

**Sudan University of Science and Technology**  
**College of Postgraduate Studies**

**Prevalence of Schistosomiasis among Basic School  
Children in Assalaya Campus - White Nile State**

معدل انتشار مرض البلهارسيا وسط طلاب مرحلة  
الاساس بمنطقة عسلاية  
ولاية النيل الابيض

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## **Dedication**

To the soul and memory of my father and sister

To my kind mother

To my beloved wife and son

To my brothers and sisters

To the people whom I love, respect and appreciate

## **Acknowledgment**

I would like to thank Allah for giving me the patience and support to complete this research.

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## **ABSTRACT**

This study was carried out among basic school children at Assalaya Campus White Nile state during the period December 2008 to January 2009.

The main objective of the study is to measure the prevalence and intensity of schistosomiasis infection in Assalaya campus and to determine the most affected age group and to access the environmental factors that influence the spread of the disease.

To conduct the study 447 basic school pupils were selected from seven basic schools. The overall prevalence of schistosomiasis was found to be 40.5%. The prevalence of *S. haematobium* was found to be 21% with mean of 50 egg per 10 ml of urine and the prevalence of *S. mansoni* was found to be 19% with mean of 100 egg per gram of faeces.

The prevalence of schistosomiasis was found to be high in males than females and the most affected age group was (10-15) years. Bad sanitation and lack of healthy drinking water and inadequate number of latrines were the main causes of the disease transmission.

Some recommendations were proposed to minimize the incidence of the disease.

## ملخص البحث

اجريت هذه الدراسة بمنطقة عسلاية بولاية النيل الأبيض وسط طلاب مرحلة الأساس في الفترة من شهر ديسمبر 2008 الي يناير 2009م . هدفت الدراسة لمعرفة معدل انتشار مرض البلهارسيا وشدة الاصابة ومعرفة الفئة العمرية الأكثر عرضة للمرض ومعرفة العوامل البيئية والظروف الاقتصادية المؤثرة في انتشار المرض.

تم اختيار اربعمائة سبعة واربعين طالب عشوائيا من عدد سبعة مدارس اساس لاجراء الدراسة. وجد ان معدل الانتشار مرض البلهارسيا البولي قد بلغ نسبة 21% بمتوسط 50 في 10م من البول كما وجد ان معدل انتشار مرض بلهارسيا المستقيم قد بلغ نسبة 19% بمتوسط 100 بيضة في جرام من البراز و قد بلغت نسبة الاصابة الكلية لمرض البلهارسيا 40%.

وجد ان معدل انتشار مرض بلهارسيا اعلي عند الذكور من الاناث كما وجد ان الفئة العمرية من 10-15 سنة اكثر عرضة للاصابة بالمرض.

كما ثبت ان عدم توفر المياه الصالحة للشرب وتدني نسبة المراحيض وعدم اصحاب البيئة من العوامل المساعدة في إنتشار المرض بين التلاميذ. تم وضع الحلول المناسبة لخفض نسبة الإصابة بالمنطقة.

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