Sudan University of Science and Technology
College of Graduate Studies

Prevalence of intestinal parasites in Algitanah locality ((White Nile State

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A dissertation Submitted in Partial Fulfillment of the Requirement of M.Sc. Degree in Medical Parasitology

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بِسْمِ اللّهِ الرَّحْمَنِ الرَّحِيمِ

قال الله تعالى

قُلْ لَوْ كَانَ الْبَحْرُ مِدَادًا لِكَلِمَاتِ رَبِّي لَنَفِدَ الْبَحْرُ قَبْلَ أَنْ تَنْفَدَ كَلِمَاتُ رَبِّي وَلَوْ جِئْنَا بِمِثْلِهِ مَدَدًا

صدق الله العظيم

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Dedication

---------- To

.My dear parents

---------- To

.My wife and sons whom I love so much

---------- To

.My brothers and sisters

---------- To

.My teachers, friends and colleagues

Acknowledgement

Thank you my God, for giving me the ability to bring this research to light.

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Abstract

This study was conducted on school children in Algitanah locality, White Nile State. In this study, 288 faecal samples were collected from students (158 males and 130 females). The stool samples were processed by using formal ether concentration and direct wet preparation techniques.

The results revealed that 198 (68.8%) of school children were infected with intestinal parasites. six different parasites have been detected in this study and their prevalence was as follows: *Entamoeba coli* (44%), *Entamoeba histolytica* (28.7%), *Giardia lamblia* (18.2%), *Hymenolepis nana* (8.5%), *Enterobius vermicularis* (0.3%) and *Schistosoma mansoni* (0.3%). This study revealed that infection with intestinal protozoa (62.5%) was higher than infection with intestinal helminthes (6.3%).

The results showed that the prevalence rates of intestinal parasites among males and females were almost similar (69.6% and 67.6% respectively). ($P > 0.05$). Also, the results showed that there is no variation in infection rates among different age groups of school children. ($P > 0.05$).

The study demonstrated that the prevalence rate of the single infection was higher than the prevalence rate of the mixed infection (39.6% and 29.1% respectively).

The study proved that there was an obvious difference of the detection rates of the two techniques used, formal ether concentration and direct wet mount (68.8% and 54.4% respectively). ($P < 0.05$).

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