Etiology, diagnostic approaches and management strategies of Acidovorax citrulli, a bacterial fruit blotch pathogen of cucurbits

ABSTRACT

One Health is increasingly being used as a tool in ecosystem protection. The Orangutan Veterinary Advisory Group (OVAG) is working to address One Health concerns in Pongo spp. (orangutan) welfare and conservation. Orangutans are vital contributors to the ecosystem health of their range areas. Strengthening national capacity is crucial to make a lasting difference in the currently bleak outlook for orangutan species survival. OVAG is a capacity strengthening and expertise network that brings together all those working with orangutans, in- and ex-situ, to share knowledge, skills, and to collectively learn. Using the One Health paradigm embedded to enhance professional development, the OVAG network is successfully supporting conservation outcomes and impact. As part of our adaptive management approach, and to assess individual and organizational change attributable to the capacity strengthening work of OVAG, we evaluated technical skill test data, program satisfaction data, and asked participants to complete a self-reflective survey. This pilot study of our work demonstrates statistically significant improvements in conservation medicine (t = 5.481, p < 0.0001) and wildlife clinical skills knowledge (t = 3.923, p < 0.001) for those in the OVAG program. Most consider OVAG participation to be either critical or very useful in their conservation medicine decision-making process, with a perceived positive impact on their skills at handling multiple situations. Additionally, participant feedback shows a sense of being able to drive positive change locally and nationally (within their own countries) as a consequence of OVAG participation. The authors hope the OVAG model including its associated capacity support mechanisms and pedagogical approaches can be used as a template for other One Health efforts.

Keyword: One Health; Capacity building; Conservation; Orangutan