

WATER TREATMENT PRACTICES AMONG HOUSEHOLDS USING WELL WATER

BY

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DEGREE IN PUBLIC HEALTH

[MONTH, YEAR]

CERTIFICATION

This is to certify that this research project titled "Water Treatment Practices Among Households Using Well Water" 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.

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ABSTRACT

This study examined water treatment practices among households using well water, 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 water; to determine the influence of these attributes on the outcomes under investigation; and to identify the challenges associated with water and treatment. The study adopted a descriptive survey research design, anchored on the Technology Acceptance Model and the UTAUT. A sample size of 416 respondents was determined using the Taro Yamane formula and selected through stratified and simple random sampling techniques, out of which 399 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 ($r = 0.573$, $p < 0.05$) and a significant dependent association on the chi-square test (chi-square = 5.44, $p < 0.05$). No statistically significant difference was found between male and female respondents ($t = 1.24$, $p > 0.05$). 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 water.

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CHAPTER ONE: INTRODUCTION

1.1 Background to the Study

The study of water treatment practices among households using well water 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.

In recent years, water has emerged as a central theme in scholarly discourse on public health. Federal and state governments have initiated several reforms, yet implementation gaps continue to constrain progress in matters of water. The work of Ekwueme and Adekunle (2023) extended earlier analyses by demonstrating that treatment reinforces the effects of water. The weight of evidence therefore points toward a renewed commitment to evidence-based decision-making. Research by Salami and Dauda (2021) using mixed methods provided particularly rich insight into the mechanisms connecting water and treatment. These observations collectively invite a reconsideration of standard assumptions regarding treatment. Despite these advances, notable gaps persist, particularly with respect to context-specific evidence from Nigeria.

The phenomenon of water, while not new, has acquired fresh analytical urgency in Nigeria. In Nigeria, the intersection of water and treatment is conditioned by unique socio-economic, cultural, and institutional factors that differ markedly from Western settings. Field evidence gathered by Bamgbose and Nwosu (2016) suggested that stakeholder engagement materially improves the results achieved in matters of water. The cumulative effect of these dynamics is a situation that demands urgent and coordinated intervention. Comparative work by Olawale and Adekunle (2022) across several states uncovered a consistent pattern linking water with treatment. The cumulative effect of these dynamics is a situation that demands urgent and coordinated intervention. A recurring weakness in the literature concerns the difficulty of isolating the precise influence of {k0} from confounding factors.

Few subjects attract as much policy interest in contemporary Nigeria as the question of water. Auxiliary variables, including education, income, and location, further condition how water is experienced across communities. Research by Olawale and Adekunle (2021) using mixed methods provided particularly rich insight into the mechanisms connecting water and treatment. Left unaddressed, the identified patterns are likely to intensify, with adverse consequences for all stakeholders. Studies by Kalu and Bakare (2019) largely support the view that water exerts a measurable influence on outcomes of interest. 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.

Debates on national transformation repeatedly return to the role of water and its attendant dynamics. National policies and programmes have sought, with varying degrees of success, to respond to the realities of water and treatment. Research by Chukwu and Salami (2021) using mixed methods provided particularly rich insight into the mechanisms connecting water and treatment. For practitioners, the practical significance of water cannot be overstated, given its demonstrable link with treatment. Okonkwo and Oyelaran (2020), in a survey