

Major human scourges have been present for as long as there have been conditions for the establishment of human settlement. Living conditions, natural and man-provoked disasters can intensify the risk of epidemics considerably. Throughout mankind's history, populations all over the world have sporadically been affected by devastating outbreaks of infectious diseases, especially cholera, plague and smallpox. Hippocrates (460-377 BC) and Galen (129-216 AD) have already described an illness that might well have been cholera⁽¹⁾.

Diseases associated with civilization is older than written history. The illnesses at the early stages of human development were identified by archeological studies⁽²⁾.

Today's society is marked by recurrent eruptions of newly discovered illnesses, like the hantavirus, AIDS, Ebola and influenzas caused by viruses with several different structures, and other epidemics of diseases migrating to new areas, diseases which became important through human technologies, like the toxic shock syndrome, Legionnaire's disease and zoonoses, through man-made disruptions in local habitats. Some of these diseases will possibly generate large-scale, worldwide epidemics, like the global epidemic of human immunodeficiency virus, AIDS, considered the first of the modern epidemics of infectious diseases^(2,3).

The large increase in worldwide movement of people and goods is the driving force behind the globalization of diseases, making the world more vulnerable to the widespread of both old and new diseases. People and goods have started to move and travel more, bringing with them microorganisms to places where they have never existed.

The new epidemic of Ebola poses great challenges for health services and researchers.

Three key factors contributed for its outbreak and repercussion. The first one is the severity of the disease, which presents mortality rates ranging from 50 to 90%. The second factor refers to the magnitude of the disease, which affects three largely populated countries and cities (Liberia, Guinea-Conakry and Sierra Leone). According to the World Health Organization (WHO), the outbreaks occur primarily in remote villages in Central and West Africa, near tropical rainforests. Currently, the virus comprises five species and it only exists in the African continent, but there have been case reports in the Philippines and China^(4,5,6).

The third factor refers to cultural aspects concerning local practices that have favored transmission and the population's distrust of health services and their unpreparedness. This melting pot gave rise to a new threat that is associated with the huge mobility between countries through tourism and business travel.

The risk of Ebola spread in developed countries has put the world in a state of alert, particularly the WHO. As the epidemic affected African countries only, the response by international authorities was slow and patchy. Ebola virus was first discovered in 1976 in the Democratic Republic of the Congo and in Sudan, and little has been done since then until the current devastating outbreak that has already killed circa 5,000 Africans. Three strategies – also challenges – have become evident today, and the first action took place in a location where *Médecins*

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Sans Frontières (Doctors without Borders) proposed to hire people cured from Ebola to work as peer educators (a kind of a community health agent) and established the hug ritual, in which healthcare professionals, without any protective equipment, shared a hug with patients discharged from treatment centers. The population's confidence and professionals' commitment have reduced lethality rates from 10 to 20%. The second major event, the international solidarity, was notably evident due to the *Médecins Sans Frontières* and the deployment of 250 professionals (nurses and doctors) by the Government of Cuba. The third event, which is notably important for virus diseases, was the boost in research for the development of an effective vaccine against Ebola⁽⁴⁻⁶⁾.

The biggest challenges in case of a new Ebola epidemic are: the integration of health services and the local population, taking into account the cultural aspects and the reality of health inequalities; the assumption of the concept of equity, facing the uneven distribution of factors that contribute to the exposure to risks of getting sick and dying and the access to health goods and services among different population groups through an increased amount of resources; the international solidarity; and research to meet the needs of the population.

Finally, it is important and crucial to obtain international collaboration in all the procedures of epidemiological and sanitary surveillance of borders and airports of every country aiming at the early identification of suspected cases, the care for the management and temporary treatment in order to avoid the dissemination of the virus and epidemic outbreaks in other countries.

Always willing to answer any questions about Ebola or any other global health risks, the *RBPS* will be alert to the latest scientific breakthroughs in this spreading epidemic, like the disclosure on new vaccines and treatments, and inform its readers in order to control Ebola with the help of the Ministry of Health and the WHO.

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