

## **RATIONALIZING THE IRRATIONALITY OF OPEN DEFECATION PRACTICE AMONG HOUSEHOLDS WITH TOILETS IN OGUN STATE, NIGERIA**

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### **ABSTRACT**

Various studies aimed at unravelling the practice of open defecation, the world over, establish lack of toilets as being the major factor responsible for open defecation. However, the reality in most countries like Nigeria where open defecation is still in practice is the fact that people who have toilets in their homes are not precluded from the terrible sanitation culture. The paper is therefore an attempt to investigate latent factors that account for the seeming irrationality of seeking recourse to open defecation when toilets are available. The study is limited to Ogun State, one of the 36 states of Nigeria, where households are not in dearth of toilet facilities, but open defecation culture is ironically still in practice. Using the multi-stage sampling approach, a total of 165 questionnaires were administered to representative households in the study area. This implies that 55, 50, and 60 questionnaires were administered in Surulere, Ilaro I, and Sodeke/Sale-Ijeun I, respectively, on the basis of ratio 1.1:1.0:1.23, which reflects the variance in population of 1,250,435(33%), 1,112,761(30%), and 1,387,944(37%) for Ogun East, Ogun West and Ogun Central, respectively. The study found, among others, that HIEDQU (2), HIEDQU (4) (The dummies of the categorical variables of the highest education attained by respondents), and NRODHT (Neatness of Toilets as the reason households defecate in the open) at significance levels of 0.016, 0.011, 0.10, were the only significant predictors in the logistic regression model. The paper concludes that toilet provisioning without the adoption of holistic infrastructural framework and policy enforcement would not suffice in the quest to eradicating open defecation.

**Keywords: Open Defecation, Toilets, Nigeria**

### **INTRODUCTION**

Sub-Saharan Africa accounts for 16 of the 24 countries where at least one person in five cannot access improved sanitation services. In these countries, the proportion of population sharing facilities is larger in the cities [1]. A study [2] had ranked Nigeria as the sixth worst of the most people defecating in the open, with the average number of people defecating (46,017,300) in its land mass of 923,770 square kilometres, put at 50 per square kilometre. This is consistent with the 2017 findings of Joint Monitoring Programme — a body set up by UNICEF and the World Health Organization as reported in [3] that 33% of people in Nigeria do not have clean water, 67% do not have a decent toilet and 26% practice open defecation. As reported in [4], Nigeria loses over 3

billion dollars to poor sanitation. This fact is corroborated by [5] that persons practicing open defecation expend practically 2.5 days a year finding a private location to defecate, leading to huge economic losses and proliferation of unhealthy flies and pathogens. Diarrhoeal diseases related deaths in Nigeria reached 130,610 and 6.85% of total deaths [6]. Around 60,000 children under the age of five in Nigeria die from diarrhoeal diseases essentially caused by the country's poor levels of access to water, sanitation and hygiene [3].

The gender perspective to sanitation is equally important. Women and girls are disproportionately impacted by the rampant lack of access to clean water and adequate sanitation. Apart from exposure to all variants of toilet infections in badly managed toilets, they stand the risk of exposure to sexual harassment in their quest to finding an open place to defecate [7, 8]. It had been established that a nexus exists between the lack of toilets and open defecation [9, 10]. Like those in most Nigerian settlements, residents of Ogun state mostly live in buildings without improved sanitary facilities. Improved toilet facilities are the safely managed and environmentally friendly variants that are also unshared [11]. There are sizeable numbers of households who have the luxury of toilets, both improved and unimproved, who still practice open defecation within the State.

The study is aimed at investigating the significant factors that account for why people who have toilets still defecate in the open, with the view of providing sustainable solutions to the open defecation challenge. A total of 165 questionnaires were administered to representative households in the study area. This implies that 55, 50, and 60 questionnaires were administered in Surulere, Ilaro I, and Sodeke/Sale-Ijeun I, respectively, on the basis of ratio 1.1:1.0:1.23, which reflects the variance in population of 1,250,435(33%), 1,112,761(30%), and 1,387,944(37%) for Ogun East, Ogun West and Ogun Central, respectively. The multi-stage method adopted, which several random processes enable eventual selection of suitable samples within homogenous clusters, immensely reduced the chance of sampling error that could be associated with the sample percentage. For bivariate analysis, chi-square (Pearson) statistics was used to assess relationships between how household toilets are shared, income level of households, and the level of education of the household heads, with the level of significance at <5%. Binary logistic regression was used to assess the significant predictor variables that best explain why respondents who have toilets still defecate in the open, and their odd ratios equally determined.

## MAIN RESULTS

The study shows that a significant association was found between how households' toilets are shared and the level of education of the representative households heads ( $P=0.00$ ) Furthermore, how households' toilets are shared was significantly associated with the economic class of households ( $P = 0.00$ ).

**Table 2.** Relationships Between How Households' Toilets Are Shared and Other Associated Variables

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square 1	62.826 <sup>a</sup>	12	.000
Pearson Chi-Square 2	49.372 <sup>a</sup>	9	.000

Logistic regression which assessed the impacts of key factors on the phenomenon of open defecation by households who have toilets revealed that HIEDQU (2), HIEDQU (4) (The dummies of the categorical variables of the highest education attained by respondents), and NRODHT (Neatness of Toilets as the reason households defecate in the open) at significance levels of 0.016, 0.011, 0.10, were the only significant predictors a lot of key information.

## CONCLUSION

The paper offers a different view to the open defecation phenomenon that can be of help to government policy makers, Non-governmental Organizations and International stakeholders in the quest to eradicate open defecation and ultimately meet sustainable development goal 6 and its target B. The critical point is that toilet provisioning without the adoption of holistic infrastructural and policy framework would not suffice in the quest to eradicating open defecation. Urban Planning is key to ensuring building plans that can afford improved and unshared toilets are only considered approvable by planning agencies. It can also be the instrument for discouraging open defecation through proactive landscape planning of open spaces, mainstreaming of transport terminals that integrate adequate toilet facilities in cities' plans, and the equitable distribution of public toilets in neighbourhoods. Moreover, water, electricity and the will to enforce sanitation laws by municipal authorities should equally be ranked as imperative.

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