

**Dr Ali Karami, Associate Professor of Molecular Biology and Biotechnology at the Baqiyatallah University of Medical Science, talks to Dr Shahriar Khateri, Co-founder of the Society for Iranian Chemical Weapons Victims Support**

# Long Legacy

**AK: Could you please introduce yourself for our readers?**

SK: I am a physician and currently work for Janbazan Medical and Engineering Research Center (JMERC) as the head of a research group for CW victims. JMERC is under the organisation for veterans and war victims. Concurrently, I am volunteering for the Society for Chemical Weapons Victims Support (SCWVS), which is a Tehran-based NGO.

**AK: Can you tell us about the history of chemical attacks against Iran, i.e., to what origin can that history be traced to and what type of chemical weapons did Iraqi forces first use against Iranians?**

SK: During the eight-year war between Iran and Iraq (1980-1988), Iraqi forces employed chemical weapons extensively against Iranian targets, including both military personnel and civilians in border towns and villages. The agents used by the Iraqis fell into two major categories based on chemical composition and casualty-producing effects. The most frequently used compounds were organophosphate neurotoxins, known as nerve agent Tabun and Sarin; mustard gas was also used extensively.

Iraqi troops are reported to have used vomiting agents during their initial, smaller attacks in 1981. They then employed chemical weapons in August, 1983, on the Piranshahr and Haj-Omaran battlefields, and later in November, 1983, on the Panjvien battlefield.

The first extensive chemical attack by Iraqi troops was carried out in March, 1984, when they used tonnes of sulfur mustard and nerve agents against Iranian soldiers on the Majnoon Islands battlefields (along the southern border). Afterward, extensive employment of chemical weapons by Iraqi troops in March, 1985, led to huge Iranian

casualties – both soldiers and volunteer combatants. The chemical attacks continued until the last days of the war in August, 1988. It is estimated that more than 350 large-scale gas attacks took place along the Iran-Iraq border between 1980 to 1988.

**AK: Did you have any capability at that time to manage the casualties, such as NBC support teams, doctors and other specialists?**

SK: At the beginning of the gas attacks there was insufficient knowledge and capability to cope with the problem, but the Iranian army rapidly developed special units for detection, decontamination and medical management of chemical casualties. They also provided protection equipment for soldiers. Because of the sanctions that were in place at the time, it was not easy to import individual protective equipment (IPE) of good quality. Later they managed to produce Iranian gas masks and other protection equipment of superior quality.

**AK: What about chemical attacks on civilians?**

SK: The Iraqi regime not only used chemical weapons against military targets, but frequently targeted civilian residential areas, especially in the border towns and villages. According to official reports, there were more than 30 chemical attacks against Iranian, and some Iraqi Kurdish, non-military targets. The main attacks were:

- Sardasht (28 June, 1987).
- Villages around the city of Marivan (March, 1988)
- Halabja, with the massacre of more than 5,000 civilians (16th of March, 1988).
- Villages around the cities of Sarpol-e Zahab, Gilan-e-gharb and Oshnavieh (May–Jun, 1988).

Even some medical centers and field

hospitals were targeted by chemical munitions, which resulted in high casualties among medical personnel.

**AK: What types of chemical agents were used during these eight years?**

SK: The most recent and accurate description of the chemical weapons used by Iraqi forces during the conflict is the 2003 United Nations Monitoring Verification & Inspection Commission (UNMOVIC) report. This document estimates that 1,800 metric tonnes of mustard gas, 140 tonnes of Tabun and over 600 tonnes of Sarin were used against Iran, using munitions that included approximately 19,500 aerial bombs, 54,000 artillery shells and 27,000 short-range rockets. An estimated 1,000,000 Iranians, both military and civilian, were exposed to chemical warfare agents. More than 100,000 Iranians were documented to have received emergency medical care for chemical injuries. Half of those injuries were moderate to severe. During the war, at least 7,500 Iranians died directly and immediately from chemical injuries (roughly 4,500 from nerve or blood agents and 3,000 from mustard agent). Since the end of the war in 1988, several hundred have died of chronic complications due to mustard intoxication.

In 2012, more than 22 years after the end of war, approximately 70,000 Iranians are registered as receiving care for chronic effects from chemical weapons injuries. Of these around 10,000 are civilians (including 4,000 women). An additional 25,000 civilians (including 6,000 women) are estimated to be currently affected by chemical weapons injuries but not included in the national registry.

