Health literacy screening in community pharmacy: development of the RALPH-instrument

Dr. Ellen Koster, assistant professor
# Health literacy

Skills to **obtain, process and understand** basic information and services to make appropriate decisions regarding health

<table>
<thead>
<tr>
<th>Functional</th>
<th>Reading and writing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Communicative</strong></td>
<td>Finding and applying information</td>
</tr>
<tr>
<td></td>
<td>Expressing concerns</td>
</tr>
<tr>
<td><strong>Critical</strong></td>
<td>Analyzing information applicability and quality</td>
</tr>
<tr>
<td>Country</td>
<td>Excellent HL</td>
</tr>
<tr>
<td>---------</td>
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</tr>
<tr>
<td>AT</td>
<td>9.9%</td>
</tr>
<tr>
<td>BG</td>
<td>11.3%</td>
</tr>
<tr>
<td>DE*</td>
<td>19.6%</td>
</tr>
<tr>
<td>EL</td>
<td>15.6%</td>
</tr>
<tr>
<td>ES</td>
<td>9.1%</td>
</tr>
<tr>
<td>IE</td>
<td>21.3%</td>
</tr>
<tr>
<td>NL</td>
<td>25.1%</td>
</tr>
<tr>
<td>PL</td>
<td>19.5%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>16.5%</td>
</tr>
</tbody>
</table>

Sorensen, 2015
UPPER - Utrecht Pharmacy Practice network for Education and Research

You must be this.

Health literate to ride.
Recognition and addressing limited pharmaceutical literacy (RALPH)

To develop and validate a new instrument (RALPH)

• suitable for use in daily pharmacy practice

• measurement of different health literacy aspects necessary for correct medication use
Development instrument → Test phase in pharmacies → Toolbox
Development RALPH-instrument

• Literature review and expert meeting

• Development first version
  • Interview
  • 12 questions in 3 health literacy domains
    • General questions
    • Questions related to antibiotic prescription label
    • Optional questions related to patient’s own medication
  • Instruction sheet and movie clips for pharmacist
<table>
<thead>
<tr>
<th>Functional</th>
<th>Suppose you have pneumonia and you get this antibiotic [prescription label] prescribed. When do you take a tablet?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communicative</td>
<td>How easy or difficult is it for you to find information about your medicines in words you understand?</td>
</tr>
<tr>
<td>Critical</td>
<td>How easy or difficult is it for you to decide whether medication information you read in the newspaper or on the Internet applies to you?</td>
</tr>
</tbody>
</table>
Interviews waiting area (n = 274)
38% male; age 64.5 ± 11.8;
26% low, 47% moderate, 26%
high educated, 94% Dutch

Interviews medication review (n = 147)
40% male; age 77.2 ± 8.0;
56% low, 28% moderate, 16%
high educated, 92% Dutch

Evaluation questionnaire pharmacist (n = 13)
% of patients having difficulties to..

- understand use instructions
- find understandable information
- decide if information applies to own situation
- mention correct indication
- mention correct dosage instructions

waiting area
medication review
Experiences of pharmacists

• In general positive about instrument
  • 100% mentioned the instrument and instruction were clear
  • 69% thought the instrument was clear for the patient
  • 67% thought the instrument was suitable to recognize inadequate health literacy

• Suggestions for improvement
Adjusting instrument

- Linking questions to patient’s own medication
  - More logical for patient
  - Easier for pharmacist

- Rephrasing questions

- Deleting questions

- 11 questions in 3 health literacy domains
First conclusions

• Substantial number of medication users experiences difficulties in understanding information about medication

• The RALPH-instrument may help pharmacists to identify these high-risk patients
Next steps

- Testing adjusted instrument
- Recommendations based on RALPH scoring
- Final instrument will be available summer 2017
Contact

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