

## Wrong Weapons in Wrong hands: Ensure compliance with readiness

Col. DPK Pillay, SC

*The author is a doctoral student of Panjab University Chandigarh.*

### Summary

Chemical weapons can cause large scale death and destruction. To give an example, a pinhead size drop of nerve agent can kill an adult within minutes. In a country like India which has a large density of population, a large scale attack is almost impossible to prepare against. Chemical weapons are ideal for terror seekers because they are cheap and easily accessible. They are also easy to transport.

It is in human nature to take advantage of all available resources to destroy enemies. Poisoned arrows, arsenic, poisonous fumes, hot oils, burning sulphur and other materials have all been used in warfare. The first modern use of chemicals occurred on 22 April 1915 at Ypres in Belgium during World War I. During the entire period of war, large-scale use of chemical weapons was reported. The use of mustard gas, chlorine and phosgene led to over 90,000 deaths and a million other casualties.<sup>1</sup> The belligerents during World War II also prepared for the use of chemical weapons and both sides of the bloc during the Cold War continued to amass large stockpiles of chemical weapons sufficient to destroy all traces of organic life on earth several times over. In recent history, United States used Agent Orange in Vietnam; Iraq under Saddam Hussein used chemical weapons against its own people; a doomsday cult in Japan used Sarin in the 1990s, and more recently, the use of chemical weapons was reported during the Syrian conflict.

The potential for devastation and destruction due to use of chemical weapons prompted the Chemical Weapons Convention (CWC) which entered into force in April 1997 and it is the fastest growing international disarmament organization in history.<sup>2</sup> There are prohibited and non-prohibited chemicals under the terms of this Convention. The Organization for Prohibition of Chemical Weapons (OPCW) has developed an internationally unique, peer-reviewed, and certified analytical database, containing information on over 3,900 chemical weapons-related compounds<sup>3</sup>. Though Syria acceded to the treaty on 14 October 2013, chemical weapons continue to be used in its internal conflict, indicating a serious gap between the professed intention and ground realities. Between 16 and 30 March this year,

air dropped barrel bombs with chlorine killed over 200 unarmed civilian, including children, in Idlib.<sup>4</sup> Chlorine, a common industrial chemical, has allegedly been used in another recent attack as well. Under the provisions of the CWC, certain listed classes of chemicals are permitted under specifically prescribed circumstances. These are called non-prohibited purposes and allows production of chemicals for industrial, agricultural, research, medical, pharmaceutical, protective, or other peaceful purposes. While chlorine falls under non-prohibited items of manufacture and was thus outside the scope of the disarmament agreement, its use as a chemical weapon violates the CWC.

Chemical weapons can cause large scale death and destruction. To put matters in perspective, a pinhead size drop of nerve agent can kill an adult within minutes. In a country as densely populated as India, a large scale attack is almost impossible to prepare against. Chemical weapons are ideal for terror seekers because of the cost factor, easy availability and transportability. Chemical agents are easily available in the form of insecticides and industrial chemicals. With the help of freely available chemicals, toxins such as ricin can easily be synthesised by a skilled chemist with the precursors provided by a state sponsor of terrorism like Pakistan which has active programmes for Weapons of Mass Destruction (WMD). There should be no room for doubt that given its antecedents, Pakistan can be a willing conduit for such clandestine programmes for its many surrogate groups to inflict a devastating blow on India. Another source that should be a cause of worry should be the large stockpile of chemical weapons in Syria, discussed above, homeland to the Islamic State of Iraq and Levant (ISIL), the most recent and also violent as well as virulent of all known extremist organizations.

In its methods and means, ISIL poses an extreme danger to humanity as a whole, and in case even a fraction of the chemical weapons arsenal of Syria falls into its hands, the results would be devastating. With organizations like Boko Haram and Al Shabaab offering allegiance, the danger becomes all the more transnational and potent. The rise in spite of attacks on school and college students by *jihadists* in Pakistan, Nigeria, Syria, and Kenya indicates a sense of desperation and an absolute bankruptcy of humanitarian values and principles. It is futile to expect the likes of ISIL and states that support them to abide by internationally accepted norms. Therefore, it is best to prepare for the worst case scenarios.

