Recognizing pharmaceutical illiteracy in community pharmacy practice: a practice-based interview guide versus questionnaire based assessment

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**Background** Patients with limited pharmaceutical literacy are at increased risk of drug-related problems. Recognition of these patients in daily clinical practice is difficult. The Recognition and Addressing of Limited Pharmaceutical Literacy (RALPH) interview guide was developed as practical set of questions to recognize patients with limited pharmaceutical literacy in daily pharmacy practice.

**Purpose** To provide insight into patients’ pharmaceutical literacy using the RALPH interview guide. In addition, we compared the RALPH guide with a validated general health literacy questionnaire.

**Method** The final RALPH interview guide comprises 10 questions, all directly linked to the patient’s own medication in three health literacy domains: functional domain regarding reading and writing skills, communicative domain regarding skills to find/ask information and to assess concerns and critical domain regarding skills to analyse information applicability and quality. Structured face-to-face interviews with patients who visited a community pharmacy to fill a prescription for themselves were conducted. The interview included the RALPH guide as well as the Functional Communicative Critical Health Literacy (FCCHL) questionnaire to measure general health literacy. Functional, communicative and critical skills were measured and agreement between two methods was calculated.

**Findings** Data were collected from 509 patients. Most patients (>90%) had correct understanding of frequency and timing of medication use, but 25% did not understand warnings or precautions correctly. Finding understandable information (39%), assessing information applicability (50%) and reliability (64%) were mentioned as difficult. Patients with limited pharmaceutical literacy, indicated by the RALPH questions, also had a lower general health literacy level according to FCCHL scores. Agreement between the RALPH guide and FCCHL questionnaire was moderate (~60%).

**Conclusion** Patients experienced difficulties with more complex skills, such as interpretation of warnings or precautions, finding and analyzing information. Whereas the FCCHL questionnaire is useful to assess general health literacy, the RALPH interview guide provides insight in the level of skills needed for good medication use and is thus more suitable for use in a medication specific context such as community pharmacy. Context specific assessment of skills is important to provide tailored pharmaceutical care.