



PANDÉMIES, ÉTHIQUE, SOCIÉTÉ



Surveillance can dangerously reconcile medicine and security

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Infectious diseases, public health and security

The Centre for Science, Society and Citizenship¹ has a strong interest in the study of ethical, social and political aspects of emerging technologies.

From the historical point of view the origin of public health lies undoubtedly in military medicine.

In other words, public health and military medicine overlapped. The key concept was of course security. In fact, the first medical organizations devoted to public health were military religious orders.

Given that no effective means had been discovered to fight epidemics, the only available strategies were based on security. Infected people had to be confined. They had to be separated from the rest of the population.

The birth of public medicine occurred in the 19th century. Rudolph Virchow is probably the most symbolic character of this birth. He was indeed a strange kind of intellectual and doctor. He participated in the 1848 revolution in Prussia. Later, he became minister of health. In his mind, public medicine was nothing but social policy. Obviously, we now strongly separate public health, public medicine policy, military medicine and security measures. We do not mistake any of these disciplines for another. Regarding knowledge, disciplines linked to their teaching are separated.

¹ www.cssc.eu/

When humanity had to face the HIV pandemic, no overlapping between military medicine and public health occurred. The HIV was a threat to our health, not to our security. Over and above, two elements must be emphasized as components of HIV's *Zeitgeist*:

- HIV was the first infectious disease for which the same words that those which characterized plagues in the human history were used (extravagant rumours were spread, the virus was described as a scourge punishing evil, and humanity had to pay for its sins...);
- relative to HIV infection, people have been classified on the basis of "at risk groups".

In fact, the elaboration of groups at risk was one of the most decisive criteria shaped to tackle the disease.

What does frighten us?

In 2003/2004, we launched a wide scale survey, calling the related project "Research project on bioethical implications of globalization"². We sent a questionnaire to about 600 experts in 27 countries.

According to a large majority of experts (63 %), infectious diseases are the most important challenge related to health. Are there any scientific grounds to think that therein lies the main threat to humanity?

In the 1950s, the main fear of men were nuclear bombs and the beginning of a post apocalyptic era. Today, we think we are potentially endangered by an infectious catastrophe. Remember the resounding headlines about the so-called "mad cow disease". Who died of the "mad cow disease"? Did anybody at all die of it? We do not have any scientific evidence to establish that the human species is affected by such a disease³.

The case of SARS demonstrated our progress in preventing the spreading of infectious diseases. Most infected people lived in China. An amount of 8096 cases has been reported, according to WHO, between 2002 and 2006. We cannot talk about a true epidemic. Indeed, SARS remained a local epidemic. A pandemic would cause far many more deaths than the 128 who have been reported in 6 years. We can notice that huge means were devoted to fight the infectious threat. In Asia, people were confined to airports. Compulsory medical check measures had to be enforced, not to mention the financial and medical cost of SARS. In Canadian hospitals waiting lists, an absolute priority was given to people (supposedly) suffering from SARS.

² <http://www.bigproject.org/>

³ <http://rarediseases.about.com/od/rarediseases1/a/vcjd.htm>

What can be said about pandemic flu? I could quote the director of a hospital located in Ethiopia, who described the reported sickness of a duck as a blessing. Of course, no human case was involved. But the sick duck in Ethiopia raised huge attention and a poor hospital in Ethiopia received help it otherwise would never have had.

Epidemiological and military considerations to be mixed again

Dealing with the pandemic risk, we face serious political issues. Carl Schmitt, a German philosopher, wrote: “the sovereign is him who decides about the state of exception”. In other words, the one who can suspend the law has sovereignty.

Is emergency situations, the ordinary balance of powers is replaced by a state of exception. Who has the right to declare the state of exception?

In *Executive Orders*, Tom Clancy, depicts the President say, in face of the spreading of the Ebola virus: “*the constitution is not a suicide pact*”. This statement could be called upon in all emergency situations (terrorism, plagues...).

Emerging diseases (SARS, Ebola...) are key items in the political agenda. In the past few years, almost all negotiation processes with China were related to the Olympic Games and the pandemic risk.

Bioterrorism is a very hot topic. Our societies are worried by the dissemination of viruses or any other infectious agent due to evil plans. Nevertheless, we must be aware that we have never been under a bioterrorist attack until now. Biological weapons have always been an obsession in military minds. Remember that Japanese scientists, after World War II, were never prosecuted despite being responsible for horrible crimes, they just joined the laboratories of the US army. It was easy for them to negotiate a secure future considering the projects they were working on.

Terrorism never resorted to biological weapons. The main goal of terrorists is usually fear-mongering rather than killing. The desire is to scare people and possibly create a panic reaction. One of the key means for causing fear is to demonstrate that you have entire control on a weapon. Infectious agents spread mainly by themselves - once they have been launched, they don't obey the terrorists' will. To put it differently, the mechanism of bioweapons cannot be compared to the mechanism of bombs.

In 2000, WHO initiated a global public intelligence network to detect any anomaly related to terrorism and epidemics. The information available on the internet is continuously scanned to spot any hot mention. Note that specialists of epidemiology work together with experts of bioterrorism. Epidemiological surveillance and military surveillance tend to overlap again.

Medicine and science at the service of security

Surveillance technologies are at the interface between medicine and security. We can refer for example to body scanners. Basically, soft X-rays scan human bodies in order to avoid physical search.

On one hand a person is not physically investigated, but, on the other hand, he is naked. Any cosmetic surgery implant would be revealed by X-rays.

Another technology has to be described, in which infrared images of the body are screened for security purposes. For example, when applied, it could detect people suffering from fever in airports (whatever the cause of the fever). When the body is surgically altered, it can sometimes change altered parts' temperature.

It should be added that some research projects deal with potential intentions spotting, by studying the face of people. It can again be applied in airports. Today, it is legal in the US and it could soon become legal in Europe.

Everybody knows that more and more surveillance data is available. This focus on data gathering has to be paralleled with profiling and category of risk setting. For example, one could mention the risks of infection, or terrorism.

Data mining in text is a well known activity. We should not forget that data mining will increasingly deal with images. Take what Google can do; its search engine is able to find faces which look like the one on any given picture. It is a sort of likeness query. One can try to spot his "siblings".

What will be detected in the future and for what purposes? Risk profiling is dangerous. Establishing groups on the basis of categories of risk is common in medicine. In politics, the implications of this way of reasoning are highly debatable, especially when a state of exception is to be decided.

The French revolution brought the idea that individuals matter, regardless of categories, communities, corporations, etc. Part of the philosophical inspiration of our democracies lies in the fact that what citizens do matters. They should not be characterized on the basis of profiles and at risk groups.