# **Dedication**

To my beloved

**Parents** 

My husband Badraldeen

My daughters Tayeba and Fatima and my son Mohamed

# Acknowledgement

Thanks and praise is due to Allah.

I would like to show my deep appreciation and gratitude to my supervisor Dr.mohamed Baha Eldin for his sincere help, valuable suggestions and advices throughout the period of study.

My thank and gratitude is extended to the staff of the Parasitology department, faculty of medical laboratory sciences, Sudan university for sciences and technology.

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#### **Abstract**

This survey was conducted in different hospitals in Omdurman city. The study involved three hundred stool samples collected from 200 patients with irritable bowel syndrome (IBS) and another 100 as control, during the period between May and December (2011). The result showed that 112(56%) of irritable bowel syndrome patients were harboring gastrointestinal parasites and 20% of the control as well.

The study revealed that *Giardia lambilia* was seen in 28.5% of the irritable bowel syndrome cases, followed by *Entamoeba histolytica* in 9.2% of cases, *Hymenolepis nana* (7.0%), *Taenia spp* (4%) and *Entamoeba coli* and *Ascaris lumbricoides* (3.5% each).

Lower rates were reported among the control group where *G. lamblia* was seen in 10% of the cases, *E. coli* in 5%, *E. histolytica* in 1%, *H. nana* in 2% and *Taenia* spp in 2% of the cases.

The result demonstrated that the prevalence rate of gastrointestinal parasites among males and females was almost the same (55% and 57% respectively).

On the other hand, the prevalence of gastrointestinal parasites among males and females in the control group was found to be 22% and 18% respectively.

The highest prevalence rates (61.5% and 60%) were reported among the 21-30 and 31-40 years age group respectively, while the lowest rate (22.2%) was reported among the 10-20 years age group for the IBS patients.

For the control group, the highest prevalence rate (23.3%) was reported among the 21-30 years age group, while the lowest prevalence rate (13.3%) was reported among the over 40 years age group. All individuals in the 10-20 years age group were refractory to infection.

It was revealed that infection with *G. lamblia* was the highest (28.5%) in the IBS patients followed by *E. histolytica* in 9.2% of the cases. In the control group, an infection rate of 10% was reported for *G. lamblia*.

#### خلاصة البحث

تم اجراء هذا البحث في المستشفيات المختلفة من مدينة امدرمان حيث شملت الدراسة 300 عينة براز جمعت من 200 مريض بالمصران المتهيج (العصبي) ومن 100 آخرين لا تظهر عليهم اعراض المصران العصبي في خلال الفترة من مايو الي ديسمبر 2011.

اظهرت النتيجة ان 112(56%) من مرضى المصران العصبى مصابين بالطفيليات المعدية المعوية وكذلك في 20% من الاشخاص السليمين.

اظهرت الدراسة ان G. lamblia ظهرت في 28.5% من حالات المصران العصبي يليها G. lamblia في 9.2% من الحالات, H. nana في 9.2% من الحالات بالك E. coli و Ascaris

E. سجلت معدلات اقل في الاشخاص السليمين, G.lamblia ظهرت في 10% من الحالات, H. nana ,%1 في E. histolytica,%5 في Coli

بينت الدراسة ان معدل الانتشار للطفيليات المعدية المعوية كان تقريبا متساويا في الايناث والذكور (57% و55% على التوالي).

فى الجانب الآخر كان معدل الانتشار فى الاشخاص السليمين فى الذكور والاناث (22% و18% على التوالى).

اعلى معدل انتشار (61.5%و 60%) في حالة المصابين بالمصران العصبي سجل في الفئات العمرية 21-30,31-40 سنه على التوالى بينما اقل معدل (22.2%) فقد تم تسجيله في الفئة العمريه 10-20 سنه.

فى الاشخاص السليمين تم تسجيل اعلى معدل انتشار (23.3%) فى الفئة العمريه 21-30 سنه بينما اقل معدل انتشار (13.3%) تم تسجيلة فى الفئة العمرية اعلى من 40 سنة.

كل الأشخاص في الفئة العمرية 10-20 سنة كانوا سالبين لعدوي الطفيليات.

اتضح ان الاصابة بطفيل G. lamblia كان الاعلى (28.5%) في حالة المصابين بالمصران العصبي يليه E. histolytica (من الحالات.

في حالة الاشخاص السليمين تم تسجيل 10% معدل اصابه ب G. lamblia.

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