



The Prevalence of Intestinal Parasites Detected During Pre-Employment Health Care Worker Stool Examination at KAMC, Tertiary health care center in Makkah, KSA.

Ahmed M, Eltaweel N, Elmorsy S. AlZaidi A,
Al-Dhahwani B, Al-Fahmy A, Bakhsh B,
Farhat L, Kamal R, Felimban S.

Received 09 October, 2015; Accepted 26 October, 2015 © The author(s) 2015. Published with open access at www.questjournals.org

I. BACKGROUND

According to Saudi Health Authorities, healthcare workers should be infection-free and physically intact to avoid disease transmission. The harm of parasitic infection is not exclusive for healthcare workers only; it may transmit to the patient and other healthcare workers. Stool analysis plays an important role in pre-employment tests for the screening of intestinal parasites in new workers.

II. OBJECTIVE AND STUDY DESIGN

This Retrospective cross-section study aimed to determine the prevalence of intestinal parasites in healthcare workers and their families during pre-employment testing at King Abdullah Medical City (KAMC) and to compare the prevalence of different types of intestinal parasites among different nationalities, age groups and gender in KAMC to gain knowledge that will help to decrease transmission of such communicable diseases.

III. STUDY POPULATION AND STUDY PROCEDURES

Data were collected from the results of routine single stool analysis available in the electronic hospital information system for pre-employment tests for All health care workers who attend staff clinic at KAMC over four years period. All results was exported into Excel work sheet containing the following fields: Medical record number (MRN), name, age, gender, nationalities, date of test and the test result , then exported to SPSS statistical program after erased the name and replaced the MRN by study codes, then the analysis is performed. For positive result, if the file still open > 3 months, the hospital file was checked for any given anti parasitic medications and if there is Re-test for the same person or if the file is closed that was reported.

IV. RESULTS

The total number of records is 2491, there is one missing result. There are 1184 male and 1306 female included in the study. The countries of origin of these workers are largely from 5 geographical areas which are East Asia: 842 cases, West Asia: 1107, North Africa: 293 cases, Sub-Saharan Africa: 44 cases, European:53cases and non-Saudi for whom the exact nationality was not determined in the electronic hospital files :140 cases and 12 missing . The age distribution of the screened workers showed that 5 were less than age 20 years, 2119 were aged 20-39 years, and 342 were aged 40-59 years, 60 and above were 13 cases and 12 missing cases. The distribution of the workers through the study years was as follows: 2010: 290 cases, 2011: 510 cases, 2012: 835 cases, 2013:554 cases and 2014: 302 cases .Intestinal parasites were detected in 16% of the total workers. The most common parasite was Blastocystis 78.9% of positive cases followed by E-coli 9.3% , Giardia Lamblia 5.8% and E-histolytica 5.3 % . The prevalence of intestinal parasites was significantly higher in females =57.4% than males =42.6% . Also the differences in prevalence of positive cases among different geographical areas was highly significant; East Asia: 53.6% , West Asia:25.8% , North Africa: 11.3% , Sub-Saharan Africa : 1.3% , European:1.8% and non-Saudi5.8% .Checking of electronic files of positive cases revealed that no treatment was given and no retesting of positive cases were done.

V. CONCLUSION

Infestation of stools with intestinal parasites is a common finding in more than 16% of the new workers and their families and their potential hazards cannot be overlooked. The prevalence of parasites was fairly constant through the period of study. The distribution of parasites was significant between genders and different geographical areas. Effective stool screening and eradication strategies for intestinal parasites in new workers should be rigorously enforced, and more attention needed for treatment and retesting for positive cases.