India has consciously chosen not to pursue chemical and biological weapons programmes. In October 2002, the then President of India, Dr. A.P.J. Abdul Kalam, who had also been chief of the Defence Research and Development Organisation (DRDO), stated that India would “not make biological weapons as it is cruel to human beings”.<sup>5</sup> India also ratified the Biological and Toxin Weapons Convention (BTWC) on 15 July 1974 and has sought to explore biotechnology for peaceful purposes. In the past, India had manufacturing facilities and a considerable inventory of chemical weapons, all of which have been reported to have been destroyed following its obligations under the Chemical Weapon Conventions.<sup>6</sup> In India, the National Disaster Management Authority (NDMA) has prepared guidelines for a terrorist attack using chemical weapons.<sup>7</sup> A terrorist attack with chemical agents differs in the sense that the effects of such attacks will continue to linger long after the act and continue to cause panic and distress in the community. The armed forces of the country have Nuclear, Biological and Chemical (NBC) warfare cells or directorates

in the respective Services. The Defence Research and Development Establishment (DRDE) is the primary establishment for studies in toxicology and biochemical pharmacology.<sup>8</sup> It carries out the necessary research and development of antibodies against several chemical, bacterial and viral agents. In addition, research is carried out on antibodies against chemical agent poisoning and heavy metal toxicology. The DRDO is also responsible for design and development of protective clothing and equipment against chemical weapons attacks.

While the armed forces may be prepared for a conventional attack using nuclear chemical and biological weapons, India is not entirely secure given India's population density. The equipment, clothing and manpower required to be deployed to counter the consequences will be difficult to muster for such large numbers. NDMA has listed the immediate, short term (0-5 years) and long term (5-8 year) measures that need to be implemented to counter such threats.<sup>9</sup> The recommended measures include education and training as one of the elements of the short term plans. In August 2014, India collaborated with the OPCW in conducting a regional basic course in assistance and protection against chemical weapons. Such initiatives need to be taken further and given the propensity of terror groups to attack school and college students, measures must be taken to impart the necessary awareness and instill a sense of preparedness much like the training imparted in Japanese schools against earthquakes. The idea is three-fold:

- (a) Instil long-term risk awareness and methods for risk mitigation in event of a chemical or biological attack,
- (b) Provide training for life saving responses and methods to these students who can

also transmit this knowledge to family members and others in their community,

- (c) Prepare safe houses, shelters and medical response chambers in schools and colleges to prepare for the eventuality of use of such weapons.

Universities and colleges can also take the following steps to generate awareness:

- (a) It has been found that the existing curricula and/or training at universities or research facilities do not mention the relevant international conventions against chemical and biological weapons. Under the University Grants Commission (UGC) guidelines, there are courses relating to environment studies, climate change and sustainable development at the undergraduate as well as postgraduate levels. There is a need to also introduce courses on chemical and biological weapons and toxins at these levels. Such courses will assist in compliance promotion and also help raise awareness of the dual use of chemicals.
- (b) Any Convention is only as good as its reach and the extent of awareness of its provisions. In addition to educational programmes mentioned above, there is a need to increase awareness on the provisions and activities of OPCW / CWC as well as National Authorities of CWC on these weapons of mass destruction. To this end, seminars should be planned at various levels involving academics and other stakeholders like the industry, the armed forces, the NDMA, the Ministry of Home Affairs, the Ministry of Health and Family Welfare, State Governments, district administrations and non-governmental organisations. Such collaboration will also ensure pre-

disaster coordination, facilitate dissemination of information and enable a focused discussion on theory, general principles and practicalities of the problem, which is currently lacking. It will also help all stakeholders understand the following:

- Implications of the CWC and its contribution to global peace and security,
- Development of safety and security standards and counter measures,
- Evaluation of the OPCW verification system in view of the possible misuse of commercial and dual use chemicals,
- Technical safety practices, emergency drills and protection in case of attacks,
- The impact of advances in science and technology to mitigate the possible effects of an attack.

