

Abstract

Electrocardiographic Changes Associated with Cardiovascular Risk Factors in Institutionalized Older Adults in Luanda

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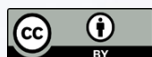
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Introduction: Several studies have demonstrated an association between electrocardiographic abnormalities and hypertension, diabetes, hypercholesterolemia, obesity, alcohol consumption, and tobacco use. They have also shown that electrocardiography (ECG) provides independent prognostic value beyond traditional cardiovascular risk stratification models, reinforcing the importance of systematic screening in geriatric populations. **Objective:** To identify the frequency of major and minor electrocardiographic abnormalities among institutionalized older adults at Beiral in 2025. **Methods:** A cross-sectional quantitative study was conducted involving 63 older adults aged ≥ 60 years, selected by convenience sampling. Data collection included interviews, standardized measurements of blood pressure, blood glucose, and anthropometric parameters, as well as 12-lead ECG recordings classified according to the Minnesota Code. Fisher's exact test and Cramér's V coefficient were used for statistical analysis. **Results:** The sample was predominantly male (61.9%), with a mean age of 69.3 years. Hypertension was present in 73.0% of participants, while smoking and alcohol consumption were reported by 60.3% and 34.9%, respectively. Among the ECGs analyzed, 54.0% showed some type of abnormality, with 34.9% classified as major abnormalities, particularly left ventricular hypertrophy associated with repolarization abnormalities (23.8%). Minor abnormalities accounted for 19.0%, with premature beats being the most common finding (7.9%). The presence of electrocardiographic abnormalities was significantly associated with hypertension, smoking, and alcohol consumption ($p < 0.001$). **Conclusion:** The high frequency of electrocardiographic abnormalities, particularly major abnormalities, is concerning in this specific population. These findings suggest that incorporating ECG into the routine assessment of institutionalized older adults may be an important step toward closer cardiovascular surveillance and the prevention of cardiovascular events in the Angolan context.