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Morbidity and mortality profile due to conduction disorders and arrhythmias in elderly patients in Brazil from 2017 to 2022

Anna Beatriz Vilas Boas Moreira[1], Daniel Nascimento Machado[1], Maria Eduarda Mota Oliveira[2], Gabriel Diógenes Moreira Ferreira[1]

1. Bahiana School of Medicine and Public Health - Salvador (BA), Brazil
2. Salvador University – Salvador (BA), Brazil

Introduction: Arrhythmias correspond to changes in cardiac electrical conduction that generate the need for immediate hospitalization, representing a warning sign of possible serious complications, especially for the elderly population, which is most affected by cardiovascular diseases. Despite the tremendous impact of these disorders on public health and in this age group, few epidemiological studies evaluate their profile in Brazil. **Objective:** In this sense, this work aims to analyze this condition's morbidity and mortality profile in patients over 60 years of age. Methods: Analytical ecological study, with quantitative data secondary to the DATASUS/SIH platform, about conduction disorders and arrhythmias (ICD 10: I44 - I49) in Brazil during the years 2017 to 2022. The variables analyzed were: age group type 1 (over 60 years old), nature of care and deaths. **Results:** In the period analyzed, 267,773 hospitalizations for conduction disorders and cardiac arrhythmias were recorded for the elderly in Brazil. Of these, the year 2022 was responsible for the highest number of hospitalizations, with 48,682 (18.1%), followed by the year 2019, with 47,797 (17.8%) and 2018, with 44,434 (16.6%). The years with the lowest hospitalization rates were 2017, with 42,417 (15.8%), and 2021, with 42,299 (15.7%). In this sample, the majority recorded corresponded to the population between 70 and 79 years old, with 37.3% of the total. Furthermore, 32.3% of individuals aged between 60 and 69 years old, while patients aged 80 years or older represented 30% of the sample group. Regarding the nature of care, for every 100 cases reported, 84 were urgent, with the most affected age group being 70 to 79 years old. When analyzing the mortality rate, it was observed that 2021 had the highest rate, with 15.02, followed by 2020 (14.29) and 2022 (13.42). The years with the lowest mortality rates were 2017 (11.1), 2018 (11.38) and 2019 (12.26). Concerning the number of deaths, the highest numbers were found in the age group over 80 years old and in emergency cases. **Conclusion:** The data shows that hospitalization for conduction disorders and arrhythmias showed linear growth in the period analyzed, interrupted in 2020 and 2021, when the COVID-19 pandemic had a more significant impact. During this period, despite the lower number of cases, there was an increase in deaths and the mortality rate observed in all years except in 2022, which decreased by 10% compared to the previous year. The population over the age of 80 represented the largest number of deaths, while the 70 to 79 age group was the most affected, in general, by arrhythmias and was also the one with the most associated emergency cases.