IPPNW, the International Physicians for the Prevention of Nuclear War, was founded in 1980 by American and Soviet physicians with the aim of raising awareness on the humanitarian consequences of nuclear weapons. As the momentum for this movement of humanitarian disarmament grew, nuclear weapons stopped being considered merely as strategic assets, to be seen in the light of their effects on humankind. Ultimately, it is the people who matter, and change started to happen once people were placed at the center of these discussions.

Today we continue to work so that an evidence-based understanding will prevail in the policy-making process regarding nuclear weapons, and to this end we continue to raise awareness on their impact on humanity. Let me refer very briefly to what this impact is. The immediate consequences of a nuclear explosion derive from the blast, the heat and the ionizing radiation.

The blast wave reduces most buildings and infrastructure to rubble. The heat, in the hundreds and thousands of degrees, produces large areas of coalescent fires that, either by incineration or oxygen depletion, eliminate all forms of life therein.

Ionizing radiation can be experienced as part of the detonation itself or as it spreads regionally as part of a nuclear fallout. It causes acute and long-term illnesses that are often deadly, as well as genetic and inter-generational health effects.

Acute radiation sickness can cause death within hours, days, or weeks, and those who survive it may remain ill for months or even years. Lower doses of ionizing radiation can cause cancers and other chronic diseases, even many years after exposure. Radiation also causes dramatic birth defects and genetic damage. Even today, babies with serious malformations are born in regions affected by nuclear tests. Furthermore, survivors of nuclear attacks will have seen their homes and their cultural and natural heritage destroyed, and they will suffer a lifetime of stigma and prejudice.

No meaningful medical or disaster relief response would be possible, as the physical and social infrastructure required for recovery, including hospitals, would be destroyed. Most healthcare workers would be killed or severely injured, and the dangerous levels of radiation would prevent emergency responders from entering affected areas. This means that the victims with injuries, burns and the painful manifestations of acute radiation syndrome would be left to suffer and die alone.

Moreover, a high-altitude nuclear explosion would create an electromagnetic pulse that would disrupt most electrical devices within a radius far greater than the physical devastation from the blast, causing a widespread failure of automobiles, computers, telephones, and telecommunications. The world, as we know it, would be radically changed by this effect alone.

Nuclear weapon detonations also have extreme and long-lasting environmental consequences. Climate scientists have determined that a “limited” nuclear war—one caused by 100 Hiroshima-sized nuclear weapons detonated in cities in a war between India and Pakistan—would not only cause several million deaths and injuries directly, but that the soot and debris that rise to the atmosphere will rapidly reduce the temperature in the biosphere, affecting the production of staple grains. This would result in a famine
that would kill around 2 billion people worldwide. The scarcity of food supplies and the ensuing price speculation would increase the likelihood of armed conflicts and, perhaps, even of a full-scale nuclear war that, aside from killing dozens of millions of people, would generate a nuclear winter through which many species, maybe even our own, could become extinct.

According, to the Bulletin of Atomic Scientists, the risk of a nuclear war occurring is ever greater. Their Doomsday Clock, a symbolic clock that measures a global man-made catastrophe in minutes to midnight, for 2020, marks 100 seconds to midnight. This is the highest risk in history, and it is mainly due to the incendiary rhetoric of leaders in nuclear weapon states, the growing climate crisis and its potential for generating and aggravating conflicts, and the ever-growing risk of accidental nuclear detonations and technological warfare.

Over 1000 accidents have been recorded with the US nuclear arsenal alone, 6 of which have nearly resulted in a nuclear war. Of the nearly 14,000 nuclear warheads in the current global arsenal, approximately 1,800 remain in a state of high alert, pointing at cities, ready to be detonated within minutes. The ever-increasing reliance on automated systems has raised the risk of cyberterrorism and machine and human error, to the point that the Future of Life Institute has determined that the most likely nuclear war is an accidental one. If we are alive today, it is not due to good politics, or to these arsenals being in “safe” and “responsible” hands. It is due to luck. And, let’s face it, this luck will not last forever.

With the entire world paralyzed and suffering by a pandemic, we have become painfully aware of how vulnerable the current global system is. However, the havoc caused by this pandemic is minimal compared to the effects that a nuclear war of any size would have in the world, and recovery from a full-scale nuclear war would be impossible. The only sensible path is to prevent it, and the only path towards prevention is complete and total nuclear disarmament.

On July 7th, 2017 at the UN in New York, 122 countries, a clear majority of the international community, voted in favor of adopting the Treaty on the Prohibition of Nuclear Weapons, the TPNW, which provides a broad prohibition of these weapons. This prohibition, or ban, aims to stigmatize nuclear weapons, a strategy history has proven to be effective, and is the process whereby all other weapons of mass destruction have been eliminated or nearly so. Currently, no state boasts of being a chemical weapons power or of using biological weapons in their security doctrine. This is because a strong international norm and a climate of moral condemnation have been effective in making such claims taboo. And this stigmatization is precisely how the TPNW is already starting to take effect, even before its actual entry into force.

Today we commemorate the unspeakable suffering caused by the atomic bombings of the cities of Hiroshima and Nagasaki. As we reflect upon what should have never been, and must never be again, we call on all the people of the world to open our eyes to the terrible risk that we are all in, and to take action. It is up all of us, citizens of the world, to protect our planet and to protect humankind, and it is our collective responsibility to stop one of the darkest chapters in history from repeating itself. We must all demand from our governments to be on the side humanity. To be on the side of science, evidence and common sense. Our existence depends on it.