Medical surveillance and global security: why eHealth needs ethics and politics

Emilio Mordini, M.D.
DIRECTOR
CENTRE FOR SCIENCE, SOCIETY AND CITIZENSHIP – ROME (IT)
• I’m a psychoanalyst and my background is in Psychiatry and Philosophy.
• I currently run the Centre for Science, Society and Citizenship, in Rome, Italy.
In Europe public health developed from military medicine

Only military medicine had the logistic and the operational structure for dealing with large health threats such as epidemics.

Moreover military medicine was already a kind of « mass medicine »
At the beginning, public medicine was chiefly a matter of military and police authorities.

Public health was eminently an issue of public security and the main public health measures concerned control of people movements and mandatory health check for special categories (e.g., mobile populations, migrants, prostitutes, etc.)
In XIX century cholera pandemics was the benchmark for military medicine applied to civil society and was the origin of public medicine.
In late XIX century public medicine strived for emancipating itself from its « mentor ».

The tension between military medicine and the newborn public medicine is well illustrated by Rudolf Virchow, who wrote

*Medicine is anything but social science and politics is anything but large scale medicine*

One can see here both a revolutionary approach to medicine (which goes beyond the traditional doctor-patient relationship) and the origin of medicalization of life.
In late XX and early XXI centuries we are looking at a reverse trend: public medicine is again becoming a matter for security people and military.

It started with HIV pandemics and the notion of group at risk.

Although security measures were not the main answer to HIV pandemics, the AIDS emergency introduced in the general public the crucial category of “group at risk”, which is vital in epidemiology, but very “risky” in public policy setting.
BIG
Bioethical Implications of Globalisation
Local Strength. Global reach
DELPHI QUESTIONNAIRE
(27 Countries, 13 International Organisations and NGOs and International Networks, 600 expert contacted, 3 rounds)
Future Global Health Issues

- Poverty related diseases: 12%
- Infectious diseases: 11%
- War: 14%
- Degenerative diseases: 63%
Globalisation and Infectious diseases

Globalisation is characterised by

i) the confluence of all infectious diseases in one world pool;

ii) an increasing resistance against antibiotics and other antimicrobial medications, due to an increasing selective pressure on pathogens on a world-wide scale; and, as a consequence,

iii) new emerging and re-emerging infections.

The goal of controlling the microbial agents has not been not achieved, partly for the social changes in the countries, the emergence of new pathogens, the resurgence of others that were already controlled and other associated factors that have modified its clinical presentation around the world.
Infectious diseases are today a leading cause of death, accounting for a quarter to a third of the estimated 54 million deaths worldwide in 2006.

... people fear that infectious diseases are likely to be the next catastrophic event.
After AIDS many other new infectious diseases emerged, from ebola to “mad cow disease”.

No doubts that some of them were real, but the most astonishing event is that some others have been almost virtual.
SARS is likely to be the most known example

According to the WHO since 2002 there have been 8096 SARS cases worldwide, causing 774 deaths in total.

Yet 648 deaths were in China, say in the place of origin of this pretended epidemics.

In other words if one does not consider China, SARS has been till now responsible for 667 cases and 128 deaths worldwide.

We have blocked the world for such a « epidemics ».
In 2002, when SARS started, there have been only in Italy 7273 deaths because of car accidents, that is 58 times more than SARS victims worldwide in 6 years!
• Schengen Treaty suspended
• Canadian airports and most Asian airports confined
• Million dollars lost by Asian economy and by travel industry
• Mandatory health screening at borders
• Tens indirect victims in Canadian hospitals
Either SARS has been the greatest success of preventive medicine since the birth of public medicine or it has been one of the greatest medical frauds.
From 9/11 on we have seen the practical application of the well-known analysis carried out in early 1920’s by the German philosopher Carl Schmitt:

« The souvraign is him who decides about the state of exception »

In other words, when the whole community is threatened, there is an authority who can suspend any standard rule and declare a state of emergency in which any citizen right can be suspended.
In Tom Clancy's 1996 Executive Orders, the United States is attacked by terrorists using a strain of Ebola virus that is transmissible through the air. To contain the epidemic, the President declares a state of emergency, orders that all nonessential businesses and places of public assembly be closed, and suspends all interstate travel by airplane, train, bus, and automobile. In defending the order, the fictional President states: "The Constitution is not a suicide pact".
Together with terrorism, epidemics are the other “big” fear of the new millennium, no matter that some epidemics have been almost virtual.

