

بسم الله الرحمن الرحيم

**Sudan University of Science and Technology**

**College of Graduate Studies**

**Seroprevalence of Syphilis among Pregnant Women in**

**Khartoum State, Sudan**

الانتشار المصلي لمرض الزهري بين النساء الحوامل في  
الخرطوم، السودان

**degree in A thesis submitted in partial fulfillment of the M.Sc.**

**Medical Laboratory Science**

**(Medical Microbiology)**

**By**

**Abdarahman Abdalbagee Mohammed Abdarahman**

**Medical laboratory Science, National Ribat University B.Sc.**

**(2006)**

**Supervisor**

**Dr. Yousif Fadlalla Hamedelnil**

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بسم الله الرحمن الرحيم

قال تعالى

فتعالى الله الملك الحق ۖ ولا تعجل بالقرآن من قبل أن  
يقضى إليك وحيه ۖ وقل رب زدني علما ﴿١١٤﴾

صدق الله العظيم

(سورة طه الاية 114)

# **DEDICATION**

- To my mother and father for instilling the importance of hard work and higher education
- To my supervisor Dr/Yousif Fadlalla for his support and encouragement
- To my brothers, sisters, friends and teachers

Abdarahman

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## **Abstract**

This cross-sectional, analytical study was conducted in Khartoum, Sudan, during the period from April to June 2014. Blood samples from one hundred (100) pregnant women in different gestational period and have different ages attending Omdurman Maternity Hospital and Almotakaml Medical Center, were collected to detect seroprevalence of syphilis.

All serum samples were tested for syphilis using two screening serological tests Rapid Plasma Reagin Test (R P R) and Rapid Syphilis Test (RST). Reactive specimens with one or both of the screening tests were further assayed with enzyme linked immunosorbent assay (ELISA).

From this study, 4% were positive by RPR test and 2% by RST, and when confirmatory by ELISA the specific treponemal antibodies were detected in 2% pregnant women.

Among the two positive cases one showed history of previous abortion while the other one had no previous abortion. No history of genital ulcers showed in positive cases. The two positive cases was among the age group 23-27 year and among age group 28-32 year. The two positive cases was detected among the third and fourth gestational period.

## الخلاصة:

اجريت الدراسة في الخرطوم، السودان خلال الفترة من ابريل الي يونيو عام 2014

اخزت عينات الدم من مائة (100) نساء حوامل في أشهر مختلفة وفئات عمرية مختلفة من المترددين على مستشفى ام درمان للامومة ومركز المتكامل الطبي، جمعت للكشف عن الانتشار المصلي لمرض الزهري.

تم اختبار مصل جميع العينات باستخدام اثنين من فحص الاختبارات المصلية، فحص الزهري السريع واختبار البلازما السريع.

العينات الايجابية مع واحد او كلا الفحصين يتم تاكيدها بواسطة الانزيم المناعي المرتبط.

كانت النتيجة كما يلي: 4% موجبة باستخدام البلازما السريع راجنه و 2% باستخدام فحص الزهري السريع، وعند تأكيد العينات الايجابية بواسطة اختبار الانزيم المرتبط تم الكشف عن 2% من اجسام اللولبيات المضادة في النساء الحوامل من بين الحالتين الايجابية واحدة قد اظهرت تاريخ اجهاض سابق والاخر بدون حالة اجهاض سابقة ولا يوجد حالات من القرع التناسلية في الحالتين الايجابية واحدة كانت من ضمن الفئة العمرية 23-27 من ضمن الفئة العمرية 28-32 سنة الحالات الايجابية كانت خلال الشهر الثالث والرابع من فترة الحمل.