Health Literacy and Older Adults: What do we know?

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Agenda

- Older Adults
- Ageism
- Current Research
Health Literacy Toward Solutions

- Definition
- Assessment
- Intervention
What is Health Literacy?

“The degree to which individuals have the capacity to obtain, process, & understand basic health information & services needed to make appropriate health decisions.”

The 2003 National Assessment of Adult Literacy (NAAL) estimated only 3% of older adults, 65 and older, were proficient with health literacy skills.
Age-Related Changes and Health Literacy

There are several different age-related changes that could contribute to the decrease in health literacy in older adults.

- Decline in cognitive ability
- Physical impairments (i.e. hearing and vision loss)
- Psychosocial factors
- Sense of shame and embarrassment
Health Literacy Regional Network
## State of Kansas Health Literacy Rates (BRFSS 2014)

<table>
<thead>
<tr>
<th>Health Literacy Rate</th>
<th>Weighted %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Health Literacy</td>
<td>7.5%</td>
</tr>
<tr>
<td>Moderate Health Literacy</td>
<td>61.1%</td>
</tr>
<tr>
<td>High Health Literacy</td>
<td>31.4%</td>
</tr>
</tbody>
</table>
Older Adult Groups
Older Adult Groups

Older Adults

- Typically seen as a large group age 65 and older
- Arbitrarily set by researchers
- We did not locate any studies using these three groups
Several studies have divided older adults into subgroups. Forman, Bermand et al (1992)\(^1\) identified

- the young old (60 to 69),
- the middle old (70 to 79),
- and the very old (80+).

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Others\textsuperscript{1,2} have identified the subgroups according to significant life changes

- the young-old (65 to 74),
- middle-old (75–84),
- and oldest-old (85+).


\textsuperscript{2} "Demographics of Aging". Transgenerational.org. Retrieved 2018/17/01
## Published Screening Tools

<table>
<thead>
<tr>
<th>#</th>
<th>Tool</th>
<th>Year</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>WRAT-R3</td>
<td>1965, 1995</td>
<td>Word recognition</td>
</tr>
<tr>
<td>2.</td>
<td>REALM*</td>
<td>1991, 1993</td>
<td>Health word recognition</td>
</tr>
<tr>
<td>3.</td>
<td>TOFHLA*</td>
<td>1995</td>
<td>Comprehension of health materials</td>
</tr>
<tr>
<td>4.</td>
<td>S-TOFHLA*</td>
<td>1999</td>
<td>Comprehension of 2 health forms</td>
</tr>
<tr>
<td>5.</td>
<td>HALS</td>
<td>2004</td>
<td>Use of print materials to accomplish health tasks</td>
</tr>
<tr>
<td>6.</td>
<td>NVS</td>
<td>2005</td>
<td>Comprehension, numeracy interpretation of food label</td>
</tr>
<tr>
<td>7.</td>
<td>MART</td>
<td>1997</td>
<td>Medical word recognition</td>
</tr>
<tr>
<td>8.</td>
<td>LAD</td>
<td>2001</td>
<td>Diabetes word recognition</td>
</tr>
<tr>
<td>9.</td>
<td>REALM-R</td>
<td>2003</td>
<td>Health word recognition</td>
</tr>
<tr>
<td>10.</td>
<td>REALM-SF</td>
<td>2006</td>
<td>Health word recognition</td>
</tr>
<tr>
<td>11.</td>
<td>REALM-Teen</td>
<td>2006</td>
<td>Adolescent health word recognition</td>
</tr>
<tr>
<td>12.</td>
<td>SAHLSA</td>
<td>2007</td>
<td>Spanish word recognition and comprehension</td>
</tr>
</tbody>
</table>

Davis et al. HARC (2010)
Health Literacy: Single Item Screener

(1) How confident are you in filling out medical forms by yourself? For example insurance forms, questionnaires, and doctor’s office forms. Would you say...

Response choices:
• Not at all
• A little
• Somewhat
• Quite a bit
• Extremely
Health Literacy and Older Adults: The literature (2016)

- No study reported the validation of health literacy tools for use in an older adult population.

- The use of the Single Item Screener (SIS) in comparison with results from the S-TOFHLA reported mixed results.

- The validation and standardization of tools has important implications as the call for an integrated health literacy screening tool in primary care settings increases.
Ageism
Ageism

• Per Merriam Webster: Ageism is:
  • prejudice or *discrimination* against a particular age-group and especially the *elderly*

• Ageism: negativism toward older adults; irrational prejudice toward the overall aging population
Ageism: Current Research

Current publications were (1986-2017) were Searched in PubMed (Medline)

U.S. studies only

Search Terms:
“Ageism” AND “Older Adults”
“Ageism” AND “Elderly”
“Ageism” AND “Geriatrics”
“Aged”

N=38
Ageism: Current Research cont.

