SESSION 3 • Wednesday, December 2, 2020



## ROBERTO BURIONI

Professor of Microbiology & Virology, Vita-Salute San Raffaele University, Milan

Fake news and trust issues in times of pandemics

## Abstract

Together with a pandemic caused by the new coronavirus, we must face a second pandemic, made of fake news that is widely circulated and believed by the general population. While COVID-19 is stressing our health systems and endangering public health, fake news is on one hand eroding the general trust in public health institution, on the other is bringing many to personal decision and conducts that are endangering public safety. A vaccine for stopping both pandemics is a major medical and social need.



We are at an unprecedented moment where all disciplines are converging and crossing each other in the face of this pandemic emergency and the consequences in many different fields.

As a medical doctor and a virologist, I am not formally involved in mental health and addiction but in the last few years in Italy I have had the opportunity to fight misinformation about vaccination. This also gave me good experience and ideas on how to deal with fake news when this pandemic started in January.

We are facing two kinds of pandemics. One is a virus that is spreading very easily and very fast, the other is made up of false information. This can be very dangerous because firstly, false information can be very attractive. People want to know that everything fine, going well and not dangerous and we have known this from ancient times and the works of Julius Caesar. He wrote that people are very likely to believe what they want and what people want to hear in these difficult times is that masks are not necessary, the virus is not dangerous and does not even exist. Unfortunately, this kind of false information provides the grounds for very dangerous behavior by individuals. We must remember that fighting a pandemic is something that we have to do as individuals, and everybody is really equal in the face of the virus and everybody can be important for the spread or the containment of the virus.

The second thing that was very bad at a certain point was an idea that was also spread by some very important politicians, that some drugs were effective without there being any proof. Once again this was dangerous with people trying to buy these drugs and taking them from people who really needed them. It also generated a kind of frenzy for the idea that was pushed just in my own country and also by some politicians, that an effective treatment had been withdrawn from the population for some reason, because of an extremely powerful international plot.

One of the most dangerous issues is that fake news can really orient public opinions in a very dangerous way. When you tell your citizens that the virus is a Chinese virus or even that it was constructed and synthesized in a Chinese laboratory and spread deliberately, you are really preparing the ground for people to hate each other and this is once again extremely dangerous. We have past experience of how bad this can be, and it could be a huge problem for scientific collaboration from the international point of view, which is absolutely vital for making the rapid scientific advances that are the only thing that can save us in this sort of situation.

Another major problem that depends on the spread of this false news is the erosion of trust. That is trust in the WHO, seen by some people as a political entity, which it is not. That is trust in institutions like governments, ministers of health, as well as doctors. In Italy we had people saying that everything had been invented and that doctors were just killing people in the hospitals and creating this emergency, which is really incredible. This is very dangerous because you must rely on trust. We must trust the FDA to authorize a new vaccine, new drugs or the EMA in Europe. It is very bad when these very reputable institutions are being pushed politically, as happened in the US for example with President Trump pushing for an immediate greenlight for some treatments or even a vaccine. If important institutions lose trust, then it is very difficult to regain it.

These are the problems, but I also think it is very important to point out a few solutions. First, we need crystal clear scientific data about safety and efficiency, but this is not enough. My experience of vaccines shows clearly that good, clear scientific data is not enough. We are no longer in an age where people just follow what the doctors say without any discussion. Now, people try to inform themselves through the Internet and social media and the information is very often incorrect.

One very clear example demonstrates how inadequate very good scientific data is. We have one vaccine against the human papillomavirus, which actually protects against cancer which is not a negligible clinical entity. This vaccine is safe, extremely effective and is wiping out cancer where it is widely used,

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such as Australia and in many countries, Italy for example, it is provided to patients for free. In Italy, almost 40% of parents actively refuse this vaccine for their children, in Holland close to 50%, more than 50% in Germany and even higher in France. People refuse a vaccine that protects against cancer, which is safe and effective. Considering this, it is clear that data is not enough.

We must realize that times are changing, and we have to go out from our universities and speak to people. Talking to people is very different from talking to patients who come to our offices and who trust us, students in our universities who want to learn, or colleagues who basically speak our own language and understand the process of scientific debate. We are basically talking to people who are not interested in what we are talking about or confident about what we say, thus requiring to be extremely convincing.

Another problem arises from the fact that many doctors and scientists with opposing views talk to the public. That is absolutely normal because in the initial phase of a pandemic caused by a new virus that we had never seen before January 2020 there is not a lot of knowledge and there is room for scientific opinion. However, this is very bad for the general public because if this legitimate scientific discussion happens outside scientific conferences, universities, or journals and instead on TV shows in front of public audiences it will generate a lot of confusion.

The last point I want to highlight is the need for a strong institutional voice. These often contradictory voices are all heard because there is an empty space left by the institutions. I think that at this moment we realize how important it is to have an institution that is trusted and convincing. That not only requires strong and clear scientific data but also with the skill to present them in a way and with a storytelling that will convince people who believe them and act accordingly. In this case, the form really becomes the substance. The way you talk to people is very important, not only what you tell them, which obviously must be true and must be a correct scientific information.

There are many things we can learn from this very bad experience and there are useful things we can use over the next months, when hopefully we will have a vaccine that could end this whole terrible story of the pandemic which really had a bad impact on everyone's lives. I would like to give people something to believe in, not just good data or optimistic forecasts but really to convince them that they can trust authorities. They must trust the FDA when it approves the vaccine. They must trust the government when it tells them to stay home, or when they say children can go to school. One thing that what we can learn from this terrible experience is that we must build this trust in "peace time" because it is something that will be very useful during the war. Certainly, from the virological point of view, I do not know when, but I am sure we will have to face some other pandemics. I hope we will be ready with the diagnostic tools, vaccines, isolation, quarantine, and personal equipment for protection, but we also need to be ready from the crucial point of view and able to face worried and scared people with the voice authority and trust from the institutions.