

Acknowledgement

We extend our sincere gratitude to the members of the HELPE project (Helpe.eu.com) for generously providing materials that serve as a valuable foundation and support for the activities undertaken within the CAPAGE project.

We used licensed materials from the HELPE project (Erasmus+ HELPE: 2020-1-AT01-KA203-HE-078086): <https://creativecommons.org/licenses/by-sa/4.0/deed.en> .

In this presentation we used slides from the following HELPE presentation:

- Lecture_05_HL on micro level
- Lecture_06_HL questionnaire and reflection tool

Health Literacy

Health literacy on micro level
Evaluation methods

Learning outcomes

You are able to:



- identify vulnerable groups for health literacy and discuss the impact on health and diseases
- describe signs suggesting limited health literacy
- describe methods for evaluation of health literacy

Levels of Health Literacy



Nurses and Health Literacy



Image 1. Senior male patient meet nurse to receive medical consultation



Image 2. Health education by a nurse

Signs of limited health literacy

- Incompletely or inadequately completed forms
- Frequently missed therapy appointments
- Inability/difficulty to name and take correctly medications
- Inability to follow instructions referred by other healthcare professionals
- Inability to comprehend/complete their home exercise program, or disease management tasks
- Refusing to read written instructions or asking the nurse to read to them

How do you identify the level of health literacy of a client?

- Difficulty filling out forms
- Always late for appointments or no-shows
- Difficulty using instructions
- Poorly formulating questions
- Difficulty answering questions
- Indicating complaints
- Unable to name chronology
- Making excuses

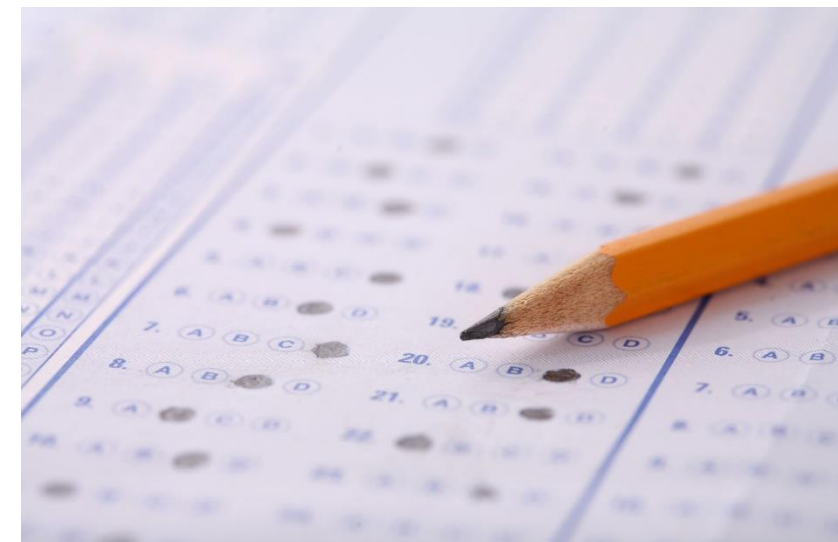


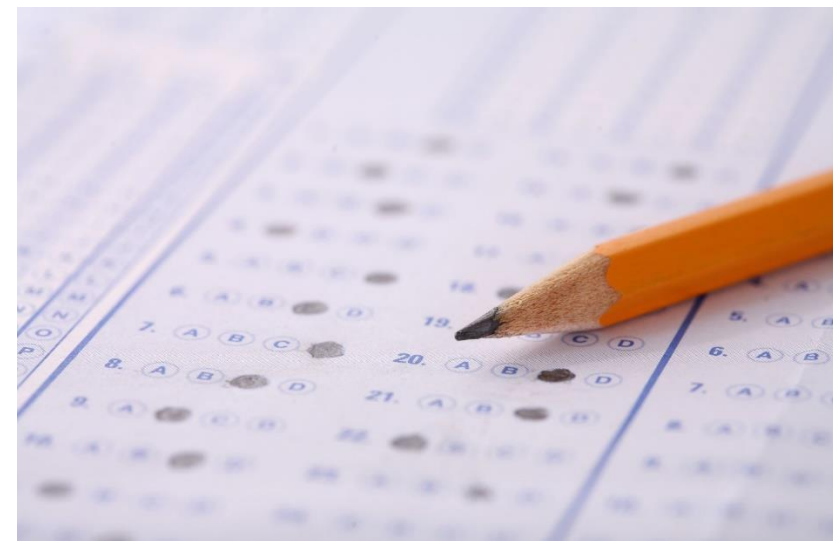
Image 3. Filled questionnaire

<https://www.ahrq.gov/health-literacy/improve/precautions/index.html>

How do you identify the level of health literacy of a client?

