

**DEPARTMENT OF FAMILY MEDICINE &
PRIMARY HEALTH CARE
UNIVERSITY OF LIMPOPO (MEDUNSA CAMPUS)**

**TITLE OF STUDY: EVALUATION OF DIAGNOSIS AND TREATMENT OF
PULMONARY TUBERCULOSIS AMONG ADULT PATIENTS IN MATLALA
DISTRICT HOSPITAL IN GREATER MARBLE HALL SUB-DISTRICT IN LIMPOPO
PROVINCE.**

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DECLARATION

I, Otesile Mayokun Oluseun, declare that this research report is my own work. It is being submitted to the University of Limpopo (Medunsa Campus), Limpopo in partial fulfillment of the requirements for the award of the Masters of Medicine in Family Medicine (Mmed Fammed). It has not been submitted and will not be submitted for any degree or examination in this or any other university.



Signed

Submitted on 25th of July, 2010

DEDICATION

THIS RESEARCH REPORT IS DEDICATED TO GOD ALMIGHTY AND TO MY FAMILY

ACKNOWLEDGEMENT

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ACRONYMS AND ABBREVIATIONS

TB	Tuberculosis
PTB	Pulmonary tuberculosis
HIV	Human immunodeficiency virus
AIDS	Acquired immune deficiency syndrome
MDR-TB	Multi drug resistant tuberculosis
XDR-TB	Extensive drug resistant tuberculosis
WHO	World health organization
DOTS	Directly observed therapy short course
MTB	Mycobacterium tuberculosis
NTCP	National tuberculosis control programme
HBCW	Home based care worker
MDG	Millennium development goal
HAART	Highly active anti-retroviral therapy

DEFINITION OF TERMS

DOTS: A treatment strategy in which a treatment supporter (a health worker or trained lay person not related to the patient) watches the patient swallow anti- TB drugs over the course of treatment.

NEW TB CASE: A patient who has never had TB treatment or has taken treatment for less than four weeks.

RETREATMENT TB CASE: A patient previously treated for TB for more than four weeks.

CURED: A patient with positive sputum initially who completed treatment with negative sputum in the last month of treatment and on at least one previous occasion.

TREATMENT COMPLETED: A patient who has completed treatment and is clinically well, but does not meet the criteria for cure or failure.

DIED: A patient who dies for any reason during treatment for TB.

DEFAULTED: A patient whose treatment was interrupted for two consecutive months.

FAILURE: A patient whose sputum remains positive or became positive again (smear or culture) at least five months after starting treatment.

TRANSFERRED OUT: A patient who has been transferred to another reporting unit and his/her treatment outcome is not known.

MULTI-DRUG RESISTANT TB (MDR-TB): A patient with mycobacterium tuberculosis that is resistant to two or more of the following drugs: Isoniazid, Rifampicin, Ethambutol and Streptomycin.

EXTREME-DRUG RESISTANT TB (XDR-TB): A patient with MDR-TB that is resistant to at least three of the second-line drugs.

LIST OF TABLES AND FIGURES

Figure 1: Age distribution	21
Table 1: Two-sample t-test with equal variances	22
Table 2: Descriptive characteristics of the patients	23
Table 3: Disease category	24
Figure 2: Method of diagnosis	25
Table 4: Sputum results	26
Table 5: Overall treatment outcomes	26
Figure 3: Overall treatment outcomes	27
Table 6: Treatment outcomes and age	28
Table 7: treatment outcomes and gender	29
Table 8: Treatment outcomes and employment status	30
Table 9: Treatment outcomes and HIV status	31

ABSTRACT

Tuberculosis (TB) is a major health problem in South Africa especially in this era of high prevalence of human immune deficiency virus (HIV) infection. South Africa is currently ranked fourth among the twenty-two high burden countries worldwide with an incidence of 940/100 000 population/year and mortality of 218/100 000 population/year. The notational tuberculosis control programme (NTCP) was established in response to this growing burden. The aim of this study is to evaluate the TB programme at Matlala District hospital and to make recommendations that could improve its effectiveness.

