Intestinal Parasitic Infections between Patients Attended to Soba University, Khartoum, Sudan, July-September 2016

By Mosab Nouraldein Mohammed Hamad

Abstract- Background: Intestinal parasitic infections are amongst the most common infections throughout the world. It is estimated that some 3.5 billion people are affected, and that 450 million are ill as a result of these infections, the majority being children.

Rationale: Intestinal parasitic infections lead to nutritional deficiency and impaired physical developments which will have negative consequences on cognitive function and learning ability.

Objective: To detect prevalence of intestinal protozoa among patients attended to soba university hospital during the period of the study.

Material and Method: Descriptive, cross sectional study, stool specimens were collected from 113 patients attended to Soba university hospital and examined by wet preparation and concentration techniques.

Discussion: Our result represent that the level of sanitation is moderate compared with other studies mentioned above, but we need to perform stool concentration methods to confirm this suggestion.

Result: 15.92% of stool specimens examined were positive for intestinal parasites.

Conclusion: Further studies are required with large sample size, long duration and stool concentration techniques.

Keywords: prevalence, intestinal parasites, patients.

GJMR-K Classification: NLMC Code: WA 240
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I. INTRODUCTION

Intestinal parasitic infection is the common parasitic infection worldwide, particularly in the developing countries, due to overcrowding, bad sanitation and contamination of drink water resources in that area from the world. Children are the most affected group because of low immunity due to malnutrition, infections, pollution, inadequate health care facilities and conflicts.

Most of intestinal parasitic infections are transmitted through drinking of contaminated food or drinking polluted water and the behavior of local population, whom defecate in the night soil, due to absence of well-constructed latrines enhance the spreading of that type of parasitic infections between the individuals of such community.

Study done by Curval LG et al, in Midwest Brazil, showed that; the overall prevalence was 20.2%. (1)

Study done by Astal Z in Khan Younis Governorate, Gaza strip, showed that; the general prevalence of intestinal parasites was 34.2%. (2)

Study done by korzeniewski K, in eastern Afghanistan, showed that; 38.8% of the study population were infected with intestinal parasites. (3) Study done by Abolfath Shojaii Arani, in a population in South of Tehran, Iran, showed that; prevalence period of 10.7%. (4) Study done by A. Dudlova et al, in Slovakia, showed that; the prevalence of gastro-intestinal parasitic infection was 6.81%. (5) In study done by David NA Aka et al, in Abidjan, Cote Divoire, showed that the overall prevalence of intestinal parasitic infection was 19.3%. (6)

II. RATIONALE

Intestinal parasite infections lead to several complications, however, most of cases were being asymptomatic carriers and usually tend to be chronic. Helminthic infestation lead to nutritional deficiency and impaired physical developments which will have negative consequences on cognitive function and learning ability.

III. OBJECTIVES

To detect prevalence of intestinal parasites among hospital patient admitted to Soba University hospital.

IV. MATERIAL AND METHODS

a) Study Design
   Descriptive, cross sectional study.

b) Study Period
   From July to September 2016.

c) Study Area
   Soba University hospital, Sudan.

d) Sample Size
   113 Stool Samples.

e) Study Population
   Patients with abdominal pain attended to soba university hospital, from July to September 2016.

f) Ethical Consideration
   All participants were consent to participate in the study.
V. Methodology

Specimen: Stool Specimen
Method of Diagnosis: Wet Preparation

VI. Results

15.92% of stool specimens examined were positive for intestinal parasites.

VII. Discussion

Our result represent that the level of sanitation is moderate compared with other studies mentioned above, but we need to perform stool concentration methods to confirm this suggestion.

VIII. Conclusion

Further studies are required with large sample size, long duration and stool concentration methods.

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