

# The Physician's Role in Society: Enhancing the Health of Individuals and the Public

## A physician discusses his experiences with Physicians for Social Responsibility and encourages others to become involved.

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We hear frequently that the model physician is a "triple threat" player, skilled at patient care, research, and teaching. I would submit that even this is not enough. To meet the full measure of professional responsibility, it is necessary to serve the community. This premise can be traced to the Hippocratic Oath, in which physicians pledge to "keep [patients] from harm and injustice." I interpret this as an exhortation to protect society as well as individual patients. During the course of our training, we gain specialized knowledge. While a great deal of what we learn is directed at caring for individual patients, we also discover that some of that knowledge has broader applications. Two examples make this point.

Dr. John Snow (1813–1858) was a London physician best known for his epidemiological observations on cholera, eventually published as *On the Mode of Communication of Cholera*. Snow's observations of the distribution of cholera cases led him to suspect that 1 source of the disease was the Broad Street public water pump. After he appeared before the city's Board of Guardians to make his case, the pump handle was removed—and the epidemic ended. Thus, Snow became an activist. He went beyond his own very considerable responsibilities as a practitioner, which included the administration of anesthesia to Queen Victoria during childbirth. His display of courage and commitment led to his recognition as one of the fathers of epidemiology [1].

The benefits associated with the removal of lead from gasoline are an example of a relatively recent triumph in public health. In the early 1970s, the average blood lead level of a US patient was about 16 µg/dL, a level that some thought was an irreducible minimum. While we all knew that lead poisoning caused severe neurological signs and symptoms, the effects of low-level lead intoxication were unknown. As the result of painstaking and often controversial epidemiological research, occasionally marked by rancorous attacks, it was shown that this "minimum" concentration of lead was producing low-level lead poisoning in children and reducing their IQs. Industry opposed the efforts of public health advocates to remove lead from gasoline. After lead-free gasoline became the industry standard, however, blood lead levels fell to an average of 1.7 µg/dL. This reduction is thought to be associated with a gain of 7-8 IQ points. For the nation and society as a whole, the impact is enormous. It translates into more gifted children and fewer who are mentally retarded.

For more than 20 years, I have committed time and effort to Physicians for Social Responsibility (PSR), a national organization of nearly 30 000 members, many of whom are medical students. Indeed, I was recruited into PSR by 2 students at the University of Miami. At that time, our efforts centered on preventing nuclear war. In the 1980s, the government was advocating the construction of bomb shelters and devising elaborate strategies for surviving a nuclear war that seemed increasingly probable. PSR showed that the destruction of the medical and social infrastructure coupled with environmental changes would make survival impossible for all but a few. Based on the premise that prevention is the only viable option for an untreatable condition, PSR advocated an end to nuclear testing, the negotiation of arms control treaties, and other steps designed to reduce the nuclear threat. Our movement spread to many other nations via International Physicians for the Prevention of Nuclear War, the group that contributed to the

end of the Cold War. For its efforts on this front, the International Physicians for the Prevention of Nuclear War won the 1985 Nobel Peace Prize.

Today, PSR's agenda has expanded to include the prevention of gun violence and the enhancement of health by environmental improvement. Now, as chairman of PSR's Environment and Health Committee, I work with my colleagues on a variety of issues ranging from greenhouse gases and mercury emissions from power plants to pesticides in our food. After a 1993 National Academy of Sciences report concluded that pesticides were a threat to children's health, the US Congress unanimously passed the Food Quality Protection Act, with multiple provisions to protect the health of children. The response of the multibillion dollar agricultural and pesticide industries has been predictable: opposition to any steps that would limit pesticide use. To protect their investments, they have sponsored experiments in which human volunteers have been fed a variety of pesticides. These experiments have been criticized on both ethical and scientific grounds [2]. One study implies that ingesting pesticides might make you smarter. Others involved as few as 6 participants, whereas statisticians assert that hundreds or even thousands would be necessary to form valid conclusions, depending on the margin of safety desired. A medical perspective that acts in the interest of health and for the prevention of injustice is necessary.

It is the professional responsibility of physicians to use our medical knowledge, scientific expertise, and ethical training to work for better public health. We must have a particular sensitivity to the needs of those least able to speak for themselves, such as children and the economically and socially disadvantaged. This is an era in which money talks louder than ever and appears to influence the development of public policy, as lobbyists stalk the halls of Congress seeking short-term gains that are often contrary to long-term health objectives. Good public health policy makes economic sense. Remember the unleaded gasoline story and think of the gains to society as measured in dollars or IQ. Help publicize recent White House data showing that environmental regulations costing industry about \$25 billion have led to \$150 billion in health savings. Protecting the environment is not only the right thing to do, it is good for the economy and it is good for national security. As a physician, you should be a part of that effort.

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## References

1. Dr. John Snow information. Accessed Feb 27, 2004.
2. Oleskey C, Fleischman A, Goldman LR, et al. Pesticide testing in humans: ethics and public policy. *Environ Health Perspect.* 2004.  
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