**AK: What type of medical problems did you have during the war and after it?**

SK: At the beginning of the gas attacks

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there was no trained medical system to handle the chemical casualties, particularly for mass casualties managements, antidote therapy and nursing for CW agents injuries. It took time and hard work to train such medical personnel and develop medical facilities to cope with a problem that had not been faced since WWI. Even now, it is still a serious challenge for the Iranian medical community to deal with thousands of patients with exposure related illnesses. Many of the late health effects of exposure to sulfur mustard have no cure and their natures are not clearly known, thus no effective medical treatment exists.

**AK: There is an international convention banning the production and use of chemical weapons and IRI is member of this convention. So what international measures did you take to prevent Iraq from using these banned weapons?**

SK: Iran asked the UN to take an action to stop Iraq from using CW agents, but there was no strong reaction from the UN or other international organisations. Following requests by the Iranian Government, UN specialist teams were sent to Iran in March, 1984; April, 1985; February to March, 1986; April, 1987; as well as March, July and Aug, 1988. The conclusions, based on field inspections, clinical examinations of casualties and laboratory analysis of samples, were released as official UN documents (S/16433, S/17127, S/17911, S/18852, S/19823, S/20060, S/20134). Based on the UN fact-finding team's investigations, they confirmed the use of mustard gas as well as nerve agents against Iranians. The reports were subsequently submitted to the Security Council and two statements were released on 13th March, 1984, and 21st March, 1986, which condemned the use of chemical weapons. But neither of these statements, nor Resolution 612 (May, 1988) or Resolution 620 (August, 1988), secured the cessation of chemical weapons attacks by the Iraqi regime that continued to violate international law with impunity.

**AK: What is the current situation of CW injured patients in Iran?**

SK: More than 70,000 CW victims are registered by the government and receive medical care. Many thousands are not registered and need medical care, and many had low-dose exposure and may develop long-term health effects in the future. Several of them have died in recent years because of respiratory failure, lung infection and other diseases. The government has provided full medical insurance and medical support for all registered CW victims. Sadly, there is almost no contribution by international medical communities and international organisations to help the Iranian medical community treat this huge number of patients. One reason might be that this humanitarian issue has been over-shadowed by political issues.

**AK: What is the situation regarding Iran's current capability against another possible chemical attacks, from personal protection, decontamination, prevention, treatment and consequence managements?**

SK: Iran has a unique level of knowledge and experience when it comes to dealing with CW attacks, although I am now unaware of the precise level of capability because the military is in charge of the defense system.

**AK: What is the SCWVS doing in terms of raising international awareness of CW weapons?**

SK: The SCWVS is a Tehran-based, non-governmental organisation (NGO), that was founded in 2003. It operates on a national basis and many of its members and their families are survivors of chemical attacks. It has also many volunteers with different backgrounds. Recent activities and projects within the SCWVS include the following:

- Conducting awareness programs in order to increase public awareness on the consequences of war and the use of chemical weapons (and other weapons of mass destruction).
- Providing advisory services to the veterans and war victims organisation and the government in fields related to

the CW victims

- Organising national and international conferences addressing the medical, environmental and social consequences of the use of chemical weapons.
- Conducting oral history projects based on eye witness accounts of the survivors of CW attacks
- Increasing awareness in Iran and internationally of the continuing health effects of chemical warfare on both civilians and veterans by preparing educational materials on the topic in Farsi, English and Japanese.
- Educating the Iranian and broader international community on important happenings within the framework of the Chemical Weapons Convention.
- Organising and establishing the Tehran Peace Museum (2005) as part of an international network of peace museums. Its mission is to raise awareness of the consequences of war, to promote citizen diplomacy and to educate the public (especially schoolchildren) on peaceful ways to resolve conflict.
- Sending delegations of physicians and CW victims to Hiroshima, Japan, each August (from 2004) for the Peace Memorial Ceremony, which commemorates the 1945 atomic bombing.
- Hosting annual (since June, 2004) delegations from Hiroshima to Iran for Iran's National Day for Campaigning Against Chemical Weapons. In 2007, Japanese visitors toured sites of CW attacks in Iran and attended the opening ceremony of the Tehran Peace Museum and the unveiling of the Peace Memorial in Tehran City Park.
- Organising exhibitions on the consequences of war and gas attacks, such as the annual Chemical Weapons Convention conferences at The Hague (since 2003) and the the 90th anniversary (2005) of the first attack at Ypres, Belgium

**AK: What is your future plan to fight against use of these deadly weapons?**

SK: We are dedicated to continue our awareness program, expand our international campaign against weapons of mass destruction and to support the CWC.