

Title: Prevalence and Correlates of Hypertension and Diabetes Mellitus among Adults in Eket, Nigeria: A Community-Based Cross-Sectional Study.

Authors' Names and Affiliations:

Donatus Onyeka Adigom^{1,2}, Unyime Israel Eshiet³, Peter Uchenna Gbuchie^{4,2}, Ifiok Udoebom^{5,2}, Abasibiange Sunday^{6,2}, Tony Anderson Akpan^{7,2}

¹Smartados Pharmacy, 7 Afaha Atai Road, Eket, Akwa Ibom State.

²Association of Community Pharmacists of Nigeria (ACPN) Akwa Ibom State Research Unit.

³Department of Clinical Pharmacy and Biopharmacy, Faculty of Pharmacy, University of Uyo, Uyo, Nigeria.

⁴De-Zaki Pharmacy, 44A, Hospital Road, Eket, Akwa Ibom State.

⁵Ifidex Pharmacy, 1A, Afaha Atai Road, Eket, Akwa Ibom State.

⁶Vikhane Pharmacy, 217B, Nsikak Eduok Avenue, Uyo, Akwa Ibom State.

⁷Golden Drugs Pharmacy, 51 Nwaniba Road, Uyo, Akwa Ibom State.

Background: Non-communicable diseases (NCDs), particularly hypertension and diabetes mellitus, are major public health concerns in Nigeria. Limited local epidemiological data hinder effective planning and implementation of prevention and control strategies. Community pharmacists are well positioned to support surveillance and early detection of these conditions.

Objectives: To determine the prevalence and correlates of hypertension and diabetes mellitus among adults in Eket, South-South Nigeria.

Methods: A community-based cross-sectional study was conducted among 360 adults (≥ 18 years) of 11 communities in Eket during health outreach programmes organized by the Association of Community Pharmacists of Nigeria (ACPN), Akwa Ibom State. Participants were assessed at three outreach locations using a structured interviewer-administered questionnaire. Blood pressure and random blood glucose were measured using standard procedures. Data were analysed using IBM SPSS statistics software version 31.0.1. Continuous variables were summarized as mean $\pm$ standard deviation, while categorical variables were expressed as frequencies and percentages. Associations were assessed using Pearson's correlation, Chi-square or Fisher's exact tests, and multivariable logistic regression. Statistical significance was set at $p < 0.05$.

Results: The mean age of the participants was 46 ± 14 years, and 71% were female. The prevalence of hypertension was 35.3% (127/360; 95% CI: 30.5%–40.3%), while diabetes mellitus prevalence was 4.7% (17/360; 95% CI: 3.0%–7.4%). Body mass index showed weak positive correlations with systolic blood pressure ($r = 0.134$, $p = 0.011$) and diastolic blood pressure ($r = 0.254$, $p < 0.001$), whereas random blood glucose correlated positively with systolic blood pressure ($r = 0.159$, $p = 0.002$). Systolic and diastolic blood pressure were strongly correlated ($r = 0.798$, $p < 0.001$). Increasing age independently predicted hypertension (adjusted OR = 1.042, 95% CI:

1.024–1.060; $p < 0.001$), while participants with hypertension had over threefold higher odds of diabetes mellitus (adjusted OR = 3.097, 95% CI: 1.090–8.802; $p = 0.034$).

Conclusions: Hypertension affects more than one-third of adults, while diabetes mellitus remains an important public health concern in the study population. Strengthening pharmacist-led screening programmes could facilitate timely diagnosis and reduce the burden of cardiovascular and metabolic diseases in Nigeria.

Keywords: Prevalence; hypertension; diabetes mellitus; community pharmacy; Nigeria.