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 poorer health status (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)
  o CHIS is a telephone survey of CA residents
  o 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* Literacy Score

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>NLW</td>
<td>8.30</td>
</tr>
<tr>
<td>Aggregated AA</td>
<td>7.11*</td>
</tr>
<tr>
<td>Chinese</td>
<td>6.00*</td>
</tr>
<tr>
<td>Korean</td>
<td>6.73*</td>
</tr>
<tr>
<td>Filipino</td>
<td>8.48</td>
</tr>
<tr>
<td>South Asian</td>
<td>8.08</td>
</tr>
<tr>
<td>Vietnamese</td>
<td>6.54*</td>
</tr>
</tbody>
</table>

*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 higher level of self-rated health status and a lower 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 *aggregated* Asian immigrant group.

• When *disaggregated* 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 aggregated Asian immigrant group.

• When disaggregated 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