Measuring Communicative health literacy
in patient-physician communication

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» Communication with healthcare professionals is important for understanding and managing own health, but also for diagnosis

» Communication is linked to

» (dis)satisfaction in health care

» trust in healthcare professionals

» Change in the patient role – patient involvement

» People with low health literacy report weaker communication skills than those with higher health literacy and are less likely to ask questions during a consultation

Communicative health literacy (COM–HL)

Communicative health literacy refers to patients' communicative and social skills that enable them to actively engage in face-to-face encounters with healthcare professionals, to give and seek information, derive meaning from it, and apply this information in decision-making and in co-producing their health care (Nowak et al., 2021).

Information about people's communicative health literacy (COM-HL) is needed to better adapt health communication and ensure patient involvement in health communication.
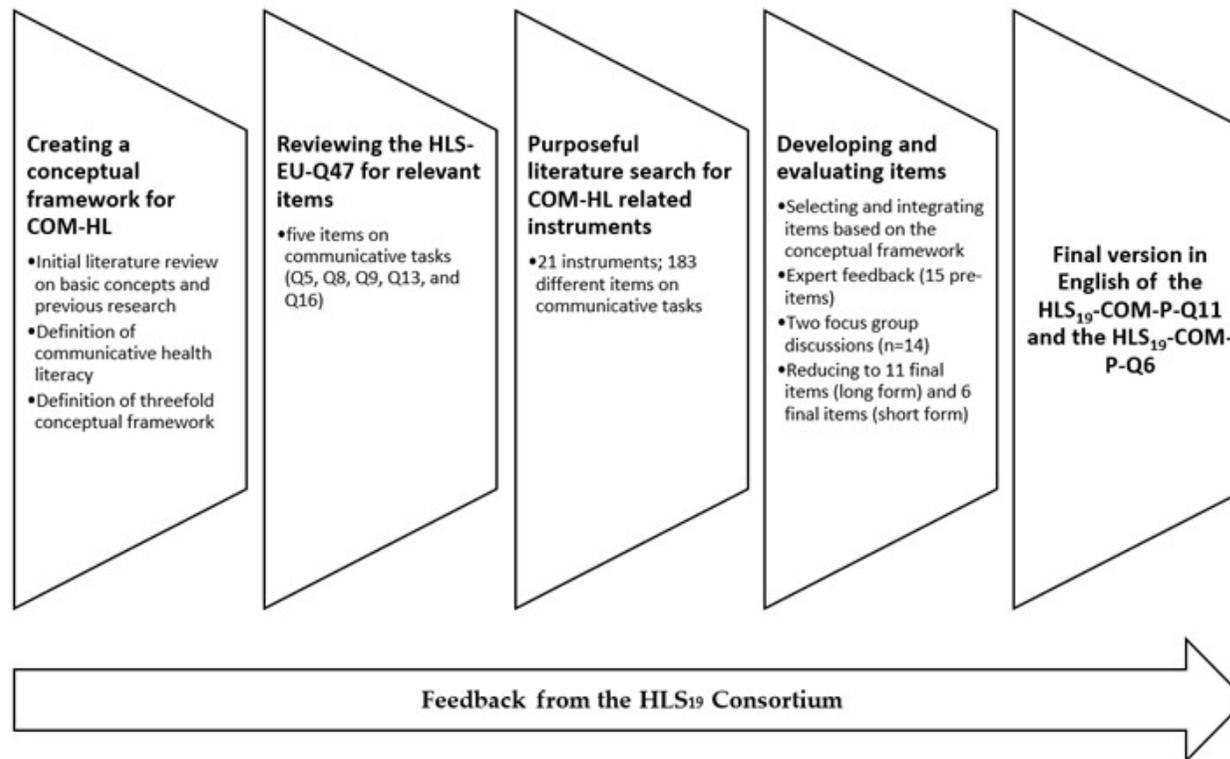
» Develop an instrument with sufficient psychometric properties for measuring communicative health literacy (COM–HL) in patient–physician communication

  » Both an 11 item version (HLS$_{19}$–COM–P–Q11) and a short version of 6 items (HLS19–COM–P–Q6) were developed for the purpose of HLS$_{19}$ – survey

HLS₁₉
Health Literacy Survey 2019
a project of M-POHL

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Conceptual Framework for COM–HL

C–CG main phases	Patients' communicative tasks	
1. Initiating the session	1. Opening the session and giving initial information	Participating actively
2. Gathering information	2. Giving full information	
3. Providing structure	3. Understanding and following the agenda	
4. Building relationship	4. Expressing own views / feelings and trusting the health professionals (e.g. physician)	
5. Explanation and planning	5. Understanding and decision making (extract information & derive meaning)	
6. Closing the session	6. Final understanding, agreement (and application)	

