Health (Information) Literacy and Self-Determined Ageing

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Health-Related Decisions in Older Adults Everyday Life

when healthy / symptom-free
• health promotion (aspects of healthy lifestyle: nutrition, physical activity, ...)
• prevention of diseases (e.g., quit risk behaviors, participate in screening)

when facing symptoms
• self-help options?
• seek professional diagnosis and treatment? → if yes: where?

when in contact with medial service providers
• comply/adhere to suggested treatment option(s)
• participate in informed / shared decision making
Health Literacy: Definition

- „people’s knowledge, motivation and competences to
  - access,
  - understand,
  - appraise, and
  - apply
- health information in order to make judgments and take decisions in everyday life concerning
  - healthcare,
  - disease prevention and
  - health promotion
- to maintain or improve quality of life during the life course”

(Soerensen et al., 2012; Consortium Health Literacy Project European [HLS-EU])
Types of Health Literacy (Nutbeam, 2000)

- **Functional Literacy**: basic literacy (reading, writing) and numeracy; extension: *digital literacy* (*e-health, m-health*) (see PIAAC, CiLL studies)

- **Communicative Literacy**: abilities related to accessing and understanding information, and personalising the meaning of information

- **Critical Literacy**: abilities related to critical analysis, evaluation and use of health information (Sykes et al., 2013)
individuals with low health literacy tend to be in a poorer state of health, show more “unhealthy behaviors” and utilize the health care system more often (Schaeffer et al., 2016; Schaeffer & Pelikan, 2017), e.g.

- less frequent use of programs for prevention or early recognition of diseases (i.e., mammography screening, Pagán et al., 2012; Diviani et al., 2012)
- later diagnosis of illness, e.g. diagnosis of cancer at more advanced stages (Davis et al., 2002)
- lower compliance/adherence to medical recommendations (i.e., intake of prescribed medicine; Bauer et al., 2013; Damiani et al., 2014)
- more frequent hospitalizations / re-hospitalizations (Bailey et al., 2015; Hardie et al., 2011)
- poorer state of health overall (Berens et al., 2016; Berkman et al., 2011)
- more use of health care services → more costs (Vandenbosch et al., 2016)
• Estimated costs of low health literacy in the USA: between $106 and $238 billion annually! (Holstein et al., 2014)

• WHO estimates (http://www.irohla.eu/about/background-info/): 3-5% of health costs are directly associated with low health literacy!
Percentages of Older Adults with Limited Health Literacy

<table>
<thead>
<tr>
<th></th>
<th>Austria</th>
<th>Bulgaria</th>
<th>Germany</th>
<th>Greece</th>
<th>Ireland</th>
<th>Netherlands</th>
<th>Poland</th>
<th>Spain</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age ≥ 76</td>
<td>72.60</td>
<td>75.40</td>
<td>53.90</td>
<td>72.30</td>
<td>46.00</td>
<td>28.80</td>
<td>65.50</td>
<td>71.10</td>
<td>60.80</td>
</tr>
<tr>
<td>66 - 75</td>
<td>71.40</td>
<td>79.70</td>
<td>39.70</td>
<td>66.20</td>
<td>37.10</td>
<td>30.40</td>
<td>58.70</td>
<td>77.10</td>
<td>58.20</td>
</tr>
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nationally representative sample, \( n = 2,000 \), age: \( \geq 15 \) years, 
HLS-EU-47 questionnaire

Health literacy* scores and levels stratified by age groups:

<table>
<thead>
<tr>
<th>Limited</th>
<th>15–29 yrs</th>
<th>30–45 yrs</th>
<th>46–64 yrs</th>
<th>65–99 yrs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inadequate</td>
<td>6.8 (25)</td>
<td>7.0 (34)</td>
<td>9.4 (58)</td>
<td>15.2 (70)</td>
</tr>
<tr>
<td>Problematic</td>
<td>40.5 (152)</td>
<td>40.2 (197)</td>
<td>45.8 (283)</td>
<td>51.1 (236)</td>
</tr>
<tr>
<td>Sufficient</td>
<td>42.5 (159)</td>
<td>44.3 (217)</td>
<td>37.1 (229)</td>
<td>30.7 (142)</td>
</tr>
<tr>
<td>Excellent</td>
<td>10.3 (39)</td>
<td>8.5 (42)</td>
<td>7.8 (48)</td>
<td>3.0 (14)</td>
</tr>
</tbody>
</table>

Mean (SD)  
- 33.8 (6.3)  
- 34.0 (6.0)  
- 32.8 (6.1)  
- 30.7 (6.0)

*measured as perceived difficulty to perform health information tasks
Core Assumptions

• Fostering health information literacy may contribute to healthy ageing, e.g.
  • by supporting well-informed & „better“ decisions regarding health behaviors, reactions to symptoms and complaints etc., and
  • by fostering feelings of autonomy, control, and self-efficacy which are associated with higher levels of life-satisfaction, well-being, and quality of life
Focus Group „Health (Information) Literacy as a Contribution to Healthy Ageing”

Head:
• Dr. Anne-Kathrin Mayer (ZPID)
• Carolin Knauber (DIE)

Objectives: develop interdisciplinary research projects that focus on ...

a) understanding personal, social, and environmental factors that determine health literacy in middle and older adulthood and

b) conceptualize and evaluate theory-based interventions which aim at fostering the acquisition of health literacy and adequate use of health information in old age
Some Research Tasks & Questions

• construction / adaptation of assessment tools (objective tests of skills / knowledge) for health

• identification of groups with special health literacy needs, e.g., older migrants, older adults with lower SES, persons with limited functional literacy

• development of explanatory models for health literacy, including, e.g., role of competence (knowledge about information searching & evaluation; knowledge about health) versus motivation (beliefs in controllability of health, epistemic beliefs about medicine, ...)

• theory-based development and evaluation of intervention concepts on different levels, e.g.:
  - individuals: use digital health information (functional level), develop communicative/critical literacy (e.g., evaluate reliability of information from social media, make decisions about seeing a doctor/getting a second opinion)
  - actors in health system (doctors, nurses, ...): support & communication strategies
  - health information technologies and materials

• economic analyses: levels of health literacy and health cost
Thank you!

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References (1)


References (2)


