Sudan

# University of Science and Technology College of Graduate Studies

Prevalence of Miscarriage Cases in KostiHospital Using Ultrasound

معدل انتشار حالات الاجهاض في مستشفي كوستي باستخدام الموجات فوق الصوتية

A Thesis submitted for partial fulfillment for the requirements of M.Sc. Degree in Medical Diagnostic Ultrasound

Presented by:

Mohammed Hamid Medani

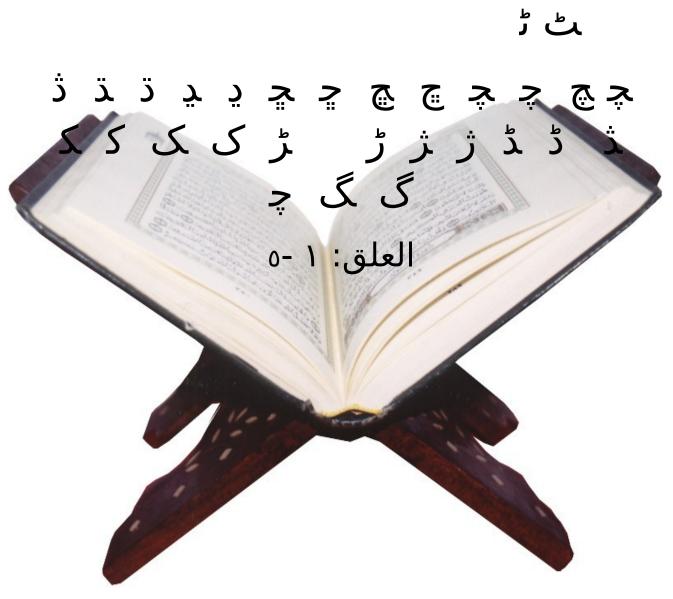
Supervisor:-

Dr. Mohammed Alfadil Mohammed

MD in medical physics

MSc in medical ultrasound

February 2015 بِسْمِ اللهِ الرَّحْمَنِ الرَّحِيمِ



To my mother
My father
My brothers
And
My sisters
Who supported me to complete this thesis

### **Acknowledgment**

I would like to express my gratitude to mysupervisor Dr. Mohammed Alfadil Mohammed who helped me with generous advice to complete this work.

Also I would like to enlarge my thanks to my teachers, colleagues and family members who helped me much to perform this thesis.

الخلاصةِ

اجريت هذه الدراسه بقسم الموجات الصوتيه بمستشفي كوستي التعليمي وكان الهدف الاساسي منها دراسة معدل انتشار الاجهاض باستخدام الموجات فوق .الصوتيه بمسبار بتردده الموجي 3.5 ميجاهيرس

جمعت بيانات هذه الدراسه من 100 امراه حامل قبلالاسبوع 24 من الحمل حضرن .بنزف او فقدان حركة الجنين او الاثنين معا

اظهرت هذه الدراسة ان معدل حالات الاجهاض 20% من حالات الحمل المتردده علي حوادث المستشفي 70% منهم شخصت عن طريق الموجات فوق الصوتيه علي البطن بينما 10% شخصت عن طريق المسبار المهبلي و 20% شخصت سريريا ومن ناحية اخري بينت الموجات فوق الصوتيه ان 60% كان الاجهاض كان .غير تام و 25% اجهاض مهدد و 10% اجهاض مفقود و 5% اجهاض تام

.كما اظهرت ان 80% من حالات الاجهاض تحدث في الثلث الاول من الحمل

اظهرت هذه الدراسه مقدرة الموجات فوق الصوتيه في المساعدة علي تشخيص .حالات الاجهاض وا نواعه

#### **Abstract**

This study has done in kosti teaching hospital in ultrasound department

The main objective of this research is to study prevalence of miscarriage cases

In kosti hospital using ultrasound with a probe of 3.5 MHz frequency. The data was collected from hundred pregnant ladies before 24 weeks of gestation, presented with vaginal bleeding and, or loss of fetal movement.

Using questioner include patients personal data plus ultrasound finding.

Ultrasound finding showed that the prevalence of miscarriage in kosti hospital is 20% 70% of them were diagnosed with Trans abdominal ultrasound, 10% with Trans vaginal ultrasound and 20% diagnosed clinically. The commonest type of miscarriage is incomplete which is 60%.25% threatened, 10% missed and 5% complete. 80% of miscarriage occurred in first trimester.

This study showed the importance of ultrasound in diagnoses of miscarriage and it's types.

#### **List of tables**

TITLE	page
Table 1: Distribution of miscarriage by age	24
Table 2: Distribution of miscarriage by education level	24
Table 3: Distribution of miscarriage by parity	24
Table 4: Distribution of miscarriage by medical condition as a cause	25
Table 5: Distribution of miscarriage bynumber of previous abortions	25
Table 6: Distribution of miscarriage by presenting symptoms	25
Table 7: Distribution of miscarriage bytype of miscarriage	26
Table 8: Distribution of miscarriage by US criteria for diagnosis	26

## **List of figures**

figure	page
Figure 1: Distribution of miscarriage by occupation	27
Figure 2:Distributionof miscarriage by of previous abortion	28
Figure 3: Distribution of miscarriage by method of diagnosis	29
Figure 4: Distribution of miscarriage by gestational age	30

#### **Contents**

T0pic	page
List of contents	i
List of tables	ii
List of figures	iv
List of abbreviations	V
Acknowledgment	vi
Abstract in English	vii
Abstract in Arabic	ix
CHAPTER ONE	
Introduction	1
Literature review	9
Objectives	18
CHAPTER TWO	
Methodology	19
CHAPTER THREE	
Results	22
CHAPTER FOUR	
Discussion	31

Conclusion	34
Recommendations	35
References	36
Appendix	39