The development process of the instrument intending to measure COM–HL

Creating a conceptual framework for COM-HL
- Initial literature review on basic concepts and previous research
- Definition of communicative health literacy
- Definition of threefold conceptual framework

Reviewing the HLS-EU-Q47 for relevant items
- five items on communicative tasks (Q5, Q8, Q9, Q13, and Q16)

Purposeful literature search for COM-HL related instruments
- 21 instruments; 183 different items on communicative tasks

Developing and evaluating items
- Selecting and integrating items based on the conceptual framework
- Expert feedback (15 pre-items)
- Two focus group discussions (n=14)
- Reducing to 11 final items (long form) and 6 final items (short form)

Final version in English of the HLS₁₉-COM-P-Q11 and the HLS₁₉-COM-P-Q6

Feedback from the HLS₁₉ Consortium

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Countries included in the optional package & method of data collection

Country	Short (SF) / Long form (LF)	Type of data collection	Number of respondents
AT	LF	CATI	2954
BE	SF	CAWI	1000
BG	SF	CAPI, CAWI	859
CZ	SF	CATI, CAWI	1597
DE	LF	PAPI	2133
DK	SF	CAWI	3600
FR	SF	CAWI	2003
HU	SF	CATI	1186
SI	LF	CAPI, (PAPI,) CAWI	3342
9 Countries	3 LF; 6 SF	3 CATI, 6 CAWI, 2 CAPI, 2 PAPI	Σ 18744

Psychometric properties

» **Confirmatory factor analysis**

» Acceptable goodness-of-fit indices

» The loadings are close to or above 0.7 for most items

» **Rasch Measurement Theory**

» Unidimensional scale

» Targeting could have been better

» Most items displayed acceptable fit

» Some items displayed differential item functioning

» Response categories worked as intended

» **Reliability analysis**

» Acceptable reliability

» HLS19-COM-P-Q11: Cronbach's alpha 0.90 (DE)–0.94 (SI), PSI: 0.86 (AT)–0.88 (SI)

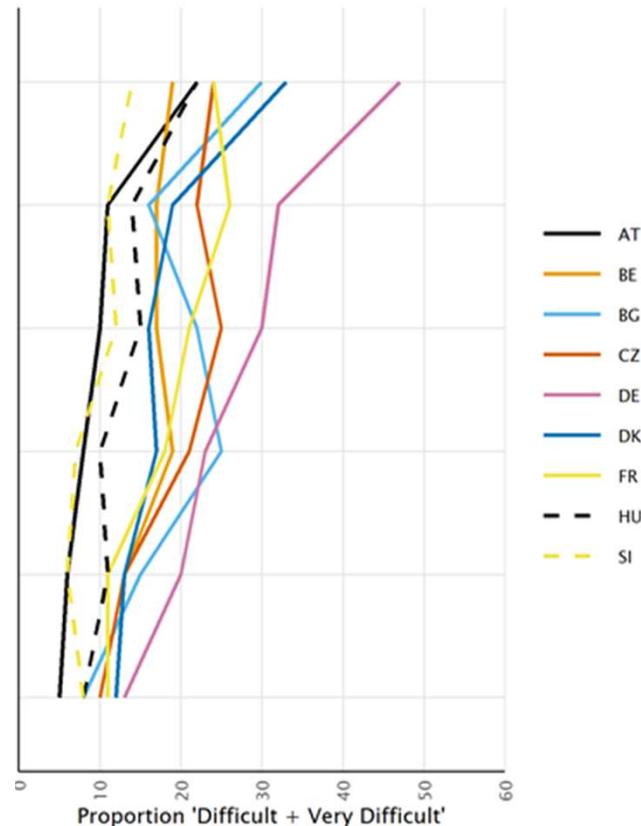» HLS19-COM-P-Q6: Cronbach's alpha 0.84 (DE)–0.90 (BE, DK, SI (CAPI)), PSI: 0.75 (AT)–0.83 (CZ,DK,FR)