The majority of research falls within 3 categories:

1. Education, Ageism and Health Professionals (Nursing, PT, MD)
2. Ageism and Adults
3. Ageism within the older adult population
Ageism and Health Literacy

- To date, our team was unable to locate any peer-reviewed published articles on *Health Literacy* and *Ageism*. 
Ageism and Knowledge Study

• We conducted a pilot study to investigate whether a relationship exists between the level of knowledge of aging and ageist attitudes

• Convenience sample of students enrolled in the fall semester at Wichita State University

• Fraboni Scale of Ageism (FSA).
• Palmore Facts on Aging Quiz.
N=123 respondents

Mostly women (79%), age 19-60, white (71), and a senior in undergraduate studies (53%)

Overall score of knowledge was low ($M = 10.65$, $SD = 2.99$), possible score range 0-25

Overall attitudes towards older adults was positive ($M = 51.70$, $SD = 8.2$), possible score range 23-92, neutral score 57.5
Ageing and Knowledge Study cont. 2

Results indicated a significant negative relationship between knowledge and ageism, $r(117) = -.216, p < .05$; higher knowledge score, lower FSA score,

- more positive attitudes in students of greater knowledge.

A significant negative relationship between age and ageism was also found, $r(114) = -.234, p < .05$; greater age, lower FSA score,

- implying more positive attitudes in students of greater age.
Current Research:
2000-2017
Health Literacy and Older Adults: The literature


- S-TOFHLA AND MMSE
- N=2,774

- Mean S-TOFHLA scores declined 1.4 points (95% CI 1.3-1.5) for every year increase in age (p < .001).
  - After adjusting for sex, race, ethnicity, and education, the S-TOFHLA score declined 1.3 points (95% CI 1.2-1.4) for every year increase in age.
  - Even after adjustment for performance on the MMSE, the S-TOFHLA score declined 0.9 points (95% CI 0.8-1.0) for every year increase in age (p < .001).
  - Differences in newspaper reading frequency, visual acuity, chronic medical conditions, and health status, did not explain the lower literacy of older participants.
Health Literacy and Older Adults: WSU study

- Data was collected by the State of Kansas Health Department BRFSS survey.
- 3 question screening tool
- Cognitive function was assessed through a series of self-report questions.
• Having **high** health literacy or **moderate** health literacy after the age of 65 years **decreases with each subsequent year of life**, relative to those with low health literacy.

• **Cognitive decline alone** was the single most important predictor of health literacy in older adults.
Health Literacy and Older Adults: The literature

Current publications were (2000-2017) were Searched in PubMed (Medline)

Search terms:
• “Health Literacy” AND “Older Adults”
• “Health Literacy” AND “Elderly”
• “Health Literacy” AND “Oldest Old”
• “Health Literacy” AND “Geriatrics”

• 1 book
• 127 total published articles
• 0 publications with title including “Oldest Old”
Health Literacy and Older Adults: The literature

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Published Articles</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000-2005</td>
<td>3 publications</td>
</tr>
<tr>
<td>2006-2010</td>
<td>26 publications</td>
</tr>
<tr>
<td>2011-2015</td>
<td>59 publications</td>
</tr>
<tr>
<td>2016-2017</td>
<td>37 publications</td>
</tr>
<tr>
<td>TOTAL</td>
<td><strong>127</strong></td>
</tr>
</tbody>
</table>
Health Literacy and Older Adults: The literature

126 Total records from database search

Practical Screen

98 total excluded (with duplicates)
Not U.S. Studies (43)
Study Population <65 (59)
1 Book

20 Remaining
Health Literacy and Older Adults: The literature

Methodological Screen

20 Remaining

10 Articles Remaining

10 Total excluded
No (or valid) health literacy measure (X)
Literature Reviews (3)
Tool Development (1)
Mental Health Literacy (1)
Financial Health Literacy (1)
Commentary (1)
Case Study (1)
Not Available (1)
Health Literacy and Older Adults: The literature

10 Articles Remaining

10 Total (with Duplicates)
- REALM (3)
- S-TOFHLA (3)
- TOFHLA (3)
- SAHLSA (1)
- CAPS (1)

- 0 Articles Testing Interventions with participants 65+
- 0 Articles breaking analysis into 3 groups
Health Literacy and Older Adults: Where Are We Now?

• The majority of the articles that passed practical and methodological screening were assessment studies.

• The case study (Cutilli et al. 2011) tests an intervention in geriatrics

• More than 190,000 articles on “Health Literacy” we have a great opportunity to advance Health Literacy and Older Adult interventions.
<table>
<thead>
<tr>
<th></th>
<th>Author(s)</th>
<th>Title</th>
<th>Journal</th>
<th>Volume/Issue/Supp</th>
<th>Pages</th>
</tr>
</thead>
</table>
What do you think?