

The origins of Physicians for Social Responsibility (PSR) and International Physicians for the Prevention of Nuclear War (IPPNW)

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Abstract

This article reviews the beginnings and history of the physicians' antinuclear movement. The role of Victor W. Sidel, MD, is described, particularly his involvement with Physicians for Social Responsibility (PSR) and International Physicians for the Prevention of Nuclear War (IPPNW).

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I am honored and delighted to be part of this wonderful celebration. My tasks today are to describe the origins of Physicians for Social Responsibility (PSR) and briefly International Physicians for the Prevention of Nuclear War (IPPNW), to review the political climate and events of the mid 20th century that led to their formation, and, importantly, to discuss Dr. Sidel's role in their formation.

Vic Sidel and I go back a long way. We were medical school classmates and met first in 1953. Our paths have often diverged but invariably converged around the issues of nuclear war, radiation effects, the role of the physician, and, in particular, Victor's early and unique contribution, the connection between the cost of the arms race and its social implications.

Before beginning a brief historical review of the world of the mid-20th century, perhaps we ought to see Dr. Sidel at that time (Figure 1). This is the Peter Bent Brigham medical house staff picture from 1959. In Figure 2, we see another picture of Vic

Sidel 26 years later, on December 1985, with Jack Geiger and me in Oslo, when IPPNW won the Nobel Prize—a culmination of years of effort by many dedicated physicians and others.

Nuclear issues were then becoming a grave concern to many. But American medicine paid little attention. "Nuclear issues are political issues." "Doctors should not become involved." "These are matters best left to 'experts.'" Two years later, PSR changed this and initiated the physicians' antinuclear movement. It is a story worth telling.

Figure 3 shows a timeline of historical events.

On August 3, 1939, Albert Einstein sent a letter to President Franklin Delano Roosevelt saying,

Some recent work ... leads me to expect that the element uranium may be turned into a new and important source of energy in the immediate future. Certain aspects of the situation which has arisen seem to call for watchfulness and, if necessary, quick action on the part of the Administration. ...[I]t may become possible to set up a nuclear chain reaction in a large mass of uranium, by which vast amounts of power and large quantities of new radium-like elements would be generated. [I]t appears almost certain that this could be achieved in the immediate future. ...[I]t is conceivable ... that extremely powerful bombs of a new type may thus be constructed.¹

Einstein urged accelerated uranium research and implied that secret German research had already started. Roosevelt initiated government support for nuclear research. The nuclear age had begun.

What prompted Einstein's letter? In August 1964 in *The New York Times*, the physicist Ralph E. Lapp described the events that led up to the letter.² Leo

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**Figure 1: Harvard Medical School, Class of 1957
Dr. Sidel stands slightly to the right of center in the third row**



Szilard and Eugene Wigner, both eminent physicists concerned about the German threat, visited Einstein while he was vacationing on Long Island. They were chauffeured by, of all people, Edward Teller, whose fame as a physicist was transcended by his staunch and unwavering advocacy of nuclear weapons as an essential component of American safety and sovereignty.

Later Einstein famously wrote: “The unleashed power of the atom has changed everything save our modes of thinking and we thus drift toward unparalleled catastrophe.”³

On July 16, 1945, the first nuclear device, curiously named “Trinity,” was exploded at Alamogordo, New Mexico. On August 6 and 9, 1945, Hiroshima and Nagasaki were bombed, killing and injuring hundreds of thousands of people.

In 1949, the Soviet Union detonated its first nuclear device. In 1950, President Truman approved a

program to build a hydrogen bomb. On March 1, 1954, the hydrogen bomb “Bravo” was tested at Bikini Atoll, causing severe radiation exposure to a Japanese fishing crew 85 miles away. The explosion was equivalent to a thousand Hiroshima bombs. It ignited international concern about the dangers of nuclear testing and sparked a global campaign to end it.

In the years 1945 to 1963, there were approximately 500 atmospheric nuclear tests, most of them conducted by the United States and the USSR.

In 1957, the Committee for a Sane Nuclear Policy (SANE) was founded. Other like-minded organizations included the Nuclear Weapons Freeze Campaign, Women Strike for Peace, and countless religious and socially concerned groups. Also in 1957, the Soviet Union launched the first orbital space satellite, Sputnik, and the UK conducted its first nuclear test.

