On August 6, 1945, an American B-29, the *Enola Gay*, dropped an atomic weapon on the Japanese industrial center at Hiroshima. With a single bomb, the United States completely incinerated a four-square-mile area at the center of the previously undamaged city.

Many Americans learned about the effects of the bombing from John Hersey, an American journalist who was covering the war in the Far East. *Hiroshima*, which originally appeared in *The New Yorker*, was published as a book in 1946.
hear, "Sensei! Doctor!" and the less seri-ously wounded came and pulled at his sleeve and begged him to go to the aid of the worse wounded. Tugged here and there in his stockinged feet, bewildered by the numbers, staggered by so much raw flesh, Dr. Sasaki lost all sense of the profession and stopped working as a skillful surgeon and a sympathetic man; he became an automaton, mechanically wiping, daubing, winding, wiping, daubing, winding....

Early that day, August 7th, the Japanese radio broadcast for the first time a succinct announcement that very few, if any, of the people most concerned with its content, the survivors of Hiroshima, happened to hear: "Hiroshima suffered considerable damage as the result of an attack by a few B-29s. It is believed that a new type of bomb was used. The details are being investigated." Nor is it probable that any of the survivors happened to be tuned in on a short-wave rebroadcast of an extraordinary announcement by the President of the United States, which identified the new bomb as atomic: "That bomb had more power than twenty thousand tons of TNT. It had more than two thousand times the blast power of the British Grand Slam, which is the largest bomb ever yet used in the history of warfare." Those victims who were able to worry at all about what had happened thought of it and discussed it in more primitive, childish terms—gasoline sprinkled from an airplane, maybe, or some combustible gas, or a big cluster of incendiaries, or the work of parachutists; but, even if they had known the truth, most of them were too busy or too weary or too badly hurt to care that they were the objects of the first great experiment in the use of atomic power, which (as the voices on the short wave shouted) no country except the United States, with its industrial know-how, its willingness to throw two billion gold dollars into an important wartime gamble, could possibly have developed....

Dr. Sasaki and his colleagues at the Red Cross Hospital watched the unprecedented disease unfold and at last evolved a theory about its nature. It had, they decided, three stages. The first stage had been all over before the doctors even knew they were dealing with a new sickness; it was the rect reaction to the bombardment of the body, at the moment when the bomb went off, by neutrons, beta particles, and gamma rays. The apparently uninjured people who had died so mysteriously in the first hours or days had succumbed in this first stage. It killed ninety-five percent of the people within a half-mile of the center, and many thousands who were farther away. The doctors realized in retrospect that even though most of these dead had also suffered from burns and blast effects, they had absorbed enough radiation to kill them. The rays simply destroyed body cells—caused their nuclei to degenerate and broke their walls. Many people who did not die right away came down with nausea, headache, diarrhea, malaise, and fever, which lasted several days. Doctors could not be certain whether some of these symptoms were the result of radiation or nervous shock. The second stage set in ten or fifteen days after the bombing. Its first symptom was falling hair. Diarrhea and fever, which in some cases went as high as 106, came next. Twenty-five to thirty days after the explosion, blood disorders appeared: gums bled, the white-blood-cell count dropped sharply, and petechiae [eruptions] appeared on the skin and mucous membranes.... The third stage was the reaction that came when the body struggled to compensate for its ills when, for instance, the white count not only returned to normal but increased to much higher than normal levels. In this stage, many patients died of complications, such as infections in the chest cavity. Most burns healed with deep layers of pink, rubbery scar...
tissue, known as keloid tumors. The duration of the disease varied, depending on the patient's constitution and the amount of radiation he had received. Some victims recovered in a week; with others the disease dragged on for months.

As the symptoms revealed themselves, it became dear that many of them resembled the effects of overdoses of X-ray, and the doctors based their therapy on that likeness. They gave victims liver extract, blood transfusions, and vitamins, especially B1. The shortage of supplies and instruments hampered them. Allied doctors who came in after the surrender found plasma and penicillin very effective. Since the blood disorders were, in the long run, the predominant factor in the disease, some of the Japanese doctors evolved a theory as to the seat of the delayed sickness. They thought that perhaps gamma rays, entering the body at the time of the explosion, made the phosphorus in the victims' bones radioactive, and that they in turn emitted beta particles, which, though they could not penetrate far through flesh, could enter the bone marrow, where blood is manufactured, and gradually tear it down.

Whatever its source, the disease had some baffling quirks. Not all the patients exhibited all the main symptoms. People who suffered flash burns were protected, to a considerable extent, from radiation sickness. Those who had lain quietly for days or even hours after the bombing were much less liable to get sick than those who had been active. Gray hair seldom fell out. And, as if nature were protecting man against his own ingenuity, the reproductive processes were affected for a time; men became sterile, women had miscarriages, menstruation stopped....

A surprising number of the people of Hiroshima remained more or less indifferent about the ethics of using the bomb. Possibly they were too terrified by it to want to think about it at all. Not many of them even bothered to find out much about what it was like. Mrs. Nakamura's conception of it—and awe of it—was typical. "The atom bomb," she would say when asked about it, "is the size of a matchbox. The heat of it is six thousand times that of the sun. It exploded in the air. There is some radium in it. I don't know just how it works, but when the radium is put together, it explodes." As for the use of the bomb, she would say, "It was war and we had to expect it." And then she would add, "Shikata ga nai," a Japanese expression as common as, and corresponding to, the Russian word, "nichevo": "It can't be helped. Oh, well. Too bad." Dr. Fujii said approximately the same thing about the use of the bomb to Father Kleinsorge one evening, in German: "Da ist nichts zu machen. There's nothing to be done about it."


QUESTIONS

1. How do you think American citizens reacted to Hersey's descriptions of the effects of the bombing?
2. Do you think Hersey's book caused Americans in 1946 to question or re-evaluate the decision to drop an atomic bomb on Hiroshima?