



Corruption and Its Effects on Primary Health Care System: A Case Study of Oju Local Government Area of Benue State, Nigeria

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Citation: Ojenya Freedom Otor, and Ochelle Jennifer Okwa (2026). Corruption and Its Effects on Primary Health Care System: A Case Study of Oju Local Government Area of Benue State, Nigeria. *Annals of Medical and Health Research: An International Journal*.
DOI: <https://doi.org/10.51470/ARMHR.2026.5.1.36>

Received 10 January 2026 | Revised 12 February 2026 | Accepted 15 March 2026 | Available Online 07 April 2026

Abstract

Background: Corruption constitutes one of the most severe and pervasive threats to health system performance globally, with its effects most acutely felt at the primary health care (PHC) level in low- and middle-income countries. In Nigeria, PHC facilities are frequently characterised by dilapidated infrastructure, counterfeit drugs, ghost workers, and unqualified health personnel, conditions rooted in systemic corruption within local governance structures. Oju Local Government Area (LGA) of Benue State exemplifies this crisis, yet empirical evidence documenting the specific effects of corruption on PHC delivery in this locality remains sparse.

Objective: This study investigated the effects of corruption on the primary health care system in Oju LGA of Benue State, Nigeria, examining seven outcome domains: accountability, transparency, monitoring of PHC activities, employment of health personnel, facility adequacy, presence of fake or expired drugs, and staff commitment to duties.

Methods: A descriptive survey research design was adopted. Six council wards were randomly selected from the eleven council wards in Oju LGA using a balloting technique, namely: Ukpa/Ainu Ette, Okwudu, Ibilla, Ainu, Iyechi, and Owo. Twenty respondents were randomly selected from each ward, giving a total sample of 120 participants. Data were collected using a structured questionnaire comprising a personal data section and seven close ended items, each requiring an Agree or Disagree response. All 120 questionnaires were retrieved and found usable, representing a response rate of 100%. Data were analysed using simple frequencies and percentages presented in tabular form.

Results: Findings showed that corruption leads to: inadequate accountability in the PHC system, with 85.0% (n = 102) agreeing; inadequate transparency in PHC delivery, with 70.8% (n = 85) agreeing; improper monitoring of PHC activities, with 72.5% (n = 87) agreeing; employment of untrained health personnel, with 87.5% (n = 105) agreeing, the highest agreement rate recorded; inadequate health facilities in the health sector, with 83.3% (n = 100) agreeing; presence of fake or expired drugs in clinics and hospitals, with 85.8% (n = 103) agreeing; and inadequate staff commitment to duties, with 85.0% (n = 102) agreeing.

Conclusion and Recommendations: In Oju LGA, corruption poses a multifaceted danger to PHC delivery by compromising staff motivation, drug safety, facility standards, personnel quality, and governance. The study suggests that the government should institutionalise accountability and transparency in PHC administration; communities should use village development committees and traditional leaders to keep an eye on health facility operations; PHC facilities should only employ qualified staff; staff compensation should not be embezzled; and supervisory structures at the LGA level should be reinforced. Further studies should be centred on the underlying causes and enabling circumstances of PHC corruption in other LGAs in Benue State and North-Central Nigeria.

Keywords: Corruption; Primary health care; Accountability; Transparency; Health governance; Local government; Survey; Nigeria.

1.0 INTRODUCTION

Nigeria operates a three tier health care delivery system comprising primary, secondary, and tertiary levels. Primary health care (PHC) constitutes the entry point into the health system and is designed to provide essential, community based health services. However, the Nigerian PHC system has long been characterised by systemic collapse, with facilities dilapidated, drugs expired or counterfeit, and qualified health workers displaced by unqualified

political appointees, largely due to corruption [1]; [2]. Corruption in the health sector is not a problem unique to Nigeria but is recognised globally as especially damaging in low and middle income countries (LMICs) where public resources are already scarce [3]. The World Health Organization (WHO) defines corruption in health care as the abuse of entrusted power for private gain, manifesting in diverse forms including bribery, absenteeism, embezzlement, informal payments, and procurement

fraud [4]; [5]. Savedoff and Hussmann [6] note that health systems are particularly susceptible to corruption due to information asymmetries between patients and providers, the large number of dispersed actors, and weak governance structures.

