Examining health literacy among a low-income adolescent population in California

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Background and Objectives

- 93% of American adolescents have comprehensive health insurance¹
- Few adolescents receive preventative care, regardless of insurance coverage²
- Adolescent health may vary based on factors such as health literacy

Study Objective:

Explore the association between health literacy and:
• General Health
• Emotional Health
• Wellness visits

Methods

Study Data and Design: Cross-sectional analysis of survey data from adolescent members in a large California Health Plan
Sample Selection: Self-selected adolescent respondents to a 2010 mailed survey
Sample Size: n=1,142

Outcome measures:

- General Health
  How would you rate your overall health?
  - Emotional Health
    In the last 4 weeks, how many days did a health or emotional problem keep you from doing what you usually do?
  - Annual wellness visits
    When was the last time you went for a regular medical checkup or routine care? Routine care means seeing a doctor or other health care provider for something that is not a medical emergency.

Primary predictors:

- Measures of expanded domains of health literacy
- Additional covariates:
  - Gender, ethnicity, community type
  - Urban vs. suburban
  - Baseline health status
  - Media availability

Analysis:

Multinomial logistic regression

Results

Multinomial logistic regression models: general health, emotional health and wellness visits (n=1,142)

<table>
<thead>
<tr>
<th>General Health (ref: fair/poor)</th>
<th>Emotional Health (ref: 4+ days)</th>
<th>Wellness Visits (ref: ≥ 2+ years ago)</th>
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</thead>
<tbody>
<tr>
<td>Excellent</td>
<td>Very good</td>
<td>Good</td>
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<th>RR (95% CI)</th>
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Outcomes and demographic characteristics (n=1,142)

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Conclusions

- Improvements in health literacy may be related to better general health.
- Results suggest health literacy is positively associated with general health, with navigating the health care system and the patient-provider encounter carrying the largest effects.
- Improvements in health literacy may be related to emotional health, though improvements across multiple domains are necessary for a substantial effect.
- Results suggest an association between health literacy and emotional health, but no single domain carries a dominant effect. This suggests that emotional health interventions may need to adopt a comprehensive multi-pronged approach to provide substantial improvements.
- Improvements in health literacy may be related to less time between wellness visits.
- Increases in the patient-provider encounter and health information from personal sources are associated with wellness visits. Interventions aimed at wellness visits may want to focus on the patient-provider encounter and the patient’s personal network for health information.

References

1) CDC. DHEW (NIH) Publication No. 1113. 1983
2) CDC. DHEW (NIH) Publication No. 84-153. 1984

Notes:

- Red text indicate statistical significance (p < 0.05)
- Table 1. General Health
- Table 2. Emotional Health
- Table 3. Wellness Visits

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