

Prevalence of Intestinal Parasites and associated risk factors among Inflammatory Bowel Disease suspected patients in Tigray Regional State, Northern Ethiopia.

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Abstract

Background: Intestinal parasite infections are important public health concerns globally. Besides, some Intestinal parasite infections aggravate symptoms, have a clinical similarity, and considered differential diagnosis with Inflammatory Bowel Disease. So, the prevalence of intestinal parasites and associated risk factors among Inflammatory Bowel Disease suspected patients were determined.

Objective: To determine the prevalence of intestinal parasites and associated risk factors among Inflammatory Bowel Disease suspected patients attending in Ayder Comprehensive Specialized Hospital, and Hiwot Private Clinic, Mekelle, Tigray, Ethiopia, 2020.

Methods: A cross-sectional study was conducted among individuals who were Inflammatory Bowel Disease suspected patients in the Ayder Comprehensive Specialized Hospital, and Hiwot Private Clinic from February 01, 2019 to July 30, 2020. Descriptive statistics were computed to summarize data and result was presented using tables. Association between different variables with outcome was analyzed using Bivariate and multivariate logistic regressions. The p-value less than 0.05 were considered as statistically significant.

Results: A total of 297 Inflammatory Bowel Disease suspected patients were included. Of these, 54.9% were males. The overall prevalence of intestinal parasites was 127 (42.76%). *Entamoeba histolytica/dispar* 76 (25.58%), and *Giaardia lamblia* 32 (10.77%) were the most predominantly identified parasites. Participants with untrimmed fingernail (AOR =2.4 95% CI =1.3-4.3, $p =0.002$), eating unwashed vegetables (AOR=2.3, 95%, CI: 1.2-4.3, $p =0.011$), and family size of greater than five (AOR=1.7, 95% CI= 1.029-2.881, $p = 0.039$) were found to be independent predictors of intestinal parasites.

Conclusion: Overall prevalence of intestinal parasites infection was 127 (42.76%). *Entamoeba histolytica/dispar* was the most prevalent parasites. Family size of greater than five, eating unwashed vegetables, and untrimmed fingernail were fund to be statistically associated with infection of intestinal parasites. Therefore, health care providers should screen and treat Inflammatory Bowel Disease suspected patients for intestinal parasites in order to ensure good diagnosis, and treatment.

Keywords: Crohn's disease, Inflammatory Bowel Disease, Intestinal parasite infections, and Ulcerative colitis, Mekelle, Ethiopia