

Open Urination as a Public Health and Sanitation Governance Challenge in Nigeria: A Narrative Integrative Review of Urban Public Space Sanitation

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Abstract- Open urination is a visible yet under examined sanitation practice in Nigerian urban environments. While national sanitation efforts have prioritized the elimination of open defecation, open urination has received limited scholarly and policy attention despite its environmental and public health implications. This paper adopts a narrative integrative review design to examine open urination as a public health and sanitation governance challenge in Nigeria. Drawing on Nigerian empirical studies, sanitation policy documents, and legal analyses, the paper synthesizes evidence on the prevalence and determinants of open urination, its health and environmental implications, and gaps in sanitation policy and public toilet provision. The review reveals that open urination is predominantly infrastructure driven, arising from inadequate, poorly managed, or inaccessible public toilet facilities, especially in high mobility urban spaces. The paper argues that addressing open urination requires explicit policy recognition, infrastructure led interventions, and improved governance of public sanitation systems. The paper recommend that, It will be of great importance for government to direct local governments to establish, manage, and regularly maintain hygienic and accessible public toilet facilities across Nigerian cities, as empirical evidence shows that poor facility condition discourages usage even where toilets exist. Government should immediately align sanitation enforcement with the availability of adequate public toilet infrastructure, ensuring that enforcement measures are supportive rather than punitive and effectively address the structural causes of open urination.

Keywords: Open urination, public sanitation, public toilets, urban health, sanitation governance, Nigeria

I. INTRODUCTION

Sanitation is a fundamental determinant of public health, environmental quality, and human dignity. Inadequate sanitation contributes to the transmission of infectious diseases, environmental degradation, and reduced quality of life, particularly in rapidly urbanizing low- and middle income countries (Akinyemi, 2018). In Nigeria, persistent urban sanitation challenges are closely linked to rapid population growth, increased rural urban migration, expanding informal economic activities, and pressure on limited public infrastructure.

National sanitation efforts in Nigeria have largely focused on the elimination of open defecation, particularly through the Clean Nigeria: Use the Toilet Campaign and the National Roadmap for Making Nigeria Open Defecation Free by 2025 (Federal Ministry of Water Resources (FMWR), United Nations International Children's Emergency Fund (UNICEF), (2018; UNICEF Nigeria, 2016). While these initiatives have strengthened sanitation advocacy and policy visibility, they have also narrowed policy attention to household sanitation outcomes, leaving other sanitation behaviours in public spaces insufficiently examined.

One such behaviour is open urination, defined as the act of urinating in public or open spaces such as streets, markets, motor parks, open drains, riverbanks, and uncompleted buildings due to the absence, inaccessibility, or poor condition of sanitation facilities. In many Nigerian cities, open urination is a visible and recurring practice, particularly in high-

traffic areas where daily sanitation demand exceeds available services (Fadairo & Adedeji, 2012).

Despite its prevalence, open urination has received limited scholarly and policy attention in Nigeria. It is often framed as a social nuisance or moral infraction rather than as a sanitation and public health concern. However, emerging Nigerian empirical evidence suggests that open urination is predominantly infrastructure-driven, shaped by inadequate public toilet provision and poor facility management rather than by ignorance or negative hygiene attitudes (Ekanem, 2025). This limited framing has resulted in its exclusion from sanitation monitoring indicators, implementation strategies, and infrastructure planning.

From a public health perspective, open urination contributes to environmental contamination, offensive odours, and unsanitary public spaces, particularly in dense urban environments where human contact with contaminated surfaces is frequent (Akinyemi, 2018). Addressing open urination is therefore essential for achieving comprehensive urban sanitation and sustainable public health outcomes in Nigeria.

II. STATEMENT OF THE PROBLEM

Despite national sanitation campaigns and policy commitments, urban sanitation conditions remain poor in many parts of Nigeria. Public toilet facilities are grossly inadequate, especially in high traffic locations such as markets, motor parks, transport corridors, and informal trading areas. Where public toilets exist, they are often poorly maintained, lack water supply, are unhygienic, insecure, or require user fees that discourage utilization (Fadairo & Adedeji, 2012; Abioye, 2014).

