

# Objective modification necessity in conventions of using mass destruction weapons prohibition with emphasis on the biological disarmament convention

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## Abstract

**Introduction:** International disarmament conventions lack necessary compliance and consistency by production and application of new generation weapons, shortly after their development. Also by emergence of new threats of microbial weapons, bioterrorism and development of new biological technologies, the necessity of revising the content of these conventions is felt. In this formative research, the stages of growth and development of biological weaponry studies, international laws and conventions on the prohibition of production, development and stockpiling of biological weapons is studied in an interdisciplinary setting and the necessity of revision and reform in these conventions is proposed.

**Conclusion:** Growth of biological sciences in current century has been very fast, but development of international laws on control of military and weaponry trends of this science has been under the influence of weaponry authorities and developed governments and with no explicit prohibition of the use of these weapons, has imposed restrictions on developing countries which want to achieve the peaceful aspects of biological agents. Production of sustainable aerosols resistant to identification and detection techniques, will inevitably lead to convention's content reform.

**Keywords:** Revision, Biological Agents, Biological Weapons Convention of 1972, Armed Conflicts

*Jean Jacques Rousseau: "War is constituted by international relations and not by people relation. War is not a fight between two individuals, but it is a state collision with the other state."*

## Introduction

Throughout the history, in order to preserve territorial sovereignty, governments have encountered the belligerent powers based on the principles of territorial jurisdiction and the respect to the border treaties [1]. Thus, war was accepted as an inevitable incident internationally, but it could be managed by laws of war in order to alleviate the injuries [2]. Initially, the idea of finding weapons with less inflict and disarmament had more philosophical aspects and not practical ones and it was a way to punish defeated side of the war. But from the nineteenth century, these theoretical ideas raised towards operational actions. One of the most successful steps was Rush-Bagot agreement in the 19th century [3].

Biological weapons are one of the weapons used in the wars. These weapons try to kill and weaken the opponent using microbial agents (bacteria, viruses, fungi and parasites), or biological toxins [4]. These bacteria grow rapidly in the body of people, animals or plants and wipe out them slowly [5]. Eight unique

features of these weapons are: 1- Difficulty of the detection and identification 2- Lower effective doses to reach the applicable goal 3- The ease in the diffusion by each synthetic and natural device 4- Very low chance for the prevention (lack of the appropriate and effective vaccination); 5- Contagiousness 6- Ease of application and difficulty in proving the claim of the victim 7- The possibility of production, development and stockpiling in the least possible space and with minimum cost 8- High capacity in stability and diffusion per time unit [6]. These characteristics have made them different from other weapons and caused the sensitivity of the international community.

From 1874 to 1925, international community held five conferences to inhibit the production and stockpiling of these weapons. Convention on the prohibition of the development, production, and stockpiling of biological and toxin weapons was open to signature in the sixth conference on 10th April in 1972 and was subjected to the approval of countries in Moscow, London and Washington simultaneously. This convention was officially signed by 44 countries on 26th March 1975 and entered the imperative phase [7]. In addition to biological agents, the other series of modern weapons using nuclear and chemical agents were created. Treats were concluded for each in order

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to inhibit using them in the conflicts (convention on the prohibition of the development, production, stockpiling and using chemical weapons and their devastation in 1993 and the treaty of prohibition of nuclear weapons during three phases from 1945 to 1968).

This formative research has addressed the conflict or belligerent events from 1874 to 2008 with an emphasis on the use of biological weapons and the microbial and genetic agents which have been followed, identified, and announced by the inspection team of United Nations. It was aimed at investigating whether the provisions of the 1972 convention had managed an inhibitory role in controlling the application of the microbial weapons using the latest advances in making the microbial weapons. The ultimate goal of this analysis was to achieve a modifying mechanism during the lifetime of the convention on biological research in order to enable the convention to respond the modern biological progresses through effective ways in a constructive interaction between the scientific-medical advisory or legal structure of the convention.

### **Conventions and International Law**

The modern warfare tactics are in fact the very use and defense of chemical, microbial or nuclear agents in the wars. International law is one of the tools for preventing these wars. International conventions and treaties are amongst the most prestigious legal documents signed by the governments. Governments make an attempt to participate in international cooperation by limiting its options of the sovereignty. Unfortunately, there are some weaknesses and problems in these conventions of prohibition of the new weapons into the conflicts and many of them are caused by the rapid growth of science in the recent decades which leads to a fundamental change in the definitions contained in the contexts of conventions. These problems are not reversible with the interpretation of the treaty, since by the 1969 Vienna agreement about the rights of the international treaties, such interpretations should not disrupt the context undermines and interpretations should also be based on the time conditions of the treaty's conclusion [8].

