Editorials

The Physician's Role in Efforts to Slow Global Warming

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Dr. Parker's article in this issue of *American Family Physician* offers a concise presentation of the science of climate change.[1] Global warming will directly affect the health of our patients, communities, and planet; therefore, physicians and other health care professionals have a critical role in addressing the issue.

In 2007, greenhouse gas emissions attributable to the production of health care goods and services accounted for 8 percent of total emissions in the United States.[2] Hospitals are the largest contributors to health care's carbon footprint, responsible for an estimated 39 percent of the sector's greenhouse gas emissions.[2] Many major health systems and organizations committed to improving sustainability and safety across the health care sector have been participating in the Healthier Hospitals Initiative (HHI). The HHI is a coordinated sector-wide approach to the design, construction, and operation of hospitals.[3]

The HHI partner organizations have developed a number of innovative programs to foster climate-friendly health care institutions. One such valuable resource, *Addressing Climate Change in the Health Care Setting,* focuses on addressing seven major contributors to climate change in hospitals: energy conservation and efficiency, alternative energy generation, green building design, waste disposal and management (including recycling anesthetic gases), water conservation, transportation, and food service.[4] Myriad strategies for reducing the impact of each of these areas have been developed and successfully implemented at hospitals across the United States, with potential benefits to the general public health from reduced hospital-generated pollution.[4,5]

Other efforts to reduce the carbon footprint of hospitals include the Health Care Without Harm initiatives, Healthy Food in Health Care campaign and Balanced Menus Challenge.[6] These initiatives complement efforts to educate patients about reducing meat consumption outlined in Dr. Parker's article by changing hospital food procurement patterns to help prevent and mitigate climate change and related adverse health impacts.[7]

The links between our industrialized food system and climate change include: (1) fossil fuels that are consumed to run farm machinery and transport food over long distances; (2) fossil fuels related to heavy reliance on pesticides and chemical fertilizers; and (3) industrialized livestock production (e.g., fossil fuel–intensive grain to feed livestock, deforestation for feed production and pasture).[7]

Steps that health care facilities can take include procuring food produced in systems that eliminate the use of toxic pesticides and chemical fertilizers using ecologically protective and restorative agriculture (e.g., local, organic). Data from four institutions demonstrate that implementation of the Balanced Menus Challenge can yield substantial reductions in greenhouse gas emissions, as well as save hospitals money in food purchases.[8] Because the health care sector spends $12 billion annually on food,[9] this balanced menu approach can serve as a model for healthy food purchases in other sectors and encourage the more widespread availability of healthy foods. Thus, realignment of the hospital's food system can have positive health impacts well beyond our cafeterias.

Recognizing that education is key to the success of climate-friendly hospital programs, 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.[10]

Finally, Dr. Parker points to physician involvement in policy change. Historically, the clinical voice in policy arenas has been central to addressing environmental threats to patient health.[11,12] The potential of physician involvement in addressing climate change cannot be overestimated. For example, the California Medical Association has adopted numerous policies to prevent and mitigate climate change, including encouraging hospitals to implement better food-purchasing strategies.[11] The AMA has also adopted far-reaching policies that comprehensively address healthy food issues[13] and call for active engagement of physicians in other efforts to prevent and mitigate climate change.[14] This was underscored by a November 19, 2009, letter from the AMA to President Obama citing the "significant public

health implications" of climate change, and urging him to take a "strong and visionary stand for human health and the environment" by supporting robust climate change policies.

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