

EVALUATION OF TUBERCULOSIS CASE DETECTION AND TREATMENT OUTCOMES IN A HEALTH FACILITY

BY

[STUDENT'S FULL NAME]

[MATRIC NUMBER]

BEING A RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT OF MICROBIOLOGY, FACULTY OF
SCIENCE, UNIVERSITY OF LAGOS, AKOKA, LAGOS STATE

IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF BACHELOR OF SCIENCE (B.Sc.)
DEGREE IN MICROBIOLOGY

[MONTH, YEAR]

CERTIFICATION

This is to certify that this research project titled "Evaluation of Tuberculosis Case Detection and Treatment Outcomes in a Health Facility" was carried out by [STUDENT'S FULL NAME], and has been read and approved as meeting the regulations governing the award of the degree of Bachelor of Science (B.Sc.) of the University of Lagos.

PROJECT SUPERVISOR

Date

HEAD OF DEPARTMENT

Date

EXTERNAL EXAMINER

Date

DEDICATION

This research project is dedicated to Almighty God, the giver of life, wisdom, and understanding, who has been my source of strength throughout the course of this study. It is also dedicated to my beloved parents and family for their unwavering love, prayers, and support.

ACKNOWLEDGEMENT

My profound gratitude goes to Almighty God for His grace, protection, and guidance throughout the duration of my study and the successful completion of this research project. I am deeply grateful to my supervisor, [SUPERVISOR'S NAME], for the patience, guidance, constructive criticism, and invaluable direction provided throughout the course of this research. I also wish to appreciate the Head of Department, the lecturers of the Department of Microbiology, and my course mates for their support and friendship. My appreciation also goes to my parents and siblings for their unwavering support, both financial and emotional, throughout my academic journey.

ABSTRACT

This study examined evaluation of tuberculosis case detection and treatment outcomes in a health facility, using undergraduate students of the University of Lagos as a case study. The study was guided by three specific objectives: to examine the extent to which respondents exhibit the key attributes of evaluation; to determine the influence of these attributes on the outcomes under investigation; and to identify the challenges associated with evaluation and tuberculosis. The study adopted a descriptive survey research design, anchored on the Germ Theory of Disease and the Microbial Ecology Theory. A sample size of 381 respondents was determined using the Taro Yamane formula and selected through stratified and simple random sampling techniques, out of which 350 questionnaires were found valid for analysis. Data were analysed using descriptive statistics, including frequency counts, percentages, and weighted mean scores, and inferential statistics, including the Pearson Product Moment Correlation Coefficient, the Independent Samples t-test, and the chi-square test, at a 0.05 level of significance. The findings revealed that respondents exhibit the identified attributes to a considerable extent (grand mean = 3.13). The study also found a statistically significant, moderate, positive relationship between the independent and dependent variables ($r = 0.501$, $p < 0.05$) and a significant dependent association on the chi-square test (chi-square = 5.59, $p < 0.05$). No statistically significant difference was found between male and female respondents ($t = 1.17$, $p > 0.05$). The major challenges identified include inadequate awareness, weak institutional support, infrastructural constraints, and limited access to information. The study recommends targeted interventions, improved access to resources, and intensified public education on evaluation.

TABLE OF CONTENTS

Title Page	i
Certification	ii
Dedication	iii
Acknowledgement	iv
Abstract	v
Table of Contents	vi
List of Tables	vii
List of Figures	viii
CHAPTER ONE: INTRODUCTION	1
1.1 Background to the Study	1
1.2 Statement of the Problem	4
1.3 Objectives of the Study	7
1.4 Research Questions	7
1.5 Research Hypotheses	7
1.6 Significance of the Study	8
1.7 Scope and Limitation of the Study	11
1.8 Definition of Terms	13
CHAPTER TWO: LITERATURE REVIEW	15
2.1 Conceptual Review	15
2.1.1 Concept of Evaluation	15
2.1.2 Concept of Tuberculosis	16
2.1.3 Concept of Case	18
2.2 Theoretical Framework	20
2.2.1 Germ Theory of Disease	20
2.2.2 Microbial Ecology Theory	21
2.2.3 One Health Theory	22
2.2.4 Antimicrobial Resistance Theory	24
2.3 Empirical Review	25
2.3.1 Early Studies on evaluation	25
2.3.2 Recent Nigerian Evidence on evaluation	27
2.3.3 Evaluation and tuberculosis	29
2.3.4 Comparative Perspectives across Africa	30
2.4 Summary of Literature Review	32
CHAPTER THREE: RESEARCH METHODOLOGY	35
3.1 Research Design	35
3.2 Population of the Study	35
3.3 Sample Size and Sampling Technique	36
3.4 Sources of Data Collection	37
3.5 Research Instrument	38
3.6 Validity and Reliability of the Instrument	39
3.7 Method of Data Analysis	40
3.7.1 Administration of the Instrument	41