Empirical studies conducted in Nigeria consistently identify the absence of public toilets and the poor sanitary condition of available facilities as the strongest predictors of open urination. For instance, Ekanem (2025), in a cross-sectional study in Uyo, reported a high prevalence of public urination and found that lack of accessible and acceptable toilet facilities was the primary reason for the practice. Similar findings have been reported in studies of public toilets in institutional environments and urban public spaces, where dysfunctional facilities

undermine sanitation compliance (Elesin, 2021; Rotowa, 2020).

Furthermore, sanitation policy and governance in Nigeria have largely prioritized household sanitation and open defecation reduction, with limited attention to sanitation behaviours occurring in public spaces (Gbadegesin & Akintola, 2020). This narrow policy focus has created an institutional gap in which open urination is neither adequately regulated nor addressed through infrastructure development. Consequently, responses to open urination are often enforcement-driven and punitive rather than preventive and infrastructure based.

The continued reliance on enforcement without corresponding provision of functional public toilets has normalized open urination in many urban settings, thereby degrading public environments and exposing residents to sanitation related risks (Akinyemi, 2018). Without explicit policy recognition and targeted intervention, open urination will continue to undermine Nigeria's urban sanitation and public health goals. It is on this backdrop that this paper seek to examine Open Urination as a Public Health and Sanitation Governance Challenge in Nigeria.

III. OBJECTIVES OF THE PAPER

To examine the prevalence and key determinants of open urination practices in urban areas of Nigeria.

To assess the perceived health and environmental effects of open urination in Nigeria.

To analyze sanitation policy, public toilet provision, and enforcement mechanisms relating to open urination in Nigeria.

IV. CONCEPTUAL REVIEW OF LITERATURE

Open Urination

Open urination refers to the act of urinating in public or open spaces such as streets, markets, motor parks, open drains, and uncompleted buildings due to the absence, inaccessibility, or poor condition of sanitation facilities. In urban contexts within Nigeria, open urination occurs predominantly in public spaces where sanitation demand exceeds available services. Empirical studies in Nigeria show that open urination

is largely an adaptive response to infrastructural inadequacy, particularly the lack of functional and hygienic public toilets, rather than a result of poor hygiene awareness or deliberate non-compliance (Fadairo & Adedeji, 2012; Rotowa, 2020; Ekanem, 2025).

From a public health perspective, open urination contributes to environmental contamination, odour nuisance, and degradation of public spaces, especially in densely populated urban environments (Akinyemi, 2018). Within sanitation governance discourse, it represents a neglected sanitation behaviour that falls outside the dominant focus on household sanitation and open defecation (Gbadegesin & Akintola, 2020).

Public Sanitation

Public sanitation refers to the provision, management, and maintenance of sanitation facilities and services in public spaces such as markets, transport hubs, streets, parks, and commercial centres. Unlike household sanitation, public sanitation addresses the needs of mobile populations and individuals away from their homes during daily activities. Effective public sanitation is critical for maintaining environmental hygiene and preventing unsanitary coping behaviours in urban areas (World Health Organization [WHO], 2018).

In Nigeria, public sanitation systems are often underdeveloped and poorly integrated into urban planning, resulting in sanitation gaps in high-traffic locations (Akinyemi, 2018). The weakness of public sanitation infrastructure has been empirically linked to practices such as open urination, highlighting its importance as a determinant of urban environmental health (Rotowa, 2020).

Public Toilets

Public toilets are sanitation facilities provided for use by the general public in non-residential spaces, including markets, motor parks, schools, and commercial areas. They serve as critical components of public sanitation systems by enabling hygienic waste disposal outside the household environment. However, empirical studies in Nigeria indicate that the mere presence of public toilets does not guarantee their utilisation.