In 1958, the Campaign for Nuclear Disarmament was founded in the UK. There was enormous public interest worldwide. The journalist I. F. Stone wrote,

A UN committee has discovered that nuclear test radiation is harmful to world health.... The truth is that no one knows just how and to what degree radiation is harmful.... This is a question that the average man may be equipped to answer as well as the scientist. Have we the right to poison the lives of some now living and many more to be born in the future, all for the sake of carrying on an endless arms race that makes all humanity vulnerable to accident and miscalculation?⁴

In 1959, Sir Philip Noel-Baker was awarded the Nobel Peace Prize for his long-term dedication to disarmament. We will hear more about him soon, but I should mention that he is the only person who has won both a gold medal in the Olympics (as a runner in 1920) and a Nobel Prize.

In 1960, France conducted its first nuclear test. In 1961, Yuri Gagarin of the Soviet Union became the first human to orbit the earth. High levels of strontium-90 were found in children's teeth, and a mothers' group centered in St. Louis initiated a campaign to outlaw nuclear testing.

Throughout these turbulent years, the medical profession remained silent. Why? Some of you will remember how amazingly conservative organized American medicine was at that time. Thwarting all attempts to "socialize" medicine was the major AMA target: "Nuclear issues are political, not medical." "Doctors have no particular expertise and should not meddle in things they know nothing about."

It was in this environment that PSR was born. It happened almost by accident; I was privileged to be there at its conception.

One day late in March 1961, Dr. Roy Menninger of the famous Menninger psychiatric family, then at the Brigham, contacted Bernard Lown, MD, and me (I was Lown's cardiology fellow), inviting us to hear Sir Philip Noel-Baker speak about the health threat of the high levels of radioactivity caused by nuclear weapon testing.

On a cold March night, we journeyed to an old Victorian ark of a house in Cambridge where the

**Figure 2: IPPNW receives the Nobel Peace Prize
Drs. Jack Geiger, Victor Sidel
and Sidney Alexander (left to right)**



widow of John Marquand, a famous chronicler of the foibles of the Boston Brahmins, regularly held court. There, surrounded by members of the liberal Cambridge community and numerous cats, Sir Noel-Baker described in compelling and frightening terms the potential health threat of radioactivity, the increasing public anxiety, and the vague, inadequate, and paternalistic government responses. Strontium-90 had found its way into the food chain and was now detected in infants' teeth. Parents were alarmed and demanded answers. Few were forthcoming. One of my teachers, a famous pathologist and advisor to presidents, Shields Warren, MD, had stated unequivocally that there was no evidence that low-level radiation posed any medical risk.

Noel-Baker ended with a plea for more information, particularly urging biologists and physicians to study the issues of radiation danger more closely. As we left that evening, Bernard Lown turned to Roy Menninger and me and said, "We must do this; it is our responsibility." He might have even said it was our "social responsibility"—hence the rather cumbersome and somewhat inaccurate title chosen for the organization. At this moment, PSR was conceived.

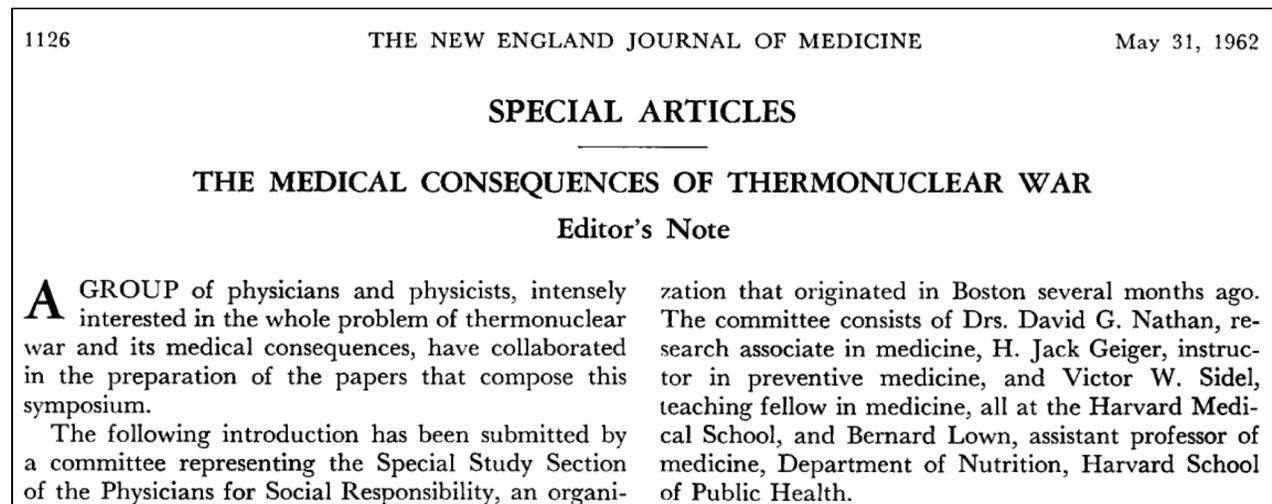
Just a few days later a small group of us, including Vic Sidel, began meeting regularly in Bernard

