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Emergence of Monkeypox as the Most Important Orthopoxvirus Infection in Humans

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Abstract

Monkeypox is an emerging zoonotic disease recognized as the most important orthopoxvirus infection in humans in the smallpox post-eradication era. The clinical presentation of monkeypox is similar to the one of smallpox. The case fatality rate of monkeypox (10%) lies between the case fatality rate of variola major (30%) and variola minor (1%). The disease is endemic in the Democratic Republic of the Congo, but other countries of Central and West Africa either reported cases of monkeypox in humans or circulation in wildlife. Monkeypox was also imported once into the USA. The disease has always been considered rare and self-limiting, however recent sporadic reports suggest otherwise. Unfortunately, the collected data is limited, dispersed and often incomplete. Therefore, the objective of this review is to trace all reported human Monkeypox outbreaks and relevant epidemiological information. The frequency and geographical spread of human monkeypox cases have increased in recent years, and there are huge gaps in our understanding of the disease's emergence, epidemiology, and ecology. The monkeypox virus is considered a high threat pathogen causing a disease of public health importance. Therefore, there is an urgent need to focus on building surveillance capacities which will provide valuable information for designing appropriate prevention, preparedness and response activities.

Keywords — *emerging infectious diseases, monkeypox, orthopoxvirus, zoonosis*

Professional Biography (100-150 words)

Nikola graduated as a biomedical scientist from KU Leuven, Belgium and worked in different international laboratories as a researcher. She always wanted to have an impact on the lives of people in need and she found her passion in public health and infectious diseases. She followed a postgraduate course of International Health, a part of a Master of Public Health degree which she is pursuing now. Nikola's interest has been emerging diseases with a special focus on monkeypox. She joined the Emergency Operation department of the World Health Organization in 2018 for six months and worked in multiple countries of East and West Africa in the last two years.



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