In the context of its war in Ukraine, the Russian government has made several explicit and implicit threats to use nuclear weapons if other countries intervene in the war or attack the “territorial integrity” of Russia. The United States has not explicitly said it would respond with the use of nuclear weapons but has said Russia would face “catastrophic consequences”.

Some Western media commentators and “nuclear experts” have suggested that if Russia uses nuclear weapons, it might use what is known as a “tactical” nuclear weapon. They argue these are small bombs that will not cause that much damage.

This is irresponsible and incorrect. While some “tactical” nuclear weapons do have a relatively low yield of explosive force, every nuclear weapon has the potential to cause catastrophic levels of destruction, especially if used in a populated area.

Moreover, the Russian nuclear arsenal does not include small nuclear weapons. The smallest nuclear weapons in the Russian nuclear arsenal are 10 kilotons of explosive yield. The nuclear bomb the United States detonated over Hiroshima was 15 kilotons. Approximately 140,000 people died from the bomb in Hiroshima by the end of 1945; many more died later from radiation burns and cancers.

The use of one nuclear weapon, if used in a populated area, will destroy buildings, including hospitals and medical facilities. The International Committee of the Red Cross has made it clear that no medical or humanitarian response is possible in the wake of a nuclear weapon detonation. Thousands of people would die instantly from the blast, fires, heat, and radiation. More would die in the coming hours, days, weeks, and months. The effects of radiation will cause intergenerational harms, affecting the reproductive systems of people who give birth.

In addition, the use of one nuclear weapon by Russia could lead to an escalation of the conflict into a nuclear war. The myth of nuclear deterrence is that nuclear weapons are meant never to be used. They are supposed to prevent conflict and deter the use of nuclear weapons. Instead, Russia has used nuclear weapons to provide cover for its illegal invasion of and now annexation of Ukrainian territory. Nuclear weapons have not maintained international peace and security, they instead cause insecurity, instability, and violence.
Even without being detonated, nuclear weapons cause grave harm. The nuclear-armed states spend roughly $70 billion a year on nuclear weapons, money that is urgently needed to confront crises of climate change, poverty, and pandemics. From uranium mining to weapon production and testing to radioactive waste storage, each link of the nuclear chain is toxic to land, water, animals, and people.

We urgently need de-escalation, diplomacy, and dialogue in the current conflict to prevent the use of nuclear weapons and global nuclear war. Beyond this current crisis, we need complete denuclearisation of international relations through the abolition of nuclear weapons.

The Treaty on the Prohibition of Nuclear Weapons is ready to go as an international instrument that outlaws the use and threat of use of nuclear weapons and provides a framework through which the nuclear-armed states can eliminate their nuclear weapon programmes in a verifiable and time-bound manner.

Beyond nuclear weapons, another nuclear dimension to Russia’s war in Ukraine is its occupation of nuclear power facilities and armed conflict ongoing at the Zaporizhzhia Nuclear Power Plant. Any fighting at or near nuclear power plants creates the risk of damage to the reactors, cooling ponds, or power supplies, any of which could result in radioactive catastrophes. Even outside of armed conflict, nuclear power is dirty, dangerous, expensive, and its production results in grave humanitarian and environmental harm. It is not a feasible alternative to fossil fuels to address the climate crisis—we need a nuclear-free, carbon-free future.