Figure 3. Nuclear Timeline

1939	August 3: Albert Einstein writes to President Roosevelt
1945	July 16: First nuclear device exploded at Alamogordo, New Mexico
	August 6: Hiroshima bombed
	August 9: Nagasaki bombed
1945–1963	About 500 nuclear explosions
1949	USSR detonates its first nuclear device
1950	President Truman approves program to build a hydrogen bomb
1954	Hydrogen bomb, Bravo, detonated at Bikini Atoll
1957	Formation of anti-nuclear groups: <ul style="list-style-type: none"> • Committee for a Sane Nuclear Policy • Nuclear Weapons Freeze Campaign • Women Strike for Peace • Many other religious and socially concerned groups
	USSR successfully launches Sputnik
	UK conducts its first nuclear test
1958	Campaign for Nuclear Disarmament founded in the UK
1959	Sir Philip Noel-Baker awarded the Nobel Peace Prize for his long-term dedication to disarmament
1960	France conducts its first nuclear test
1961	Yuri Gagarin of the USSR becomes the first human to orbit the earth
	Increased Strontium 90 in children’s teeth
	Mothers campaign to outlaw nuclear testing
	Physicians for Social Responsibility (PSR) founded
1962	May: Publication in <i>New England Journal of Medicine</i> of proceedings of PSR’s symposium on “Medical Consequences of Thermonuclear War”
1963	Limited Test Ban Treaty approved by Congress
1970–1977	Détente, Vietnam, domestic issues divert attention from nuclear issues; PSR and most other anti-nuclear groups become less active
1978	PSR revived by Helen Caldicott and colleagues
1979	International Physicians for the Prevention of Nuclear War (IPPNW) founded by Bernard Lown, Eugene Chazov, and colleagues
	Three Mile Island nuclear plant explosion
1983–1984	PSR becomes the American affiliate of IPPNW
	PSR expands its mission to include social justice, other environmental issues, violence
	Medical Student and International Committees are formed
	Physician exchange programs are begun
1985	IPPNW awarded Nobel Peace Prize
1987–1988	Victor Sidel is President of PSR, succeeding Jack Geiger
2011	PSR celebrates its 50 th anniversary
2013	PSR continues as an important national organization not only of physicians but also of other medical professionals and students

Adapted from: Lown B. *Prescription for survival*. San Francisco: Berrett-Koehler Publishers; 2008.

Figure 4.



Lown's living room. Lown was unanimously elected president, and Sidel vice president, of the fledgling organization. We started by reviewing the existing literature. While there was significant concern about the dangers of the arms race, there was very little information regarding the medical consequences of atmospheric radiation. Nor was there any conception of what would happen if the new nuclear weapons, a thousand times as powerful as the Hiroshima bomb, were detonated in heavily populated areas.

When it became clear that no satisfactory literature existed, we decided to produce a series of articles describing the medical consequences of increased atmospheric radiation levels and an actual nuclear explosion in a metropolitan area. By this time our ranks had increased to perhaps a dozen Boston physicians and scientists. Writing teams were assigned topics. To my regret, Dr. Lown decided that my role was to continue our cardiology projects, which were indeed a full-time job. Others would do the writing.

The results, titled "The Medical Consequences of Thermonuclear War," were published in *The New England Journal of Medicine* in May 1962,⁵⁻⁹ but not before a major struggle between Joseph Garland, MD, editor of the journal, and his editorial board. There was strong opposition to publishing these articles. Again, nuclear weapons were not considered a medical issue, but a political one. Garland held fast and wrote a memorable introduction (Figure 4):

A group of physicians and physicists intensely interested in thermonuclear war and its medical consequences have collaborated in the preparation of the papers that compose this symposium.... The articles are written to describe the biologic, physical and psychological consequences of a thermonuclear attack.... Why should physicians be especially interested in the problem? The answers are clear; no single group is as deeply involved and committed to the survival of mankind. No group is as accustomed to the labor of applying the practical solutions to life threatening difficulties. Physicians are aware, however, that intelligent therapy depends on accurate diagnosis and a realistic appraisal of problems.... The rapid rate of arms development has been reflected in the changing and at times contradictory civil defense program. The public seeks truth and a coherent policy. Yet the magnitude of the spiraling arms race, complexities of the cold war, and the ever increasing size of the government, produce a broadening gulf between citizens and the decision making process. It is essential for physicians, in their role as protectors of the health and the community and advisors to their patients, to become fully informed.... The article of Sidel and his colleagues analyzes specific medical problems and explicit choices which will be faced by the surviving physicians in an attempt to give medical care in the postattack period.⁵ (Figure 5)

Other papers described the destruction that would occur from a bombing of metropolitan Boston, the inadequacy of the medical response, and the psychological problems that would be produced.

