PREVALENCE, PUBLIC HEALTH AND ASSOCIATED RISK FACTORS OF COCCIDIOSIS IN SMALL RUMINANTS AT DEYNIILE SUB-DISTRICT IN MOGADISHU, SOMALIA

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Abstract

Prevalence study of coccidiosis was conducted in Raadeerka, Gubta and Bangalo in deyniile Sub-district, using a cross sectional approach. A total of 120 faecal samples were examined, the overall positive for the parasite was 100% of which, 37.5%, in sheep and 62.5% in goats. Sex and species did not significantly influence ($p > 0.05$) the trend of infection. Prevalence of Small ruminants within different body conditions were Good 16(33.3%), Medium 20(41.7%) and Poor 12(25%) This indicates small ruminants with medium body condition are most likely to be effected with coccidiosis. There was significant ($p < 0.05$) difference observed in Prevalence of Coccidia species based on the study site of small ruminants, and All ages of small ruminants (Sheep and Goat) were risk factors of infection when compared to the other small herds. In Raadeerka 14(29.5%), Gubta 18(37.5%) and Bangalo 16(33.3%) The prevalence of coccidosis in Gubta was higher as compared to other two Sub-districts. The overall prevalence of pathogenic Eimeria species was 100 %, while the prevalence of that in sheep and goats were 78.68% and 48.13% respectively. Species, nsex and age of animals in this case significantly influenced n($p < 0.05$) the prevalence of pathogenic Eimeria species. The females (58.3%) significantly ($p < 0.05$) had higher infection rates than males (41.7%). Animals of age greater than one years old (62.5%) had significantly ($p < 0.05$) higher prevalence rates than one years (20.8%) and less than one years old (16.7%). Conclusively, prevention, public health awareness and effective control programs should be targeted towards the most predisposed females and younger animals.

The results of the study revealed that the sheep and goat Coccidiosis is widespread in the study areas. Therefore, there is a need for executing control measures and increasing public awareness in the prevention methods of the disease transmission.

Key Words: Coccidiosis; Public Health; Risk Factors; Small Ruminants; Benadir Region Somalia.