
POTENTIAL BIOHAZARDS ON A GLOBAL LEVEL - PREVENTIVE DIPLOMACY AS AN INSTRUMENT OF PREVENTION**^{1,*} Petrovska Basovska Branka and ²Icoska Emilija**¹Institute of Public Health of the Republic of North Macedonia – Skopje, 50 Divizija 6, 1000 Skopje, Republic of North Macedonia²International Slavic University - Marshal Tito 77, 2220 Sveti Nikole, Republic of North Macedonia**Received 25th April 2024; Accepted 30th May 2024; Published online 28th June 2024**

Abstract

Background: The preventive branches of public health have the task of promoting, maintaining and improving people's health. Preventive diplomacy propagates actions, such as peace, promotion and maintenance of peace. Eradicated diseases are a "silent" potential danger - a biological weapon. Such is the case with smallpox. In 1980, the eradication of smallpox was declared worldwide. Russia stores smallpox virus strains at the State Research Center for Virology and Biotechnology (Vector) in Koltsovo, near Novosibirsk, while the United States (US) stores strains in Atlanta at the Center for Disease Control and Prevention. **Methodology:** "The most painless way" to prevent an act of bioterrorism and international protection of the population from an infectious disease is through preventive diplomacy. **Conclusion:** Conventions and national legislation are harmonized, but the need for strong regional and global cooperation, the exchange and indication of relevant information, coordination and mutual assistance in situations of biological risk remains crucial.

Keywords: Prevention, Public health, Diplomacy, Biohazard, Global politics.

INTRODUCTION

Public health is a continuous and permanent obligation to preserve people's health, its promotion and improvement. Public health branches are tasked with encouraging, educating people, and doing whatever is necessary for their better health. The right to health is a fundamental right. Individual health is a basic prerequisite for collective health. The primary, preventive branches of public health have the task of promoting, maintaining and improving people's health. Preventive diplomacy has such a legal role in international law. The complicated relations between the "main state actors" on the "big stage" of the European Union (EU), as well as in the world in general, still create situations of tension and instability both at the regional and global level. Potential political instability would affect the integrity and well-being of certain countries or regions, up to global threats to human security and health. This paper would define and promote the meaning of preventive diplomacy, as a preventive remedy in dealing with biohazard potential dangers on a global level. This study would indicate the importance of the implementation of International Health Regulations (IHR) in the member states of the EU, as well as the importance and significance of the functionality of the national legal and health systems for the protection of the population. [1]

MATERIALS AND METHODS

The research was conducted through the method of content analysis, data from domestic and foreign literature, as well as from national and international health regulations, were used as material.

RESULTS/ PRINCIPAL FINDINGS

Preventive diplomacy is a peace activity that is generally used in conjunction with other types and tools of peacemaking, thus directly related to actions such as peace, promotion and maintenance of peace. This activity also requires the implementation of measures aimed at establishing mutual trust between the parties. Peacekeeping operations are carried out during conflict escalation and are an important means of promoting peace and security. Peacekeeping operations also have international recognition. The goal of preventive conflict diplomacy is to stop armed conflicts before they escalate. Preventive diplomacy includes activities such as: facilitation, mediation, conciliation, adjudication and arbitration, if conflict prevention is wider. Conflict prevention includes a range of activities, such as: strengthening human rights monitoring mechanisms and efforts to address the root causes of conflict. This is made possible by improvements in various modes of governance, social and economic well-being, equality and management of common resources. Monitoring, limiting and reducing risk are all aspects of conflict prevention. The two concepts together are often referred to as 'preventive action'. There are experts who consider preventive diplomacy and conflict prevention as two separate concepts, while others consider that they are two components of the same preventive concept. Recent United Nations (UN) reports suggest that preventing conflicts would facilitate preventive diplomacy. Preventive diplomacy, as a tool of international law, or more specifically, a tool of the UN, can play a very important role in the peaceful resolution of disputes. This finding could be accepted from the point of view that it is always better to prevent the conflict before it occurs. Taking into account the wide range of actions of preventive diplomacy, it can be seen that each of them would find a place in the peaceful resolution of the conflict, all depending on the stage it is in. Preventive diplomacy is a necessary and inseparable instrument for resolving potential conflict and can prevent its occurrence and

