

Geopolitical Disparity in Cigarette Smoking in Nigeria: Analysis of Secondary Dataset

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BACKGROUND

- Cigarette smoking remains the most common form tobacco use and major driver of several preventable diseases.
- In Nigeria, national estimates mask substantial subnational variation. This study examines the prevalence and determinants of cigarette smoking across Nigeria's six geopolitical zones using the 2024 Nigeria Demographic and Health Survey dataset.

METHODS

DESIGN

Analysis of secondary data from the 2023–24 Nigeria Demographic and Health Survey (NDHS).

STUDY POPULATION

Population who completed the tobacco module (aged ≥15 years).

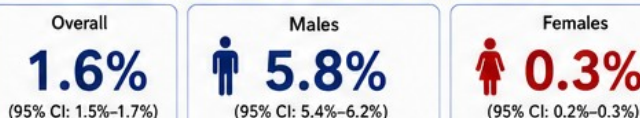
STATISTICAL ANALYSIS

- Applied DHS survey weights, strata, and primary sampling units in all estimates.
- Computed weighted prevalence nationally and by zone.
- Logistic regression was used to identify determinants of current cigarette smoking.

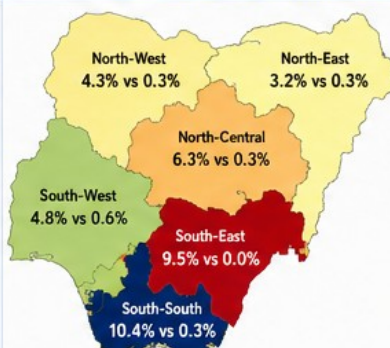
AOR = Adjusted Odds Ratio;
CI = Confidence Interval

RESULTS

NATIONAL PREVALENCE OF CURRENT CIGARETTE SMOKING



PREVALENCE BY GEOPOLITICAL ZONE (MALE vs FEMALE)



Values are weighted prevalence (%)
Male vs Female

Geopolitical Zone	Prevalence (%)	
	Males	Females
South-South	10.4	0.3
South-East	9.5	0.0
North-Central	6.3	0.3
South-West	4.8	0.6
North-West	4.3	0.3
North-East	3.2	0.3
Nigeria (Overall)	5.8	0.3

OTHER KEY FINDINGS

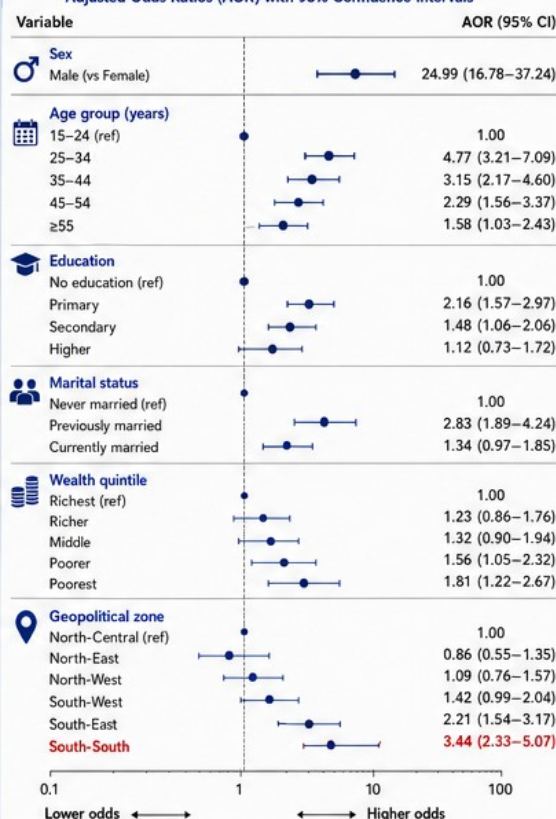
Males had a markedly higher prevalence than females (5.8% vs 0.3%).

Prevalence varied substantially across geopolitical zones, highest in the South-South (10.4%).

Females prevalence was consistently very low across all zones (0.0%–0.6%).

DETERMINANTS OF CURRENT CIGARETTE SMOKING

Adjusted Odds Ratios (AOR) with 95% Confidence Intervals



KEY FINDINGS

- National prevalence of current cigarette smoking was 1.6%.
- Males had a much higher prevalence than females (5.8% vs 0.3%).
- Wide regional variation observed, highest in South-South (10.4% in males) and lowest in North-East (3.2% in males).
- Male sex, age 25–34 years, lower education, previously married status, and poorest wealth quintile were independently associated with higher odds of smoking.
- After adjustment, South-South had the highest odds of smoking (AOR 3.44; 95% CI: 2.33–5.07).

CONCLUSION

The study revealed wide regional and demographic disparity in cigarette smoking in Nigeria. Implementation of specific demographic interventions to reduce cigarette smoking could further reduce the burden and protect Nigerians from its long-term consequences.



ACKNOWLEDGEMENTS

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DHS
Demographic and
Health Surveys



DATA SOURCE

Nigeria Demographic and
Health Survey 2023–24 (NDHS-8)
ICF International



DISCLOSURES

The authors declare
no conflicts of interest.