The study was a descriptive cross-sectional study. Retrospective data of all adults ≥ 15 years diagnosed with pulmonary TB (PTB) were collated from the TB register and patients' records between 01/01/2008 and 31/12/2008. Children < 15 years and extra-pulmonary TB were excluded because of the challenges in diagnosis. Follow-up was done until end of treatment to determine the outcome. The outcomes were cured, completed treatment, failed treatment, died, defaulted treatment, transferred out and not evaluated based on the NTCP criteria.

A total of 482 patients (266 females and 216 males) were included in the study with a median age 40.91 (standard deviation (SD) 14.65; 95% CI 39.59-42.22). Women with mean age 38.35 years (SD 15.03; 95% CI 36.54-40.16) were significantly younger (P value < 0.00001) than men with mean age 44.05 (SD 13.55; 95% CI 42.23-45.87). There were 399 (82.78%) new cases and 83 (17.22%) re-treatment cases. 130 (26.97%) patients were co-infected with HIV while 236 (48.96%) patients did not know their status. In all, 193 (40%) were cured, 63 (13.07%) completed treatment, 4 (0.83%) failed treatment, 43 (8.92%) died, 27 (5.60%) defaulted, 141 (29.25%) were transferred out and 11 (2.28%) were not evaluated. The treatment success rate was 53.11%.

The treatment success rate in this study is well below the 85% target in the NTCP. A large number of the patients did not know their status and the outcome could not be determined in significant number of patients (not evaluated and transferred out). A systematic referral and recording process; and a collaborative effort between TB and HIV services is therefore necessary to face this challenge. It may also be important to re-open the TB ward to prevent nosocomial transmission.

TABLE OF CONTENTS

DECLARATION	ii
DEDICATION	iii
ACKNOWLEDGEMENT	iv
ACRONYMS AND ABBREVIATIONS	v
DEFINITION OF TERMS	vi
LIST OF TABLES AND FIGURES	vii
ABSTRACT	ix
TABLE OF CONTENTS	x – xii
CHAPTER 1: INTRODUCTION.....	1- 4
1.1. Overview.....	1
1.2. Problem statement.....	3
1.3. Justification for the study.....	4
CHAPTER 2: REVIEW OF LITERATURE.....	5 - 13
2.1. Introduction.....	5
2.2. History of tuberculosis.....	5
2.3. Global burden of tuberculosis	6
2.4. Tuberculosis in Africa.....	6 - 7
2.5. Tuberculosis in South Africa.....	7 - 9
2.6. Determinants of worsening TB epidemic in South Africa.....	10 - 11
2.7. HIV/AIDS and Tuberculosis	11
2.8. Financial cost of TB control in South Africa.....	12
2.9. Summary	13
CHAPTER 3: METHODOLOGY	14 - 20
3.1. Aim of the study.....	14

3.2. Objective of the study.....	14
3.3. Research question.....	15
3.4. Study design.....	15
3.5. Study setting.....	15
3.6. Study population.....	16
3.7. Sample.....	17
3.8. Data collection.....	18
3.9. Data analysis.....	18
3.10. Bias	19
3.11. Reliability and validity.....	19
3.12. Ethical considerations	20
CHAPTER 4: RESULTS	21 - 29
4.1. Age	21
4.2. Gender	22
4.3. Employment status	23
4.4. HIV status	23
4.5. Diagnosis	24
4.6. Treatment	25
4.7. Treatment outcomes	26
4.8. Associated factors	28
4.8.1. Treatment outcomes and age.....	28
4.8.2. Treatment outcomes and gender	29
4.8.3. Treatment outcomes and employment status.....	30
4.8.4. Treatment outcomes and HIV status.....	31
4.9. Summary	32

CHAPTER 5: DISCUSSION	33 - 36
CHAPTER 6: CONCLUSION AND RECOMMENDATIONS	37 - 38
REFERENCES	39 - 43
ANNEXURES	
ANNEXURE 1: Research protocol.....	44 - 61
ANNEXURE 2: Data collection form.....	
ANNEXURE 3: Statistical analyses.....	
ANNEXURE 4: MREC clearance certificate.....	