AC010

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INSECURITY AS A BARRIER TO ADVANCED CARDIOVASCULAR CARE: IMPLICATIONS FROM A LATENT RHD AND HYPERTENSION STUDY IN SOUTHERN NIGERIA

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Background: Advanced cardiovascular care in Nigeria is constrained by workforce shortages, centralized diagnostics, and poor access to echocardiography. Latent rheumatic heart disease in young adults remains underdiagnosed yet progresses to heart failure without secondary prophylaxis. Hypertension further worsens outcomes. We determined the prevalence, patterns, and predictors of latent RHD among young adults in Akwa Ibom State.

Methods: A cross-sectional survey of 650 young adults was conducted across 3 LGAs between January 2023 and June 2024. Multistage sampling was used. Socio-demographic, clinical, and anthropometric data were collected. A cardiologist performed echocardiography using a SonoScape E2 system, applying 2023 WHF criteria for latent RHD. Hypertension was defined as BP ?140/90 mmHg. Logistic regression identified predictors of RHD. Results: Mean age was 28.8±6.8 years; 61.8% were female. Latent RHD prevalence was 5.4% (n=35), with 85.7% stage B. Mitral regurgitation was the predominant lesion; 5 cases were stage C. Hypertension increased odds of latent RHD 4.48-fold (95% CI 1.16-17.35, p=.030), while regular fruit consumption was protective (OR 0.18, p=.001). Lower ejection fraction (OR 0.93, p=.009) and higher left ventricular mass index (OR 1.03, p<.001) predicted RHD.

Conclusion: Latent RHD remains prevalent in young Nigerian adults, with hypertension as a key risk factor. Prospects for advanced care, despite <300 cardiologists nationwide, include decentralizing echocardiography to secure primary health centers using handheld devices. We recommend task-shifting by training non-physician health workers on handheld echocardiography with telecardiology support for remote interpretation, integrating RHD screening with routine hypertension screening.

Keywords: Rheumatic heart disease Echocardiography Hypertension Young adults Nigeria