**AFE BABALOLA UNIVERSITY ADO-EKITI, EKITI STATE**

**PEACE AND CONFLICT STUDIES**

**PCS 408**

**ASSIGNMENT**

**Question**

**The Chemical Weapons Convention or CWC which enter into force in April 1997 prohibits the development, production, stockpiling, acquisition, or transfer of chemical weapons. In relation to this statement how effective is CWC in eliminating chemical weapons under universally applied international control?**

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**INTRODUCTION**

The chemical weapons convention (CWC) is one of the most successful arms control treaties in existence. It outlaws the production, stockpiling or research on offensive lethal chemical weapons.

Yet chemical weapons have recently featured in the news – such as the recent Novichok poisonings in the UK – and the convention is facing questions.

The 193 signatory nations to the convention will assemble from November 19 this year at the Organization for the Prohibition of Chemical Weapons (OPCW) in The Hague for the latest periodic review of the chemical weapons convention.

As reported today in Science, this is an important opportunity to get some key things back on track.

The chemical weapons convention is a legacy of the end of the cold war. The collapse of the Soviet Union reinvigorated the long-dormant chemical weapons control process. This culminated with most nations signing and ratifying the chemical weapons convention, which came into force in 1997.

Each nation is responsible for the destruction of its own stockpile of weapons (either alone, or with the help of others), with compliance monitored by OPCW. So far about 96% of declared stocks of chemical weapon agents have been eliminated, including all of Russia’s declared stockpile.

**Fit for the mid-21st century?**

Most nations accept that chemical weapons are an anachronism, with only limited military value against an enemy of similar technological sophistication.

But there has been a rise in recent years in the use of chemical weapon agents against civilian populations, as in the Syrian civil war, and as tools of assassination, such as in the murder of Kim Jong-nam and the attempted murder of former Russian spy Sergei Skripal and his daughter in Salisbury in the UK. So are chemical weapons climbing out of the grave we thought we had consigned them to?

**What is a chemical weapon?**

It’s important to clear up a common misconception about the chemical weapons convention and how it handles lethal chemical agents.

Under the convention, the use of the pharmacological effects (what the chemical does to the body) of any chemical to achieve a military outcome (death or permanent disability) makes that a chemical weapon.

This means that novel agents, such as the Novichok (or A-series) chemicals alleged to have been used against the Skripals, are illegal, not because of their structure but due to the attempt to use them to kill.

This definition can create some complexities. If we take as a given that many chemicals are potentially lethal – it’s the dose that makes the poison – how do you regulate compounds that are likely to be used as weapons?

How should these be distinguished from those that could be fatal, but aren’t typically applied for ill-purpose? For example, the anticancer drug mustine – also known as nitrogen mustard – is a schedule 1 weapon under the chemical weapons convention (under the codename HN2).

**Police action or short cut to new weapons?**

Riot control agents are those such as pepper spray, 2-chlorobenzalmalononitrile (better known, slightly erroneously, as CS-gas). These compounds are designed to cause the victim discomfort. But the effects dissipate soon after the victim is removed from exposure – similar to if you get capsaicin in your eyes while cutting chillies, you can wash the compound away with lots of water or milk.

These agents are only lightly regulated under the chemical weapons convention. Their use is allowed as part of normal law enforcement, but prohibited in war.

Different to these, incapacitating agents are defined as those that cause the victim to lose consciousness, or otherwise become systemically incapacitated – but the effects of these are not reversible by removing exposure.

Examples include chemicals that cause massive sensory hallucinations and prevent the victim from recognizing reality.

There is much debate about the ultimate safety of riot control agents, but in general they are seen as safe unless incorrectly used. On the other hand, a Russian incapacitating agent is believed to have caused many of the fatalities during the 2002 Moscow theatre siege.

So how can these agents be legal, while the agent used in Salisbury is immediately considered illegal? What is an appropriate level of chemical force that should be acceptable when applied to a person as part of civilian policing?

What level of research into, or stockpiling of, such compounds would suggest the goal is no longer to develop countermeasures, but is part of an offensive chemical weapons program?

The CWC was written to outlaw these things, but has its success only moved the goalposts? These are open questions that the review should address.

**Responsibility of scientists**

Questions about how responsible a scientist is for the use of their work probably go to Fitz Haber and beyond. The 1918 Nobel Prize winner is generally considered the father of modern chemical warfare for his suggestion that the Imperial German Army use chlorine, the first lethal chemical weapon of World War I.

Today there are several questions about how scientists should interact with the world, using their knowledge to educate the public through the media, while avoiding drawing attention to possible misuses of that knowledge (or allowing their messages to be manipulated to cause panic).

Is it a greater good for society for me to explain that nitrogen mustard (from the example above) treats cancer, than the risk that someone will now try to steal some mistune from the oncology clinic to misuse it?

There is also the problem of dual use technologies. These are techniques that can equally be used develop a new pharmaceutical, or could be applied to develop a new nerve agent.

How much regulation of day-to-day research and commerce is acceptable to prevent those who would do us harm having access to materials and knowledge?

In the 20 years since the ratification of the CWC, we have made discoveries and improved access to technologies that may make it easier to create a truly effective improvised chemical weapon.

The chemical weapons convention has almost reached the initial goal of the signatories, the elimination of chemical weapons. Now the convention needs to move with the times, to prevent backsliding from the prevailing culture that considers chemical weapons to be unspeakably barbaric.