Primary health care was formalised globally through the Alma-Ata Declaration of 1978, which defined it as essential health care based on practical, scientifically sound, and socially acceptable methods, made universally accessible to individuals and families in the community at a cost that the country and community can afford [7]. The WHO [8] further identifies five key reform areas essential for PHC achievement: universal coverage, service delivery restructuring, public policy integration, leadership dialogue, and stakeholder participation. Despite these global commitments, PHC in Nigeria remains inadequately funded and poorly managed. Transparency International [9] consistently ranks Nigeria among countries with high corruption perceptions, particularly in public sector service delivery.

Several scholars have examined the relationship between corruption and health system performance. Vian [3] conducted a seminal review of corruption in the health sector and demonstrated that corruption reduces the volume of services, increases their cost, and diminishes their quality, with PHC systems in developing countries bearing the heaviest burden. In Nigeria specifically, corruption leads to drug diversion, ghost workers, absenteeism of health personnel, and the proliferation of counterfeit medicines in public facilities [10]; [5]; [11].

Bardhan [12] and Shleifer and Vishny [13] established the theoretical foundations linking corruption to governance failure, arguing that corruption emerges when public officials exploit information asymmetries and weak institutional oversight to appropriate public resources for private gain. Applied to the health sector, this principal agent framework explains how health workers, administrators, and procurement officials act as agents of the state but, in the absence of accountability, divert resources meant for service delivery.

Glynn [14] demonstrated empirically that countries with higher levels of corruption have worse health outcomes, including higher infant and child mortality rates, and that corruption in health procurement specifically diverts budgets away from facility development and essential medicines. Agwu et al. [15] confirmed similar patterns in PHC service delivery across West African states, linking untrained personnel and facility inadequacy directly to corruption at the local government level.

In the Nigerian context, Onwujekwe et al. [5] documented that corruption in the health system operates through multiple pathways: informal payments at PHC facilities, diversion of drugs and medical supplies, employment of ghost workers, and nontransparent procurement processes. Uzochukwu et al. [16] further showed that these corruption driven inefficiencies have prevented the National Health Insurance Scheme from becoming universally accessible, with only salaried workers in formal employment benefiting from the scheme while the

majority of Nigerians, particularly those in rural LGAs like Oju, are excluded.

Odi et al. [17] documented that in Nigerian PHC facilities, absenteeism driven by corruption related governance failures significantly undermines health worker motivation, with irregular salary payment and pilfering of drug stocks creating environments of low morale and high absenteeism. Adigwe [18] traced the supply of counterfeit pharmaceuticals in Nigeria to procurement corruption, in which inferior or expired drugs are purchased at premium prices through fraudulent tendering processes, directly endangering patient safety in PHC settings.

Despite this body of literature, empirical studies that comprehensively examine all seven dimensions of corruption's effect on PHC delivery, accountability, transparency, monitoring, personnel quality, facility adequacy, drug authenticity, and staff commitment, at the local government level in Benue State, Nigeria, are absent. This gap constitutes the primary motivation for the present study.

1.1 Theoretical Framework

This study is anchored on two complementary theoretical frameworks. First, the Principal Agent Theory of corruption [13]; [12] posits that corruption arises when agents (health workers, administrators, procurement officers) who are entrusted to act in the interest of principals (government, communities, patients) exploit information asymmetries and weak oversight to pursue private gains. This framework explains how PHC corruption in Oju LGA, manifesting as drug theft, employment of unqualified personnel, and embezzlement of salary funds, is enabled by the absence of effective monitoring and accountability mechanisms.

