# Taking the nuclear threat seriously

by Dr med. Sabine Vuilleumier-Koch, MD.

Western media and policy makers ignore or trivialise the threat of nuclear war spreading across the world. Nuclear weapons are a suppressed reality.

Fortunately, however, there are – since the invention of the atomic bomb in 1945 and also today – organisations and people who make us aware again of the destructive effects of an atomic bomb. Nothing of what we know, of what we hold dear, would remain. The horror scenarios as described in detail by various authors must be taken note of.

## **Devastating effects**

In Nagasaki, "36,000 people were killed instantly and more than 100,000 were injured. Another 37,000 people died within the next five years due to radioactive contamination. In all, more than half of Nagasaki's residents were killed or injured." In the brochure of the *Henry Dunant Museum* (see box) entitled "The Nagasaki Peace Bell", the reader is made unmistakably aware of the impact of atomic bombs.

"The blast wave caused instant death within a radius of one kilometre. The enormous heat wave charred human bodies. The most severe burns and skin damages occurred within a radius of three kilometres. The atomic radiation destroyed the cells of all living beings in the im-

#### Remembrance of the atomic bombing of Nagasaki in 1945

In Heiden, a village in eastern Switzerland, is the Henry Dunant Museum, named after the founder of the Red Cross.\* Henry Dunant (1828-1910) spent the last 18 years of his life in this house. In his honour, the Japanese city of Nagasaki, which was almost completely destroyed by an American atomic bomb on 9 August 1945, donated a slightly smaller copy of the bell found in the charred ruins of the Urakami Cathedral to the museum - a gift intended to spread the idea of peace throughout the world. In October 2009, the "Nagasaki Peace Bell" was given a dignified place in the Henry Dunant Museum. Every year on 9 August, the "Peace Bell Commemoration" takes place there with the ringing of the bell at 11.02 a.m. to remember the atomic bombing.\*\*

\* https://www.dunant-museum.ch/de

\*\* https://www.museen-im-appenzellerland.ch/veranstal tungen?tx\_news\_pi1%5Baction%5D=list&tx\_news\_pi1% 5Bcontroller%5D=News&cHash=535a575272beedff9291c5191b8c91a9#news1663

mediate vicinity. In a wider radius, there were massive consequential damages and cancer cases."

"The next war will be suicide of mankind!" Nuclear scientist and physician *Dr Paul Takashi Nagai* was at his workplace at 11.02 am on 9 Au-



The enormous blast wave caused instant death within a radius of 1 km. Bodies within a radius of 500 m were instantly charred by the heat wave. The extreme heat loosened the skin from the flesh. Severe burns and skin damage occurred within a radius of 3 km. Atomic rays penetrated the body and caused destruction of cells of all living beings. After 3 hours: exhaustion, faintness, nausea; – After 3 days: disturbances of the digestive tract; – After 3 weeks: disturbed blood formation, hair loss, tissue decay, organ damage. – Even after years, cancers are the result of radiation!

gust 1945. He was the head of the X-ray Institute of the Nagasaki University School of Medicine. Like medical students, fellow professors, nurses and people outdoor in the vicinity, he was completely taken by surprise by the explosion of the atomic bomb at a distance of 300–600 metres. His book "The Bells of Nagasaki"<sup>1</sup> was published in 1950, and Dr Nagai died of the "atomic disease" in the spring of 1951.

As a physician and researcher, he gave himself two tasks in writing the book: he felt it was important "to set down a truthful and up-to-date report", and secondly, he wanted to "cry out to the world never to allow another war". – All the monitoring instruments had been destroyed in the explosion.

In his book, the effects of the atomic bomb are brought to the immediate attention of the reader. The people Dr Nagai worked with on a daily basis and the hundreds who became his patients are the focus. It was the civilian population of Nagasaki who was affected by the atomic bomb.

#### Blast wave

A flash was immediately followed by a blast wave. The window casements of his laboratory flew open, a terrible gust of wind threw his body into the air. Splinters from the window pane entered his body all over his right side, deep wounds over his right eye and ear "spewed warm blood down my cheek and neck." Buried under a pile of wood, glass and dirt, he cried out for help, "but my voice hopelessly echoed in the darkness."

There are reports to follow from staff who survived. A nurse looked out of the window at the city: "The factories, from whose chimneys the smoke rose, were gone. Where to? Inasa Moun-

tain, which had been green and forested only a moment ago, was nothing but a bare rock. All greenery, foliage and grass had disappeared. The earth was exposed."

The first-year students were following an anatomy lecture. "Then came the lightning, the flash – and their world collapsed. The professor's voice still echoed in their ears.



Paul Takashi Nagai, Friedrich Seizaburo Nohara: Die Glocken von Nagasaki. Geschichte der Atombombe.

There was no time for them to look up or around themselves. One moment it happened, and the next it was over! The heavy roof struck them as they sat there listening to the lecture ..."

### Heat wave

The heat wave ignited countless fires, a hot, stinging smoke filled the rooms, whole buildings burnt down. People were burned alive. Dr Nagai was rescued from the rubble by colleagues; despite the horror of mountains of charred bodies, together they took up the task of tending to the wounded.

As the flames began to engulf every corner of the compound, they dragged the wounded up a nearby hill and laid them on the grass – many died there from their injuries.

Later, an emergency hospital was established, and Dr Nagai and the few survivors – doctors and nurses – made their way to the surrounding villages to care for the injured and burnt people





there – a physically and psychologically Herculean task that caused them to collapse themselves.

## Radiation

The Japanese scientists were unaware that the Americans had already developed the atomic bomb to the point where it was ready for operation.

Direct burns from the heat wave. (All legends for this article and the pictures themselves were taken from the leaflet).

Now they found themselves to be the object of the experiment and experienced the effects of the bomb on their very own bodies.

Since Dr Nagai had already been exposed to gamma rays in his radium experiments, it was clear to him that his rapidly appearing symptoms, such as dullness throughout the body, headache, nausea to the point of vomiting, drowsiness and physical weakness, were due to radiation.

Neutrons had also been released from the atomic bomb, the effects of which he did not yet know. He was aware that after a "silent phase", the appearance of as yet unknown disorders in the human body was to be expected. "A new disease, a novel, hitherto unknown group of diseases has been created by man himself."

In the chapter "The Disease" he describes in detail the effects of radiation, which are more severe in younger people and, depending on the organ, appear earlier or later. The site of blood formation, the bone marrow is affected first which can lead to a decrease in blood cells, then to the increased formation of non-functioning white blood cells, leukaemia.

Despite suffering severe pain himself from his physical decay, Dr Nagai documented all the ailments that he encountered or were reported to him later on, when he himself could no longer rise from his bed.

#### Never again!

Dr Nagai's book was highly acclaimed. It should urgently be reprinted in order to bring the destructive effects of the atomic bomb, which have been forgotten, (again) to the attention of people today. What the people of Hiroshima and Nagasaki had to experience must not be repeated. Even the scientists who developed the atomic bomb realised after it was dropped that nothing like this should ever happen again!<sup>2</sup>

- <sup>1</sup> Paul Takashi Nagai, Friedrich Seizaburo Nohara: The Bells of Nagasaki. History of the atomic bomb. ISBN: 3877210341. Currently not available or only available antiquarian.
- <sup>2</sup> https://swiss-standpoint.ch/news-detailansicht-engesellschaft/war-in-ukraine-conceiving-the-incon ceivable.html