

**A NEW INTERNATIONAL ORDER FOR EXTRAORDINARY PUBLIC HEALTH
RISKS? NORMS, ACTORS, MODES OF INTERACTION**

*Iris Hunger**

Excellencies, ladies and gentlemen, colleagues and friends,

Health is central to any person's well-being. Everyone realizes this fact in times of illness. And forgets it easily if oneself and one's family and friends are in good health. Yet health is very unequally distributed – globally as well as within societies. For some, it is increasingly a life style issue – health not any longer being about surviving diseases but about increasing the quality of life and healthy life span. Others, however, still die of preventable diseases at an early age and do not have access to adequate health services nor sufficient support during child birth.

A few numbers may illustrate this point. On average, a person in Japan can expect to live 40 years longer than a person in Somalia. Death among children under the age of 15 years represents 46% of all deaths in Africa, while in Western states this is a mere 1%. In my own country, women in the lower income groups are three times as likely to die from heart attack, than women in the higher income groups. In recent months, the inequality of access to health care has most disturbingly been illustrated by the Ebola virus disease outbreak in Africa. While during the heights of the outbreak in Guinea, Liberia and Sierra Leone sick people were dying at the doors of Ebola treatment centres for lack of free beds, international health care workers were evacuated to Europe or the US and treated under extreme high-tech conditions at the cost of up to 1.5 million EUR per person for evacuation and treatment. The latter very often survived, even if they had been in an advanced state of illness.

But it is not just individual humans' health and happiness that is affected. From an economic perspective, a high disease burden leads to loss of gross domestic product (GDP) at the national level and generally to reduced possibilities to develop individual human lives and society as a whole; it also may lead to social disruption, in particular when people in their reproductive years and economically most productive times are affected. While a number of communicable diseases

–HIV/AIDS, tuberculosis, malaria – receive a lot of political attention, other communicable diseases – schistosomiasis, trypanosomiasis, leprosy – which are also causing significant health burdens are still neglected. Non-communicable diseases are even less on the political agenda, even though they are the major source of deaths almost everywhere on earth.

One particularly challenging health threat are severe unusual disease outbreaks. These extraordinary public health events often are unusually large, unusually deadly or unusually difficult to contain and threaten health beyond the local level. Ebola is a case in point. The WHO declared it a public health emergency of international concern in August last year. There are many who believe that such extraordinary public health events will continue to be a major problem due to more frequent human contact, adaptation and change of disease causing agents, breakdown of public health capacities at various levels, change in human demography and behaviour, and economic development and land use patterns. There are also fears that such disease outbreaks could be the unintended result of certain types of modern life science research, or caused by intentionally releasing pathogens.

Addressing the threat of diseases globally requires more serious, more sustained, and more coordinated efforts by both rich and poor countries to improve disease surveillance and laboratory diagnostics, to create universal access to quality health care, to foster health education, a healthier lifestyle, health-supporting living conditions and trust in health authorities, and to put in place national and international emergency capacities. Rich countries need to make sure not only that their own public health systems work well, but also that their health development assistance is tailored to the country-specific needs and conditions and aims at sustainable local ownership of disease surveillance and health improvement processes. Poor countries need to get their priorities right and often eradicating corruption is part of the solution to health problems. As the president of the Nigerian Academy of Sciences said recently about failures in health improvement in Africa: “[T]he real culprits are corruption and misplaced priorities – which guarantee that delivery of health care is poor, surveillance systems to detect emerging and re-emerging pathogens are ineffective, and efforts to control disease often end in failure.”

Establishing stronger public health systems will contribute to preventing disease outbreaks and limiting their effects, whether the outbreaks are naturally occurring or are due to malevolent releases of pathogens. Indeed, from a public health perspective, the risk that pathogens will be released intentionally has simply joined a list of existing, but constantly changing, natural threats. While it is true that natural and intentional outbreaks will differ to a certain degree, not least in

terms of legal ramifications, it is also true that in significant areas, the differences are likely to be small. These areas include detection (for example, through disease surveillance) and public health response measures that are not disease-specific (such as finding and interviewing patients, finding and eliminating the source, and instituting quarantine and hygiene precautions). After all, a disease outbreak is a disease outbreak, no matter how it starts. Strengthening public health systems globally would improve the health of people around the world, and would have the added benefit of increasing preparedness in the unlikely event of intentionally caused disease outbreaks.

The factors influencing public health are so numerous and so diverse – including social, economic, environmental, religious – that there can be no single international order to regulate it. Instead we need and to a certain degree already have a network of regional and issue-specific sub-orders. In such a network of sub-orders on global public health, the World Health Organization is the logical global coordinator, states need to be central actors, and civil society organisations are indispensable supporting actors. One small part of this network to improve global public health is the Biological Weapons Convention, whose 40th birthday we are celebrating today.

The BWC, fundamentally, is about preventing the most devious form of disease. It embodies a norm that is at least 40 years older than the BWC itself, the norm that human beings should not be subject to disease intentionally caused, should not be subject to biological warfare. This norm has survived the ups and downs of the BWC remarkably well, and we should make sure this continues for many decades to come. For this, it is important to refocus the BWC on what it is designed for: preventing biological warfare. The BWC is not a biosafety treaty, nor is it a development assistance or an education treaty. Equally it is not an anti-terrorism treaty or a disaster assistance treaty or an ethics council. It is a disarmament treaty and we need to enable it to comprehensively fulfil this, its main purpose.

Two things are required in my view. First, we need to protect the norm against bioweapons by opposing any type of norm-harming activities. There should be no talk of using pathogens to kill animals or plants or biological agents to destroy materials in military settings. States should exercise strong self-restraint in biodefence activities, in particular in regard to aerobiology and increasing weapons-suitable characteristics of pathogens such as stability in the environment or ability to evade diagnostics. Great care is also advisable in relation to research on mind-altering substances of biological origin. And we certainly do not want to discuss biological weapons as alternatives to nuclear weapons, as recently suggested in a well-known arms control journal.

Second, we need to come back seriously to the issue of verification. The lack of monitoring and verification measures is a major source of weakness in identifying and deterring bioweapons development efforts. The small number of activities in the life sciences that are prone to direct misuse for weapons development need to come under strong international oversight. What are these activities? Surprisingly, after years and years of discussion there is no agreement yet on the answer to this question. In the nuclear arena, enrichment can be prohibited or at least closely monitored; the same is true of work with e.g. sulphur mustards in the chemical arena. But nothing like this has been agreed upon in the biological area. Everyone understands the “dual-use dilemma” – the reality that certain techniques, data, information, and implicit and explicit knowledge (though they are developed, generated, and disseminated for the benefit of public health) could be misused for bioweapons development. But though governmental and nongovernmental experts have produced dozens of lists of “dangerous” activities or “dangerous” agents, none is generally accepted on an international level as guidance for control efforts. Even less agreed are the control measures themselves; one could think about continuous international on-site presence of observers, regular international project reviews, or international on-site inspections. An urgent task for parties to the Biological Weapons Convention is to develop and update a list of activities that ought to be conducted under international scrutiny. Likewise, it is urgent that parties to the treaty agree on procedures for international oversight of these activities. Such oversight is no unattainable fantasy – as illustrated by the international oversight procedures that have been established for smallpox research.

In concluding I would like to urge that we all realize the central issue that the BWC stands for: our common wish to prevent the addition of intentionally caused disease on a massive scale to the disease burden that is already upon us, locally and globally.

So I wish the BWC not just a very happy birthday but many, very many, happy healthy returns.

Thank you.

* The views expressed here are entirely the author’s views; they do not necessarily represent the views of her current employer.