In the Organization for the Prohibition of Chemical Weapons which was established to execute the 1993 treaty, a Scientific Advisory Council was considered as a sub-organization consisting of 25 independent chemists in order to provide the experts' opinions about the most recent changes in the triple tables of the chemical methods and technical equipments by evaluating the scientific and technical developments in

the chemistry science [9]. In the 2010 Review Conference for the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), the membership governments were asked to approve and execute the amendments of the NPT [10]. In this convention, due to the advances of the physics science and nuclear knowledge and new fusion techniques, there were attempts to influence the international systems by controlling the construction of these weapons, and these weapons should be made in a way that their effects would remain unknown; as in DU bullets which were largely used in the armies of the United States, Britain, France, Russia, Greece, Turkey, Israel, Saudi Arabia, Kuwait, Bahrain, Egypt, Thailand, Taiwan and Pakistan [10].

Unfortunately the performed revisions do not answer the defects of the existing conventions while modifications are essential in these conventions as to add or delete some items or change the given definitions regarding the most recent scientific progresses. The essential modifications include provisions that should or should not be appealed and the mechanism of acceptance includes the imperative time and legal effects [11]. The modification in the conventions can be applied by unanimous votes. The pronouncement of this law includes only some special materials or specific organs, the example is the unanimous condition of the permanent Security Council members for the Charter modification i.e. all members must agree with them.

Another way to pronounce modifications is with majority votes which is a current procedure in the present century, and the subject of the modification is proposed based on the request of a certain number or percentage of members or by a particular element of the organization. The modifications are sometimes permitted at any time and sometimes the time period is determined [12]. If the modifications voted by the majority are applied, a question is raised that what about the group who disagreed the modifications? Some believe that the minority group must consequently accept the modifications. In the case of Escarshin in 1934 (the lawsuit of Belgium against England), the Permanent International Court of Justice considered the 1919 San German amendment imperative for the governments who had signed the Berlin General treaty (1885), (even for the governments such as Britain who had not signed the amendment), because they believed that the amendment had found a public-including aspect. On the other hand, some believed that this treaty could not be applied to the minorities because it considers the classical solution of any treaty imperative about its

environment, as it is true in the General Agreement on Tariffs and Trade (GATT). If we accept such a justification, then it would be extremely difficult to evaluate the exact scope of each convention and that who is committed to what [11].

### **Problems of the Biological Agents as Weapons**

Biological agents can damage a huge area due to their low weight and increasing diffusion. The victims and injuries of these factors are more frequent compared to other weapons of mass destruction (nuclear and chemical). Thus, more global attention is attracted; the global demand for the crime-considering and compulsoriness of obligations of the governments belonging to this convention has been more fortunate. On the other hand, the biotechnological power and efficiency in the construction of these weapons are wider today. Unfortunately, by the genetic manipulation, microorganisms have become resistant to antibiotics, vaccination, standard treatments and tracking devices and identification. This genetic development had progress so well that some governments have become able to make the biological weapons with the ability of the complete removal of a generation or a specific ethnicity during a certain period of time (ethnic weapons). This revolution has occurred after 1972, when the convention on the prohibition of using the biological weapons has been approved, and can cause dramatic changes in the concepts of generation-killing because it is difficult to detect and prove if it has been applied or not or even if it has been used in higher or lower doses. And also it is hard to determine the exact application time and injuries of these weapons to claim lawsuit in the international courts. Perhaps, this is the reason that this convention seems to have no implementation guarantee.

### **Convention Defects**

The new advanced agents do not adhere to the common standards of the effective, pathogenic, and risk-free doses in terms of creating the gene mutations. So, it is practically infeasible to confirm or reject the claim of the research and peaceful experiments or the experiments opposing the world peace based on provisions of the conventions, since the convention does not decide distinct boundaries between research and criminal industrial production. This has been actually bad for developing countries in providing vaccinations and other medical and peaceful applications. In addition, no specific organization has been responsible in the convention to control the manufacture ban and the weapons stockpiling. The

other unfortunate point is that there is no committee of technical and scientific expertise in order to transfer the newest developments of the biological science to deciding elements of the convention. Moreover, the word "use or applying" is never mentioned in the convention and therefore, using biological weapons is not expressly prohibited. The motive violations and duality of some members of the convention has made the international community reluctant to trust the behavioral integrity of these members while they are interested in high knowledge and power of the biological research. In some countries like the United States, Defense Department looks for suitable viewpoints on producing and encountering biological weapons, and has virtually been an obstacle for the developing countries to seek the Life-Sciences peaceful aspects by imposing severe restrictions for transferring the technical knowledge of the biological research.

