Prevalence and risk factors associated with intestinal parasitic infection among children in Aswan, Egypt

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Abstract:

Aims: Due to lack of available studies on the intestinal parasitic infection in children in Aswan Governorate, the present study is planned to monitor and associated risk factors of the intestinal parasitic parasites among urban and rural primary school children in Aswan Governorate. Study Design: A cross-sectional descriptive study. Place and Duration of Study: This study was carried out in Aswan Governorate during the period from October 2015 to March 2016. Methodology: A total of 300 stool samples were collected from children were included in the study. Their ages ranged from 6 to 12 years, 170 of them were males 130 were females and examined by direct wet mount and formal ether concentration techniques and also stained with different stains for parasitic infections. Medical Sociodemographic data were collected by using a standardized questionnaire. Results: The overall prevalence of intestinal parasitic infections was 31%; Single infection in 26% and mixed infection in 5%. The most predominant protozoal parasites found was Entamoeba histolytica 8.3% followed by Giardia lamblia 3.7% and Cryptosporidium parvum 1.7% and commonest helminthic infection was Oxyuris 6.6% followed by H. nana 3% Ascaris lumbricoides 1%. Mixed infection was in form of Entrobius vermicularis plus Entamoeba histolytica in 23.4%, Entrobius vermicularis plus Giardia lamblia in 17.6%, Entrobius vermicularis plus Cryptosporidium parvum in 11.8%, Entamoeba histolytica plus Hymenolepis nana in 11.85%, Ascaris lumbricoides plus Entamoeba histolytica in 17.6%, Giardia lamblia plus Entamoeba histolytica in 11.8%. Parasitic infection was more prevalent in rural areas 60% than urban 30%. Parasitic infection was more prevalent in boys 53.8% than girls 46.2%. There was significant increase of recurrent abdominal pain, dysentery, vomiting, diarrhea, peri-anal itching and pallor in infected students when compared to non-infected students. Conclusion: The present study highlighted on prevalence of intestinal parasitic infection in children in Aswan Governorate, Egypt and provided that, the intestinal parasitic infections are a public health problem and there is an urgent need for efforts towards ensuring adequate control of intestinal parasites in Aswan Governorate and preventive measures to be re-established especially in children of school age.

Keywords:

risk factors, intestinal parasitic, children, public health, Aswan Egypt

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