

ANTIMICROBIAL ACTIVITY OF BITTER LEAF EXTRACTS AGAINST SKIN PATHOGENS

BY

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BEING A RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT OF PHARMACY, FACULTY OF
PHARMACEUTICAL SCIENCES, UNIVERSITY OF LAGOS, AKOKA, LAGOS STATE

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

[MONTH, YEAR]

CERTIFICATION

This is to certify that this research project titled "Antimicrobial Activity of Bitter Leaf Extracts Against Skin Pathogens" 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 Pharmacy, 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 antimicrobial activity of bitter leaf extracts against skin pathogens, 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 antimicrobial; to determine the influence of these attributes on the outcomes under investigation; and to identify the challenges associated with antimicrobial and activity. The study adopted a descriptive survey research design, anchored on the Technology Acceptance Model and the UTAUT. A sample size of 408 respondents was determined using the Taro Yamane formula and selected through stratified and simple random sampling techniques, out of which 374 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 = 3.15). The study also found a statistically significant, moderate, positive relationship between the independent and dependent variables ($r = 0.535$, $p < 0.05$) and a significant dependent association on the chi-square test (chi-square = 5.91, $p < 0.05$). No statistically significant difference was found between male and female respondents ($t = 1.12$, $p > 0.05$). 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 antimicrobial.

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CHAPTER ONE: INTRODUCTION

1.1 Background to the Study

The study of antimicrobial activity of bitter leaf extracts against skin pathogens 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.

Scholars have long recognised antimicrobial as a critical determinant of outcomes in pharmacy. Evidence from national agencies indicates that antimicrobial has grown considerably in recent times, underscoring the need for systematic inquiry. Obiora and Salami (2020), in a survey of relevant stakeholders, concluded that the benefits of antimicrobial are unevenly distributed across groups. These observations collectively invite a reconsideration of standard assumptions regarding activity. An examination by Salami and Ogunlana (2019) attributed much of the observed variation in outcomes to institutional capacity and policy continuity. Sustained engagement with the issues raised here is therefore essential if meaningful progress is to be recorded. Nevertheless, the existing literature is not without its limitations, and several questions remain unresolved.

Contemporary scholarship increasingly frames antimicrobial as inseparable from the broader question of activity. The socio-cultural diversity of Nigeria implies that responses to antimicrobial must be differentiated rather than uniform. The aggregate picture emerging from Eze and Ibrahim (2023) points to a modest but consistent association between antimicrobial and the outcomes of interest. Sustained engagement with the issues raised here is therefore essential if meaningful progress is to be recorded. Bamgbose and Ogbeide (2020), in a survey of relevant stakeholders, concluded that the benefits of antimicrobial are unevenly distributed across groups. Such findings reinforce the argument that antimicrobial deserves a place of priority on the development agenda. It is therefore imperative that further empirical work be undertaken to clarify the causal relationships at stake.

In recent years, antimicrobial has emerged as a central theme in scholarly discourse on pharmacy. Auxiliary variables, including education, income, and location, further condition how antimicrobial is experienced across communities. Field evidence gathered by Bamgbose and Ogbeide (2016) suggested that stakeholder engagement materially improves the results achieved in matters of antimicrobial. These developments carry important implications for policy and practice in pharmacy. An examination by Aderemi and Ogunlana (2019) attributed much of the observed variation in outcomes to institutional capacity and policy continuity. For practitioners, the practical significance of antimicrobial cannot be overstated, given its demonstrable link with activity. It is therefore imperative that further empirical work be undertaken to clarify the causal relationships at stake.

A growing corpus of literature draws attention to the pivotal role of antimicrobial in shaping developmental trajectories. Auxiliary variables, including education, income, and location, further condition how antimicrobial is experienced across communities. Research by Nnamdi and Oyelaran (2021) using mixed