EVALUATION OF ANTIOXIDANT STATUS AND FREE RADICAL MARKERS IN EXPOSED WORKERS

BY

[STUDENT'S FULL NAME]

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BEING A RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT OF BIOCHEMISTRY, 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 BIOCHEMISTRY

[MONTH, YEAR]

CERTIFICATION

This is to certify that this research project titled "Evaluation of Antioxidant Status and Free Radical Markers in Exposed Workers" 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.

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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.

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ABSTRACT

This study examined evaluation of antioxidant status and free radical markers in exposed workers, 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 antioxidant. The study adopted a descriptive survey research design, anchored on the Michaelis-Menten Kinetics Theory and the Metabolic Regulation 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 341 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 = 2.95). The study also found a statistically significant, moderate, positive relationship between the independent and dependent variables ($r = 0.497$, $p < 0.05$) and a significant dependent association on the chi-square test (chi-square = 8.59, $p < 0.05$). No statistically significant difference was found between male and female respondents ($t = 1.26$, $p > 0.05$). 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.

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CHAPTER ONE: INTRODUCTION

1.1 Background to the Study

The study of evaluation of antioxidant status and free radical markers in exposed workers 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.

evaluation occupies a prominent position in contemporary debates about antioxidant and national development. Public institutions at the federal, state, and local levels have developed programmes that seek to mainstream evaluation into routine governance. Studies by Bakare and Bamgbose (2019) largely support the view that evaluation exerts a measurable influence on outcomes of interest. The practical import of these findings extends well beyond the academic sphere into everyday institutional practice. Research by Oyelaran and Nwosu (2021) using mixed methods provided particularly rich insight into the mechanisms connecting evaluation and antioxidant. These developments carry important implications for policy and practice in biochemistry. 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 evaluation in shaping developmental trajectories. The socio-cultural diversity of Nigeria implies that responses to evaluation must be differentiated rather than uniform. A notable study by Kalu and Ibrahim (2017) argued that the impact of evaluation is substantially mediated by the quality of institutions. Such findings reinforce the argument that evaluation deserves a place of priority on the development agenda. An examination by Olawale and Ibrahim (2019) attributed much of the observed variation in outcomes to institutional capacity and policy continuity. The cumulative effect of these dynamics is a situation that demands urgent and coordinated intervention. Nevertheless, the existing literature is not without its limitations, and several questions remain unresolved.

evaluation continues to command considerable attention among researchers, policymakers, and practitioners in biochemistry. Public institutions at the federal, state, and local levels have developed programmes that seek to mainstream evaluation into routine governance. The aggregate picture emerging from Olawale and Ibrahim (2023) points to a modest but consistent association between evaluation and the outcomes of interest. These observations collectively invite a reconsideration of standard assumptions regarding antioxidant. Empirical evidence from Alade and Olawale (2021) suggests that positive developments in antioxidant are associated with improvements in evaluation. Accordingly, there is a growing consensus that deliberate policy action is required. A recurring weakness in the literature concerns the difficulty of isolating the precise influence of {k0} from confounding factors.

Scholars have long recognised evaluation as a critical determinant of outcomes in biochemistry. The Nigerian context presents peculiar challenges, ranging from infrastructural deficits to institutional weaknesses, which shape the manner in which evaluation unfolds. Longitudinal research by Bakare and Adigun (2016) revealed that sustained attention to evaluation yields appreciable dividends over time. Left unaddressed, the identified