Second, the WHO Health System Building Blocks Framework [8] provides the structural lens through which the seven outcome domains examined in this study are understood. The framework identifies six interlinked building blocks of a functional health system: service delivery, health workforce, health information systems, access to essential medicines, financing, and leadership/governance. Corruption, as documented in this study, directly undermines five of these six building blocks simultaneously, making it a systemic rather than isolated threat to PHC performance in Oju LGA.

1.2 Definition of Key Terms

Corruption: For the purpose of this study, corruption is defined as the illegitimate use of public power or office for private gain [13]; [12]. This encompasses bribery, embezzlement, nepotism in employment, procurement fraud, and the pilfering of public resources including drugs and medical supplies.

Primary Health Care (PHC): As defined by WHO in the National Primary Health Care Development Agency (NPHCDA) guidelines [7]; [8], PHC is essential health care based on practical, scientifically sound, and socially acceptable methods and technology, made universally accessible to individuals and families in the community through their full participation and at a cost that the community and country can afford to maintain at every stage of their

development in the spirit of self reliance and self determination.

1.3 Statement of the Problem

Nigeria's health care system is constitutionally structured into three tiers, with PHC designated as the grassroots pillar responsible for preventive, promotive, and basic curative services. However, the status of PHC in Oju LGA reflects the broader national crisis: untrained health workers are employed in place of qualified ones, drug budgets are embezzled, health insurance schemes exclude the majority of the population, and monitoring of facilities is nonexistent. These conditions are attributable largely to corruption, which manifests as a reflection of deeper governance failures at the local government level [13]; [12]. Field observations conducted during the study period revealed systemic dysfunction across PHC facilities in Oju LGA: centres were staffed by untrained workers, drugs were pilfered, and monitoring and evaluation activities were absent. This study was therefore prompted by the need to empirically document and analyse these effects.

1.4 Objectives of the Study

The broad objective of this study was Corruption and Its Effects on Primary Health Care System: A Case Study of Oju Local Government Area of Benue State, Nigeria.

1.5 Significance of the Study

The findings of this study are expected to benefit policy makers, local government administrators, community health workers, and civil society organisations in Benue State and comparable settings. They provide an empirical basis for anticorruption interventions in PHC, support equitable distribution of health services, and offer evidence for staffing and monitoring reforms in Oju LGA. The study also contributes to the growing body of literature on health governance at the subnational level in Nigeria, where empirical data from rural LGAs remain scarce.

2.0 MATERIALS AND METHODS

2.1 Study Design

A descriptive survey research design was employed. This design was appropriate because the study sought to document and describe the existing relationship between corruption and PHC outcomes in Oju LGA without manipulation of variables [19]. A survey design suited to capturing community perceptions and experiences, particularly in settings where administrative records are unreliable or inaccessible, as is common in rural Nigerian LGAs [19]; [16].

2.2 Study Area

The study was conducted in Oju Local Government Area of Benue State, Nigeria. Oju LGA was created on 3 February 1976 from Benue Plateau State. Its administrative headquarters is Oju town. The LGA shares boundaries with Obi LGA to the north, Ado LGA to the west, Konshisha LGA to the east, and Cross River State (Yala LGA) to the south.

The LGA covers an area of approximately 20 km² with a 2006 census population of 179,686 ([20]). The Iggede people, the dominant ethnic group, are predominantly farmers producing cassava, yam, rice, and maize, with Christianity as the predominant religion. There are 37 PHC centres distributed across eleven council wards. Educational institutions in the area include the Methodist College of Health Technology (MCHT) Ebenta and the College of Education (COE) Oju.