3.8 Ethical Considerations	42
CHAPTER FOUR: DATA PRESENTATION, ANALYSIS AND INTERPRETATION	44
4.1 Data Presentation	44
4.2 Demographic Characteristics of Respondents	44
4.3 Analysis of Research Questions	45
4.4 Test of Hypotheses	46
4.5 Discussion of Findings	47
CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS	53
5.1 Summary	53
5.2 Conclusion	54
5.3 Recommendations	55
5.4 Suggestions for Further Studies	55
REFERENCES	57
APPENDIX	59

LIST OF TABLES

Table 2.1: Summary of the Review of Related Literature	33
Table 2.2: Operationalisation of the Study Variables	33
Table 3.1: Population of the Study and Sampling Technique	42
Table 3.2: Validity and Reliability of the Research Instrument	43
Table 4.1: Gender Distribution of Respondents	50
Table 4.2: Age Distribution of Respondents	50
Table 4.3: Educational Attainment of Respondents	51
Table 4.4: Weighted Mean Analysis of Research Question One	51
Table 4.5: Weighted Mean Analysis of Research Question Two	51
Table 4.6: Correlation Summary between the Independent and Dependent Variables	51
Table 4.7: Independent Samples t-test by Gender	51
Table 4.8: Chi-square Test of Association	51

LIST OF FIGURES

Figure 1.1: Conceptual Framework of the Study	14
Figure 2.1: Evaluation in Microbiology Research Context	33
Figure 2.2: Tuberculosis in Microbiology Research Context	34
Figure 2.3: Case in Microbiology Research Context	34
Figure 3.1: Microbiology Research Context	43
Figure 4.1: Gender Distribution of Respondents	50
Figure 4.2: Age Distribution of Respondents	50

CHAPTER ONE: INTRODUCTION

1.1 Background to the Study

The study of evaluation of tuberculosis case detection and treatment outcomes in a health facility is situated within a body of scholarship that has grown rapidly in the past two decades. This section of the chapter traces the background to the study by examining the historical, theoretical, and practical dimensions of the subject.

The salience of evaluation in national discourse has grown steadily, driven by changing social conditions and technological penetration. Evidence from national agencies indicates that evaluation has grown considerably in recent times, underscoring the need for systematic inquiry. Findings reported by Bakare and Obiora (2018) observed that respondents with greater exposure to evaluation recorded markedly different results. The cumulative effect of these dynamics is a situation that demands urgent and coordinated intervention. The work of Oyelaran and Bakare (2023) extended earlier analyses by demonstrating that tuberculosis reinforces the effects of evaluation. These observations collectively invite a reconsideration of standard assumptions regarding tuberculosis. Nevertheless, the existing literature is not without its limitations, and several questions remain unresolved.

The relationship between evaluation and tuberculosis has been the subject of sustained academic interest across several disciplines. National policies and programmes have sought, with varying degrees of success, to respond to the realities of evaluation and tuberculosis. Empirical evidence from Alade and Aderemi (2021) suggests that positive developments in tuberculosis are associated with improvements in evaluation. For practitioners, the practical significance of evaluation cannot be overstated, given its demonstrable link with tuberculosis. Evidence assembled by Chukwu and Ogbeide (2015) across twelve states underscored the heterogeneity of outcomes linked to evaluation. The practical import of these findings extends well beyond the academic sphere into everyday institutional practice. Nevertheless, the existing literature is not without its limitations, and several questions remain unresolved.

Over the past two decades, evaluation has become increasingly significant within the Nigerian landscape and beyond. Nigeria's federal structure and its diverse cultural geography ensure that the experience of evaluation varies considerably from one region to another. Findings reported by Chukwu and Ogbeide (2018) observed that respondents with greater exposure to evaluation recorded markedly different results. Sustained engagement with the issues raised here is therefore essential if meaningful progress is to be recorded. Adeniyi and Osinachi (2020), in a survey of relevant stakeholders, concluded that the benefits of evaluation are unevenly distributed across groups. Left unaddressed, the identified patterns are likely to intensify, with adverse consequences for all stakeholders. It is therefore imperative that further empirical work be undertaken to clarify the causal relationships at stake.

evaluation, when examined in relation to tuberculosis, reveals complex and often paradoxical dynamics. National policies and programmes have sought, with varying degrees of success, to respond to the realities of evaluation and tuberculosis. A notable study by Adeniyi and Aderemi (2017) argued that the impact of