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AN ASSESSMENT OF THE PRACTICE OF OUT-OF-POCKET HEALTH EXPENDITURES AND ITS EFFECTS ON ACCESS TO HEALTH CARE AMONG HEADS OF HOUSEHOLDS IN GWAGWALADA AREA COUNCIL, ABUJA NIGERIA

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Abstract

Out-of-pocket (OOP) expenditure remains the dominant form of healthcare financing in Nigeria, despite global efforts toward Universal Health Coverage (UHC). High OOP spending can delay care, reduce access, and push households into poverty. This study assessed the practice of catastrophic OOP healthcare expenditure among heads of households in Gwagwalada Area Council, Abuja, Nigeria. A cross-sectional study was conducted among 255 heads of households using cluster sampling technique. Data were collected through structured, interviewer-administered questionnaires. Descriptive and inferential statistics were performed using SPSS version 21, with significance set at $p<0.05$. Most respondents were male (86.3%), married (63.9%), and had tertiary education (44.3%). Only 32.5% were enrolled in the National Health Insurance Scheme.OOP expenditure is a major barrier to equitable healthcare access in Gwagwalada and enrolment in health insurance schemes remains low. Strategic health financing reforms and improved insurance coverage are crucial to reduce financial hardship and enhance health service utilization.

Keywords: Out-of-pocket expenditure, health care financing, catastrophic health expenditure, national health insurance scheme (NHIS), health insurance enrolment, universal health coverage (UHC).

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Introduction

Out-of-pocket (OOP) expenditure refers to direct payments made by individuals for healthcare services, which are not reimbursed by any form of insurance or third-party payer. These payments include fees for consultations, medications, hospitalizations, and informal charges [1]. Globally, excessive reliance on OOP healthcare financing is a major contributor to catastrophic health expenditure (CHE), pushing millions into poverty annually [2].

In countries like Nigeria, where public funding of healthcare remains inadequate, OOP expenditure accounts for over 70% of total health spending, making it the dominant means of healthcare financing [3]. This situation persists despite policy efforts to achieve Universal Health Coverage (UHC) as advocated by the World Health Organization (WHO) [4].

The effects of OOP payments are multifaceted, ranging from financial hardship and reduced access to care to delays in treatment and poor health outcomes [5,6]. Vulnerable populations-such as low-income families, the elderly, and those with chronic illnesses-are disproportionately affected [7]. The National Health Insurance Scheme (NHIS), introduced in Nigeria in 1999, was intended to reduce this burden. However, its implementation has been limited, especially among informal sector workers and rural dwellers [8].

Understanding the practice of OOP healthcare spending and its effect on access to health care is essential for developing effective policy responses. This study aims to assess these dimensions among heads of households in Gwagwalada Area Council, Abuja.

Materials and Methods

Study Area

This study was conducted in Gwagwalada Area Council, one of the six area councils within the Federal Capital Territory (FCT) of Nigeria. According to the 2006 census, Gwagwalada had a population of approximately 157,770

people, occupying an area of 1,043 km^2. The area experiences a tropical climate with distinct wet and dry seasons and average temperatures ranging from 30°C to 37°C. Farming and trading are the predominant occupations among residents, with motorcycles being the common mode of transportation.

Study Design

A descriptive cross-sectional study design was employed to assess the practice of out-of-pocket (OOP) healthcare expenditure among heads of households.

Study Population

The study population consisted of heads of households who were residents of Gwagwalada Area Council. Only individuals who were 18 years and older, unmarried adults living independently, and those who gave informed consent were included in the study.

Inclusion Criteria

- Heads of households residing in Gwagwalada Area Council.
- Individuals aged 18 years and above who consented to participate.

Exclusion Criteria

- Individuals under 18 years of age.
- Adults dependent on parents or guardians.

Sample Size Determination

The sample size of 255 was calculated using the Leslie-Kish formula for estimating proportions in a population:

A 10% non-response rate was included in the final estimate.

Sampling Technique

A cluster sampling technique was utilized. Firstly, all 10 political wards within the Area Council were identified. From these, five wards were selected using simple random sampling technique. Within each selected ward, eligible households were identified and all available and consenting heads of households were studied.

Data Collection Instrument

Data were collected using a structured, interviewer-assisted questionnaire designed by the researchers. The instrument was pretested in another Area Council within North-Central Nigeria to validate its reliability. The questionnaire was organized to gather information on demographics and healthcare utilization practices Related to OOP expenditures. Data were collected using a pre-tested, interviewer-administered structured questionnaire developed by the researchers. The questionnaire consisted of socio-demographic characteristics, effects of OOP on healthcare service utilization and OOP practice and socio-economic status.

Data Analysis

Data were cleaned, coded, and analyzed using SPSS version 23. Descriptive statistics were generated. Associations between variables were tested using Chi-square and t-tests. Statistical significance was set at a p-value <0.05, with a 95% confidence interval.

Ethical Considerations

Ethical approval was obtained from the Health Research Ethics Committee of the University of Abuja Teaching Hospital, Gwagwalada. Participants were fully informed about the purpose of the study, and informed consent was obtained. Anonymity and confidentiality were strictly maintained, and participation was entirely voluntary.

Results

Socio-Demographic Characteristics

The majority of the 255 household heads were males (86.3%) and aged between 30–39 years (40.8%). Most respondents were married (63.9%) and lived in monogamous households (61.2%). Regarding education, 44.3% had tertiary education and 40%had completed secondary school.Also, 44.3% had tertiary education, and 64.3% identified as Christians.

