A-BOMB WOUNDS The A-Bomb

The A-Bomb worked on minds as well as bodies, and for the survivors the wounds are slow to heal

BY JOANNE SILBERNER
This is the second of two articles
on the medical and psychological
aftereffects of the atomic
bombing of Japan 36 years ago.



Joanne Silberner is a Washington-based science writer and former SCIENCE News intern who traveled to Japan on a grant from the Hiroshima Cultural Foundation.

296 SCIENCE NEWS, VOL. 120



AGASAKI—If there are some questions about the long-term medical and genetic effects on the survivors of World War II's nuclear bomb blasts, there are far more questions and far fewer data on the psychological effects.

When Robert J. Lifton, a Yale University psychiatry professor, wrote *Death in Life* (Simon and Schuster, 1976), a book on the mental health of *hibakusha* (explosion-affected persons), he noted that there were few good studies on the topic. That was in 1967, and the situation hasn't changed much since, perhaps

for the reasons Lifton offered. There is a resistance in the would-be researcher to approach so depressing a topic. "Research is a form of re-creation," Lifton wrote. The survivors Lifton talked to had such vivid recall he said he could "sense [the] bomb was falling right in my office."

There is also not as great a tradition of psychological research in Japan as there is in many Western countries; the Japanese medical community and the government considered the A-bomb aftereffects to be chiefly medical. Even today, the psychological depression and excess fatigue felt by many hibakusha (how many is not known) is not considered an A-bomb-related condition by the government when it awards compensation.

The major problem for the hibakusha is learning to live with their memories and learning not to fear the future. Some people refuse to leave their houses, some can't hold jobs, some suffer from nightmares, some experience depression or anger. The problems are not related to the large number of deaths per se—the number of people who died in each city was of the same order of magnitude as the number of people who died in the fire-bombing of Tokyo, and there have been no reports of similar problems in Tokyo.

The problems, say researchers, occurred because the destruction occurred all at once, in such an unexpected and incomprehensible manner and wiped out all social structures—the family, the workplace, schools, governments, hospitals, homes. More than 40 percent of the population in the two cities was dead by November, some three months after the bombs were dropped. In Hiroshima 96 percent of those within 500 meters of the hypocenter—including entire school populations—died by November. One-third of Japan's total war dead perished in Hiroshima and Nagasaki.

Like the medical effects, the psychological effects of the bomb are long-reaching. "The damage was not limited to August 6," says a Hiroshima social worker. "The life cycle was destroyed beyond repair."

Because the widespread and total devastation was so incomprehensible, many people didn't know how to act. Some acted as if everything was still the same or the support systems were still in place. Sumitero Taniguchi, then a 16-year-old messenger, was thrown from his bicycle, and his back completely burned, but he collected his scattered mail before going to a shelter. Taniguchi's wounds were such that he remained on his stomach for 20 months, in great pain and begging to be killed, while his back healed.

Akira Iwanaga was in his Hiroshima office three kilometers from the hypocenter on August 6. Not seriously wounded, he searched through the city for a colleague and assisted in rescue operations. On Aug. 9, he was due in his Nagasaki office, and "quite naturally I went," he says. He witnessed the second bomb as his train neared the city. Again he made his way through the destruction, seeing people burned so badly "their skin looked powdered with cement," and numbly made it through to his office.

For various reasons — including their own injuries, and general panic — many people were unable to help each other in the wake of the explosion and in some cases left family members or friends who died in the rapidly encroaching fires. The bomb "created an extreme situation," says Tadashi Ishida, a Tokyo



Yufuku Kaku, a resident of the special hospital for A-bomb victims in Hiroshima. A Korean, she was interned in Hiroshima when the bomb exploded.



Toyoko Sugano, a Hiroshima resident. In 1955, a man came to visit with the intention of asking her hand in marriage. When he found out she was an A-bomb victim, he withdrew the proposal. After that, "I dedicated myself to my parents," she says.



Sumiteru Taniguchi spent 20 months on his stomach while his badly burned back healed, and now his scarred skin makes it impossible to gain more than a few pounds without great pain. He has been active in the movement to ban nuclear arms since 1956.

410

NOVEMBER 7, 1981 297



Kuni Saeki fled barefoot with her family to a military training ground, where she squeezed her water-soaked hankie into the parched mouths of the wounded. "Quite often I feel I should have died," she says. "It would have been easier."

sociology professor. And under such an extreme situation, human beings do not behave in their usual manner.

One-third of those within 2 kilometers of the hypocenter left someone behind, he says. Tazu Shibama, an English teacher, lost a cousin that way. Her cousin's mother promised to stay with her daughter, who was pinned beneath a beam the mother couldn't lift. The mother came to Shibama's house the next day in tears, carrying a teacup filled with her daughter's ashes. "I promised Tomoko-chan to die with her but when the fire almost burned me up I left her," she told Shibama. "She did not know why she left," says Shibama. "But I think that's human nature. She's dead now but she never smiled again after her child died."