Research shows that factors such as cleanliness, water availability, privacy, safety, and maintenance significantly influence public toilet usage (Fadairo & Adedeji, 2012; Elesin, 2021). Where public toilets are poorly managed or unhygienic, users often avoid them, leading to alternative practices such as open urination (Rotowa, 2020; Olanrewaju John et al., 2023).

Sanitation Governance

Sanitation governance refers to the institutional, legal, and policy arrangements through which sanitation services are planned, financed, implemented, regulated, and monitored. It encompasses the roles of government agencies, legal frameworks, funding mechanisms, and enforcement strategies that shape sanitation outcomes. Effective sanitation governance requires coordinated action across multiple levels of government and sectors (Gbadegesin & Akintola, 2020).

In Nigeria, sanitation governance has been characterised by fragmented institutional responsibility and a strong emphasis on household sanitation, often neglecting public-space sanitation needs (Federal Ministry of Water Resources, 2018). This governance gap has contributed to inadequate public toilet provision and weak management systems, thereby sustaining practices such as open urination in urban environments (Elesin, 2021).

Environmental Health

Environmental health refers to aspects of human health that are determined by physical, chemical, biological, and social factors in the environment. It focuses on preventing disease and promoting well-being through the management of environmental conditions, including sanitation, water quality, and waste disposal (World Health Organization, 2018).

Poor public sanitation, including practices such as open urination, degrades environmental quality by contributing to surface contamination, offensive odours, and unsanitary public spaces. Nigerian environmental health studies highlight that degraded sanitation environments undermine urban liveability and increase potential exposure to health risks,

particularly in densely populated areas (Akinyemi, 2018; Abioye, 2015).

The Social Ecological Model provides an appropriate conceptual lens for this study, as it explains sanitation behaviour as the product of interacting individual, community, institutional, and policy level factors. Within this framework, open urination is viewed as a manifestation of systemic sanitation failure rather than individual misconduct.

Empirical Evidence on the Prevalence and Determinants of Open Urination in Nigeria

Empirical research in Nigeria demonstrates that open (public) urination is prevalent in urban settings and is largely driven by structural sanitation deficits, particularly the lack of functional public toilets.

A key empirical study by Ekanem (2025) investigated the prevalence, attitudes, and predictors of public urination among adults attending a tertiary health facility in Uyo, Akwa Ibom State. The study adopted a descriptive cross-sectional design and surveyed 361 adult respondents using structured questionnaires. Data were analyzed using descriptive and inferential statistics. The findings revealed that a substantial proportion of respondents reported engaging in public urination. Importantly, the study identified absence of public toilets and poor sanitary condition of available facilities as the strongest predictors of the practice. Ekanem concluded that public urination in urban Nigeria is primarily an infrastructure-driven coping behaviour, rather than a function of poor hygiene knowledge or negative attitudes.

Facility focused empirical studies further corroborate these findings. Fadairo and Adedeji (2012) conducted a case study assessment of public toilets in selected universities in South West Nigeria, using direct observation, facility audits, and user perception surveys. Their study documented widespread deficiencies in cleanliness, water supply, ventilation, and maintenance. Despite the presence of toilet facilities, many users avoided them due to unhygienic conditions. The authors empirically demonstrated that poor toilet quality and management discourage usage, thereby indirectly promoting unsanitary alternatives such as open urination.

Evidence from transport environments major hotspots for public urination also supports the determinant role of infrastructure. According to Olanrewaju John et al. (2023) they assessed toilet functionality and cleanliness status in major motor parks in Ibadan metropolis. Using a cross sectional facility assessment design, the study evaluated toilets across multiple motor parks through observation checklists and user feedback. The findings showed that most toilets were either non-functional, poorly maintained, or insufficient for the daily population using the motor parks. The authors concluded that inadequate “away-from-home” sanitation facilities in high-mobility spaces create predictable conditions for open urination.