### **The effect of the Life Sciences Development on the Production of the New Weapons**

The biological weapons of mass destruction have left the primary mode of the past, and are prepared, stored, and used in an advanced form by the interference of sciences such as biotechnology and genetic engineering. Also, these researches are laboratory-based and therefore, they need no additional physical space or development expenses compared to other mass destruction weapons. This has been the main problem in discovering and detecting procedure. Fast development of biological sciences has raised the need for revising the main concepts and doctrines in biological disarmament and arms control areas like prohibition and development of mass destruction weapons and has eliminated innovative ideas and effective viewpoints on using armaments for defensive purposes [14]. Before September 11th and London underground incidents, the dominant idea on biological weapons considered them to be used only in wars and so, they were considered as conventional weapons. But today, it is known that it is viable to create a constructive power with conventional weapons unconventional ones. The obvious evidence is genetic manipulation in biological agents which has caused delayed complications on the people exposed to contaminated environment. In addition, using this weapon in terrorist operations is another reason to raise the essential need of amending the convention. Unfortunately, realization of new concepts in convention's provisions goes forward so slowly and implementation stage will be more slowly since the concept of using biological weapon has gone beyond

military instances while convention rules have not considered this issue apparently [14]. So, it is always likely to extenuate a crime against humanity to a common fray, while identity of accomplished operation is an example of a crime against humanity. In other words, despite completing the material element of the crime, it is not possible to prove mental element i.e. destruction of generation and depends on stability of biological agents during the time and damaging results of that in the preceding years. Lack of efficient executive guarantee in convention has made some countries to produce more distractive weapons by allocating enormous budgets to research on new biological war and defend aspects and on the other hand, there is an increasing number of the countries having the capability of producing microbial weapons. Distinction between gradually advancing biological weapons and other armaments has become harder and governments' strategies in dealing with all of these armaments have made them difficult to be judged [15].

#### **Lack of Convention Binding on Revisions**

Neither customary nor treaty international laws have not expressly prohibited using biological weapons and have considered its threat or implementation in accordance with requirements of law in armed conflicts. It seems that the application of this weapon is against the humanitarian rules and two basic principles of international law i.e. principle of separating civilian and military targets and the principle of limiting the right of the two hostile countries in choosing the method of war and their weapons.

Unfortunately, the NATO summits in Washington in 1999 ignored security guarantees and all the considerations about necessity of observing interactions which is somehow carried in the vote of International Court of Justice and announced their new doctrine as: if any member of the military union is threatened by a nonnuclear country with microbial or chemical weapons of mass destruction, they would allow themselves to use nuclear weapons. This doctrine is clearly contrary to the principles of international law [15].

Editors of convention of the prohibition of using biological weapons, in article 12 of the convention, have predicted revising it every 5 years and for this purpose, which should be accepted by the majority of members but mandatory execution of the amendments is carried out on the sides who vote positively to amendments and those who have joined the convention. Therefore, the convention knows rules

implementation subject to the will of governments and a voluntary affair (obligation to consideration), while the nature of the convention is inhibiting weapons of mass destruction; voluntary behavior seem not to be suitable in agreements which have direct interaction with human dignity and humanitarian laws.

The statement leaves the countries owning biotechnology free and restricts the development and completion of cases resulting in the production and stockpiling of weapons. In the review conference of first convention, two blocks of East and West were at their peak of international competitions. So, for the balance of power, the convention confined itself to praise those countries who had attempted to destroy their weapons or had transferred them to peaceful purposes and also, invited other countries to join the convention [17].

In the second conference, held in September 8<sup>th</sup> 1986, developing countries proposed technology transfer issue but advanced countries and owners of advanced biotechnology postponed it under the pretext of inspection system promotion.

