The role of social factors in the association between health literacy and health behaviors among older adults

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Background

• Low health literacy is associated with various negative health outcomes among older adults.

• This may partially be explained by associations between health literacy and general health behaviors.

• Social factors (e.g. loneliness, social support, social contacts) might moderate these associations.
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Methods (1)

• This study: *LifeLines*

• LifeLines is a Dutch prospective population based cohort study (n=167,729). Data collected in three waves (so far).

• Data of 3,241 participants were used (51.4% male, mean baseline age = 68.9 years).

• Data collection: Health literacy, health behaviors, social factors
### Methods (2)

<table>
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<tr>
<th><strong>Health behaviors</strong></th>
<th><strong>Social factors</strong></th>
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<td>Physical activity</td>
<td>Loneliness</td>
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<td>Fruit consumption</td>
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<td>Vegetable consumption</td>
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<td>Breakfast habits</td>
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<td>Alcohol use</td>
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<td>BMI</td>
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Methods (3)

- Health literacy measured by three validated questions (Chew, 2004). Added up to a 3-15 scale, dichotomized to high (13 or higher, 66.6%) vs. low (34%).

- Health behaviors assessed with self-report questions and dichotomized based on international standards.

- Social factors measured with various self-report measures.

- Logistic regression used, adjusted for age and sex. Interaction effects were assessed to study potential moderation.
Results (1)

• Low health literacy was associated with low physical activity, low fruit and vegetable consumption, poor breakfast habits, and more obesity (OR’s>1.31, p-values<.003)

• Health literacy was positively associated with alcohol use (OR=0.81, p=.013).

• No association between health literacy and smoking behavior was found (p=.26).
Results (2)

• Association between health literacy and smoking was significantly moderated by number of social contacts (p<.05).

• Many contacts: Low HL -> More smoking (OR=1.38, p=.055)
  Few contacts: Low HL -> Less smoking (OR=0.35, p=.068)

• 34 other tested moderations were not significant.
Conclusion & Implications

• Low health literacy is associated with a range of unhealthy behaviors among older adults. This may partially explain the association between low health literacy and poor health outcomes in this group.

• The negative impacts of health literacy on health behaviors are mostly not restricted to lonely people and neither buffered by social participation.
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