Similarly, Rotowa (2020) examined public lavatories in Akure, Ondo State using a descriptive survey and facility assessment approach. The study found that public toilets were grossly inadequate in number, unevenly distributed, and poorly managed. Maintenance challenges and weak institutional oversight were identified as major constraints. This study empirically reinforces the argument that urban sanitation planning in Nigeria has not kept pace with population demand, thereby encouraging unsanitary coping practices in public spaces.

Collectively, these empirical studies across multiple Nigerian cities provide consistent evidence that open urination is strongly associated with toilet scarcity, poor facility conditions, weak maintenance systems, and inadequate public-space sanitation planning.

Empirical Evidence on the Health and Environmental Effects of Open Urination

Direct epidemiological studies isolating open urination as a single exposure remain limited in Nigeria. However, several Nigerian empirical studies provide measurable evidence of environmental contamination and health-relevant exposure pathways in the same public sanitation environments where open urination commonly occurs.

Ohagim, Ikon, Matthew, and Ohagim (2017) conducted a microbiological assessment of indoor air quality in public toilets located in motor parks in Owerri metropolis. Using standard microbial air sampling techniques, the study measured airborne

bacterial and fungal loads. Results showed microbial concentrations exceeding recommended indoor air quality thresholds, indicating that poorly maintained public sanitation environments pose potential health risks to users and workers. Although the study focused on toilet interiors, it empirically demonstrates the health relevance of degraded public sanitation environments that often coexist with open urination in surrounding spaces.

Environmental hygiene audits also provide relevant empirical evidence. Abioye (2015) assessed the hygienic conditions of public toilets and sanitary facilities in Sokoto metropolis using direct observation and structured checklists. The study documented extensive hygiene failures, including misuse of toilet floors and surrounding areas as urination points, offensive odours, and inadequate waste management. These findings provide empirical confirmation that sanitation breakdowns contribute to environmental nuisance and unsanitary public spaces.

Market based sanitation studies further highlight environmental and perceived health effects. Obayi, Enemu, and Ugbe (2023) conducted a descriptive cross-sectional survey among traders in Ogige Market, Nsukka Urban, assessing sanitation practices and facility availability. The study reported inadequate sanitation infrastructure, unsanitary environmental conditions, and traders' concerns about health risks associated with poor sanitation. Markets, as high density public spaces, are particularly sensitive to sanitation failures, including open urination, which contributes to odour nuisance and environmental contamination.

Taken together, these empirical studies show that poor public sanitation environments in Nigeria are associated with microbial contamination, environmental degradation, and perceived health risks. Open urination, as part of these degraded sanitation ecosystems, therefore constitutes a legitimate public health concern rather than merely a social nuisance.

Empirical Evidence on Sanitation Policy, Public Toilet Provision, and Enforcement in Nigeria

Nigeria's sanitation policy framework provides a broader empirical context for understanding how open urination persists. The National Roadmap for Making

Nigeria Open Defecation Free by 2025, developed with support from UNICEF, explicitly recognizes the need for sanitation facilities in public spaces, including markets and transport hubs. However, empirical governance studies suggest significant gaps between policy intent and implementation.

Meanwhile, Gbadegesin and Akintola (2020) conducted a legal and policy analysis of Nigeria's WASH framework, drawing on statutes, policy documents, and institutional arrangements. Their study found that sanitation outcomes in Nigeria are undermined by weak legal enforceability, fragmented institutional responsibility, and poor coordination between levels of government. The authors argue that sanitation challenges persist not because of policy absence, but because of implementation and governance failures.

Empirical facility studies provide operational evidence of these governance gaps. Although, Elesin (2021) assessed the provision and management of public toilet facilities in a Nigerian tertiary institution using a mixed-methods approach that combined facility audits with administrative interviews. The study found that toilets suffered from inadequate funding, weak maintenance culture, and unclear management responsibility conditions that mirror broader public space sanitation challenges in Nigeria.

Similarly, Fadairo and Adedeji (2012) demonstrated that even where public toilets are provided, weak management and lack of routine inspection undermine service quality, thereby limiting the effectiveness of sanitation policy interventions. These empirical findings indicate that enforcement-only approaches, when not supported by adequate infrastructure and governance systems, are unlikely to sustainably reduce open urination.

