

الآية

بسم الله الرحمن الرحيم

قال تعالى :

قُلْ لَوْ كَانَ الْبَحْرُ مِدَادًا لِكَلِمَاتِ رَبِّي لَنَفِدَ الْبَحْرُ قَبْلَ أَنْ تَنفَدَ كَلِمَاتُ رَبِّي وَلَوْ جِئْنَا بِمِثْلِهِ مَدَدًا

صدق الله العظيم

سورة الكهف الآية (109)

Dedication

**To my parents who gave me the
confidence**

To my dear sisters and brother

And my friends

Acknowledgement

First of all, I would like to thank Allah who provided me with the power, patience and determination to touch the sky of success.

Also my great appreciation is conveyed to my supervisor Dr. Mohammed BahaEldin for his great assistance, guidance and advice in the achievement of this study.

My thanks are also extended to the staff of Baharprimary school in Al-Lamab.

Abstract

This cross sectional study was conducted in AL-Lamab_Khartoum State on 270 (200 males and 70 females) to determine the prevalence rate of *Schistosoma haematobium* and to evaluate three diagnostic methods (sedimentation, filtration technique and ELISA technique).

The study was carried out during the period between August 2013 to December 2013. Urine and blood samples were taken from the subjects. Epidemiological and parasitological were obtained and recorded.

The study showed that the overall prevalence rate of infection was 11.1%

All positive cases (30) out of 270 were detected by using urine sedimentation and filtration techniques.

Males have reported higher rate of infection than females (14% and 2.8% respectively). The highest infection rate (16.4%) was reported among the age group 10-15 years, while the lowest infection rate was reported among the age group >22 year (5%).

The study showed that among 30 positive cases, 29 (14.2%) had direct contact with water and 1 (1.4%) had no contact with water.

Also the study showed that among 30 positive cases 27 (90%) had haematuria and proteinuria in their urine while 3 (10%) had no haematuria and proteinuria in their urine.

The study indicate that the prevalence rate of *S. haematobium* 11.1% in the study area and urine sedimentation technique more sensitive than filtration technique in diagnosis of infection

Only 30 positive samples and 30 negative samples were tested by the ELISA technique. The sensitivity and specificity reported were (90.6% and 96.4% respectively).

ملخص الدراسة

اجريت هذه الدراسة المستعرضة في منطقة اللاماب _ ولاية الخرطوم علي 270 شخص (200 ذكر ، 70 أنثى) لتحديد معدل انتشار بلهارسيا المجاري البولية و تقييم ثلاثة طرق تشخيصية مختلفة (الطرد المركزي، الترشيح وتقنية ELISA) استعملت في التشخيص.

الدراسة اجريت في الفترة ما بين اغسطس 2013 الي ديسمبر 2013.

أخذت عينات من البول والدم من الأشخاص موضوع الدراسة كما تم الحصول علي البيانات الوبائية والطفيلية وتسجيلها.

اظهرت النتائج ان مدي الانتشار الكلي لطفيل بلهارسيا المجاري البولية هو 11.1% , كل الحالات الموجبة (30 من أصل 70) تم التأكد منها بتقنيتي الطرد المركزي والترشيح.

من عدد 200 من الذكور التي فحصت وجد ان 28 حالة كانت موجبة ومن بين 70 من الاناث وجد ان حالتين كانت موجبة ، هذا يمثل معد انتشار (14% و 2.8 علي التوالي).

أعلي معدل انتشار 16.4% سجل وسط الفئة العمرية 10-15 سنة بينما المعدل الأقل 5% سجل وسط الفئة العمرية ≥ 22 سنة.

اظهرت الدراسة ان خلال ال 30 حالة موجبة كان معدل الإنتشار 14% بهؤلاء الأشخاص الذين كان لديهم اتصال بالماء بينما كان المعدل 1.4% للأشخاص الذين لم يكن لديهم أي اتصال بالماء.

أيضا الدراسة أظهرت أن خلال ال 30 حالة موجبة كان معدل الإنتشار 90% لدى الأشخاص الذين لديهم بروتين ودم في البول بينما 10% لدى الأشخاص الذين ليس لديهم بروتين ودم في البول.

أثبتت الدراسة ان حساسية ال ELISA كانت 90.6% بينما معدل النوعية 96.4%.

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