

GREEN HEALTHCARE IN AMERICA: JUST WHAT ARE WE DOING?

| Joel Kreisberg, DC |

The greening of America is taking us by storm this year—at least the American media would have us think so. The cover of the *New York Times Magazine*, April 15, 2007, offers Thomas Friedman, “The Greening of Geopolitics.” *The Economist*, June 2 2007, runs “Cleaning Up: A 15-Page Report on How Business Is Talking Climate Change.” The term *greening* is used to “improve business practices around the use of renewable resources, the environmental and human rights. This includes businesses that may want to operate in a socially responsible manner, as well as protect the environment.”¹ So what is healthcare doing to clean up the environment? If you are a physician, nurse, or acupuncturist, what are you doing to green medicine?

Essential to the green healthcare movement is Health Care Without Harm. Its mission involves “a global coalition of 443 organizations in 52 countries working to protect health by reducing pollution in the health care industry.”² Health Care Without Harm has achieved fabulous results. In 10 years, it has closed over 5,000 medical incinerators in the United States, eliminated the market for mercury thermometers, initiated over 100 new green hospital projects, helped hospitals phase out PVC (polyvinyl chloride)-based medical devices, advocated for healthy foods in hospitals, organized nurses to be environmental advocates, initiated the CleanMed Conference devoted to environmentally preferable medical products and green buildings, and helped launch Hospitals for a Healthy Environment, now an independent organization. On their Web site, a PowerPoint presentation by Robin Gunther is especially relevant for all of us to review if we are going to meet the challenges of the next 50 years of global climate change.²

Hospitals for a Healthy Environment was founded by the American Hospital Association, the U.S. Environmental Pro-

tection Agency, and Health Care Without Harm to create a national movement for environmental sustainability in health care. Its mission is “educating healthcare professionals about pollution prevention opportunities and providing a wealth of practical tools and resources to facilitate the industry’s movement toward environmental sustainability.”³ The primary focus of Hospitals for a Healthy Environment is on the safe handling of medical waste, including waste reduction, hazardous waste handling, managing facilities, and reviewing and participating in the creation of standards and regulations for hospital waste. Hospitals for a Healthy Environment hosts the CleanMed Conference, which will be held in Pittsburg, Pennsylvania in 2008.

The Collaborative for Health and the Environment, founded by Michael Lerner, president of Commonweal, “is a diverse partnership of individuals and organizations working collectively to advance knowledge and effective action to address growing concerns about the links between human health and environmental factors.”⁴ The activities of The Collaborative for Health and the Environment revolve around science, community, and communication. Through their Web site and Web technologies, they are bringing together current science to support prevention in healthcare. As a free-membership organization, The Collaborative for Health and the Environment provides collaborative opportunities, creating a community platform for diverse interest groups working in the health and environmental fields. Underlying all of the activities of The Collaborative for Health and the Environment is a commitment to strong, uncompromised science. The Collaborative for Health and the Environment and its partners share the conviction that under conditions of scientific uncertainty, when the potential for harm to human health and the environment is evident and scientifically

compelling, precautionary measures should be implemented to exercise exposure prevention. Science, collaboration, and action are the lynchpins of the call of The Collaborative for Health and the Environment for improved medical care and reduced exposure to environmental toxins.

Restoring public and ecosystem health by engaging communities and governments with effective application of science is the commitment of the Science and Environmental Health Network. Founded in 1994 by the Environmental Defense Fund, the Environmental Research Foundation, and OMB Watch, The Science and Environmental Health Network is a small virtual organization. Led by Carolyn Raffensperger and Ted Schettler, MD, the Science and Environmental Health Network “identifies information, ethical concepts, and logic that have the potential to provoke essential change; and helps communities, organizations, and governments develop and implement sound environmental policies.”⁵ Although the precautionary principle was not created by the leaders at the Science and Environmental Health Network, they promote its logic in public policy. The *precautionary principle* argues “that where there is scientific uncertainty and a reasonable suspicion of harm, we as community members have a duty to act to prevent more harm.”⁶

The Environmental Research Foundation was founded in 1980 to provide understandable scientific information about the influence of toxic substances on human health and the environment (www.rachel.org). Named after activist and author of *Silent Spring*, Rachel Carson, *Rachel’s Environment & Health News* provides a weekly free e-newsletter. Editor Peter Montague offers his insights on important issues in health and the environment. Brief, up-to-date news stories offer readers comprehensive coverage of the latest is-

sues related to health and the environment.

The work of these prominent organizations, Health Care Without Harm, Hospitals for a Healthy Environment, The Collaborative for Health and the Environment, Science and Environmental Health Network, and the Environmental Research Foundation represent important steps necessary for healthcare to move toward environmental integrity and sustainable goals. Although leaders who have undoubtedly leveraged change in the healthcare industry, none of these offer programs specific to the clinical practice of medicine! The greening of medicine and healthcare is enormously successful, but it is not directed at physicians and primary care providers. This is not to suggest that physicians aren't involved like Ted Schettler, MD, leader of the Science and Environmental Health Network, a former clinician. However, after reviewing the Web sites of these prominent organizations, most of the programs are for hospital administration, public health, and community health programs. Very few, if any significant, programs specifically target primary care practitioners.

There are a few worth mentioning. Physicians for Social Responsibility developed a free training resource called the Pediatric Environmental Toolkit,⁷ which provides information and tools to clinicians to conduct comprehensive environmental screenings. The National Environmental Education Foundation offers a Health & Environment Program "to advance environmental education and training for health professionals to improve healthcare and public health."⁸

The Teleosis Institute offers Green Health Care Online,⁹ a program designed for primary care and clinical medicine. The program introduces core concepts of sustainability, including renewable practices, environmental justice, and ecological integrity in usable, interactive components for primary care physicians. What does green healthcare look like when integrated with the clinical practice of medicine?

