

Zoonotic Implications of parasite helminths among domestic animals in selected communities of Caraga Region, Philippines

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Abstract

Domestic animals are sources of livelihood, food, companionship, and security for humans. However, this close association with animals allows for the transmission of zoonotic helminths that negatively impact human health. In marginalized areas in the Philippines, very little is known about zoonotic parasites in domestic animals. In this study, fecal samples from 146 dogs, 34 cats, 211 pigs, 154 water buffaloes, and 18 cattle in selected rural communities in Caraga Region, Philippines were examined using standard parasitological techniques. Furthermore, 341 animal owners were interviewed regarding animal management practices and awareness of zoonotic helminth exposure. An additional 100 water buffalo owners were included in the survey of management practices. Seventeen species of zoonotic helminths were identified, with an overall prevalence of 55.1%. Hookworms and *Toxocara* spp. were most prevalent in companion animals while *Fasciola* spp. and strongyles in farm animals. Molecular analysis will be done to confirm identity of the parasites. Several factors such as animal age, sex, location, housing and feeding practices showed significant association for infections. The high prevalence of zoonotic infections in domestic animals and low awareness of animal owners poses health threats to the community. The results highlight the importance of a One Health approach in addressing concerns about helminth zoonoses.