2.3 Population and Sampling

The target population comprised all residents of the eleven council wards in Oju LGA. Due to financial and logistical constraints, including the wide geographical spread of the LGA and limited research funding, it was not feasible for the researcher to cover all eleven wards. Consequently, six council wards were randomly selected by balloting: Ukpa/Ainu Ette, Okwudu, Ibilla, Ainu, Iyeché, and Owo. In the balloting process, the names of all eleven council wards were written on separate slips of paper, placed in a container, thoroughly mixed, and six were drawn randomly, giving each ward an equal probability of selection.

Twenty respondents were subsequently selected from each of the six council wards using the same balloting technique applied at the individual level, giving a total sample of 120 participants. This sample size was considered adequate for a descriptive survey of this scope within a single LGA.

2.4 Instrument for Data Collection

A structured questionnaire was used as the primary instrument for data collection. The questionnaire comprised two sections: Section A, which captured respondents' demographic data (sex, age, marital status, religion, and occupation); and Section B, which contained seven closed ended items corresponding to the seven research questions, each requiring a binary response of Agree or Disagree. The binary response format was deliberately chosen to make the instrument accessible to respondents of varying educational levels.

2.5 Validity and Reliability of Instrument

The content validity of the questionnaire was established through review by the project supervisor, who assessed each item for relevance to the research questions, clarity of language, and appropriateness of the binary response format. Items were revised and edited based on this feedback to ensure they were unambiguous and appropriate for the study population.

A pilot test was not formally conducted due to time and resource constraints. However, the questionnaire was reviewed with a small group of community members in Oju LGA before full administration to check for comprehension. Reliability assessment using formal statistical measures such as Cronbach's alpha was not performed; this is acknowledged as a limitation of the study.

2.6 Data Collection Procedure

The researcher personally administered questionnaires to selected respondents in each of the six council wards. Questionnaires were distributed and retrieved on the same day in most wards to minimise attrition. All 120 questionnaires distributed were retrieved and found complete and usable, giving a response rate of 100%.

2.7 Method of Data Analysis

Data were analysed using simple frequencies and percentages presented in tabular format. Each research question was analysed item by item based on the frequency of agreement or disagreement among respondents. No inferential statistical tests were applied, which is consistent with the descriptive nature of the study design.

2.8 Ethical Considerations

The study was conducted in partial fulfilment of the requirements for the Community Health Extension Worker programme at the Methodist College of Health Technology, Ebenta-Uwokwu, and was approved by the institution. Participation was entirely voluntary and all respondents were assured of confidentiality before enrolment. Informed consent was obtained verbally from each participant prior to questionnaire administration, and respondents were explicitly informed that they were free to withdraw at any point without consequence. No personally identifying information was recorded on any questionnaire. Data collected were used solely for academic purposes.

2.9 Limitations of the Study

This study was subject to the following limitations:

(i) Time constraints: Due to the limited time available for the study, data collection was confined to six of the eleven council wards in Oju LGA. This restricts the generalisability of findings to the remaining five wards.

(ii) Financial constraints: Limited funding prevented the researcher from extending the study to all eleven council wards or from conducting a larger sample. The findings should therefore be interpreted within the context of the available sample.

(iii) Reluctance of key informants: Medical personnel in PHC facilities and some local government officials who could have provided complementary institutional data were reluctant to participate, citing fear of identification and reprisal. This limited the depth of information obtainable beyond community respondents.

(iv) Absence of formal reliability testing: Cronbach's alpha or similar reliability measures were not applied to the instrument, which may affect the precision of the findings.

(v) Binary response format: The Agree/Disagree format, while accessible, does not capture the degree or intensity of respondents' perceptions, which a Likert scale instrument would have allowed.

Notwithstanding these limitations, the information obtained is considered valid and reliable for this study, as it is based on the direct experiences and observations of community members who interact with PHC facilities in Oju LGA.

3.0 RESULTS AND DISCUSSION

3.1 Demographic Profile of Respondents

A total of 120 questionnaires were distributed and all were returned fully completed, representing a 100% response rate. Table 1 summarises the demographic characteristics of respondents.

