SPECIAL SESSION A2

INVITED PRESENTATION

Advancing Rabies Control Through Digital Tools and Data-Driven Methods

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Abstract

Known as the world's deadliest virus, rabies is 100% fatal. Over 300 Filipinos die annually due to rabies disease despite being 100% vaccine preventable. In Davao City, the City Veterinarian's Office (CVO) vaccinated over 160,000 dogs and cats in 2022. However, the city still tallied 19 animal rabies cases and 13 human rabies deaths. With the bulk of data CVO has been collecting yearly and given the limited personnel with technical expertise on data analysis, insights on rabies transmission and control tends to be subjective and at times, inconsistencies in strategic planning for rabies control are overlooked. Moreover, rabies prevention and control strategies in animals and humans are fragmented which can inadvertently lead to unmet goals despite well-meaning efforts. Many countries have shown that rabies elimination is possible through One Health and Participatory approaches. With proper data storage and management, evidence-based strategies can be formulated in which a centralize dashboard would be an effective tool to quickly gain insights about the data at hand at different levels. RabDash or Rabies Data Analytics Dashboard is a centralized data management and analytics system for rabies-related data such as the number of rabies cases, population data of dogs in an area, location of captured animals, case monitoring, and current interventions implemented by the city. The system works by collecting these data and generating downloadable data visualizations in the form of graphs, charts, and maps. RabDash can also forecast rabies cases and provides phylogenetic information of rabid dogs to produce historical data and enable further conduct of research methods. These features will help facilitate the decision-making process of the local government in developing new and targeted interventions to address rabies cases. RabDash enables easy tracking of rabies cases within the city. It aims to address the inefficiency of the current system by automating the process of analytics for all rabies-related data. Since the system no longer relies on manual data processing, results for every data input remain consistent following a uniform process. This new system will help the CVOs better assess their local rabies situation and efficiently implement local guidelines.