

A Medical Prescription For Survival

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(This article has been sent by Dr. Bernard Lown with a request that it be printed in the Pakistan Heart Journal and is condensed from his original article in *Lancet* Dec. 7, 1985.)

While many in our profession would concur about the unprecedented medical, economic, and ecological consequences of the arms race and nuclear war, they are reluctant to act on this issue in their capacity as physicians. Almost all would agree with the commitment of various professional societies to educate both the public and political leaders that "prevention is the only reasonable medical response." But must a physician's activities be limited to descriptions of the medical and environmental consequences of nuclear war? Or should physicians advocate and lobby for policies that will reduce the likelihood of nuclear war? We feel physicians must respond to the moral imperative of their commitment to life and health rather than worry about crossing the ill-defined boundary of the political realm. While the nuclear threat is a highly charged political issue, it is also the key public health issue of our era.

The highest duty of physicians in the nuclear age is marshalling professional resources to work for preventing the final epidemic. The struggle for human survival requires no apologies. It is consonant with the most hallowed traditions of medicine. Over a century ago, Rudolph Virchow, a principal architect of scientific medicine, maintained that "medicine is a social science, and politics nothing but medicine on a grand scale." He taught that, to improve the health of the public, the physician must not shy away from social action. The principles that Virchow espoused have even greater relevance today, when the question concerns not only the health but the very survival of life on earth.

In fact, the physicians' movement in opposition to the nuclear arms race has already affected

the political process. Because our message has been heard, one no longer hears about the possibility of keeping nuclear war limited or about nuclear demonstration shots to prove national resolve. Nor is there discourse about winning or prevailing in a nuclear conflict. The subject of civil defense preparation for nuclear war has become a butt for social satire. In many countries, concern about the nuclear arms race has gained respectability as a legitimate issue among political parties.

In less than 5 years, the International Physicians for the Prevention of Nuclear War (IPPNW) has grown to over 150,000 members in 41 countries. This antinuclear movement was founded by American and Soviet cardiologists. Indeed the most notable accomplishment of the IPPNW has been the broadbased, free-flowing dialogue between physicians of the two contending power blocs. Its success stems largely from an insistent avoidance of linkage with problems that have embittered relations between the superpowers. The IPPNW has resisted being sidetracked to other issues, even those which are morally compelling. Combating the nuclear threat has been IPPNW's total and exclusive preoccupation.

The IPPNW has not limited itself to dire prognostication. A year ago, at its fourth annual congress in Helsinki, IPPNW offered a medical prescription for peace. That prescription called for a comprehensive moratorium on all nuclear explosions. Such a moratorium is an achievable first step in slowing and then reversing the arms race.

A commonly heard objection to a moratorium on all nuclear explosions is the alleged difficulty of verifying a comprehensive nuclear test ban. However, seismologists have argued convincingly

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that there can be no substance to such doubts. In fact, it is now possible to verify nuclear explosions down to the one kiloton level, and the largest explosion that would have a 30% chance of escaping detection in any setting except an elaborate "salt dome" would be 0-5 kiloton. While an occasional explosion of such small size might go undetected, it is clear that in order to develop "improved" nuclear weapons systems, several such explosions would be necessary, decreasing drastically the chances that detection could be evaded.

The science of differentiating earthquakes from explosions has advanced substantially since the Limited Test Ban Treaty of 1963. Underground testing is now readily verifiable and does not require trust between the superpowers. There seems to be a broad consensus that what is lacking is not scientific skill but political will.

A complete testing moratorium is a prescription simple in concept, devoid of complexity, free of risk to either party, and verifiable without need for intrusive on site inspection. Perhaps most importantly, it has the ability to being unwinding the potentially doomsday process.

The experience of the Limited Test Ban Treaty of 1963 provides a historical precedent. On June 10, 1963, President Kennedy announced that the United States would no longer conduct atmospheric testing. Five days later Premier Khrushchev commended Kennedy and announced that the Soviet Union would discontinue production of strategic bombers; three weeks later it stopped atmospheric bomb tests. In 1963 a groundswell of world public opinion energized political leaders and provided them with the will to act.

While the LTB treaty put an end to atmospheric explosions by the United States and the Soviet Union, underground testing has proceeded at a brisk pace. Over the past ten years, an average of one nuclear device has been exploded weekly. In 1984, fiftythree nuclear devices were tested. Fortythree of these explosions were carried out by the United States or the Soviet Union. Continued testing is essential to the development of qualitatively improved nuclear weapons and indeed is a prerequisite for generat-

ing potentially destabilizing weapon systems with first-strike capability.

Physicians have the opportunity and the responsibility to prescribe an effective treatment to end this illness. A moratorium on all unclear explosions must be the first step.

(The Council of The International Physicians for Prevention of Nuclear War had earlier in 1985 ratified unanimously the Medical Prescription statement referred to by Drs. Lown and Pastore. That statement follows.)

A MEDICAL PRESCRIPTION FROM INTERNATIONAL PHYSICIANS FOR THE PREVENTION OF NUCLEAR WAR

The nuclear arms race threatens the health and the very existence of every human being on our planet. Because medicine can offer no meaningful response to the horrors of nuclear war, physicians worldwide have acknowledged their professional responsibility to work for the prevention of this final epidemic.

When faced with a life-threatening disease, a physician's responsibility does not end with diagnosis. It demands a prescription for interrupting the disease process itself. The International Physicians for the Prevention of Nuclear War have thus adopted a medical prescription for interrupting the greatest threat to human health.

An immediate moratorium on all nuclear explosions is the first essential step in stopping the nuclear arms race. This moratorium should remain in effect until the successful negotiation and signing of a universal comprehensive test ban treaty.

The benefits of this physicians' prescription for the prevention of nuclear war are evident:

1. A nuclear test ban is a clear focal point for rallying world public opinion behind a single, important, and readily achievable arms control proposal, thus sidestepping the paralyzing complexity of most other proposals.
2. A nuclear test ban does not depend on trust. It is sufficiently verifiable even

without on-site inspections. Modern seismic techniques can distinguish earthquakes from underground explosions as small as one kiloton.

3. A nuclear test ban will impede the development of new generations of nuclear warheads, including those designed to power space-based systems, those capable of acting as first-strike weapons, and those that are so small and mobile that future arms control verification might be impossible.
4. A nuclear test ban would not decrease the security of any country.
5. A nuclear test ban would strengthen the Non-Proliferation Treaty. That treaty states: "Recalling the determination. . . to seek to achieve the discontinuance of all test explosions for all time and to

continue to this end. . . Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date."

6. A proposed nuclear test ban provides a litmus test for distinguishing those politicians who are committed to ending the arms race from those who tolerate its continuation.

Finally, the achievement of a nuclear test ban will create both psychological momentum and a political climate in which additional disarmament achievements will be possible.

For these reasons the International Physicians for the Prevention of Nuclear War have adopted a moratorium on all nuclear explosions as their medical prescription for the coming year.

