

Lest we forget: why the use of chemical weapons must not go unchallenged

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On Aug. 21, 2013, many thousands of people in a suburb of Damascus, Syria, developed symptoms and signs of neurotoxicity after what appeared to be a chemical weapons attack.¹ More than 1000 people are reported to have died. Graphic video footage posted online prompted chemical weapons experts to opine that a banned neurotoxin such as sarin was the likely agent.

The direct adverse health effects of waging war are plain. Others have published extensively on the huge potential for dire health consequences among the growing Syrian refugee population, a more indirect effect.² But crude and brutal as any act of war is, the use of chemical weapons mandates special condemnation, and it is the role of physicians, medical organizations and journals to play their part in reminding the world why.

Chemical weapons cannot really be targeted; the location and radius of their effects literally change with the wind. They indiscriminately affect everyone in their path, soldiers and civilians alike, who are obligated to inhale their means of death. The mass effects of the earliest choking and blistering chemical weapons in World War I — Canadian troops among their first victims — so horrified the world by their scope and the prospect of future wars leaving vast areas devoid of life that their use in warfare was banned within a decade.

Production and stockpiling of chemical weapons, however, was not banned in 1929, and military interest shifted to the development and production of neurotoxic weapons (e.g., sarin and VX), which are more effective, silent and deadly. These powerful neurotoxins are colourless, odourless compounds that inhibit acetylcholinesterase. Once inhaled or ingested, they quickly allow acetylcholine to build up in synaptic clefts, leading to sustained muscle contraction and related effects such as pupil constriction, twitching, spasms and inability to breathe. Victims die unexpectedly, suffocated by something that they cannot see.

Mercifully, whether because of treaties, fear of retaliation or memory of their horror, the use of chemical weapons was avoided in subsequent conflicts, apart from some terrible genocide- and terror-related exceptions. Bizarrely, however, many countries amassed huge stockpiles. But without any surviving witnesses to the events of World War I, there is a danger that public understanding of what sets chemical weapons apart from other weapons will wane. Their use must provoke universal condemnation and meaningful consequences, or we risk sanctioning depravity by our silence and inaction.

The use, production and stockpiling of chemical weapons is now outlawed by the Chemical Weapons Convention, which entered into force in 1997 and to which 188 countries are signa-

tories.³ Since then, the Organisation for the Prohibition of Chemical Weapons (OPCW) has worked to discover and to ensure the destruction of stockpiles of chemical weapons. Earlier this year the director general of the OPCW declared that “[nearly] 80% of all declared stockpiles of Category 1 chemical weapons have been destroyed.” Unfortunately for Syria’s civilians, we are not yet at a global zero. There is yet more to do, particularly for doctors and biological scientists.

There is rather a preponderance of doctors among those who commit atrocities. Wesseley quoted Sherlock Homes, “When a doctor does go wrong, he is the first of criminals. He has nerve and he has knowledge.”⁴ It was a previously respected Tokyo physician, Ikuo Hayashi, who with others pleaded guilty to releasing sarin gas on Tokyo subway trains in 1995, and many of the atrocities already inflicted on the Syrian people were likely sanctioned by Syrian President Bashar al-Assad, himself a UK-trained doctor.

Where chemical weapons are manufactured and used, scientists, including physicians, must be complicit. The World Medical Association took a stand on the issue of chemical weapons in 2005, stating that it is “unethical for the physician, whose mission is to provide health care, to participate in the research and development of chemical and biological weapons, and to use his or her personal and scientific knowledge in the conception and manufacture of such weapons.”⁵ It is time again for medical bodies across the globe to publicly denounce such atrocities and to organize to rid the planet of chemical weapons. We should look within our ranks to discover why professionals who have committed themselves to healing and saving lives are taking part in killing.

Gassing civilian populations is a depraved and depraving act. It leads only to a brutalized society destroyed by monsters.

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