Family Practice Forum

The Family Physician and Nuclear War

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Stretch your imagination to encompass the following fantasy: The federal government, possibly influenced by the lobbies for the dairy industry, the tobacco growers, and the manufacturers of reclining chairs, decides that it is in the national interest to promote the consumption of saturated fats, increased cigarette consumption, and the avoidance of exercise. Lest patriotism alone and the desire to stimulate the national economy prove insufficient to counterbalance the feared health risks of this national policy, the government launches a public education campaign entitled, "You *Can* Survive Coronary Disease." Hopeful estimates of the very few millions of people who will be killed or disabled as a result of this new policy are presented in congressional testimony. Furthermore, the administration spokesmen contend, we can take positive steps to counter the health risks: if all men over 40 years of age were to take four aspirin a day, the prevention of platelet aggregation might be enough to outweigh some of the other risks and ensure that a much larger percent of the population would survive.

Programs are to be set up at the local level across the nation to oversee the proper distribution of the aspirin tablets and to educate the public as to the benefits of the proposal. Naturally, the local primary care physicians are expected by the federal authorities to play a key role in helping to organize and to legitimatize these efforts. Family physicians as a group are asked to participate wholeheartedly in the "You *Can* Survive Coronary Disease" campaign.

Would you join?

One hopes that the reaction of the medical community to this bizarre proposal would be one of outrage. Physicians, however patriotic or concerned about the national interest, would appear to have a special obligation to denounce any national policy that markedly increases the risks of death or disease for the population of this country. Physicians would seem to have an even stronger obligation not to participate and hence to lend legitimacy to any "public health" effort that is merely a Band-aid approach but that might fool the public into thinking that the health risks have been mitigated and therefore into supporting the new national policy under false pretenses.

If this, then, ought to be the reaction of physicians to this fantasy policy, what ought to be the reaction to the current national policies regarding nuclear armaments and nuclear war?*

Compared with an account of the medical consequences of a nuclear war,[1,2] the Framingham data read like a narrative of the discovery of the fountain of youth. Even a single nuclear explosion over a large city would produce, among those not killed outright, ten times as many cases of severe burns as could be accommodated by all the burn units in the nation. A larger scale attack is predicted to produce 86 million deaths immediately, 50 million more deaths in the next several weeks from fallout, dehydration, malnutrition, and exposure, and 15 million deaths in the following months from epidemics of infectious diseases such as plague and tuberculosis. To respond to this calamity, the 20 percent or so of all physicians who

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*Nothing in this paper is intended to apply specifically to the Civilian-Military Contingency Hospital System, which has recently been debated in the medical press (Beary JF, Bisgard JC, Armstrong PC: *The civilian-military contingency hospital system (CMCHS): Pro and con. N Engl J Med 306:738, 1982),* to the extent that that proposal attempts to deal solely with military casualties from a conflict outside US borders. The comments in this paper are directed at any plan which claims to be aimed at softening the impact of a nuclear attack upon the US population by emergency-preparedness means.

0094-3509/82/080371-03$00.75

have survived the attack (physicians tend to be concentrated in the prime target areas) will have few remaining hospitals with x-ray or laboratory facilities, almost no stocks of drugs or vaccines, nonfunctioning systems of transportation, communications, and sanitation, and nearly 200 acutely injured survivors per physician requiring immediate attention.

The data to support these assertions and a more detailed list of the predictable medical consequences of nuclear war have been well documented elsewhere.[1,2] Increased awareness of this issue among physicians has been prompted by some ominous indications that US defense policy may be shifting away from the notion that a nuclear war is unwinnable, and the only sane posture is one of adequate deterrence to ensure that no such war occurs, toward the notion that we can win a nuclear exchange, that nuclear wars can be successfully limited so as not to lead to full-scale holocaust, that nuclear adventurism should be kept open as a policy option in our foreign affairs, and that a commitment to civil defense can adequately negate the increased risk to the population posed by increased readiness to resort to nuclear weapons.

