



Mortality among Refugees Compared to Immigrants and U.S.-Born Decedents, Massachusetts, 1995-2014

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Background

- Massachusetts collects short-term refugee health data, but we know little about long-term health risks to refugees
- Objective was to investigate whether there is any pattern around preventable deaths among refugees

Methods

- 1995-2014 MA death certificates
- Country of birth as proxy for immigration status
 - Refugees
 - Immigrants
 - Individuals born in countries contributing a mix of immigrants and refugees to the U.S. population
 - U.S.-born

Methods

- Average age at death compared to WHO life expectancy in selected countries
- Compared leading causes of death, **stratified by age group**
- Unable to calculate rates or perform **age standardization** because population denominators are unknown
- Analyses conducted using SAS 9.3

Results

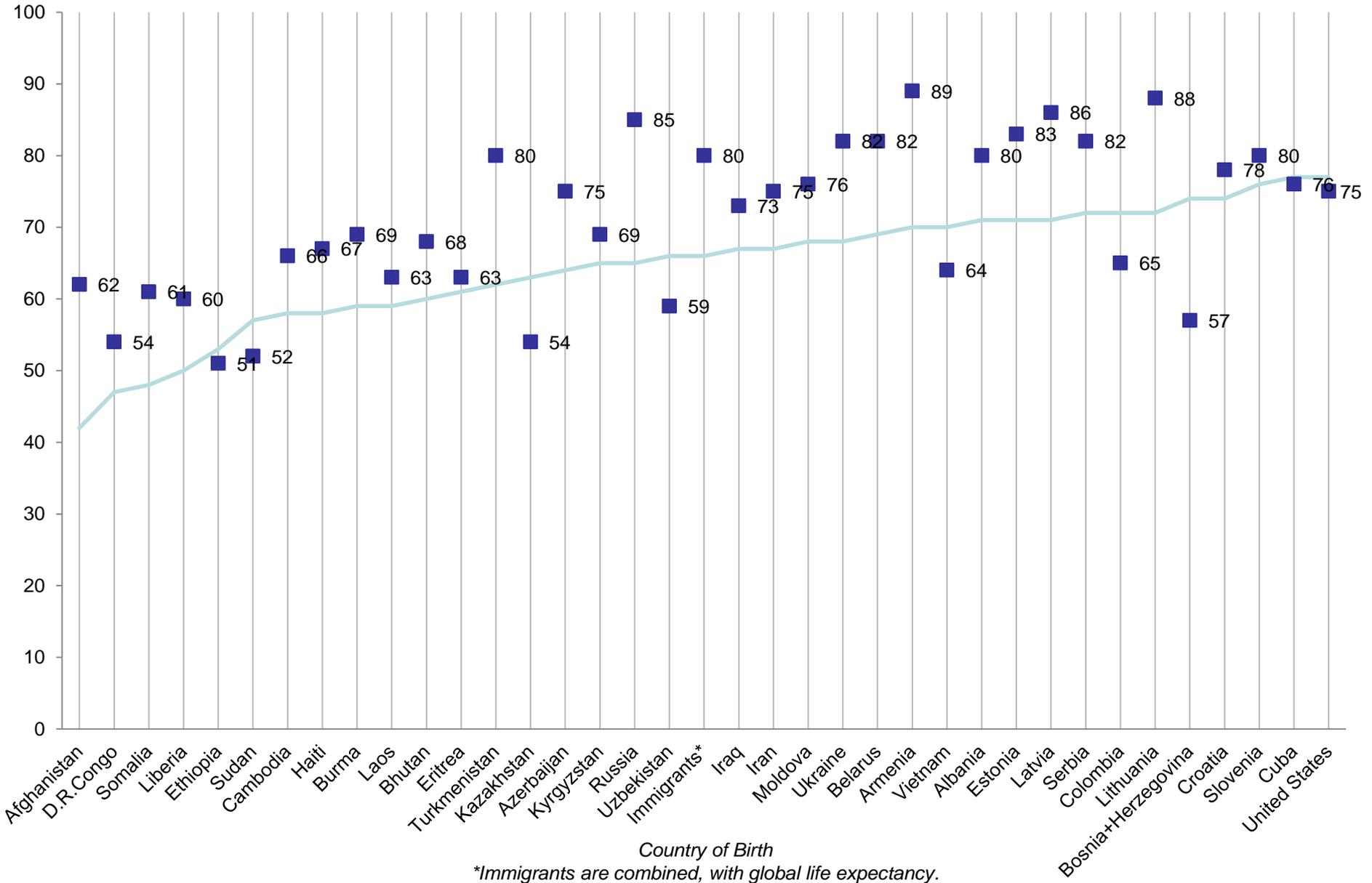
- 1,110,031 deaths reported in MA
 - 2,070 refugees
 - 112,002 immigrants
 - 17,715 people born in countries which contributed both refugees and immigrants
 - 974,759 U.S.-born individuals

Results

- The average age at death in MA was older than the WHO life expectancy for most of the birth countries examined

Difference Between WHO Life Expectancy and Average Age of Death (MA Deaths 1995-2014)

— WHO life expectancy ■ Average age of death



*Immigrants are combined, with global life expectancy.

Results

- Leading 3 causes of death were the same for all groups: heart disease, cancer and stroke
 - Comparable to results in WA
- Average age at death was highest among immigrants (80 years), followed by U.S.-born (75 years), and refugees (67 years)
 - Canadian and Danish studies (age-adjusted): immigrants>refugees>native-born

Results

- A few differences remained after age-stratification
 - < age 75 years
 - U.S.-born individuals experienced more deaths from drug overdose
 - Refugees and immigrants experienced more deaths from chronic liver disease
 - ≥ 75 years
 - Refugees experienced more deaths from diabetes
 - Refugees experienced fewer deaths from Alzheimer's disease

Limitations

- Age confounding
- Country of birth as proxy for immigration status
- Death certificates
- Focused on underlying cause of death
 - other contributing causes were not included

Conclusions

- Immigrants in the dataset lived longer than refugees and U.S-born individuals
- In general, refugees died of the same leading causes as immigrants and U.S.-born individuals

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Questions