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improve relations between the parties concerned. The tools of preventive diplomacy are more than a desirable instrument, which would lead to a peaceful resolution of the conflict at any stage (the early predispositions of the conflict or at the later stage when it starts to escalate). The United Nations, as the pivot of peace, transfers this function to other entities that know when and how to direct proactive diplomacy where it is most needed. Current international tensions may show that preventive diplomacy through practice evolves with new examples and solutions and will offer scientifically supported and empirical experience that will be of inestimable great value for international relations. [2,3] Potential biohazards at the global level as well as at the regional level, especially those with infectious potential, are a "silent" and powerful mode of biological warfare. Biological hazards are "microorganisms and other carriers of material of plant or animal origin that can cause negative health effects in humans."

The historical development and the increasing threat of biohazards pose a challenge to international diplomacy and shows crucial political importance at the international level. [4] The implementation of International Health Regulations (IHR) in the countries of the European Union promotes peace, health and well-being of the inhabitants of the EU. In international law, communicable diseases and the protection of the population against infectious diseases are governed by the International Health Regulations of 2005, according to the World Health Organization (WHO): a unique international agreement aimed at preventing, detecting and responding to the international spread of infectious diseases, while avoiding unnecessary interference with international travel and commerce. These regulations are an instrument of international law that is legally binding on 196 countries, including the 194 WHO member states. They create rights and obligations for countries, including the requirement to report public health events. The regulations also set out the criteria for determining whether a particular event constitutes a "health emergency of international concern or not". [1]

DISCUSSION

Historically, attacks using biological agents have been rare. This is not surprising given the relative ineffectiveness of biological weapons as a military weapon due to the difficulty of infecting opposing forces, rapid medical treatment for soldiers, and the risk of infecting the attacker's troops. The centuries-old aversion to killing people with poison or disease codified in the 1899 Hague Convention, the 1925 Geneva Protocol, and the 1972 Biological and Toxin Weapons Convention is perhaps the best explanation for why we do not see more deaths from biological attacks. Traditional biological agents can be found in the environment or in numerous unprotected collections of microorganism strains around the world. Former state biological programs represent another potential source of materials and equipment, which is of particular knowledge and danger. The United States government believes that Cuba, Iran, North Korea and Syria have biological weapons programs, at various levels of development, and South Africa and Iraq previously had programs from which materials or expertise could leak in the future. The United States of America (USA) "emerged" from the Cold War as the indispensable conventional military power in the world, while the collapse of the former Soviet Union left the allies to fend for themselves. In the United States, the offensive biological weapons program was terminated by

President Nixon with executive orders in 1969 and 1970. They have adopted a policy of never using biological weapons, including toxins, under any circumstances. President Yeltsin declared in 1992 that the former Soviet biological weapons program was being abolished and that the civilian biomedical research organization "Biopreparat", which had conducted much of the biological weapons research, would be converted exclusively to peaceful activities. Due to a lack of transparency, concerns remain that Russia still has a secret biological weapons program. In addition, many countries have biological weapons defense programs that produce small amounts of pathogens for peaceful purposes (testing the effectiveness of prophylaxis), which is permitted under the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and toxin weapons and for their destruction," but from these microbiological sources may also leak manufacturing materials. The dual-use nature of equipment and supplies allows biological weapons programs to be easily concealed under the guise of legitimate biomedical activities. Only small amounts of pathogens are required, and biological agents do not emit a detectable signal, making them virtually impossible to detect from a distance.