We have recently seen a renewed interest in fallout shelters, after this idea had sunk into well-deserved oblivion in the mid-1960s. The optimistic emergency-preparedness estimates generally do not take into account that a fallout shelter located at a distance from the blast site cannot promise the survival of its inhabitants unless it contains at least sufficient food, uncontaminated water, sanitation facilities, and an independent power source to maintain all these for a period of up to four weeks. (This also assumes that the at-risk population would be able to arrive at the shelter given no more than 15 minute's warning of attack.) A shelter located in the blast zone itself would be effective only if it provided deep, underground, reinforced concrete blast protection and an independent source of oxygen in addition to the previously listed facilities. Experience in the World War II firestorms of Dresden, Hamburg, and Tokyo, as well as the Hiroshima and Nagasaki blasts, proves that the usual type of underground shelter simply turns into a death trap as the high heat, raging fires, and several-hundred-miles-per-hour winds suck out all the available oxygen. It is very likely that this country would be unable to afford to build really adequate shelters to protect the urban population centers even if the entire 9 percent of the gross national product that now is devoted to health care costs were to be diverted exclusively to this use.

What, then, should be the response of the family practice community to this issue? We can start by eliminating two courses of action that are inappropriate. The first is to do nothing on the argument that such broad policy issues really have nothing to do with medicine and physicians as a group have no power to effect change. It must be admitted that when one becomes aware of the awesome magnitude of the risks, avoidance and denial are very tempting. No disease, no hazard, no public health threat that we physicians deal with on a daily basis begins to come close to nuclear war in its potential for the destruction of our race and our ecosystem. If physicians as a group did everything possible to head off this threat, the results we most fear could still occur; but we can be even more certain that if everyone who ought to be concerned does nothing, the results we most fear will almost certainly occur.

The second inappropriate course of action would be to launch single-handedly a national crusade, claiming that simply because we are physicians and are worried about people's health, our views are the correct ones and should be listened to. While we can speak with authority about the magnitude of the medical risks and the inadequacy of the health care system to mitigate them, it would be pointed out correctly that our medical training does not make us experts in foreign affairs, armaments policy, or international negotiations. The articles referred to above[1,2] do an outstanding job of restricting their pronouncements to the medical sphere and avoiding pronouncements or recommendations that go beyond legitimate medical expertise; these are the most effective examples to follow.

We can then look for some legitimate and politically effective roles that the individual physician or local medical organization can occupy.

1. The physician can remain educated to the dangers and be able to answer authoritatively any questions about medical consequences of nuclear war raised by concerned patients or community groups.

2. The physician community can refuse abso-

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lutely to participate in any local civil defense or emergency preparedness planning or related activities. At first sight this sounds terrible—how can physicians refuse their services in the face of such a great need? But this argument does not apply in cases where the advance planning for disaster might actually make the disaster more likely to occur. If physicians and hospitals refuse to participate, the gaps in the emergency preparedness plans will be blatantly obvious, and our national leaders will be forced to base policy on the assumption that any nuclear exchange will produce unacceptable civilian casualties. If, on the other hand, the medical community acquiesces, the government and the public may be lulled into a false sense of security and may be prompted to adopt a more adventuristic military posture while placing less effort in arms control negotiations. It must also be remembered that refusal to participate in civil defense would be based, not on an abstract disagreement over policy, but on hard facts that strongly suggest the futility of trying to save lives by those means—the facts which show that shelters and disaster plans will be as effective in averting the dangers of nuclear war as a few aspirin tablets would be in averting the risk of coronary disease in a population of sedentary, hyperlipidemic smokers.

3. As noted already, it is ethically inappropriate and probably politically counterproductive for the average physician to pose as an expert on defense policy and arms control. But the average physician, in his or her role as citizen and voter, can ask hard questions about a national posture that claims to be reducing the risk of nuclear holocaust by increasing the number of nuclear warheads available and by giving our potential foes no reason not to follow suit. Specifically, individual physicians and political action committees should consider the consequences of supporting any candidate for national office who favors "limited" nuclear war, an all-out civil defense program in preparation for a possible nuclear war, or a moratorium on arms control negotiations.

References

1. Abrams HL, Von Kaenel WE: Medical problems of survivors of nuclear war. N Engl J Med 305:1226, 1981
2. Lown B: Physicians and nuclear war. JAMA 246: 2331, 1981