Bat Rhabdoviruses: occurrence, detection and challenges in Africa

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Abstract

Bats carry zoonotic viruses which can be harmful to humans. Zoonotic diseases have caused huge economic losses in the production and trade of animal products and recurring diseases outbreaks and global pandemics. Studies have shown that Rabies and rabies related viruses (Lyssavirus genera, family Rhabdoviridae) are spread to humans by bats. The aim of this article is to assess the global distribution of bat Rhabdoviruses, detection and challenges in Africa. Studies have shown that the prevalence of Rhabdoviruses is high in Africa and Asia. In addition to Rabies virus, other bat Rhabdoviruses which were detected in Africa are Mokola, Lagos bat virus, Duvenhage, and Ledantevirus. In Asia Vesiculovirus and Ledantevirus were found. Australian bat lyssavirus was detected in Australia, Rabies virus was detected in American bats and European bat lyssaviruses were detected in Europe. Surveillance in Africa is inadequate due to lack of diagnostic capabilities meaning that infections maybe under reported.