

**SUDAN UNIVERSITY OF SCIENCE AND  
TECHNOLOGY**

**COLLEGE OF GRADUATE STUDIES**

**The Prevalence of Bacterial Vaginosis in  
Women with Vaginal Discharge**

**By**

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requirement of Degree of Master in Clinical  
Microbiology

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**بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ**

**قال الله تعالى**

**وَمَا تَوْفِيقِي إِلَّا بِاللَّهِ عَلَيْهِ تَوَكَّلْتُ وَإِلَيْهِ أُنِيبُ**

**صدق الله العظيم**

**سورة هود الآية 88**

# Dedication

*To the souls of my parents,  
my wife, daughter, brothers and  
sisters.*

# ACKNOWLEDGMENTS

*I would like to express my sincere gratitude and appreciation to my supervisor Dr. Humodi Ahmed Saeed, the Dean, College of Medical Laboratory Science, Sudan University of Science and Technology, for his sincere efforts, continuous guidance, comments, advices and criticism that have contributed a great deal in bringing this thesis to light.*

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## ABSTRACT

The main objective of this project to study the bacterial vaginosis in women suffering from vaginal discharge, visiting Khartoum Teaching Hospital, Khartoum, Sudan. The study was conducted during the period of seven months.

A total of 100 women complaining of vaginal discharge were examined. Vaginal swabs were collected from each subject and tested macroscopically, direct microscopy of wet vaginal smears, Gram stain and culture techniques. In addition, the vaginal pH was measured and Amine test was done. The results obtained revealed that, the commonest causes of vaginal discharge were *Candida* species (22%), *Trichomonas vaginalis* (5%) and bacterial vaginosis (3%). Other bacterial isolated were *Staphylococcus aureus* (12%) and *Eschehchia coli* (4%).

## ملخص الأطروحة

أجرى هذا البحث بغرض دراسة الإعتلال المهبلي الجرثومي لدى السيدات اللائى يعانين من الإفراز المهبلي والقيام بالفحوصات المعملية المستخدمة فى التشخيص. كانت هذه الدراسة بمستشفى الخرطوم التعليمي -الخرطوم- السودان فى خلال فترة سبعة أشهر، ولهذه الدراسة تم أخذ وفحص عينات من المهبل لمائة إمراة يشتكين من وجود إفراز مهبلي وذلك باستخدام الفحص المجهرى بالإرساء المبلل ولطاخة ملونة بتلوين غرام والزراعة وأيضاً تم قياس درجة الحموضة (pH) للمهبل وعمل الاستنشاق الأمينى لكل السيدات.

أوضحت الدراسة أن أكثر مسببات الإفرازات المهبلية هى المبيضات البضاء (22%)، المشعرات المهبلية (5%)، الإعتلال المهبلي الجرثومي (3%). بالإضافة إلى ذلك تم عزل ومعرفة المكورات العنقودية الذهبية (12%)، الاسكريشيه القولونية (4%).

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