Table 1: Demographic characteristics of respondents (n = 120)

Variable	Category	Frequency (n)	Percentage (%)
Sex	Male	58	48.3
	Female	62	51.7
Age (years)	20–30	47	39.2
	31–40	38	31.7
	41–50	19	15.8
	51–60	16	13.3
Marital Status	Single	45	37.5
	Married	73	60.8
	Divorced	2	1.7
Religion	Christianity	108	90.0
	Others	12	10.0
Occupation	Civil Servant	60	50.0
	Student	30	25.0
	Others	30	25.0

The majority of respondents were female (51.7%), aged 20–30 years (39.2%), married (60.8%), Christian (90.0%), and civil servants (50.0%). The predominance of female respondents is consistent with the demographic pattern of Oju LGA, where women constitute a slightly larger proportion of the population and are also the primary users of PHC services, particularly maternal and child health services [7]; [20]. The high proportion of civil servants (50.0%) reflects the structure of the sampled wards, several of which contain government establishments, and suggests that respondents had direct experiential knowledge of how public institutions, including PHC facilities, are managed.

3.2 Effects of Corruption on Primary Health Care Delivery

Tables 2 through 8 present respondents' views on the effects of corruption on each of the seven PHC outcome domains, corresponding respectively to Research Questions 1 through 7. Table 9 provides a consolidated summary.

Table 2: Corruption and accountability in PHC (Research Question 1)

Response	Frequency (n)	Percentage (%)
Agree	102	85.0
Disagree	18	15.0
Total	120	100.0

An overwhelming majority (85.0%; n = 102) of respondents agreed that corruption leads to inadequate accountability in the PHC system in Oju LGA. Accountability in health care refers to the obligation of health authorities to justify their decisions and accept responsibility for their actions and outcomes ([4]). When corruption pervades a system, this obligation is systematically undermined: budgets are not publicly disclosed, procurement processes are opaque, and managers are not held responsible for poor performance or resource misuse.

This finding is consistent with Vian [3], who demonstrated that corruption in health systems routinely suppresses accountability by creating incentives for officials to conceal rather than disclose the use of public resources. Onwujekwe et al. [5] similarly found that informal payment systems and drug diversion in Nigerian PHC facilities persist precisely because accountability mechanisms are absent or deliberately weakened. Transparency International [9] identifies accountability gaps as one of the most common and damaging manifestations of corruption in public health systems across sub-Saharan Africa. In Oju LGA, the absence of functioning supervisory structures and community feedback mechanisms creates an environment in which accountability failures go unchallenged.

Table 3: Corruption and transparency in PHC (Research Question 2)

Response	Frequency (n)	Percentage (%)
Agree	85	70.8
Disagree	35	29.2
Total	120	100.0

Approximately 70.8% (n = 85) of respondents agreed that corruption leads to inadequate transparency in PHC delivery. Transparency refers to the extent to which information about decision making processes, resource allocation, and service delivery outcomes is openly available to those who are affected by those decisions [20,23]. In PHC systems corrupted by patronage and embezzlement, transparency is the first casualty: staff selection is done privately based on political connections rather than merit, drug procurement records are falsified, and budget expenditures are never published.

This result corroborates Bardhan [12] and Shleifer and Vishny [13], who theorised that corruption flourishes under conditions of information asymmetry, precisely the conditions that characterise PHC administration in rural Nigerian LGAs. Vian [3] notes that corruption suppresses transparency and reduces the effective resources available for health services, increasing their cost while decreasing their volume. In addition, corruption reduces transparency by creating incentives for officials to withhold information that would otherwise expose their misconduct. The comparatively lower agreement rate (70.8%) on transparency compared to accountability (85.0%) may reflect the fact that community members have a more direct experience of accountability failures, such as seeing unqualified workers in facilities, than of the less visible processes of budget management and procurement.

