ABSTRACT

Introduction: Cystic Echinococcosis has been found in humans in Uganda with a prevalence of 1.84% (Emmanuel, 2016). They are one of Echinococcus Granulosus intermediate hosts while the dog is its definitive host thus human dog interaction is a big channel to transmission (Kumar, 2006). There is high dog ownership (Forman et-al., 2013, Daily Monitor, 2019 and Kumar, 2006), thus an active involvement of humans in its life cycle. A very high prevalence (66.3%) of Cystic Echinococcosis was found in karamoja pastoralist population dogs (Francis, 2010). Unfortunately, there are undocumented cases of this disease among urban area dogs (anecdotal data). It is a devastating disease whose control needs a multidisciplinary approach, and thus, understanding Echinococcus Granulosus in dog stool is one way of achieving the One Health strategy in controling zoonotic disease transmission. (The Commonwealth Health Hub, 2019)

Objectives: The broad objective was to establish the prevalence of Echinococcus Granulosus infection and the hygienic practices in domestic dogs while the specific objectives were to establish the prevalence of the infection, its common stages in infected dogs, and the hygienic practices of their handlers in Kijjwa-Bukasa from August to October 2021.

Method: A descriptive cross-sectional study was done on the domesticated dogs of Kijjwa-Bukasa so as to get a representation of the situation in the whole country. The dogs, kennels, and stool were examined both macroscopically and microscopically for indications and predispositions to echinococcosis and the data collected was analyzed.

Results: Of the 176 assessed dogs, 152 (86.36%; 95%CI=80.39 to 91.06) were infected. Of the 152 infected ones, all (152, 100%) had at least eggs in stool among which 108 (71.1%) hadproglotids. Of the 176 dogs, 112 (63.64%; 95% CI=56.06 – 70.74) lived in unhygienic conditions.

Conclusion: A big number of dogs 86.4% have echinococcosis which has been greatly caused by luck of good hygienic practices on the part of their handlers. Dog handler hygienic practices may not be the only dependent factor of this infection in dogs, but may determine spread of the disease to humans. Recommendations include; Health education about cystic echinococcosis, dog de-worming drives, and training.