Most common excuses

- Sorry, I forgot my glasses
- Could you fill out this for me, I write so illegibly
- I'll fill it out at home
- I can't read because I'm word-blind
- Sorry, I thought the appointment was tomorrow



<https://www.ahrq.gov/health-literacy/improve/precautions/index.html>

Image 3. Filled questionnaire

How do you actively identify the level of HL of a client?

- 1. Offer leaflet upside down
(client with limited HL will often not turn it to the right side)

If you can read this, put your left hand on your right shoulder and raise the right hand in the air.

- 2. Ask how many years client has been able to go to school

How do you actively identify the level of HL of a client?

- 3. Ask if client receives help with reading leaflets or filling in forms:
 - "How confident are you that you fill in medical forms correctly yourself?"
 - "How often is someone helping you to read letters or leaflets
 - from your nurse or the hospital?"
 - "Do you find it difficult to find out more about your health,
 - because you do not understand written information well? "

Evaluation of the level of HL and strategies

- simplifying forms/improving the readability of printed information
- client-centered language and feedback conversations
- appropriate communication strategies
 - plain language and clear sentences
 - ask questions
 - give feedback
 - “teach back” method

Challenges faced by the older adults in Sri Lanka

Poor health literacy among older adults in Sri Lanka compounds the challenges of ageing by reducing self-care ability, increasing dependence on others, and worsening health outcomes.

Addressing this issue requires age-appropriate communication strategies, community-based education programs, and health system reforms that prioritize elderly-friendly services.

Example case scenario

Mrs. Silva, a 72-year-old woman from a rural village in Sri Lanka, visits a clinic after a Myocardial infraction. The nurse provides her with a written home care exercise program and instructs her to follow it daily.

However, after two weeks, Mrs. Silva returns with no improvement—and signs of muscle stiffness and pain. Upon review, the nurse discovers:

- Mrs. Silva cannot read English and only completed primary education.
- She thought the sheet was just for the doctor and never attempted the exercises.
- She was too shy to ask questions and assumed any pain meant she should rest.

Why should client's health literacy be assessed?