Table 4: Corruption and monitoring of PHC activities (Research Question 3)

Response	Frequency (n)	Percentage (%)
Agree	87	72.5
Disagree	33	27.5
Total	120	100.0

A majority of 72.5% (n = 87) agreed that corruption leads to improper monitoring of PHC activities. Monitoring and evaluation (M&E) is a fundamental component of health system governance, providing the feedback loop through which managers identify performance gaps and take corrective action [8].

In a corrupt system, M&E is either absent because funds meant for supervisory visits are embezzled, or it is deliberately suppressed because effective monitoring would expose the very corrupt practices that officials benefit from.

Odi et al. [17] documented that in health facilities characterised by corruption, supervisory capacity is systematically eroded, creating environments in which health worker absenteeism and drug diversion go unchecked for extended periods. In Oju LGA, field observations during the study period confirmed that PHC facilities operated without regular supervisory visits from LGA health officials, and no monitoring data were available for review. This finding aligns with the principal agent framework ([13]; [12]), wherein agents exploit the absence of monitoring to maximise private gains at the expense of service delivery.

Table 5: Corruption and employment of untrained health personnel (Research Question 4)

Response	Frequency (n)	Percentage (%)
Agree	105	87.5
Disagree	15	12.5
Total	120	100.0

The highest rate of agreement (87.5%; n = 105) across all seven domains was recorded for the assertion that corruption leads to the employment of untrained health personnel in PHC facilities. This finding reflects a well documented and deeply entrenched phenomenon in Nigerian PHC: the substitution of qualified health workers with unqualified political appointees, leaving certificate holders unemployed while individuals without relevant training occupy clinical and administrative positions [21]; [22].

This practice is a direct product of corruption in recruitment processes, where positions are allocated based on political connections, ethnic affiliation, or financial inducement rather than professional qualifications. Agwu et al. [15] confirmed similar patterns across PHC service delivery in West African states, linking personnel irregularities directly to corruption at the local government level. Uzochukwu et al. [16] further noted that this pattern is particularly damaging because PHC, unlike secondary and tertiary care, depends almost entirely on community based health workers whose competence is essential for delivering preventive services such as immunisation, maternal care, and health education. The employment of untrained personnel therefore not only wastes public funds but directly endangers the health of the communities that PHC facilities are meant to serve.

Table 6: Corruption and adequacy of health facilities (Research Question 5)

Response	Frequency (n)	Percentage (%)
Agree	100	83.3
Disagree	20	16.7
Total	120	100.0

A total of 83.3% (n = 100) of respondents agreed that corruption leads to inadequate health facilities in the PHC sector. Health facility adequacy encompasses physical infrastructure, functional equipment, essential medicines, and basic utilities such as water and electricity, all of which are funded through capital and recurrent budgets allocated to LGA health

departments. When corruption diverts these budgets, facilities deteriorate: structures become dilapidated, equipment falls into disrepair, and essential supplies are either absent or counterfeit.

This finding corroborates Glynn [14], who demonstrated empirically that corruption in health procurement diverts capital budgets meant for facility development and equipment, resulting in measurably worse health infrastructure in high corruption settings. PHC centres in Oju LGA are characterised by dilapidated structures, nonfunctional equipment, and expired medical supplies, outcomes directly linked to financial misappropriation at the LGA level ([1]; [2]). These facility deficits are particularly harmful in rural communities, where geographical distance makes PHC the only accessible point of care for most households.

Table 7: Corruption and presence of fake or expired drugs (Research Question 6)

Response	Frequency (n)	Percentage (%)
Agree	103	85.8
Disagree	17	14.2
Total	120	100.0

A total of 85.8% (n = 103) of respondents agreed that corruption contributes to the presence of fake or expired drugs in PHC facilities. The proliferation of counterfeit and substandard medicines in Nigerian public health facilities is a well documented public health crisis with potentially fatal consequences for patients who receive ineffective or harmful treatments [11]; [23].

