As of 26 November 2014, 15 935 cases of Ebola had been reported to the World Health Organization (WHO), of whom 5689 have died.\(^1\) It is widely believed that these figures are underreported and the actual number of cases and deaths is higher.\(^2\) Six cases and one death were reported outside West Africa.\(^3\) This unprecedented outbreak took professionals and policy makers by surprise as it occurred where it was not expected and developed on a scale that could not have been predicted. Or at least, that has been the accepted view. A consideration of the population affected and the weak health infrastructure of the countries most affected should have led to a recognition that, once a contagious disease such as Ebola developed in this setting, the scope for rapid spread was great, given the high population density and degree of connectivity among the people of the region.\(^4\) Unlike previous outbreaks that occurred in remote rural areas of central Africa,\(^5\) this developed in a densely populated area and, very quickly, outbreaks occurred in the capitals of the main affected countries (Guinea, Sierra Leone and Liberia). Rapid initial spread was facilitated by lack of knowledge of the disease and of effective alert systems required to prompt early case finding. High-risk behaviour associated with burials and traditional healing sessions was the ‘match that lit the fire’, allowing the disease to spread from one county to another within a few generations of the epidemic. In response, and reflecting concern about imminent disruption of already fragile health-care systems in these countries, the WHO declared the Ebola epidemic to be a public Health Emergency of International Concern on 8 August 2014.\(^6\) This outbreak, as with previous Ebola outbreaks, could still have been stopped by timely isolation of cases, tracing and monitoring of contacts, safe burial practices and carefully framed health promotion messages that emphasized and supported safe behaviours. However, this only works if the anthropological reality is fully factored in. Furthermore, as the WHO has stated, a co-ordinated international response providing human, logistical and financial resources, is essential to stop and reverse the international spread of Ebola.

Europe and the USA initiated comprehensive preparedness activities for possible importation of the disease, aiming to early identify possible cases, isolate them, treat confirmed patients and establish monitoring of fever and other health complaints among contacts of cases. During the first months of the epidemic, awareness of the outbreak outside of West Africa was confined largely to the health community. A notable example was the early mission of CDC director Tom Frieden to the affected countries, where he called for scaling up of international actions. Few concerns were expressed in traditional and social media and the primary task of public health workers was to explain facts about the disease and reassure the public that western nations were prepared. But was the seemingly calm reaction of the public outside West Africa really because the epidemic occurred in a remote, and largely ignored part of the world?

As the outbreak in West Africa continued to spread and a handful of cases occurred in the USA and in Europe, media attention shifted towards the perceived risks to the public in those countries, thereby creating a parallel epidemic of fear. This led to overreaction in many countries where decisions to quarantine individuals returning from Africa or to prevent them from returning to work were based on fear rather than on evidence-based risk assessment. In response to, but also exacerbating public concerns, flights were cancelled and temperature screening was put in place in several countries, despite evidence from previous outbreaks that these are not effective.\(^7,8\) These measures have caused further harm to the affected countries in West Africa, damaging their economies and delaying the deployment of staff and resources. Public health experts repeatedly stated that the spread of the Ebola virus outside West Africa could be prevented by employing well-established measures that have proven effective in the past and that the risk of spread to high-income countries was low. These messages remained largely ignored. Despite very limited local transmission following treatment of two patients with Ebola in the USA and Spain, the public perception of Ebola is still that of an imminent threat that requires the highest level of preparedness to avoid all possible risks.

Meanwhile, the epidemic keeps growing in West Africa. What are the roles of the European public health community in such a situation? The first one is to present the evidence on which risk assessment and control measures are built. The evidence has to be sound and up-to-date. Second, there is a need to repeat continuously that there is a real tragedy happening in West Africa and that the key to prevent spread in Europe is to control the outbreak in West Africa.\(^9\) Third, there is a need to move beyond the current crisis and be prepared to support the affected countries and the entire region to strengthen capacity to detect ‘the unknown’ and build a health infrastructure in which early warning systems are functional. In our view, the international community should concentrate on reforming existing organizations that deal with crises. Ebola in West Africa shows that failing to support and empower countries with weak health systems can lead to disaster. Furthermore, the failure of the international community to respond to the outbreak in a timely manner and with sufficient means should serve as a realization that existing health and development agencies—in Africa and worldwide—need the mandate and capacity to mount an emergency response. When the crisis is over, the European public health community has a duty to draw lessons and advocate for the implementation of measures to overhaul global structures, and to participate in a larger debate about how Europe can effectively support capacity building for health and human development in Africa.

