

# Evaluating Cognitive Health Risk Among Middle Eastern and North African (MENA) Americans Using Nationally Representative Data Sources



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## Introduction

- In the United States, dementia affects more than 6 million adults
- Studies have identified risk factors that are potentially modifiable for dementia during early life, midlife and late life
- The Lancet Commission published a risk factor model for dementia that identifies risk across the life course
- Risk factors have not been thoroughly investigated among Middle Eastern and North African (MENA) Americans because they are classified as non-Hispanic white by the US government

## Objectives

- Review the literature on potentially modifiable risk factors for dementia by race and ethnicity
- Estimate and compare the age- and sex-adjusted prevalence of dementia risk factors across the life course among MENA adults compared to US- and foreign-born non-Hispanic whites

## Methods

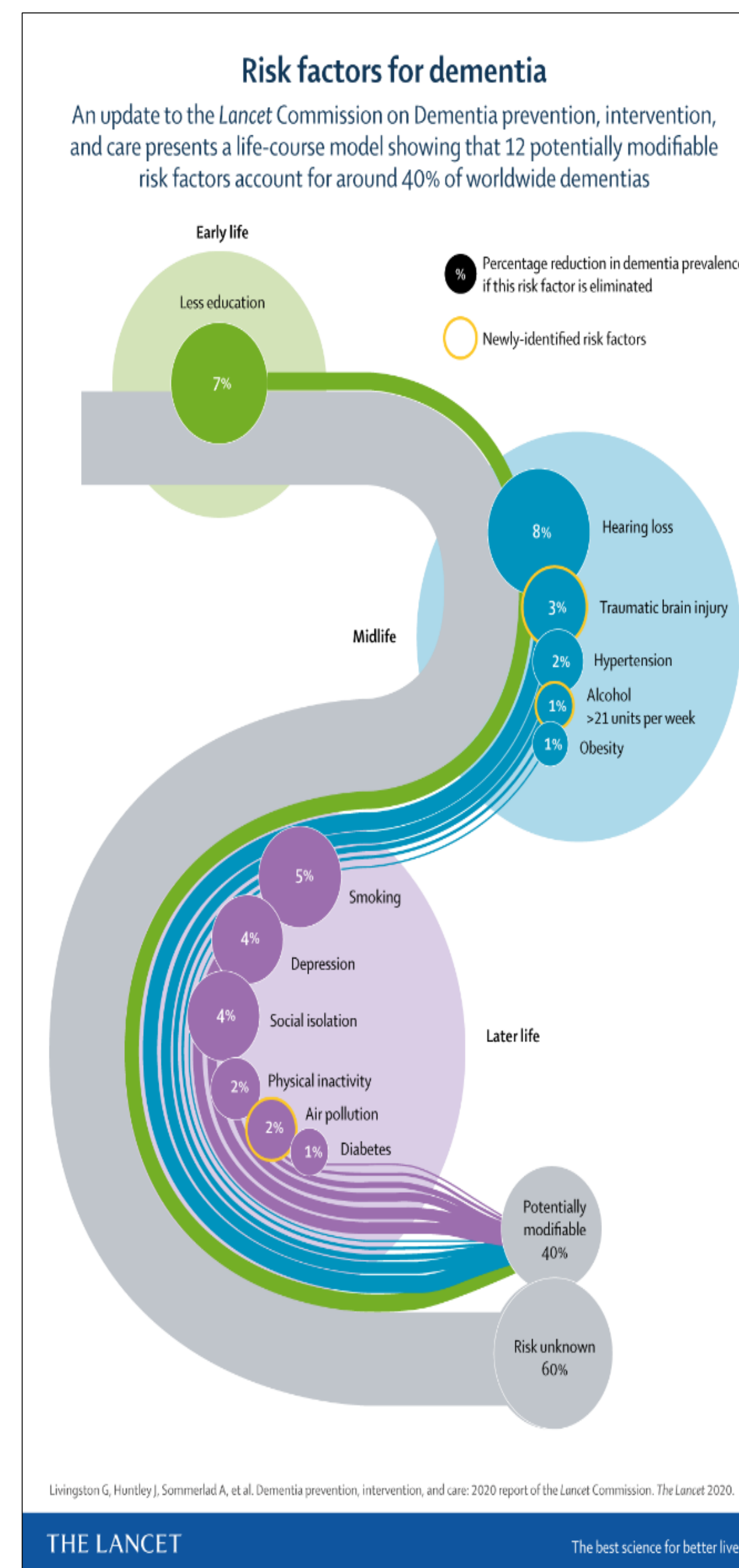
- Evaluated 2000-2017 National Health Interview Survey and Medical Expenditure Panel Survey Data
- Inclusion/Exclusion Criteria:** Non-Hispanic White adults ages 18 and older born in the US, born in Europe, born in Middle East or Africa

## Results

**Table 1: Age and sex-adjusted prevalence of selected dementia risk factors**

	US-Born		Foreign-Born
	NH White	NH White	MENA
	%	%	%
<9 <sup>th</sup> grade education	1.7	3.8	3.2
Hearing loss	6.2	4.1	2.8
Hypertension	2.9	2.5	2.1
Obesity	2.8	2.0	2.2
Current smoker	19.2	15.3	12.1
Depression	27.0	28.0	33.0
Social isolation	41.6	44.4	28.8
Physical inactivity	38.6	33.4	38.9
Diabetes	6.4	5.0	7.3

## Risk Factor Model



**Table 2: Sample Demographics**

	US-Born		Foreign-Born
	NH White	NH White	MENA
	n=101,763	n=3,021	N=889
	%	%	%
Female Sex	51.6	53.6	44.5
Age Mean years	49.9	51.4	47.2

## Results

**Table 3: Multivariable logistic regression models**

	Adjusted for Age and Sex OR (95% CI)
<b>Less Education</b>	
US-born NH white	1.00
Foreign-born MENA	<b>1.95 (1.17, 3.25)</b>
<b>Hearing Loss</b>	
US-born NH white	1.00
Foreign-born MENA	0.42 (0.28, 0.64)
<b>Hypertension</b>	
US-born NH white	1.00
Foreign-born MENA	0.67 (0.55, 0.81)
<b>Obesity</b>	
US-born NH white	1.00
Foreign-born MENA	0.75 (0.60, 0.94)
<b>Current Smoker</b>	
US-born NH white	1.00
Foreign-born MENA	0.60 (0.46, 0.77)
<b>Depression</b>	
US-born NH white	1.00
Foreign-born MENA	<b>1.28 (1.05, 1.54)</b>
<b>Social Isolation (not married)</b>	
US-born NH white	1.00
Foreign-born MENA	0.57 (0.46, 0.71)
<b>Physical Inactivity</b>	
US-born NH white	1.00
Foreign-born MENA	1.00 (0.81, 1.25)
<b>Diabetes</b>	
US-born NH white	1.00
Foreign-born MENA	1.15 (0.86, 1.54)

## Summary

- I wrote a paper every week about a risk factor for dementia based on The Lancet model
- I compared risk factors among the MENA adults to other non-Hispanic Whites which included the results from the STATA outputs
- I found that MENA adults had higher odds of having low education and depression compared to US-born non-Hispanic Whites