Emerging diseases, such as SARS, and Ebola, have been used as powerful political instruments in the international arena. It is enough to mention the political use that has been done of SARS and Avian Flu to negotiate with the Chinese government its participation in international trade agreements, and to integrate China in the international health system.
Biowarfare and bioterrorism are critical element in this scheme.

Bioterrorism preparedness raises questions about microbial transgression of borders, civil liberties, and the place of biomedical and surveillance technology in public health.

Political use of emerging infectious diseases and military use of weaponized germs rely on the same political make-up, as it is well illustrated by epidemics monitoring systems, which are targeting both emerging diseases and biological attacks.
In 2000 the World Health Organization (WHO) launched the The Global Outbreak Alert and Response Network (GOARN), which generated - under initiative of the Government of Canada and the Washington-based Nuclear Threat Initiative (NTI) - the Global Public Health Intelligence Network (GPHIN). The GOARN is a technical collaboration of existing institutions and networks who pool human and technical resources for the rapid identification, confirmation and response to outbreaks of international importance.
GPHIN is a Internet-based multilingual early-warning tool that continuously searches global media sources such as news wires and web sites to identify information about events of potential international public health concern, which include “disease outbreaks, infectious diseases, contaminated food and water, bio-terrorism and exposure to chemical and radio-nuclear agents, and natural disasters” (http://www.phac-aspc.gc.ca/media/nr-rp/2004/2004_gphin-rmispbk_e.html).
Body surveillance technologies are an expanding field of technology research and applications. They are neither medical nor security technologies but remain somehow in between. They include Info-Communication Technologies (biometrics, RFID, and technologies for data storage, data fusion, and data mining, behavioral profiling, etc.), biotechnology (DNA analysis and databank, detection technologies for biological, radiological, and chemical agent prevention), nanotechnologies (video surveillance and monitoring nano-devices, biotech nano devices, ZigBee, etc.).
• The European Group on Ethics has advocated the need to carry out proper ethical scrutiny of technology for body surveillance. Similar messages are stated in recent EC Communications (2007), such as 'Implementation of the multiannual Community programme to make digital content in Europe more accessible, usable and exploitable' (the ‘αContentplus’ programme –January 29); ‘Radio-frequency identification (RFID) in Europe: steps towards a policy framework’ COM(2007) 96 -15 March; ‘To be part of the information society’ (COM(2007) 694 -8 November) etc
Several actions have been taken by the EC or by relevant counterparts and some research projects have been funded in the scope of FP6 and FP7 (BITE, HIDE, SENIOR, etc.). But systematic, long term, and interdisciplinary reflections on the wider implications of converging between biomedical and security technologies are still lacking.
Issues include:
1) Data exchange
2) Data fusion
3) System interoperability
4) Data mining
5) Continuous surveillance (from RFID to epidemiological surveillance)
eHealth ethics comprises many important issues, such as social rights (universal access), respect for privacy, respect for human dignity, respect for people autonomy, ethical review of experimental protocols, etc.
Yet at large scale the real ethical issue is a political one, say, the raise of a new wave of somatic surveillance and the increasing overlapping between public health and homeland security.
In an article in *The New York Review of Books*, Alain Finkielkraut responded to the question “What is Europe” by saying that Europe embodies “a certain idea of culture, which can be best defined by the words: autonomy of the spirit”. This definition, which was written in 1985 — well before the fall of the Berlin Wall, the rapid growth of globalisation, the enlargement of the Union, 9/11 — is still valid.
Contact:
Emilio Mordini, MD
Centre for Science, Society & Citizenship
Piazza Capo di Fero, 23, Rome, Italy
Email: emilio.mordini@cssc.eu

THANK YOU FOR YOUR ATTENTION