Eshitera E.E.; Maingi N.; Kitala P.; Githigia S.M. Otieno R.

Prevalence of Porcine Cysticercosis and Risk Factors for Taenia Solium Cysticercosis in Homa Bay District, Kenya

Abstract

A cross sectional study was carried out to determine the occurrence of cysticercus cellulosae amongst the free range pigs of Homa Bay district. Occurrence of risk factors was sourced through structured questionnaire and the prevalence of cysticercus cellulosae determined by dividing the number of pigs testing positive on lingual palpation by total number of pigs tested.

For examination of the tongue for cysts, pigs were restrained with a hog restrainer and mouth kept open using a strong stick. The tongue was grasped using cotton gauze with one hand and the underside of tongue palpated for cysts that usually measure up to 3mm in diameter. 5.83 % (14 of 240) of pigs showed presence of palpable cysts and 1.25% (3 of 240) were suspected to have cysts. A high proportion (88%) of pigs was kept for sale. 13.98% (27 out of 193) of farmers were practicing home slaughter without official meat inspection. Pigs were mainly tethered (98.4%) during the planting season, (97.9%) during growing season and (98.4%) during the harvesting season. Farmers fed their pigs on kitchen left over and pasture (46.9%) and kitchen left over, sweet potatoes and pasture (25.9%). None of the farmers (0%) supplemented their pigs with commercial feeds. A high number (100 out of 193 = 51.8 %) of homes were without latrines. Previous tapeworm experience was 94.8% (183 out of 193). Results of this study indicate that porcine cysticercosis is prevalent in free range pigs in three divisions of Homabay District. The low levels of knowledge of occurrence and of the mode spread of *T. solium* is a probable contributor to the maintenance of the parasite. Lack of proper housing, lack of latrines and failure to use those that are present and active tapeworm infestation also contribute the perpetuation of the parasite.