Adigwe [18] traced the supply of counterfeit pharmaceuticals in Nigeria to procurement corruption, in which inferior or expired drugs are purchased at premium prices through fraudulent tendering processes, with the price difference appropriated by corrupt officials. Okereke et al. [11] documented that regulatory lapses, themselves a product of corruption in oversight agencies, create the conditions for counterfeit drugs to enter public supply chains. In PHC settings, where drug quality testing capacity is virtually nonexistent, patients are entirely dependent on the integrity of the procurement system. When that system is corrupted, the consequences fall disproportionately on the poorest and most vulnerable members of society, who rely exclusively on public PHC facilities for their medicines.

Table 8: Corruption and staff commitment to duties

Response	Frequency (n)	Percentage (%)
Agree	102	85.0
Disagree	18	15.0
Total	120	100.0

A total of 85.0% (n = 102) of respondents agreed that corruption leads to inadequate staff commitment to duties in PHC facilities. Staff commitment encompasses punctuality, professional conduct, attendance, and motivation to deliver quality care. In systems plagued by corruption, these attributes are systematically eroded by several interconnected mechanisms: salaries are embezzled or irregularly paid, leaving workers demotivated; ghost workers inflate the payroll while real workers are underpaid; and the absence of performance management

systems removes any incentive for diligence.

Odi et al. [17] documented that corruption related governance failures in Nigerian PHC facilities significantly undermine health worker motivation, with irregular salary payment and pilfering of resources creating pervasive low morale. Klootwijk et al. [22] further established that poor remuneration and job insecurity, both of which are exacerbated by corruption, are primary drivers of low staff commitment and high turnover in sub Saharan African health systems. Orjiakor et al. [24] similarly noted that when health workers observe that their supervisors benefit from corrupt practices without consequence, institutional norms of professional conduct break down, leading to a culture of absenteeism and neglect that directly diminishes the quality of care delivered to patients.

3.3 Summary of Key Findings

Table 9 presents a consolidated summary of agreement rates across all seven research domains.

Table 9: Summary of findings on effects of corruption on PHC in Oju LGA (n = 120)

Research Domain	Agree n (%)	Disagree n (%)	Rank
1. Accountability	102 (85.0)	18 (15.0)	3rd
2. Transparency	85 (70.8)	35 (29.2)	7th
3. Monitoring of PHC activities	87 (72.5)	33 (27.5)	6th
4. Employment of untrained personnel	105 (87.5)	15 (12.5)	1st
5. Adequacy of health facilities	100 (83.3)	20 (16.7)	5th
6. Presence of fake or expired drugs	103 (85.8)	17 (14.2)	2nd
7. Staff commitment to duties	102 (85.0)	18 (15.0)	3rd

Across all seven domains, the majority of respondents agreed that corruption adversely affects PHC delivery in Oju LGA, with agreement rates ranging from 70.8% to 87.5%. Employment of untrained personnel (87.5%) ranked highest, followed by the presence of fake or expired drugs (85.8%), suggesting that staffing irregularities and drug procurement corruption are the most acutely felt manifestations of health sector corruption in this community. Accountability (85.0%) and staff commitment (85.0%) were jointly ranked third, reflecting the mutually reinforcing nature of these two corruption outcomes, when accountability fails, staff commitment deteriorates, and vice versa.

Transparency (70.8%) and monitoring (72.5%) recorded the lowest agreement rates, which may reflect the fact that these processes are less directly visible to community members than the outcomes they produce. A community member may readily observe that the health worker at their PHC facility is untrained or that the drugs they receive are expired, but the opacity of budget management and the absence of supervisory visits are processes that occur largely outside community view.

These findings collectively confirm the theoretical position advanced by the principal agent framework [13]; [12] and the WHO health system building blocks model [8]: that corruption does not undermine health systems through a single pathway but simultaneously degrades governance, workforce quality, resource availability, information systems, and service delivery, making it the single most destructive systemic force in PHC performance in contexts like Oju LGA.

