



Asian Journal of Research in Pharmaceutical Sciences and Biotechnology

Journal home page: www.ajrpsb.com



PREVALENCE OF INTESTINAL PROTOZOA BETWEEN PATIENTS ATTENDED TO ATBARA TEACHING HOSPITAL IN APRIL, 2017

Mosab Nouraldein Mohammed Hamad*¹, Tarteel Ramadan Hassan¹, Hadia Khogli Ali¹, Kowther Hussien Abdelgader¹, Samar Alaaldein Mahgoub¹, Samah Abdelnaser¹, Nahed Mosa Hamed¹, Yusra Mokhtar Mohammed¹, Romysa Omer Alamen¹

¹*Department of Parasitology and Medical Entomology, Department of Medical Laboratory, Faculty of Health Sciences, Elsheikh Abdallah Elbadri University, Sudan.

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:** Helminthic infestation 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 hospital patient of Atbara teaching hospital. **Material and Method:** Descriptive, cross sectional study, stool specimens were collected from 30 patients attended to Atbara teaching hospital and examined by wet preparation and concentration techniques. **Result:** 56% of stool specimens examined were positive for intestinal protozoa. **Conclusion:** Further studies are required with large sample size and long duration.

KEYWORDS

Prevalence, Intestinal protozoa and Patient.

Author for Correspondence:

Mosab Nouraldein Mohammed Hamad,
Department of Parasitology and Medical
Entomology,
Faculty of Health Sciences,
Elsheikh Abdallah Elbadri University, Sudan.

Email: musab.noor13@gmail.com

INTRODUCTON

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 children¹. These infections are regarded as a serious public health problem, as they can cause iron deficiency anaemia, growth retardation in children and other physical and mental health conditions. The high prevalence of these infections is closely correlated with

poverty, poor environmental hygiene, and impoverished health services².

The faecal oral route is significant in the transmission of parasitic infections to human via poor personal hygiene and environmental conditions such as contaminated soil and water sources. Worm infection is believed to be imposing an unnecessary burden on many Sudanese children and on the overall cost of health-care³. Disadvantaged children are the most affected, especially those who live in densely populated and under-serviced urban informal settlements as well as in some rural areas⁴. World Health Assembly (WHA) member states, including Sudan, were urged to implement regular, non-selective de-worming of school-age children and young women by 2010 in areas where the prevalence of worm infestation is 50% or more⁵.

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.

Objectives

To detect prevalence of intestinal protozoa among hospital patient of Atbara teaching hospital.

MATERIAL AND METHODS

Study design

Descriptive, cross sectional study.

Study period

1-30th April, 2017.

Study area

Atbara teaching hospital.

Sample size

30 samples.

Study population

Patients with abdominal pain attended to Atbara teaching hospital in April 2017.

Ethical consideration

All participants were consent to participate in the study.

METHODOLOGY

Specimen

Stoolspecimen

Method of diagnosis

Wet preparation

RESULTS

56% of stool specimens examined were positive for intestinal protozoa.

CONCLUSION

Further studies are required with large sample size and long duration.

ACKNOWLEDGEMENT

The author wish to express their sincere gratitude to Department of Parasitology and Medical Entomology, Department of Medical Laboratory, Faculty of Health Sciences, Elsheikh Abdallah Elbadri University, Sudan for providing necessary facilities to carry out this research work.

CONFLICT OF INTEREST

We declare that we have no conflict of interest.

BIBLIOGRAPHY

1. Damen J G, *et al.* "Prevalence of intestinal parasites among pupils in rural North Eastern, Nigeria," *Nigerian Medical Journal: Journal of the Nigeria Medical Association*, 52(1), 2011, 4-6.
2. Al-Braiken, Faten A. "Is intestinal parasitic infection still a public health concern among Saudi children?" *Saudi Medical Journal*, 29(11), 2008, 1630-1635.
3. Andargie, Gashaw, *et al.* "Prevalence of bacteria and intestinal parasites among food-handlers in Gondar town, northwest Ethiopia," *Journal of Health, Population, and Nutrition*, 26(4), 2008, 451-455.
4. Ullah, Ikram, *et al.* "Intestinal worm infestation in primary school children in

rural Peshawar,” *Gomal Journal of Medical Sciences*, 7(2), 2009, 132-136.

5. Mohamed, Mamoun M, Abubakr I. Ahmed and ElMuntasir T. Salah. “Frequency of intestinal parasitic infections among displaced children in Kassala Town,” *Khartoum Medical Journal*, 2(1), 2012, 175-177.

Please cite this article in press as: Mosab Nouraldein Mohammed Hamad *et al.* Prevalence of intestinal protozoa between patients attended to atbara teaching Hospital in April, 2017, *Asian Journal of Research in Pharmaceutical Sciences and Biotechnology*, 5(4), 2017, 65-67.