FROM KNOWLEDGE TO ACTION APPLICATION

Title: The effect of migration on healthcare - Investigating the cardiovascular risks of immigrants in comparison with the host population

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Category: Science to Society

Problem (max. 50 words):

Migration is a specific and profoundly impactful phenomenon of our time. While cardiovascular risk is declining in the populations of the developed countries, it is unclear whether immigration influences this trend. The cardiovascular health of immigrants remains underexplored, raising concerns for equitable healthcare strategies.

Unmet Need (max. 50 words):

Despite the increasing rates of immigration and the persistent burden of cardiovascular disease in developed countries, no comprehensive synthesis exists that systematically compares modifiable cardiovascular risk factors between immigrant and host populations.

Project Description (max. 200 words):

This project aims to conduct a systematic review and meta-analysis comparing the prevalence of modifiable atherosclerotic cardiovascular risk factors—high blood pressure, obesity, diabetes, smoking, and high cholesterol-between first-generation immigrants and host populations in developed countries. Although avoidable cardiovascular mortality has declined by 57% in the EU between 1995 and 2020, cardiovascular diseases still account for 11% of total healthcare expenditures. Immigration to developed countries continue to rise, yet its potential impact on national cardiovascular health trends is poorly understood. The project will follow PRISMA guidelines, systematically identify and synthesize relevant observational studies, and assess heterogeneity and publication bias. Through our collaboration with the Academia Europaea, we will have the opportunity to access additional topic-related data, which may support not only this project but also future collaborative research efforts in the field. Findings will inform public health authorities and healthcare systems on the need for universal versus targeted prevention strategies, helping to optimize resource allocation and ensure health equity in multicultural societies. The review's results may also challenge existing assumptions about immigrant health and cardiovascular vulnerability, offering data-driven foundations for future interventional research.

Hypothesis (25 words):

The prevalence of major modifiable cardiovascular risk factors significantly differs between first-generation immigrants and host populations in countries with relevant immigration.

Implication for Practice (50 words):

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Findings could guide tailored preventive strategies, shifting from one-size-fits-all approaches toward more efficient, risk-based interventions. Healthcare providers and policymakers may use results to reduce disparities and improve outcomes among immigrant populations.

Implication for Research (50 words):

The study will identify evidence gaps and heterogeneity in current research, providing a foundation for future longitudinal studies and interventional trials targeting immigrant cardiovascular health across diverse healthcare systems.

We are seeking multidisciplinary collaborators with expertise in:

- Epidemiology & Public Health
- Biostatistics & Data Science
- Cardiology & Internal Medicine
- Migration Studies & Medical Anthropology
- Health Policy & Health Economics
- International Collaborators with Access to Regional Data