

ORIGINAL ARTICLE

Avoidable Hospitalization for Heart Failure Among a Cohort of 18- to 64-Year-Old Italian Citizens and Immigrants

Results From the Italian Network for Longitudinal Metropolitan Studies

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BACKGROUND: Heart failure (HF) represents a severe public health burden. In Europe, differences in hospitalizations for HF have been found between immigrants and native individuals, with inconsistent results. Immigrants face many barriers in their access to health services, and their needs may be poorly met. We aimed to compare the rates of avoidable hospitalization for HF among immigrants and native individuals in Italy.

METHODS: All 18- to 64-year-old residents of Turin, Venice, Reggio Emilia, Modena, Bologna, and Rome between January 1, 2001 and December 31, 2013 were included in this multicenter open-cohort study. Immigrants from high migratory pressure countries (divided by area of origin) were compared with Italian citizens. Age-, sex-, and calendar year-adjusted hospitalization rate ratios and the 95% CIs of avoidable hospitalization for HF by citizenship were estimated using negative binomial regression models. The hospitalization rate ratios were summarized using a random effects meta-analysis. Additionally, we tested the contribution of socioeconomic status to these disparities.

RESULTS: Of the 4 470 702 subjects included, 15.8% were immigrants from high migratory pressure countries. Overall, immigrants showed a nonsignificant increased risk of avoidable hospitalization for HF (hospitalization rate ratio, 1.26 [95% CI, 0.97–1.68]). Risks were higher for immigrants from Sub-Saharan Africa and for males from Northern Africa and Central-Eastern Europe than for their Italian citizen counterparts. Risks were attenuated adjusting for socioeconomic status, although they remained consistent with nonadjusted results.

CONCLUSIONS: Adult immigrants from different geographic macroareas had higher risks of avoidable hospitalization for HF than Italian citizens. Possible explanations might be higher risk factors among immigrants and reduced access to primary health care services.

Key Words health services ■ heart failure ■ hospitalization ■ immigrant ■ Italy

Hear failure (HF) represents a severe public health burden worldwide. Despite significant advances in therapies and prevention, mortality and morbidity are still high, and quality of life is poor.¹

In highly developed countries (ie, North America and Western Europe), ≈1% to 2% of people are living with HF.²

Although few data are available on the prevalence of HF in Central-Eastern Europe, the overall prevalence of cardiovascular diseases is considerably higher than in Western Europe. Evidence is scarce regarding developing countries.¹ One study showed that in Africa, patients with HF are younger than in other regions.³ A limited number of reports about the

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