V. THEORETICAL FRAMEWORK

This study is guided by the Social Ecological Theory (Social Ecological Model SEM), complemented by insights from Systems Theory in public health and sanitation governance.

Social Ecological Theory

The Social Ecological Theory originated from the work of Urie Bronfenbrenner, who introduced the ecological systems theory to explain human behaviour within interacting environmental systems (Bronfenbrenner, 1979). The theory was later adapted for public health and health behaviour research by Daniel Stokols and further operationalised by McLeroy et al. in health promotion studies (Stokols, 1996; McLeroy et al., 1988).

Assumptions of the Theory

The Social Ecological Theory assumed that Human behaviour is influenced by multiple interacting levels, including individual, interpersonal, community, institutional, and policy environments (McLeroy et al., 1988).

Environmental and structural conditions significantly shape behaviour, often more strongly than individual knowledge or attitudes (Stokols, 1996). Sustainable behaviour change requires interventions at multiple levels, not individual level action alone (Bronfenbrenner, 1979).

Relevance of the theory

The Social Ecological Theory is highly relevant to this study because open urination occurs within public spaces where individual choice is constrained by environmental and institutional factors. Empirical studies in Nigeria demonstrate that the practice is largely driven by inadequate public toilet provision, poor facility maintenance, and weak sanitation governance rather than poor hygiene awareness (Fadairo & Adedeji, 2012; Rotowa, 2020).

The theory provides a framework for understanding open urination as an adaptive response to sanitation infrastructure deficits, particularly at the community, institutional, and policy levels. This aligns with Nigerian sanitation research that links public sanitation failure to unsanitary coping behaviours in urban spaces (Akinyemi, 2018).

Weaknesses of the Theory

Despite its strengths, the Social Ecological Theory has limitations: It lacks precise predictive capacity,

making it difficult to determine which level of influence is most dominant in specific contexts (Sallis et al., 2008).

The theory is complex to operationalize, as it requires multi-sectoral and multi-level interventions that may be resource intensive.

It provides limited guidance on prioritisation of interventions in low-resource settings.

Systems Theory

Systems Theory was developed by Ludwig von Bertalanffy through his General Systems Theory, which conceptualizes social phenomena as interconnected components of a whole (von Bertalanffy, 1968). The theory has been widely applied in public health and policy analysis by scholars such as Donella Meadows to explain persistent systemic failures (Meadows, 2008).

Assumptions of the Theory

Systems Theory rests on the assumptions that, Social and health outcomes result from interactions among system components, not isolated variables (von Bertalanffy, 1968).

Failure in one component of a system affects the entire system, producing unintended outcomes (Meadows, 2008).

Sustainable solutions require system wide coordination and feedback mechanisms.

Relevance of the theory

Systems Theory is relevant because sanitation outcomes in Nigeria depend on the interaction of infrastructure provision, financing, maintenance, institutional responsibility, and policy enforcement. Empirical sanitation studies reveal that open urination persists where these system components are poorly coordinated or dysfunctional (Gbadegesin & Akintola, 2020; Elesin, 2021).

The theory strengthens the argument that enforcement only responses to open urination are ineffective, as they fail to address underlying system failures in public sanitation governance.

Weaknesses of the Theory

The limitations of Systems Theory is its abstract nature, which can make empirical testing difficult.

Limited guidance on which system component should be prioritized for intervention.

Implementation challenges in contexts with fragmented governance structures, such as urban sanitation systems in Nigeria.

Synthesis of Theoretical Application

Together, the Social Ecological Theory and Systems Theory provide a strong conceptual foundation for this paper by explaining open urination as a multi-level, system driven sanitation challenge. They support the paper's emphasis on infrastructure led, governance focused interventions and align closely with Nigerian empirical evidence on public sanitation failures.