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Properties of HL-COM-P
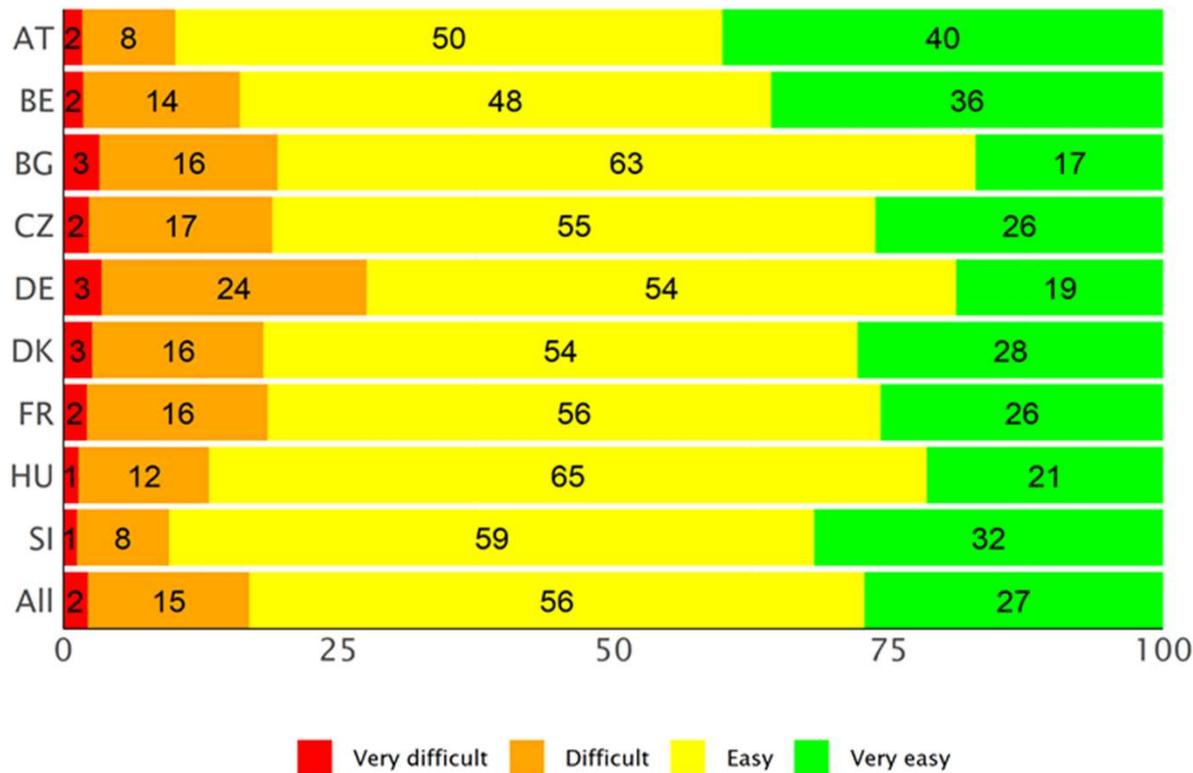
» HLS19-COM-P (SF & LF) instrument was well accepted

» HLS19-COM-P short and long form are strongly correlated

» COM-HL moderately correlated with
   » general HL scores (based on polytomous scores)
      » HLS19-COM-P-Q11 (r: .53-.59)
      » HLS19-COM-P-Q6 (r: .35-.65)
   » HL-NAV (based on polytomous scores)
      » HLS19-COM-P-Q11 (r: .53-.57)
      » HLS19-COM-P-Q6 (r: .44-.56)

» Limitations: limited comparability because of diverse data collection method; limited to physician interaction;

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Distributions of items of HL–COM–P (short form)

4   to get enough time with your doctor

5   to express your personal views and preferences

9   to be involved in decisions

10 to recall the information you get

8   to ask your doctor questions

3   to explain your health concerns

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Communicative HL in the populations

Country	Very difficult	Difficult	Easy	Very easy
AT	2	8	50	40
BE	2	14	48	36
BG	3	16	63	17
CZ	2	17	55	26
DE	3	24	54	19
DK	3	16	54	28
FR	2	16	56	26
HU	1	12	65	21
SI	1	8	59	32
All	2	15	56	27

Legend: ■ Very difficult ■ Difficult ■ Easy ■ Very easy

On average one sixth of the individuals face difficulties in participating actively in dialogue with their physician

COM-HL is lower for those with
a. lower socio-economic status (social status and financial deprivation)
b. poorer health
➔ Communicative HL follows a social gradient

Conclusion and implications

» HLS19-COM-P instruments have acceptable psychometric properties
  » Room for improvements
» Should be tested as a stand-alone instrument within a clinical context
» Adapt the instrument for measuring COM-HL version reflecting other health professionals

» COM-HL might be an important intervention area for health literate healthcare organizations
  » Education in communication and health literacy for physicians
» COM-HL interventions should consider the social gradient as central
  » Important to measure COM-HL to adapt communication

Thank you for your attention!