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Abstract

The prevalence of intestinal parasite infection and associated factors among food handlers in eating and drinking establishments in Chagni town, northwest Ethiopia

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Abstract:

Globally, it is estimated that one-third of the population is infected with intestinal parasites and most of which are found in developing countries (1). Food handlers play a major role in ensuring food safety in processing, storage, and preparation chain (2). Parasitic diseases remain one of the most common types of human infection among food handlers throughout the world and are still causes of human sickness and mortality. Food handlers infected with intestinal parasites are also potential sources of infections for customers (3, 4). But the magnitude and risk factors of this infection among food handlers is not well addressed. Therefore this study was done to fill this gap. An institution based cross-sectional study was showed from March to April 2018, in the food and drinking service establishments of Chagni town, northwest Ethiopia. A total of 400 food handlers were included. Data were collected using a structured interviewer administered questionnaire and laboratory diagnostic tests. The prevalence was determined and multivariable logistic regression was fitted to determine the adjusted odds ratio of factors associated with intestinal parasite infection. P-value < 0.05 was considered as statistically significant

A total of 59 food handlers were infected with at least one of the intestinal parasites; making the prevalence 14.8% [95% CI (11.5%, 18.0%)]. The identified parasites were Entamoeba histolytica 34 (57.63%), Ascaris lumbricoides, 11 (18.64%), Giardia lamblia 6 (10.17%), Hookworm 5 (8.47%), Taenia species 2 (3.39%) and Hymenolepis nana1 (1.7%).

According to multivariable logistic relapse analysis, lack of regular hand washing before meal [AOR = 4.77, 95% CI (2.09, 10.87)], regular hand washing after visiting toilets, [AOR = 3.39, 95% CI (1.52, 7.57)], sheared fingernails, [AOR = 2.39, 95% CI (1.29, 4.42)], and frequent medical check-ups for intestinal parasites [AOR = 3.54, 95% CI (1.11, 11.31)] were significantly associated with the infection of intestinal parasites.

Regulatory standards that enforce prior medical checkup and certification of food handlers should be advocated, practiced, monitored, and evaluated as per the standard at all levels. Hygiene elevation for food handlers, especially hand washing at critical times, including nail clipping should be practiced. Food coaches shall also clip their finger nails regularly.

Biography:

Adhanom Gebreegziabher Baraki is a lecturer and researcher in university of Gondar, Ethiopia. He holds a BSc in public health and masters degree in masters of public health in Epidemiology and Biostatistics. Adhanom has work experiences of 2 years of clinical practice and more than 4 years as a lecturer. He advises master's students of field epidemiology during their field work of outbreak investigation and surveillance. He has presented an abstract on Effect of Perinatal Depression on Birth and Infant Health Outcomes: A Systematic Review and Meta-analysis of Observational studies from Africa during the Ethiopian public health association, Ethiopia. He has published researches several researches in peer reviewed journals and several others are also under review. Adhanom lives in a low income country, Ethiopia, where infectious diseases are major public health problems and he is passionate about controlling infectious diseases.

Publication of speakers:

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