

Remnants of an eradicated disease: challenges for global health

Remanentes de una enfermedad erradicada: desafíos para la salud global Resquícios de uma doença erradicada: desafios para saúde global

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The challenges for global public health in the coming decades directly involve government action and investments. The document lists 13 urgent challenges for the world's population, among them the extremely shaken relationship between the ecosystem, climate and health and the preparation for new epidemics. The WHO also pointed out that new epidemics are inevitable and are linked to the environmental issue, however, planned preparedness and response actions are behaviors that can prevent specific damage, and avoid higher than expected morbidity and mortality indicators¹.

The relationship between ecosystem, climate and health should be a subject of surveillance on the world stage, being the object of transparency and public and private investments. Returning to the public health events that took place in recent years, we could list some cases directly linked to the imbalance in this relationship. The emergence of arboviruses in non-endemic areas such as Zika and Chikungunya, the outbreak of Yellow Fever, the increase in malaria cases and the current reappearance of dengue in alarming numbers are examples experienced in the national scenario.

Research centers linked to the WHO point out that there is evidence that some infectious diseases are related to the environment. The emergence of new strains of viruses and some bacteria may have this imbalance in their matrix, in addition to the existence of a relationship between recent epidemics or pandemics, such as HIV, SARS, MERS, H1N1, Ebola, the New Coronavirus (SARS-CoV-2) and more recently monkeypox. Studies conducted by these research centers point out that contact with virus-carrying animals is the most likely initial cause of emerging and reemerging diseases².

After the world convalesces due to the COVID-19 pandemic, in 2022, another news appears that makes everyone fearful, the WHO calls the event a "multi-country outbreak of smallpox cases in non-endemic countries". In the month of May alone, the beginning of monitoring of cases, there are more than 300 confirmed cases, distributed in 20 countries³.

This virus is called Monkeypox, orthopoxvirus genus of the Poxviridae family, which triggers symptoms similar to smallpox, but less severe. Human smallpox caused by Poxvirus variolae, historically killed about 60 million people worldwide, being eradicated in 1980. This new virus known as monkeypox was identified in humans in the 1970s and continues to occur in some African countries³.



Monkeypox is considered a zoonosis and the most frequent cases are found near tropical forests. It is known, so far, that transmission in humans is limited, with a chain of transmission of 6 generations. Transmissibility can occur through contact with body fluids, skin lesions or internal mucosal surfaces, such as the mouth or throat, respiratory droplets and contaminated objects⁴.

The incubation period for smallpox is usually 6 to 13 days but can range from 5 to 21 days, it is usually selflimiting but can be severe in some individuals such as children, pregnant women or people who are immunosuppressed due to other health conditions. Despite being less serious than smallpox, this virus has an average fatality rate of 10%⁵. Treatment is supportive and symptom-oriented, which in a way is a risk, taking into account a global health system in the post-pandemic recovery phase.

Monitoring of this outbreak is taking place worldwide, isolation recommendations for those affected, preparation for health organizations and professionals are beginning to be carried out. This increased number of atypical cases and behavior in the territorial distribution of cases still requires analysis and attention, which leads us to some reflections.

Despite some representatives claiming that there is no risk of a smallpox-related pandemic, another red light is lit on the horizon of humanity, will we experience the decade of outbreaks, epidemics and pandemics? Will we experience more reflections, in the same way that we have experienced in the last 2 years, or will we continue to ignore that we are extremely vulnerable to our own actions? Will we live in a constant state of alert? In fact, many questions could be raised and, on the other hand, effectively limited actions perpetuate both nationally and globally.

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