VI. METHODOLOGY

This paper adopts a narrative integrative review design, drawing on Nigeria focused empirical studies, sanitation policy documents, and legal and governance analyses relevant to public space sanitation. Peer reviewed journal articles, government publications, and institutional reports were systematically identified through targeted database searches and reference tracking.

The selected materials were reviewed and synthesized using thematic content analysis, guided by the objectives. Themes relating to the prevalence and determinants of open urination, associated health and environmental implications, and sanitation policy and public toilet governance were identified through iterative comparison across sources. This integrative approach enabled the consolidation of fragmented evidence into a coherent theoretical interpretation of open urination as a public health and sanitation governance challenge in Nigeria.

Contribution to Knowledge

This study makes several important contributions to knowledge in the fields of public health, environmental sanitation, and urban governance in Nigeria.

First, the study conceptually elevates open urination from a marginal social nuisance to a recognized public health and sanitation governance issue. Existing sanitation scholarship and policy discourse in Nigeria have overwhelmingly focused on open defecation and household sanitation, with limited explicit attention to open urination. By isolating and systematically analyzing open urination, this study fills a critical conceptual gap and expands the scope of sanitation research in Nigeria.

Second, the study integrates fragmented empirical evidence from diverse Nigerian contexts health facilities, markets, motor parks, public toilets, and policy documents into a coherent analytical framework. Previous studies have examined sanitation behaviour, facility conditions, or governance issues in isolation. This study contributes by synthesizing these strands and demonstrating how infrastructure deficits, facility management failures, and policy blind spots collectively shape open urination practices.

Third, the study contributes theoretically by reframing open urination as an adaptive, infrastructure driven behaviour rather than a problem of individual indiscipline or poor hygiene awareness. This reframing challenges enforcement only approaches and provides a stronger analytical basis for infrastructure-led and governance focused interventions.

Finally, the study extends sanitation governance discourse by highlighting the policy practice disconnect in Nigeria's sanitation framework. While national policies acknowledge the importance of sanitation improvement, they insufficiently address public space sanitation needs. By explicitly linking open urination to gaps in public toilet provision and institutional coordination, the study provides new insight relevant for policy reform and urban sanitation planning.

VII. DISCUSSION

First, the findings from the reviewed literature demonstrate that open urination in Nigeria is a systemic sanitation challenge rooted in infrastructural and governance failures, rather than merely a behavioural or moral issue. Across multiple urban contexts, the absence of accessible and hygienic public

toilets emerges as the dominant determinant of open urination. Where toilets exist, poor maintenance, lack of water supply, and unhygienic conditions significantly reduce utilization, reinforcing sanitation avoidance behaviours. The cross sectional study by Ekanem (2025) provides direct empirical confirmation of this position, showing that the strongest predictors of public urination among adults in Uyo were the absence of public toilets and the poor sanitary condition of available facilities. This finding aligns with facility based studies across different urban contexts, which show that the existence of toilets alone does not guarantee utilization if such facilities are unhygienic, unsafe, or poorly maintained. These findings are consistent with broader sanitation theory, which emphasizes that sanitation behaviour is shaped by environmental constraints and service availability rather than knowledge alone. The persistence of open urination in high mobility spaces such as markets and motor parks highlights a structural weakness in Nigeria's sanitation planning, which remains largely household centred despite increasing urbanization and daily population movement.

Secondly, the review further indicates that degraded public sanitation environments characterized by poor toilet hygiene, misuse of facilities, and environmental contamination create health relevant exposure pathways. Although few studies isolate open urination as a single exposure, empirical evidence from microbiological assessments and environmental hygiene audits suggests that unsanitary public spaces contribute to odour nuisance, microbial contamination, and perceived health risks. Open urination therefore operates within a wider ecosystem of sanitation failure that undermines environmental health and urban liveability. Although, Microbiological assessments by Ohagim et al. (2017) revealed elevated microbial loads in public toilets located in motor parks, indicating that poorly managed sanitation facilities constitute potential exposure settings for users and workers. These findings are particularly relevant because open urination commonly occurs in the immediate surroundings of such facilities, contributing to environmental contamination and unsanitary conditions.

