# Health Literacy as a Social Determinant of Health in Asian American Immigrants

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### Background

- Immigrant populations are among the most vulnerable to health disparities in the U.S. (Kreps, 2006).
- For immigrants, health literacy is closely associated with English proficiency (Sentell & Braun, 2012) and cultural beliefs (Shaw, Huebner, Armin, Orzech, & Vivian, 2009).

## Background



 Inadequate health literacy contributes to <u>poorer health status</u> (Schillenger et al., 2002; Wolf, Gazmararian, Williams, & Baker, 2007).

 A lower health literacy level is closely related to more depressive symptoms (Lincoln et al., 2006; Lincoln et al., 2008).

## Background

- The role of health literacy on health outcomes among immigrant populations has been understudied.
- Studies that do exist typically focus on a single immigrant population group with a single outcome variable.
- Little is known about different levels of health literacy among distinct ethnic groups of Asian immigrants.

## Study Objectives

- Identify the levels of health literacy among five subgroups\* of Asian immigrants, and compare these to the aggregated Asian immigrant group and non-Latino whites
- Identify the association between health literacy on two health outcomes (self-rated health status, depressive symptoms) across the five subgroups\*

\*Subgroups: Chinese, Korean, Filipino, South Asian, Vietnamese

## Hypotheses

- H1. The aggregated Asian immigrant group will have a lower level of health literacy than its non-Latino white counterpart; the heterogeneity among subgroups of Asian immigrants would lead to varying levels of health literacy.
- H2. Asian immigrants with a higher level of health literacy will have a higher level of self-rated health status and a lower level of depressive symptoms than non-Latino whites.

#### Research Method

- Cross-sectional survey research design
- Population-based sampling strategy using the 2007 California Health Interview Survey (CHIS)



- CHIS is a telephone survey of CA residents
- CHIS is administered in 5 languages

## Sample

- Asian Americans born outside the U.S. (3,053)
  - Chinese (1,058)
  - Korean (598)
  - Filipino (534)
  - South Asian (416)
  - Vietnamese (447)
- U.S. born non-Latino whites (30,615)

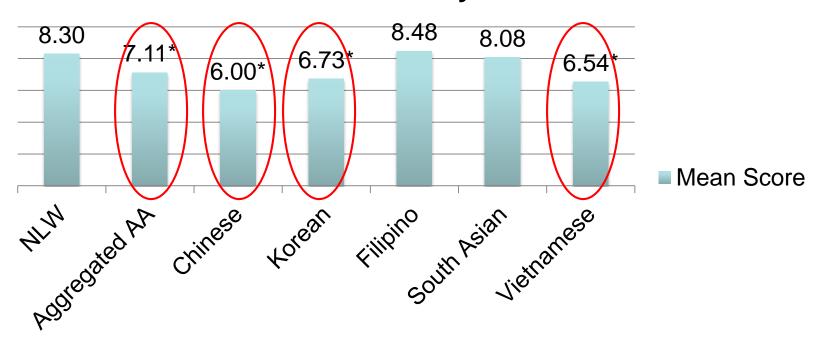


## Findings: Hypothesis 1

 H1. The aggregated Asian immigrant group will have a lower level of health literacy than its non-Latino white counterpart; the heterogeneity among subgroups of Asian immigrants would lead to varying levels of health literacy.

#### Levels of Health Literacy among Asian Immigrant Subgroups with Comparison of non-Latino Whites (N=33,668)

#### Mean<sup>a</sup> Literacy Score



a. Health literacy scores range from 0 – 10 \*\*\*p<.000



## Findings: Hypothesis 2

 H2. Asian immigrants with a higher level of health literacy will have a <u>higher level</u> of self-rated health status and a <u>lower</u> level of depressive symptoms than non-Latino whites.



#### Self-Rated Health Status

- For self-rated health status, health literacy played a significant role in the <u>aggregated</u> Asian immigrant group.
- When <u>disaggregated</u> into five subgroups, health literacy was significantly associated with self-rated health status in Chinese and Korean groups (a positive association).

## Depressive Symptoms

- For depressive symptoms, health literacy was a significant factor for the <u>aggregated</u> Asian immigrant group.
- When <u>disaggregated</u> into five subgroups, health literacy was significantly related to depressive symptoms in Korean and South Asian groups.

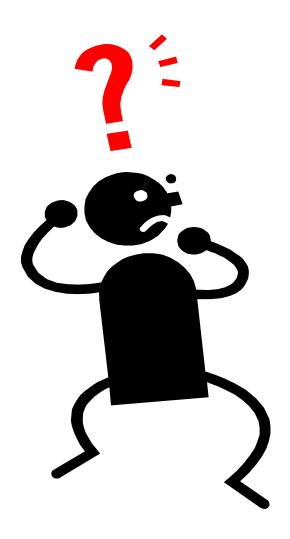
#### Conclusions

- When aggregated, Asian immigrants have a lower health literacy level than that of non-Latino whites.
- Heterogeneity clearly exists in levels of health literacy across Asian immigrant subgroups.
- Health literacy is differently associated with health outcomes across Asian immigrant subgroups.

## Discussion and Implications

- Aggregated information on Asian immigrants may mask true health disparities that each subgroup faces.
- Findings from disaggregated data enable us to prioritize intervention efforts and give primary attention to the most vulnerable groups.
- Future research is needed to better understand the differences between subgroups.





## Questions and Answers