Conflicts of interest: None declared.

References


6. WHO Statement on the 1st meeting of the IHR Emergency Committee on the 2014 Ebola outbreak in West Africa. WHO. Available at: http://www.who.int/media
On 8 August 2014, the World Health Organization (WHO’s) Emergency Committee declared the Ebola virus disease (EVD or ‘Ebola’) outbreak a Public Health Emergency of International Concern. On 6 October 2014, the first case of EVD contracted in Europe was diagnosed. A healthcare worker was infected, after providing treatment to an Ebola patient in Spain. This secondary case, like those that occurred in Dallas, tested both the responsiveness of the healthcare system, and the attitudes and skills of the population, the health professionals and the media.

Virulence and infectivity are epidemiological characteristics that define the magnitude and significance of an infectious disease. EVD virulence is evident as shown by its lethality. The number of deaths is correlative to the number of infections. The number of cases also define the magnitude and significance of an infectious disease. EVD infectivity is evidenced in outbreaks in which, as in this case, it is highly transmissible primarily by direct contact with infected body fluids and contaminated material. In the case, like those that occurred in Dallas, the media became the main source of information about the emergency and counterpublic fear. The media have later acknowledged these compulsive, excessive and unnecessary intervention, in an attempt to fuel the fear.

Unlike EVD, transmitted by direct contact with an infected patient or contaminated material, virus fear can spread in many different ways, particularly when, as in this case insufficient, inaccurate or contradictory information is disseminated. Unnecessary precautionary measures taken beyond the available evidence also contributed to fuelling the fear. In Spain, the media became the main source of information about EVD, its transmission mechanisms and even about its treatment. The media took on the role of the Public Health authorities, circulating information that was sometimes alarming and inaccurate and which led to public scepticism regarding the official recommendations issued by organizations such as the Centres for Diseases Control or the WHO.

EVD international protocols and their adaptations to our institutions were presented to the public as immutable ‘tables of the law’ instead of the evidence based set of general recommendations and rules on how to act that they are. When news on protocol adaptations were published or differences between relatively close centre were highlighted, alarms were sounded, contributing to a loss of trust by the public and, even more alarmingly, among some professionals.

This EVD crisis has not been different to other public health crises in our country and in other parts of the world. The response to avian influenza or SARS, also fuelled by media pressure, resulted in a compulsive, excessive and unnecessary intervention, in an attempt to counter public fear. The media have later acknowledged these circumstances as well as the existing lack of proactive risk management by health authorities.

Although it may be argued that the Ebola cases in the USA and Europe will help raise social awareness, cooperation with African countries and funding for research to prevent future deaths, we should note that fear of infection can bring about unacceptable attitudes of rejection of contact towards low and high risk patients and can favour gratuitous treatment of healthy patients or a source of political confrontation.

The EVD media epidemic will pass but EVD will still require an appropriate and proportionate response based on available knowledge that we hope will continue growing. Healthcare professionals should not be panic. Local adaptation and revision of the EVD protocols is undoubtedly the correct practice. Nevertheless protocols are not self-implementing and we must not forget that the EVD protocols have singular characteristics which make them different: a rare disease in our environment, involvement of different levels of care from the public health system, interdisciplinary coordination between different health professionals and the need for protective measures which, while not new, are unfamiliar to local staff.

The alarm generated among professionals by this mediatic Ebola crisis is worthy of attention. Conventional patterns for protocol optimisation are no different for Ebola. The development and updating of protocols involves identifying aids or controls that need to be included in order to secure the procedures provided. The implementation process should take into account the human factor, the ‘hurry-up-syndrome’ and the context in which the activity takes place. The interaction of these factors can be the underlying cause behind more than 1in 3 of all protocol implementation errors.

Training health care professionals in accordance with directive 90/ 679/CEE on the protection of workers from risks related to exposure to biological agents at work and introducing human factor checklists designed to help professionals review those precautions, memory aids and quality control procedures that anticipate risks and errors (such as the proposal of the CDC in the USA) or those that have been developed for health centres and hospitals in Spain) should be the way forward.

The EVD Protocols protect professionals from risks associated to healthcare work. However, this time they have raised suspicion and doubts among professionals. The guarantee of its feasibility is a learned lesson.

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References