Environmental hygiene audits conducted by Abioye (2015) provide further empirical support by

documenting misuse of toilet floors and surrounding areas for urination in Sokoto metropolis, alongside offensive odours and poor waste management. Similarly, market based studies by Obayi et al. (2023) show that inadequate sanitation infrastructure in dense commercial environments contributes to unsanitary surroundings and perceived health risks among users. These studies collectively suggest that open urination forms part of a broader ecosystem of public sanitation failure that degrades environmental quality and undermines public health.

Thirdly, from a governance perspective, the study reveals a persistent implementation gap in Nigeria's sanitation framework. National roadmaps and campaigns acknowledge sanitation improvement goals, yet empirical facility studies consistently show inadequate public toilet provision and weak maintenance systems. Enforcement oriented responses to open urination, when not accompanied by functional infrastructure, appear ineffective and may further normalize the practice by displacing it rather than eliminating it. Studies by Fadairo and Adedeji (2012) and Rotowa (2020) further reinforce this conclusion by demonstrating that public toilets in institutional and urban environments often suffer from severe management and maintenance deficiencies. These deficiencies empirically explain toilet avoidance behaviours observed in Nigerian cities. Evidence from transport hubs strengthens this argument: Olanrewaju John et al. (2023) documented widespread toilet dysfunction and poor cleanliness in major motor parks in Ibadan, environments characterized by high population turnover and intense sanitation demand. Together, these studies suggest that open urination is best understood as an adaptive response to unmet sanitation needs in public spaces, rather than as deliberate noncompliance.

Lastly, the empirical literature reviewed also highlights a persistent policy implementation disconnect in Nigeria's sanitation governance. While national sanitation frameworks and roadmaps acknowledge the importance of sanitation improvement, empirical facility studies consistently demonstrate that public toilet provision and maintenance lag behind policy intentions. The legal and policy analysis by Gbadegesin and Akintola (2020) provides a critical governance lens, showing

that sanitation outcomes in Nigeria are constrained by weak legal enforceability, fragmented institutional responsibility, and inadequate coordination across levels of government.

This governance weakness is reflected in empirical studies of public toilet management. Elesin (2021) documented unclear management responsibility, inadequate funding, and weak maintenance culture in public toilet facilities, conditions that undermine the effectiveness of sanitation policy interventions. When combined with evidence from motor parks and markets, these findings suggest that enforcement oriented responses to open urination when not supported by functional infrastructure are unlikely to produce sustainable behaviour change.

Overall, the empirical literature supports the interpretation that open urination persists in Nigeria not because of policy absence, but because of implementation failures and insufficient attention to public space sanitation needs. This reinforces the need to shift from punitive, enforcement led approaches toward infrastructure-driven and governance focused sanitation strategies.

VIII. CONCLUSION

Open urination remains a neglected yet significant public health and sanitation governance challenge in Nigeria. Empirical evidence demonstrates that the practice is driven primarily by inadequate public toilet infrastructure, poor facility management, and governance gaps. Addressing open urination requires explicit policy recognition, infrastructure led interventions, and improved management of public sanitation systems. Integrating public space sanitation into Nigeria's sanitation agenda is essential for achieving sustainable urban health and environmental outcomes.

The Way Forward

i. There is need for government at federal, state, and local levels to increase budgetary allocation to urban sanitation, particularly for the provision, upgrading, and maintenance of functional public toilets in high-traffic areas such as markets and motor parks, in order to reduce the incidence of open urination.

ii. It will be of great importance for government to direct local governments to establish, manage, and regularly maintain hygienic and accessible public toilet facilities across Nigerian cities, as empirical evidence shows that poor facility condition discourages usage even where toilets exist.

iii. Government should immediately align sanitation enforcement with the availability of adequate public toilet infrastructure, ensuring that enforcement measures are supportive rather than punitive and effectively address the structural causes of open urination.

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