In his book, Lifton describes similar occurrences and notes, "Such conflicts were particularly poignant in a culture which places extraordinary stress upon dependency and mutual responsibility, and which instills with exquisite sensitivity the fear of abandonment."

The breakdown was so complete there was none of the post-disaster euphoria that is sometimes seen after massive disasters — the "at least I'm alive" attitude, observes Lifton. Instead, there was a generalized psychic numbing. Explains Kazuko Kurako, a seamstress who was 4 kilometers from the hypocenter in Nagasaki when the bomb dropped, "If you have space in your heart you will suffer but I didn't have time to think."

Like American veterans who suffer nightmares of Vietnam, the Japanese hibakusha "can push to subconscious but can never forget their experience. It will manifest itself in many ways," says Ishida. The memories are inescapable even as time separates them from the event. "I tend to forget so many things these days," says Toyoko Sugano, who was in a military factory sewing officers' uniforms when the bomb exploded, "even money spent just a few minutes ago, so I tie things around my waist. But I still remember my experience."

Writes Lifton: "For the A-bomb victim what appeared to be recovery turned out to be the beginning of a lifelong sense of vulnerability to the same grotesque death. After any such exposure the survivor internalizes this grotesqueness as well as the deaths themselves, and feels it to be inseparable from his own body and mind."

An international group of social scientists that convened for a

symposium on the *hibakusha* in 1977 had this to say: "To the *hibakusha*, life is like walking on an endless march. They are always subject to nihilism and despair, standing always on the border between life and death. They can never say when their "miseries" will end, and if they have A-bomb disease, they are convinced that they can never recover. There are no scientific grounds on which *hibakusha* can regard all their illnesses as A-bomb diseases but they cannot be sure that such diseases will never occur in their own particular case."

Lifton describes three levels of reaction — a denial of the memories; a feeling that they are "nothing but a *hibakusha*;" and transcendence—recognizing the experience and learning to live with it. But the transcendence stage is difficult to attain.

A government survey shows that the *hibakusha* experience a higher rate of layoffs, unemployment, and job changes in a country where a worker traditionally spends his or her whole working life with the same company. Also, a higher percentage of *hibakusha* do not hold permanent jobs but work on a day-to-day basis. Beset by insecurities about the future, many constantly worry about their health. There was, says Lifton, "a vast breakdown in faith in the larger human matrix and...a loss of faith (or trust) in the structure of human existence."

There is a way toward psychological adjustment. Ishida has conducted extensive interviews with more than 500 *hibakusha* in the past 15 years with the goal of "confirming the ideology needed to overcome the experience." He has concluded from his interviews that the stable and well-adjusted *hibakusha* are those who bring meaning to their experience by working against nuclear weapons.

Says Ishida, "They witnessed death without meaning." By actively working for nuclear disarmament, he says, "for the first time they can put the meaning of life into perspective." Only a minority of the *hibakusha* do this, he says. "But it is a very important minority that point the way all *hibakusha* should take," he notes.

Many hibakusha report feeling that they are living their lives not only for themselves but for those who perished. When asked if he considered himself lucky to survive both bombs, Akira Iwanaga, who worked in a city welfare office before retiring, replied, "I consider being exposed to both bombs most unfortunate. But the meaning of my survival depends on what kind of life I lead." Says Tazu Shibama, "I think it's my responsibility to tell what happened on that day, because somebody must tell the truth to stop such a tragedy from happening again."

Members of the 1977 hibakusha symposium noted: "Only if they reject war and A-bombs... can they establish human and moral relations with the dead. Those who identified with the peace movement did so in part to reject their sense of being treated as objects and non-persons. By their role as witness to the event and its consequences, they reasserted their humanity and dignity."

The hibakusha, as a group and individually, are greatly concerned about the threat of nuclear war. As the only survivors of atomic bombs they feel they have a unique perspective. Akihiro Takahashi, a hibakusha and director of the Hiroshima Peace Memorial Museum, explains: "Considering the danger we've faced, we warn that we should not repeat the experience. There is no winner in a nuclear war, there is only complete destruction." The hibakusha say they find the amount and the increased size of the weapons incomprehensible, and feel the world is naive about the actual effects of atomic bombs. "I don't believe a limited nuclear war would be limited," says Akira Ishida, a hibakusha and leader of the A-bomb teachers' association in Hiroshima. "It's a very optimistic view that people think they can survive by making shelters."

As with the medical effects, some of the psychological problems may be just beginning. As the *hibakusha* grow older, they are less able to overcome their memories. "As they grow older," says a social worker, "their psychological scars are getting deeper and deeper." And while the vivid recollections, shrouded with age, may become less precise, the memories of August 1945 remain.