The fact that biological weapons facilities can be small and have no particular physical characteristics makes them difficult to identify even with intrusive on-site inspections. Each path has its own obstacles. Most terrorists lack the practical knowledge needed to circumvent these obstacles, and even if they have trained microbiologists in their ranks and outside financial assistance is necessary. Biological weapons can be in the form of toxins or live pathogens. They can target people, livestock or crops and hence, be targeted for mass killing or economic impact. Pathogens can be lethal or nonlethal, infectious or noninfectious, and can infect the host through contact with skin openings, animal or insect vectors, ingestion of contaminated food or water, or inhalations, leading to a wide range of attack mechanisms that are highly different in terms of their consequences. Infectious diseases were recognized for their potential impact on people and armies as early as 600 BC. On many occasions over the past 2000 years, the use of biological agents in the form of disease, dirt, and animal and human corpses has been mentioned in the historical record. On June 17, 1925, the "Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases as Bacteriological Methods of Warfare", commonly called the Geneva Protocol of 1925, was signed. A total of 108 nations, including the 5 permanent members of the United Nations Security Council (UN), have signed the agreement. The Geneva Protocol was not strictly accepted - making it a less significant document. Several countries that were signatories to the Geneva Protocol of 1925 began developing biological weapons soon after its ratification. These countries include: Belgium, Canada, France, Great Britain, Italy, Holland, Poland, Japan and the Soviet Union. The United States did not ratify the Geneva Protocol until 1975. The biological weapons programs of various nations became apparent and it was clear that the Geneva Protocol of 1925 was ineffective in controlling the spread of biological weapons. In November 1969, the World Health Organization issued a report regarding the possible consequences of the use of biological warfare agents. Subsequently, the "Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction" was developed from April 10, 1972 (entered into force on

March 26, 1975). This Convention prohibits the development, production, and stockpiling of pathogens or toxins in "quantities not justified for prophylactic, protective, or other peaceful purposes."

Furthermore, the parties to the agreement are required to destroy inventories, delivery systems and production equipment within 9 months of the ratification of the agreement. This agreement was reached between 103 signatory countries. However, like the Geneva Protocol of 1925, this Convention does not provide firm guidelines for inspections and disarmament control and adherence to the protocol. Additionally, there are no enforcement guidelines on how to handle violations. Furthermore, there are unresolved controversies over the definition of "defense research" and the quantities of pathogens necessary for benign research. Until there are specific implementing provisions, the "Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction," will remain an instrument in the hands of the UN Security Council. For this reason, the 1972 Convention did not include any arms control monitoring or verification provisions, as member states could not agree on inspection provisions.

This difficulty is compounded by the fact that it allows states to acquire small quantities of pathogens for prophylactic and other peaceful purposes. However, efforts by the World Health Organization (WHO) to implement the Global Alert and Response Network for health hazards have been well received. Of great importance are the recently revised WHO International Health Regulations, which require reporting of any disease of international public health concern within 24 hours. With their full implementation, there will be public health and safety benefits for all nations. These efforts require ongoing diplomatic and financial support. Finally, governments must recognize that the spread of disease does not respect international borders. Hence, public health is not only a sovereign issue, especially in times of rapid international travel and transport of goods. [1-8]

Conclusion

The inability to directly explain and understand security threats (including bioterrorism as a biological threat) posed by transnational organized crime becomes a necessity in the 21st century to create a new theory in international relations.

That's why there are national legal systems, as well as international regulations and directives. European integration led to the development of common policies, as well as unitary health regulations in the European Union. While disease outbreaks and other acute public health risks are often unpredictable and require a range of responses, the International Health Regulations (2005) provide a comprehensive legal framework that defines the rights and obligations of countries in dealing with public health events and emergencies that have the potential to crossing borders. In some countries, stocks of vaccines are still kept even for eradicated diseases. Due to the increasing tension in the whole world, it is started to check the stocks of vaccines, to test their potency, as well as to develop new vaccines. The rule of law in the country, compliance with the International Laws on infectious diseases and implementation of the principles of preventive public health branches, as well as preventive diplomacy, would lead to the well-being of health and peace. The rule of national legal systems leads to regionalization, while the international regulations of the World Health Organization, apart from regionalization, also lead to the globalization of good international political relations.

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