4.0 CONCLUSION AND RECOMMENDATIONS

4.1 Conclusion

This study investigated the effects of corruption on the primary health care system in Oju Local Government Area of Benue State, Nigeria. Based on empirical data collected from 120 community respondents across six randomly selected council wards, the study demonstrates that corruption exerts a pervasive and multidimensional negative effect on PHC delivery across all seven domains examined. Specifically, corruption contributes to inadequate accountability, poor transparency, improper monitoring of PHC activities, employment of untrained health personnel, inadequate health facilities, infiltration of fake and expired drugs, and low staff commitment to duty.

These findings confirm that corruption is not merely a governance abstraction but a direct, tangible, and daily public health threat that undermines the right of communities in Oju LGA to access safe, qualified, and adequately resourced health care services. The high agreement rates recorded, particularly for untrained personnel (87.5%) and fake drugs (85.8%), suggest that the effects of corruption are acutely felt by community members and are not merely institutional or administrative concerns.

The study is the first, to the researcher's knowledge, to empirically examine all seven dimensions of corruption's effect on PHC delivery at the local government level in Benue State, and its findings provide a foundation for evidence based anticorruption interventions in the health sector.

4.2 Recommendations

Based on the findings of this study, the following recommendations are made:

- (i) Government at all levels should institutionalise transparency and accountability mechanisms in PHC administration, including open competitive procurement, regular external audits, and mandatory publication of health facility budgets and expenditure reports at the LGA level.
- (ii) Communities should actively deploy village development committees (VDCs), volunteer community health workers, and traditional leaders (village heads and chiefs) to monitor the daily conduct, attendance, and activities of health workers in local PHC facilities, thereby supplementing formal supervisory structures.
- (iii) Health workers and facility managers must be strictly prohibited from inflating drug prices, pilfering drugs and medical supplies from public health facilities, or diverting resources for personal gain. Punitive measures, including criminal prosecution, must be consistently enforced for such offences.
- (iv) Government must ensure timely, complete, and transparent payment of staff salaries and rigorously audit PHC payrolls to eliminate ghost workers, thereby improving staff morale, commitment, and attendance.
- (v) Only qualified and certified health workers should be employed in PHC facilities. Political interference in health worker recruitment at the LGA level must be curtailed through the implementation of merit based, transparent, and publicly advertised hiring policies.

(vi) Supervisory and monitoring structures for PHC must be strengthened at the LGA level, with regular unannounced facility inspections, mandatory reporting of findings to state health authorities, and community feedback mechanisms integrated into routine PHC governance.

(vii) Drug procurement processes must be thoroughly reformed to eliminate fraudulent tendering. The National Agency for Food and Drug Administration and Control (NAFDAC) should intensify surveillance of drug supplies entering PHC facilities to detect and remove counterfeit and expired medicines.

(viii) Future studies should employ mixed methods designs, combining community surveys with key informant interviews of health workers and LGA officials, to more comprehensively investigate both the manifestations and the root causes of PHC corruption in Benue State and other states of North-Central Nigeria.

COMPETING INTERESTS

The author declares that no competing financial or nonfinancial interests exist that could have influenced the conduct or reporting of this study.

FUNDING STATEMENT

This study received no external funding. It was conducted as part of the requirements for the Community Health Extension Worker programme at the Methodist College of Health Technology, Ebenta-Uwokwu, Oju LGA, Benue State, Nigeria.

DATA AVAILABILITY STATEMENT

The data supporting the findings of this study are available from the corresponding author upon reasonable request.

ACKNOWLEDGEMENTS

The author sincerely acknowledges the guidance of the project supervisor throughout this study. Appreciation is also extended to the respondents in the six council wards of Oju Local Government Area who voluntarily participated and provided the data on which this study is based, and to the village heads and community leaders who facilitated access to respondents.

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