The series created a sensation. We received extensive media coverage and became instant experts. The Defense Department asked us to help define the medical problems associated with thermonuclear attacks. Requests for reprints greatly exceeded our capacity to fill them. We quickly grew from a few Boston physicians to a nationwide organization of several hundred.

The public was becoming increasingly aware of the nuclear danger and ready to support a brave political act by President John F. Kennedy. In 1963, he declared that the United States would stop polluting the atmosphere and unilaterally cease testing nuclear weapons above ground and in the sea. He challenged Chairman Khrushchev to do the same. The challenge was promptly accepted. Averell Harriman negotiated the Limited Test Ban Treaty in less than three weeks, a remarkable example of what arms control negotiations can accomplish when the political will, strongly influenced by public opinion, exists.

As important as that treaty was in keeping our environment relatively free from radioactive pollution, it is tragic that the two superpowers could not agree on a complete nuclear test ban. If you cannot test, it is difficult to develop new weapon systems. The arms race might have been considerably

slowed. But questions of verification, quibbling about the number of allowable inspections, and mutual distrust scuttled the passage of such a treaty.

Throughout this period, PSR remained busy and active. We conducted numerous grand rounds, medical lectures, and programs for general audiences. We emphasized the medical model: nuclear war had no treatment, and prevention was the only effective intervention. During this period, Vic Sidel was perhaps our most eloquent spokesperson and teacher. He was the first among us to emphasize the societal consequences of the arms race, aptly described as “Destruction before Detonation.” Later, in a series of memorable lectures, with a metronome ticking in the background, or coins clinking as they dropped into a bucket representing the money consumed by the arms race, he evocatively wed the issues of nuclearism and social justice.

In the late 1960s, détente, the Vietnam War, and a host of domestic issues seemed more important to many of our members and activity dwindled. PSR was kept alive through the efforts of Richard I. Feinbloom, MD, who maintained its nonprofit status. Its rebirth beginning in 1978 occurred chiefly through the efforts of Helen Caldicott, MD, aided by a cadre of previous PSR members, Vic Sidel prominent among them, and a new generation of anti-nuclear physicians. A short while later, Bernard Lown in the United States and Eugene Chazov in the USSR, with several others, began IPPNW.

Last year Vic and Ruth Sidel, my wife Susan,

Figure 5.

II. The Physician's Role in the Postattack Period*

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MANY monographs and articles¹⁻⁸ have been written to acquaint physicians with the medical problems that might follow a thermonuclear attack on this nation. Often, these articles rely on experience with previous disasters — for example, the New England hurricane of 1938, the Cocoanut Grove fire of 1942, the Texas City explosion of 1947, the fire bombing of Hamburg in 1943 and especially the nuclear bombing of Hiroshima and Nagasaki in August, 1945.⁹

inapplicable) and considers the implications for disaster planning.

A thermonuclear attack poses a series of questions for physicians. How many persons will be killed outright? How many will be fatally injured? How many will be injured, but survive? Similarly, how many physicians will be killed or injured? How many hospital beds will be destroyed, and how many will remain intact? Will any necessary medical supplies — drugs, plasma, blood, dressings, instruments and the

and I were hosts at the 50th anniversary celebration of PSR in Washington, DC. Today it remains a vibrant, effective organization whose mission has spread beyond nuclear issues. Vic Sidel remains a Board member and a major force in PSR, and we are exceedingly grateful for his continued efforts.

Let me close with a quote from the PSR Statement of Purpose published shortly after the organization's inception:

We believe that a physician's response to the nuclear challenge stems from his dual role as scientist and clinician. As scientist he is custodian of technical information.... It is the physician's responsibility as scientist to study the medical consequences of nuclear testing, of attack by chemical or biological weapons and of thermonuclear war.... It is the physician's further responsibility as scientist to share his knowledge with the public.... But the physician's responsibility goes beyond his role of scientist. He is also a clinician, often forced to make decisions affecting human life while relying on data which admit of no certain conclusions. He is an active participant, not only an impartial supplier of information.... The aim of PSR is to provide for the medical community and the general public the scientific data on which political decisions must in part be based; to alert physicians to the dangerous implications of the arms race; to involve physicians in serious explorations of peaceful al-

ternatives and to develop support for programs promoting effective disarmament and peace.

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