Practice of OOP Expenditures

Only 32.5% of respondents were enrolled in the National Health Insurance Scheme (NHIS). However, 54.9% had deferred treatment at some point due to financial constraints linked to OOP healthcare payments. Among those who deferred care, 41.9% did so for days, while 30.5% delayed care for weeks. Utilization of informal health providers was highest among the low socio-economic class (81.5%) as shown in table 1 below:

Table 1. Practice of OOP health expenditures in Gwagwalada Area Council.

Question	*Response*	*Low class*	*Middle class*	*High class*	*Total*	*p-value*
Are you on any health	Yes	19(17.6%)	48(38.1%)	16(76.2%)	**83 (32.5%)**	0.0001
insurance?	No	89(82.4%)	78(61.9%)	5(23.8%)	172	

Any access to health insurance?	No	88	77	4	169	0.0001
	Difficult	9(8.3%)	12(9.5%)	8(38.1%)	29	
	Fair	5(4.6%)	25(19.8%)	6(28.6%)	36	
	Good	6(5.5%)	12(9.5%)	3(14.3%)	21	
Ever deferred treatment due to OOP expenditure?	Yes	67(62%)	66(52.4%)	7(33.3%)	**140 (54.9%)**	0.039
	No	41(38%)	60(47.6%)	14(66.7%)	115	
Which facility	Chemist	70(64.8%)	78(61.9%)	8(38.1%)	156	0.0001
do you, first visit due	Herbalist	18(16.7%)	11(8.7%)	0	29	
to OOP expenditure?	Religious	8(7.4%)	4(3.2%)	1(4.8%)	13	
	Hospital	12(11.1%)	33(26.2%)	12(57.1%)	57	
Time interval	Days	33(30.6%)	60(47.6%)	14(66.7%)	107**(41.9%)**	0.596
between illness &	Weeks	40(37%)	35(27.8%)	3(14.3%)	78	
hospital visit	Months	28(25.9%)	28(22.2%)	3(14.3%)	78	
	Unconscious	6(5.6%)	3(2.4%)	1(4.8%)	10	
	Ignore symptoms	1(0.9%)	0	0	1	

Socioeconomic status was significantly associated with access to insurance (p=0.0001), practice of OOP (p=0.0001), and deferral of treatment (p=0.039). Low-income households were more likely to defer treatment and access care from non-formal providers such as chemists (64.8%) and herbalists (16.7%).

Discussion Practice of OOP Expenditures

The practice of OOP remains the predominant mode of healthcare payment in Gwagwalada. Only 32.5% of respondents were enrolled in NHIS, and more than half had previously deferred care due to financial constraints. These findings are consistent with national data indicating that OOP accounts for over 70% of health financing in Nigeria [8,9].

Respondents from low-income households were more likely to defer treatment, seek care from informal providers, and delay hospital visits, especially when faced with symptoms of illness. This pattern is associated with worse health outcomes and further entrenches cycles of poverty.

These findings align with previous research indicating that OOP payments represent a significant financial burden and a major barrier to healthcare utilization in low- and middle-income countries (LMICs) such as Nigeria [11,1,2]. Catastrophic health expenditure (CHE), lead to treatment delays, and reduced access to quality care [10]. Only one-third of the respondents were enrolled in the NHIS, underscoring systemic barriers such as limited coverage, low trust, and lack of information about available financial protection mechanisms [11,12].

Consistent with literature from India, Zambia, and Southeast Nigeria, our results demonstrate that households from lower socioeconomic strata are more vulnerable to the impacts of OOP, with a higher likelihood of delayed treatment and reliance on informal care providers [6–8]. Education emerged as a critical factor influencing OOP practices, further reinforcing findings from studies in Nepal and Indonesia which show that education enables better health decision-making and utilization of financial safety nets [13, 14].

Socio-demographic characteristics—including age, education level, occupation, and socio-economic status significantly influenced the practice of OOP health expenditures.

Our findings also highlight the regressive nature of OOP healthcare financing in Nigeria, where the burden disproportionately falls on poorer households, increasing the risk of impoverishment and reinforcing existing health inequities [11,12]. The continued low enrollment in NHIS and over-reliance on informal care options illustrate the urgent need for targeted health financing reforms and expanded social health insurance coverage.

Future policies should focus on expanding NHIS coverage, reducing informal payments, and addressing the root socioeconomic determinants of poor healthcare access.

Conclusion

This study highlights that the practice of out-of-pocket healthcare expenditure are generally high among heads of households in Gwagwalada, the actual practice remains widespread. The disproportionate burden on low-income and less-educated households underscores the regressive nature of OOP health financing in Nigeria. Despite the existence of the NHIS, enrolment remains low, and treatment delays due to cost are common.

To mitigate the financial burden of healthcare on households and promote equitable access to services, there is an urgent need for improved public health

financing, expansion of insurance coverage, and targeted educational interventions. Strengthening financial protection mechanisms is critical to achieving Universal Health Coverage and safeguarding household welfare.

Recommendations

To Government and Policymakers

- Expand the coverage of the National Health Insurance Scheme (NHIS) to include informal sector workers and low-income households.
- Increase budgetary allocation to the health sector to meet the WHO-recommended minimum of 15% of national expenditure.
- Launch community-based health insurance schemes to complement national efforts and reach marginalized populations.

To Health Workers

- Educate patients on the benefits and enrollment processes for health insurance schemes during clinic visits.
- Prioritize cost-effective treatment protocols and avoid unnecessary prescriptions that increase patient expenses.

To the Community

- Engage in health education campaigns, town hall meetings, and community outreaches to enlighten and empower the people on health financing and the benefits of insurance.
- Collaborate with NGOs and local government structures to advocate for better healthcare financing.

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Ethical Approval

Ethical clearance has been obtained from the University of Abuja Teaching Hospital.

Inform Consent

Taken from Study Participants.

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Author Contribution

Both Authors contributed equally

Conflict of Interest

None Declared

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