(c) The introduction of such syllabi may also help streamline the training of personnel required for OPCW for inspections and verifications. Currently this is the preserve of scientific community or trained personnel from establishments such as the armed forces and the DRDO. Such training will also offer international assignment opportunities for graduating students, viable careers in disaster management authorities and a reservoir of trained personnel in national emergencies.

- (d) Universities and colleges may also enhance focus on capacity building for the peaceful applications of chemistry in areas which are relevant to the CWC. In doing so, they can prepare students for:
- Specific and analytical skills development courses in this field,

- Cater for information services and laboratory assistance to interested students,
- Offer specialised research projects and internship support in organisations engaged in such work.

International laws and conventions must be followed in letter and spirit by all parties. There is no doubt that when it comes to ensuring that the WMDs do not fall into the hands of non-state actors, effective laws and regulations are crucial.<sup>10</sup> States that are not party of these treaties are not bound by their provisions. As seen in Syria, such states can become a safe haven for non-state actors seeking to obtain or produce WMD. Given the turmoil Syria is in today, the complete destruction of chemical weapons held by Syria depends not only on declaring its actual stockpile of weapons, most of which are easy to transport and disperse, but also on effective tracking systems to secure that stockpile.

When the Soviet Union collapsed, all of the unaccounted nuclear weapons were all secured due to the diligent efforts by various actors. In the case of Syria, however, despite its being a signatory to the CWC, the continued use of chemical weapons last month indicates that the Syrian stockpile has not been secured. The United Nations Security Council (UNSC) has reaffirmed the necessity to prevent non-State actors from gaining access to nuclear, chemical and biological weapons and related materials and the world must join together with renewed resolved against proliferation.<sup>11</sup> And if all else fails we must be prepared to tackle the threat of the wrong weapons in wrong hands.

## Endnotes:

- <sup>1</sup> Brief History of Chemical Weapons Use, available at the website of Organization of Prohibition of Chemical Weapons accessible at <http://www.opcw.org/about-chemical-weapons/history-of-cw-use/>
- <sup>2</sup> Facts and Figures, The Chemical Weapons Ban Facts and Figures available at the OPCW Website at <http://www.opcw.org/news-publications/publications/facts-and-figures/> accessed on 17 April 2015.
- <sup>3</sup> *ibid*
- <sup>4</sup> Syria: Chemicals Used in Idlib Attacks , Human Rights Watch , 14 April 2015 ,report available at <http://www.hrw.org/news/2015/04/13/syria-chemicals-used-idlib-attacks> accessed on 17 April 2015.
- <sup>5</sup> "India Not To Make Biological Weapons: President," Press Trust of India, 28 October 2002.
- <sup>6</sup> For further details on chemical weapon destruction, see OPCW website 'Chemical Weapons Destruction Facts and figures' available at <http://www.opcw.org/news-publications/publications/facts-and-figures/>; accessed on 17 April 2015.
- <sup>7</sup> Complete guidelines available at <http://ndma.gov.in/images/guidelines/chemicalterrorismdisaster.pdf>
- <sup>8</sup> <http://www.nti.org/country-profiles/india/biological/>
- <sup>9</sup> NDMA, note 7
- <sup>10</sup> Manley, Ron, "Denying access by non-state actors to WMD", International Summit on Democracy, Terrorism and Security, 8-11 March 2005, Madrid. Available at <http://summit.clubmadrid.org/contribute/denying-access-by-nonstate-actors-to-wmd.html>
- <sup>11</sup> Security Council statement reaffirms concern over weapons of mass destruction as it marks 10 years since adopting landmark non-proliferation text, Security Council 7169<sup>th</sup> meeting. Available at <http://www.un.org/press/en/2014/sc11382.doc.htm>