

The prevalence of atrial fibrillation in Croatia from the past to the future

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Introduction:

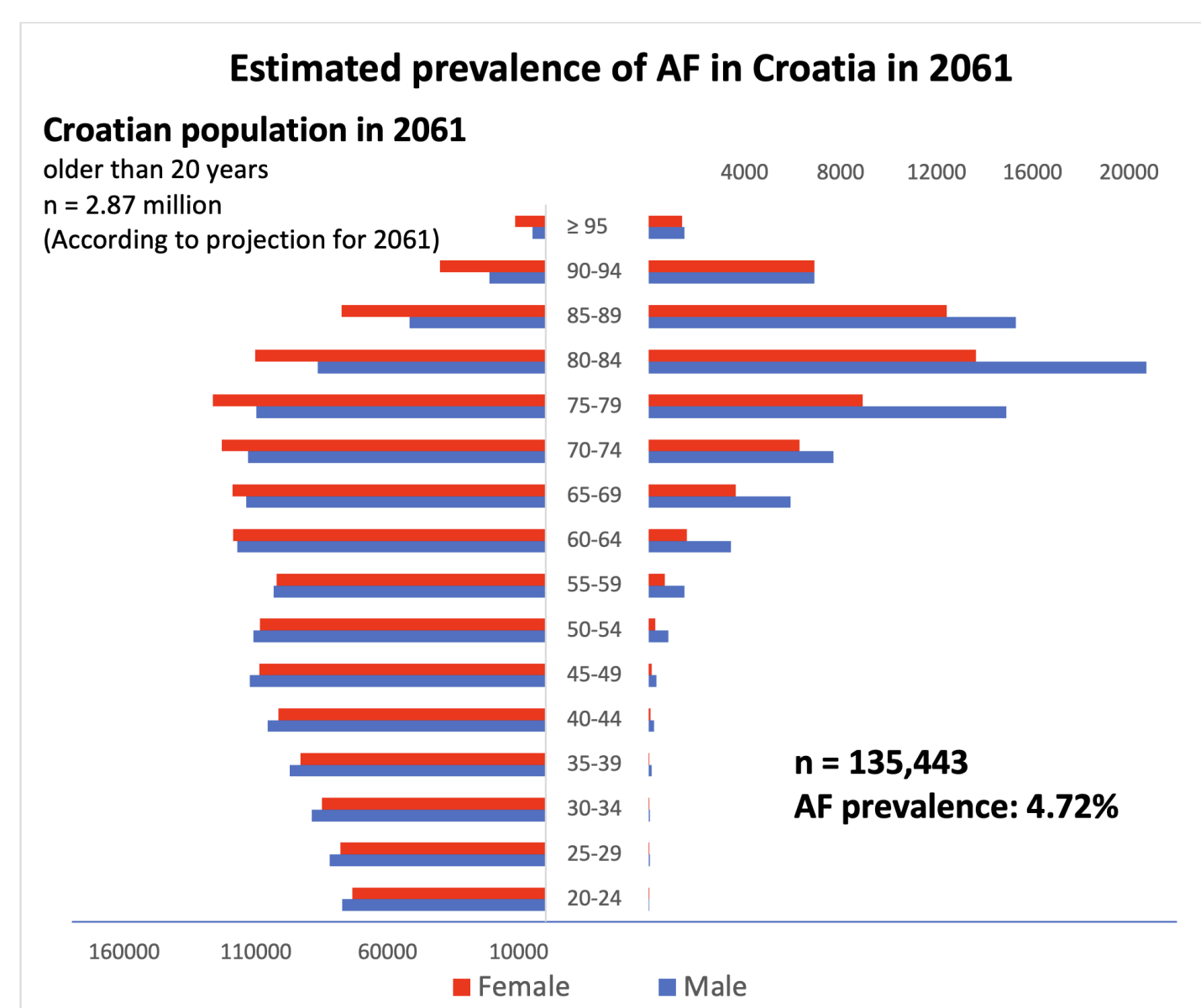


Introduction: Atrial fibrillation (AF) is the most common arrhythmia in the general population and represents a significant public health problem worldwide leading to an increased risk of stroke, heart failure, dementia, and mortality (1, 2). Methods: Using the hospital information system, we exported data as spreadsheets from the inpatient lists, protocol books, and a list of e-diagnoses based on ICD-10 classification for the 10-year period from 2007 to 2016 using information reporting options. We then integrated all these datasets into a single database, filtering only patients who were alive in January 2017 and residing in the service area of our hospital. AF patients were identified and regional age- and gender specific prevalence was established using regional census data from the 2011. For long-term projections, we calculated expected numbers and prevalence rates of AF for Croatia in 2061, assuming a constant prevalence in specific age and gender groups. Population projections were based on estimations from the Croatian Bureau of Statistics, using assumptions of low fertility and low immigration levels (3).

Results:



According to our data, regional AF prevalence on January 01, 2017 was 2,0% and estimated AF prevalence at the national level is 2,32%. Based on updated population data, the estimated AF prevalence rate for January 1, 2021, rose to 2.86% due to significant and rapid demographic changes. Based on population estimate and regional age- and gender-specific prevalence rates, AF prevalence for Croatia in 2061 is projected to be 4.72% (5.69% for men and 3.79 for women).



Conclusion:



This epidemiological study demonstrates increasing trends in AF prevalence. The data should highlight the importance of risk mitigation, healthcare planning and cost management.

Reference:



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3. Grizelj, M. and A. Akrap. Population projections of the Republic of Croatia, 2010-2061. 2011; Available from: https://www.dzs.hr/Hrv_Eng/Projections/projekcije_stanovnistva_2010-2061.pdf