To begin with, green healthcare involves leadership. Green medicine requires clear vision and purpose. Leadership skills include personal mastery, communication skills, group facilitation, collaborative skills, and authenticity. Practicing green healthcare depends upon

leadership because of the lack of awareness regarding the issues of environmental sustainability in primary care. Green healthcare doctors serve as guides for fellow professionals, clinic staff, and patients. Green healthcare leaders value sustainability, equity, and ecology for long-term health goals. Leadership requires commitment and strength to integrate value, social capital, and environmental integrity.

Green healthcare values sustainability and social equity in the workplace. During the past several years, green buildings and green practices have become more commonplace. As mentioned, more than 100 green hospitals are in the planning or are in the building phase today. However, most medicine is still practiced in the same old buildings. Shifting to green operations can make a big difference. The principles of green building support the health of the occupants of the building, the local community, and the environment. Greening a clinic must involve more than changing light bulbs, although it is a useful step. All medical and non-medical staff must engage in and develop an understanding of how important the built environment is to personal, community, and environmental health. The social benefits of promoting sustainable practices such as resource conservation, waste management, and environmental performance is shared by all citizens of the clinic, including the patients, staff, and medical staff. Promoting community values and the value of personal, community, and environmental health is good for your health!

Practicing green healthcare involves a dialogue with place, the clinic building, the local community, and the environment. The value of the environment cannot be understated. Twenty-five percent of all disease worldwide is caused by poor environmental quality.¹⁰ Green healthcare emphasizes support for the health of the local community. For clinical and community medicine, this requires learning about local environmental health issues such as air and water quality or solid waste issues. A commitment to promoting the health of the environment improves human health by protecting and preventing environmental illness. This is best done through the development of a working understanding of local issues. Reconnecting with the passion for the outdoors

offers health benefits for professionals and patients alike, reaffirming our interconnectedness with the natural world. Recognizing environmental illness and promoting environmental health go hand in hand.

What most distinguishes *green healthcare* from the work of the other environmental health organizations is that green healthcare requires promoting sustainable medical practices. Although waste issues are important for a healthy environment, sustainable medicine begins with prevention. Not only do we need to dispose of our waste properly, we will have to generate less waste if we are going to effectively create healthy medicine on the global scale of 6 billion people. This begins with offering medical interventions at portal-of-entry medical clinics that support prevention and wellness. Preventative medicine is both cheaper and more effective.¹¹ Research continues to prove that diet and lifestyle interventions slow down the onset of chronic illness and lengthen life. It is easy to forget how effective proper sanitary measures are in delivering babies. Recently, the City of Berkeley, California, offered YMCA memberships to staff, removed vending machines filled with foods offering empty calories and highly refined carbohydrates from city offices, and completed ergonomic evaluations and renovations of 38 office workstations. These relatively simple changes saved \$6 million dollars in workers' compensation claims!¹² The city manager did not know how much money was wasted from missed days at work from repetitive strain injuries and back spasms!

The most forward-thinking writers on sustainability and medicine are Daniel Callahan,¹³ and Andrew Jameton and Jessica Pierce.¹⁴ Practicing sustainable healthcare in a clinical setting requires an understanding of the consequences of high tech and pharmaceutical medicine, such as the emerging issue of improperly disposed of pharmaceuticals in the public water systems. It requires offering sustainable treatment first, before more resource-intensive treatments such as surgery of high-dose pharmaceutical interventions. Saving more intensive treatments for only the necessary interventions is a consideration that comes with a more socialized medical system. Sustainable medicine values the role of nature in healing and asks physicians, health providers, and administrators to invest personally in the local clinical setting by committing to the health of

the community. Sustainable medicine is collaborative, supporting equitable distribution of services due to the importance of managing resources most effectively, which supports programs that have the greatest cost benefit.

The British Whitehall and Whitehall II studies¹⁵ provide useful perspectives for envisioning sustainable healthcare. The Whitehall II studies found that social determinants, including but not limited to work-related stress, health behaviors, and social economic status, had the greatest impact on overall health outcomes for people in both onset of chronic illness as well as mortality. Inferences can be argued, based on this study, that money spent on social programs such as food programs, community service programs and job skills development, and public health are more beneficial to the overall health of the entire population, more so than access to medicine. This does not mean that medicine doesn't play an important role in health and healing. It just reminds us again that investing in prevention and promotion of wellness are by far more effective, both in health measures and in economic measures; therefore, primary care medicine would be wise to promote and invest more in prevention and promotion. Sustainable medicine values public health measures and community responsibility—health professionals can take a lead role here.

Popular culture has taken an interest in saving our environment from the consequences of years of misuse. Global climate change is expected to have disastrous effects on our lives, including our health. Yet, the practice of medicine, with all its stories of remarkable cures and new technologies, has just begun to take seriously the potential for a leadership role in pro-

moting a sustainable world. After 10 years, hospital administrations are catching up and cleaning up the waste system of healthcare. Primary care can support the global effort for sustainable communities by integrating healthy medical clinics, promoting environmental health, and practicing sustainable medicine. The need for physicians to step up as leaders will only grow as we face the uncertainty of our environmental health. We have all the tools required. Health professionals can live up to their commitment to “do no harm.” Green healthcare offers a vision that is good for people and for the planet.

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