Evaluation of Rabies Surveillance System Using the One Health Approach - Mozambique, 2020-2021

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Abstract

**Background:** Since 2014, Mozambique has reported various rabies outbreaks, however, prevention and control actions were sectoral, which represented a more lost significant resource, and time and, consequently, an increase in animal bite and rabies cases. In 2020, the national strategic plan for rabies control in Mozambique was elaborated and implemented to ensure coordinated actions for rabies prevention and control using the One Health approach. Due to new guidelines on rabies surveillance, such as weekly information sharing and a joint rabies investigation between sectors. After the Rabies National strategic plan, we evaluate the rabies surveillance system to understand the level of stakeholder involvement and achievement of its objective.

**Population and Methods:** We evaluated the rabies surveillance system in Mozambique based on qualitative and quantitative attributes. Manuals, flowcharts, reports, and case investigation forms of the human and animal component of rabies were used as data sources. Means, standard deviation, rates, and proportions were calculated using Microsoft Excel 2019.

**Results:** Attribute assessment identified weaknesses related to information sharing and coordination of rabies control and prevention actions between the two sectors. In the human component, 48,606 animal bite cases were reported nationally. Of these, 595 (1.2%) cases were investigated. In total, 595 notification forms were analysed from the human component and could not locate the animal component forms. The variables on the notification form were on average 82.0% (SD±29.1%) complete. The animal observation variable was 95 (16.0%), post-exposure prophylaxis 198 (33.3%) and the vaccination status of the aggressor animal 70 (11.8%) had a lower-than-average fill rate. The average attendance time was less than 48 hours (SD±3.55), and animal bite cases had post-exposure prophylaxis in less than 24 hours. **Conclusions:** In the human component, the system has weaknesses related to information sharing and coordination of rabies control and prevention actions between the two sectors. It is recommended to create a multi-sectoral platform for sharing and visualizing rabies surveillance data in Mozambique.

**Key words:** rabies; public health surveillance; one health; post-exposure prophylaxis; Mozambique.