The performance of advanced group is considered as a pretext because in legal topics an effective proposal should be provided after objecting the current situation, something that did not occur in these sessions [18]. Finally, 4 paragraphs passed as "confidence building measures" while in none of them obligatory statements were used. As there was no decision on creating practicable inspection system coordinated with recent biological advances, the issue was transferred to the Global Health Organization directly. But, due to professional and specific areas of competence, WHO can only monitor issues of public health and is not responsible for identifying and blocking advanced research centers or prohibiting the manufacture and production of biological weapons [17].

In the third conference, held on September 9<sup>th</sup> to 27<sup>th</sup>, developed countries observed the strong desire and noticeable progress of developing countries, and proposed sever supervision policies and arranging additional protocols. A part of this protocol was creating scientific dictionaries, dual-purpose laboratory equipments, a list of biological agents and microbial toxins and their thresholds and effective doses. Iran was the president of this part. Beside this discussion, the issue of methods integration and conclusions and development of inspection criteria was assigned to England. It is noteworthy that final conclusion came back to the developed countries. Despite the preliminary efforts, as the conference went to change to a comprehensive and satisfactory plan,

negotiations stopped by U.S government reaction that was a member of convention sign board and the discussion is still open [19, 17].

Fourth revision conference was confined to national actions in prohibition of biological weapons application which includes legislation and supportive aspects of peaceful uses and in consequent paragraphs confidence building measures are mentioned in an exhortative way rather than an obligatory one. Although the Security Council is not a judicial pillar and is merely political in nature, in the fourth paragraph of this session, complaint of members from the offending members is predicted. In the fifth paragraph, even helping other countries is subject to approval of the Security Council. And in the sixth paragraph, instead of binding to scientific co-operations and solving new emerging and re-emerging problems, they have been proposed exhortative again [20, 21].

In the fifth meeting, held in two sections from November 19<sup>th</sup> to September 7<sup>th</sup> 2001 and from November 11<sup>th</sup> to November 22<sup>th</sup>, the only positive point was the arrangement of annual meetings of member states' experts up to the sixth one in 2006. Discussed cases in this annual conference include legislative measures at national level, national mechanisms for security and monitoring of pathogenic microorganisms and toxins, promotion of international ability in respond to research and reduction of using biological weapons, strengthening and expanding institutional national efforts and existing and regulatory mechanisms, inspection and identification, announcement release, adoption and acceptance of a set of behavioral rules for scientists. Consensus was considered as the method of voting in these meetings. In these meetings, UN institutions, such as United Nations Institute for Disarmament Research (UNIDIR), Supervision Commission, United Nations Monitoring, Verification and Inspection Commission (UNMOVIC), International Committee of the Red Cross (ICRC), World Health Organization (WHO) were attended. Also, in the fifth meeting, US failed the summit to arrive at a conclusion despite the conflicts in existing thoughts by proposing end of validity of special group agenda. Therefore, chairman of summit invited members to propose common issues and avoid controversial dispute, he also asked developed countries to pay attention to transferring technology to developing countries and take appropriate actions in line with international cooperation. This movement was known as "new process" i.e. holding annual meetings until the sixth revision conference [22].

In the sixth conference in 2006, the convention keeping the same former process only confined to welcoming "scientific exchange" and no obligation was mentioned there.

Six rounds of meetings which were held around the convention amendments passed with conflicting votes of developing countries for acquiring new biological knowledge for peaceful purposes in one hand, and unwillingness of developed countries to transfer this knowledge and insisting on disclosure of research centers in developing group and acquiring unrestricted license inspections on the other hand. In the meantime, no special attention has ever been paid on nonobligatory of convention's provisions and entrance of non-peaceful use of biological agents to civilian realm such as bioterrorism or updating concepts of convention or adding new concepts like "prohibiting their usage".

## Conclusion

The convention on the prohibition of the development, production and stockpiling of biological weapons in 1972, despite holding 6 revision conferences, is still far away from updated concepts of biological sciences. In order to solve this problem, it seems necessary to form a committee consisting of biological scientists from developed and developing states, lawyers from international law, relying on the principles of international treaties, international convention, fairness and good faiths towards changing the concepts and adding new concepts, with emphasis on science as the common heritage of humanity, and referring to wording and soul of international cooperation inserted in UN charter and respecting to sovereignty of governments (second provision of the charter). In the new changes, transferring the updated knowledge from governments owning the latest technology in controlled way needs to be considered in line with peaceful purposes and promotion of economical situation and health of human beings. Moreover, convention provisions should be move from state of commitment to consideration towards commitment to legislation and obligations.

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