Title

LIMITED ENGLISH PROFICIENCY, CARDIOVASCULAR RISK FACTORS, CARDIOVASCULAR DISEASE AND IN-HOSPITAL COVID-19 OUTCOME

Journal

Journal of the American College of Cardiology, 81(8)

ISSN

0735-1097

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Publication Date

2023-03-01

DOI

10.1016/s0735-1097(23)02224-6

Peer reviewed

Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

ACC.23 TOGETHER WITH WCC

1780
JACC March 7, 2023
Volume 81, Issue 8, suppl A

Prevention and Health Promotion

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Poster Contributions
Poster Hall_Hall F
Saturday, March 4, 2023, 2:45 p.m.-3:30 p.m.

Session Title: Prevention and Health Promotion: Special Populations 6
Abstract Category: 42. Prevention and Health Promotion: Special Populations
Presentation Number: 1384-178

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Background: Cardiovascular risk factors and overt cardiovascular disease are associated with greater morbidity and mortality in patients hospitalized with COVID-19. Limited English proficiency (LEP) has been associated with worse outcomes in this setting in a small number of prior studies. Whether LEP modifies the association between traditional cardiovascular risk factors or overt disease and outcome in patients hospitalized with COVID-19 is unknown.

Methods: Adult patients admitted with COVID-19 to a large New England health system between 3/1-12/31/20 were included. LEP was defined as not speaking English as a primary language and/or limited ability to speak, read, or write English. Cardiovascular risk factors, overt cardiovascular disease and LEP were related to the primary composite clinical outcome, death or ICU admission, using multivariable logistic regression, adjusted for race, ethnicity and clinical characteristics. Interaction terms for LEP and model covariates were included.

Results: Of the 3,584 patients hospitalized with COVID-19, 1,026 (28.6%) had LEP. Death or ICU admission occurred in 794 (22%). In unadjusted analyses, male sex, hypertension, hyperlipidemia, smoking, diabetes, ischemic heart disease (IHD), history of MI, and heart failure (HF) were all significantly associated with composite death or ICU admission, but LEP was not. In the multivariable analysis, adjusted for demographic and clinical characteristics, male sex and IHD, but not LEP, significantly predicted the primary outcome. LEP did not modify the effect of these associations. Results were unchanged when race, ethnicity and income were removed from the model.

Conclusion: Among patients hospitalized with COVID-19, limited English proficiency did not significantly impact the odds of death or ICU admission, nor did it modify the association between cardiovascular risk factors or overt cardiovascular disease and this outcome.