



A survey of knowledge, attitudes, and perceptions (KAPs) of monkey tapeworm disease in Matara District

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Bertiellosis (monkey tapeworm disease) is a rare intestinal parasitic infection in humans caused by adult cestode genus *Bertiella* of the family Anoplocephalidae. Primates act as the definitive host while a soil-inhabiting mite species of family Oribatidae is known to be the intermediate host. Since 1976, cases of human Bertiellosis have been reported from various regions of Sri Lanka, including Southern province (Matara district). Because it is a relatively unknown yet an emerging health problem, an awareness survey (knowledge, attitudes and perceptions; KAPs) of the disease was carried out among 190 people selected from areas where previous cases were reported in Matara district (Dodampahala, Dikwella, Batheegama, Kapugama, Kithalagama and Poramba). Regarding the disease-transmission role of monkey in general, about 55% of the studied population had some knowledge. Only 16.3% had previous knowledge that the monkeys were responsible for spreading a disease known as the tapeworm disease. Among those who knew, only 1.6% had a very good knowledge while others either knew to some extent (10.5%) or knew very little (2.6%) about the disease and the role of monkeys in it. Monkey faecal matter seem to be a common occurrence as more than 50% of the studied population detected them in their surrounding daily, indicating that the monkeys have been frequent migrants to those areas. These droppings are the main source, which spreads the infective embryonated eggs in the environment, and when these eggs enter into the intermediate host in soil, life cycle continues. The potential route of entry of the parasite into human is via these mites through soil related works, nail-eating habit etc, and children seem to be the most susceptible group. About 83% of the studied population engaged in soil-related work at least once a month, thus providing an easy route of entry into human unless people take necessary precautions, such as cleaning hands. More than 90% of the people suggested holding awareness programs to villagers about the disease in order to prevent infections. Awareness of people related to the disease in general seems to be poor, and enhancing the awareness on disease is important to prevent this rare infection. Preliminary study of the biology of the parasite species in Sri Lanka was also carried out, and the mites containing metacestode cysts were discovered in soil. The study concludes that the awareness of the Bertiellosis in Matara district is poor, and measures should be taken to educate people about the disease.

Key words: Monkey tapeworm, Bertiellosis, Awareness, KAPs survey