Prevalence of Human Brucellosis among Abattoir’s 
Workers and Brucella Laboratories Workers in 
Khartoum State

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Degree In Medical Laboratory Science (Microbiology)

By

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قال تعالى:

"يا أيها الناس إن كُنت مِّن البُعثِ فإنَا خَلَفناكُم مِّن ترابٍ ثُمَّ مِّن نَفقةٍ ثُمَّ مِّن عِلقاءٍ ثُمَّ مِّن مُضْعِفَتْكُم مُخَلِفَةٍ وَعِيْر مُخَلِفَةٍ لَتَبَيِّنَ لَكُم وَتَقْرِرُ في الأرْحَام ما تَشَاء إِلَى أَجَل مُصَمِّي ثُمَّ تَخْرِجُكُم طَفَالَ ثُمَّ لِتَبَلُّغُوا أَشْدَكُم وَمَسَّكُم مِّن يَتَوقَّفُ وَمَسَّكُم مِّن يَرُدُّ إِلَى أُرْدُلِ الْعُمَّر لَكِتَالِ يَعْلَم مِّن بَعْدِ عَلِمُ شَيْئًا وَتَرَى الأرْضَ هَامِدَةٌ قَدَا أَتْرَلْنَا عَلَيْهَا الْمَاء اهْتَرَّت وَرَبَتْ وَأَتْبَنَتْ مِن كُل ذُرْجٍ بَهْيَج؟

صدق الله العظيم
سورة الحج
الآية (5)
Dedication

• To the soul of my mother and father
  • To my brothers and sisters
  • To my small family (Amna, Faried)
They always provide me a rich source of moral support.

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All the praises and thanks are due to Almighty Allah, the Cherisher and Sustainer of the worlds, at the beginning and the last.

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ABSTRACT

The main aim of this study was to investigate the prevalence of human brucellosis among abattoir’s and brucella-laboratory workers, Khartoum State, Sudan. The study provided information about the epidemiology of the disease among human subjects in the study area. A serological survey of human brucellosis was carried out from July to August 2007. Ninety two volunteer participants (n= 92) were enrolled in the study. The diagnosis of human brucellosis was based on Rose Bengal Plate Test (RBPT) to screen the prevalence of antibrucella antibodies. The Standard Agglutination Tests (SAT) was used to confirm some negative samples obtained by the screening test. The overall prevalence rate was found to be 10.9% in human. Seventy subjects in this study were males (76.1%) and 22 subjects (23.9%) were females. Among male participants 7 subjects (10%) were positive, while among females 3 subjects (13.6%) were positive.
The highest prevalence rate was observed among those who were 56 - 65 years including two infected subjects (40.0%).

ملخص الأطروحة

أجريت هذه الدراسة بغرض معرفة مدى انتشار مرض البروسيل في مسالخ ومعمل البروسيل في ولاية الخريطوم. وقد وفرت هذه الدراسة معلومات عن وبائية هذا المرض وسط المجموعات البشرية في هذه المنطقة. أجري المسح المصنلي للبروسيل في الفترة من يوليو إلى أغسطس عام 2007م، حيث تم اختيار المتطوعين الذين شاركوا في الدراسة بناءً على رغبتهم في المشاركة وعددهم 92 متطوع. وقد تم التشخيص المصلي باستخدام إختبار الروز بنقال وإختبار التراص المصلي لتأكيد نتيجة بعض العينات السالبة. وجد أن معدل الإصابة بمرض البروسيل في الإنسان 10.9%. أخذت العينات من 70 رجل (76.1%) و 22 أمّرأة (23.9%), وكانت النتائج الإيجابية في 7 من الرجال (10%) و 3 من النساء (13.6%). أظهرت الدراسة أن الفئة العمرية الأكثر تأثر بالإصابة 56-65 سنة متضمنة 2 مصابين (40.0%).
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