

Denial is the easiest heuristic to describe, as we all do it. For example, we all have patients who smoke and deny that smoking is a personal and public health threat. This denial allows them to smoke without apprehension for their well-being or that of others. Many of us similarly deny the damage that excessive alcohol or fatty-food consumption means for our longevity. Denial is bolstered by myriad other heuristics that apply equally forcefully to climate change. Confirmation bias, the tendency to reconfirm our own beliefs from the available information, allows us to choose only those data that suit our existing notions.² Discounting helps us to avoid worrying about the future in favor of focusing on the present. Discounting explains how a cold weather event allows someone to "confirm" there is no climate change and, therefore, no need to worry about its future possibility.¹

Other heuristics also come into play when we think about climate change data. Humans are wired to be optimistic, to want to have the best experiences possible, to avoid losses, to believe only what they see or what a chosen authority figure believes who nonetheless may be inaccurate, and to have a bias toward growth at all costs.^{1,3,4} Those are among the well-researched mechanisms that would thwart many a keen mind from believing in climate change and its risks for significant losses; changes to our lifestyles; and even harm to the health of humanity. Awareness of these heuristics could help us to use them wisely to deter such threats as climate change.

Addressing the specific issues in the responses to my article, it was interesting that Dr. Imperial chose to quote Dr. Singer. After an illustrious career as an atmospheric physicist, Dr. Singer formed the Science and Environmental Policy Project in 1990 through which he posts his opinions on many topics, including his denial not only of human-caused climate change but also of the well-proven science linking chlorofluorocarbons to the destruction of the upper-atmosphere ozone layer, and the link between secondhand tobacco smoke and lung cancer.⁵

Dr. Sealander asks if I would be willing to retract my statements if global warming, like the theory of global "cooling" reported in a 1975 *Time* magazine article, is proven wrong. The answer is "yes," although I don't expect to have that opportunity.

I appreciate Dr. Sulik's reminder that homeless patients are especially vulnerable to the health effects of a changing climate's extremes. It is important to remember that there are multiple vulnerable populations who merit our careful consideration and advocacy, and many of these individuals will not make it into our offices for care.

Finally, Dr. Lessens notes that physicians are more believable and more likely to positively influence beneficial health behaviors in our patients if we lead by example. For physicians and patients alike, the recommendations in the article have cobenefits: improving air quality, increasing physical activity, and reducing dietary red meat all have health benefits, whether one *believes* that climate change is because of human actions or not.

We are among the most trusted professions, and naysaying what may be the most damaging public health threat ever not only breaks our covenant to truly care for our patients but also harms our profession and its essential values. My goal is not to persuade those whose thinking is set against climate change to simply believe me. Like most physicians who are taught to sift through a multitude of patient data to discern where the risks are and how best to eliminate them, my goal is to discern from the growing body of climate change research what the health risks are, and what I, as a physician and educator, can do to deter that harm. It is time for all of us to think about the data—and to think critically about *how* we think about the data—so we can, as a profession, play a significant role in ensuring the health of our patients and communities in the era of climate change.

CINDY L. PARKER, MD, MPH
Baltimore, Md.
E-mail: ciparker@jhsph.edu

Author disclosure: No relevant financial affiliations to disclose.

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EDITOR'S NOTE: We received dozens of letters about this article, the most ever received about a single topic. Several comments are in order:

1. Editorial independence: As indicated in our published policy, "The information and opinions presented in *AFP* reflect the views of the authors, not those of the journal or the [AAFP], unless so stated." The AAFP's position on climate change is: "In recognition of the numerous and serious adverse health consequences resulting from pollution, climate change and ozone layer depletion, the AAFP recommends strong action on all public levels to limit and correct the pollution of our land, atmosphere and water."¹

2. Purpose of the article: The article was not intended to present a detailed scientific argument for climate change. The clinical take-home points involved promoting healthy behaviors that would be good for the health of the patient and the planet. However, some readers objected to giving credence to the concept of climate change, or to the notion that human behavior has anything to do with any climate change that is occurring.

3. Scientific process: When Dr. Parker first proposed this article, we challenged the author to justify how this information could be of use to the office-based physician, in terms of improving practice and patient outcomes. The author replied with a detailed explanation about how physicians can counsel their patients in ways that would help their health, as well as be good for the environment—a double benefit. These included eating less red meat and using bicycles for exercise and transportation. Although we were aware that the issue of global warming is controversial, we did not think that these particular recommendations, which are consistent with current national guidelines on healthy diet² and physical activity,³ would be considered controversial.

As is standard for every clinical review article, the manuscript was independently assessed by two medical editors and three external reviewers. The reviews were supportive of the article's basic concept, and provided helpful recommendations to strengthen and increase its relevance to the practicing family physician.

To provide additional perspective on this topic, we solicited an accompanying editorial.⁴ It described the Healthier Hospitals Initiative, and also said: "the American Medical Association (AMA), in concert with the

American Nurses Association and the American Public Health Association, has strongly supported educating health professionals about the impacts of climate change. The AMA is a major participant in the Climate and Health Literacy Consortium, which has developed free standard PowerPoint presentations for hospital administrators and clinical staff."⁴

Finally, Dr. Parker is codirector of the Program on Global Sustainability and Health and director of the Global Environmental Change and Sustainability major and minor at Johns Hopkins Bloomberg School of Public Health, and is an expert in the field. We mention this to indicate that this article was not published without due deliberation and discourse.

4. The controversy: Although public opinion is mixed, the cause of climate change does not appear to be controversial among climate change scientists, with more than 97 percent of them agreeing with the concept of man-made climate change, according to a survey published by the National Academy of Sciences.⁵ Other medical journals have addressed the topic of anthropomorphic climate change, without indicating any evidence to the contrary.⁶⁻⁸ However, we are aware that many disagree.

Although we acknowledge the strong objections to our having published such an article, we encourage readers not to disregard the relevant clinical messages that were the reason for its publication.

JAY SIWEK, MD

Editor, *American Family Physician*

KENNETH W. LIN, MD

Associate Deputy Editor for *AFP Online*, *American Family Physician*

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