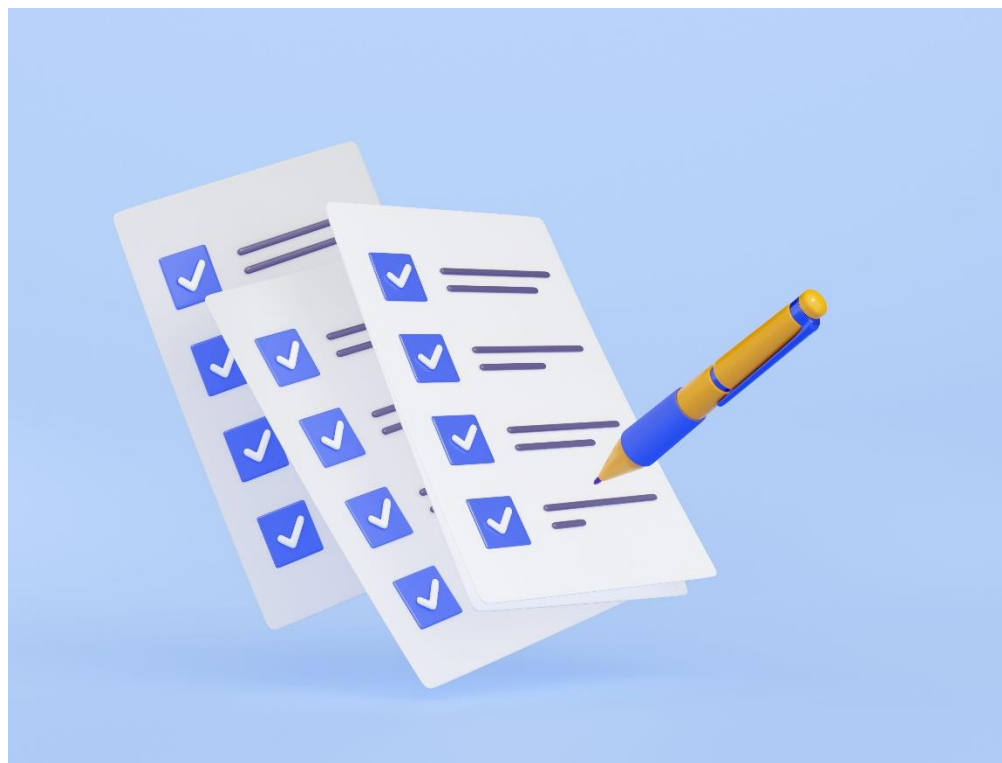


Image 4. Questionnaire

Health Literacy assessments for clients (overview)

Measurement	Functional HL	Interactive HL	Critical HL	Items	Type
FCCHL	x	x	x	14	self-reported
HELMA	x	x	x	44	self-reported
HLAT	x	x	x	8	self-reported
HLS-EU-Q47/Q16/Q6	health care/disease prevention/health promotion			47/16/6	self-reported
HLQ	multidimensional			44	self-reported
NVS	x			6	performance based
REALM	n.a.	n.a.	n.a.	125 (S-REALM 8)	performance based
SAHL S&E	x			18 (Dutch 33)	performance based
S-(TOFHLA)	x			40	performance based



Health Literacy Questionnaire (HLQ)

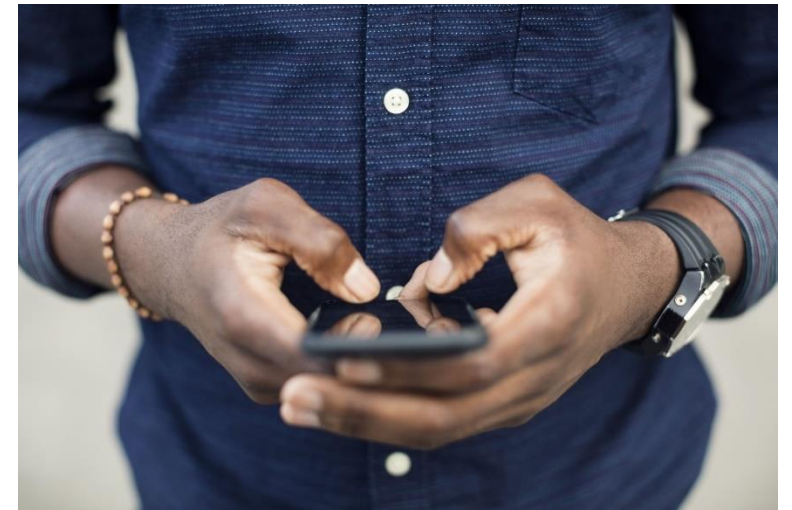
- Widely used internationally
- Measures 9 domains (e.g., understanding health info, engagement with providers)
- Can be translated to Sinhala/Tamil
- **Facilitates community-level and clinical assessments**

HLQ

- Multidimensional Assessment
- 9 dimensions of health literacy:
 - (1) Feeling understood and supported by healthcare providers
 - (2) Having sufficient information to manage my health
 - (3) Actively managing my health
 - (4) Social support for health
 - (5) Appraisal of health information
 - (6) Ability to actively engage with healthcare providers
 - (7) Navigating the healthcare system
 - (8) Ability to find good health information
 - (9) Understanding health information well enough to know what to do.

Evaluation of digital health literacy

- DHLI (Digital Health Literacy Instrument)
- eHLF (e-health literacy framework)
- eHEALS (The eHealth Literacy Scale)



(Kayser et al., 2018; Norman & Skinner, 2006; van der Vaart & Drossaert, 2017)

Image 5. Person types on smartphone

Challenges in Sri Lankan Context

- Language diversity
- Low formal education in rural/older populations
- Stigma in admitting low understanding
- Lack of validated local tools
- Resource limitations in rural healthcare facilities

HL assessment tool use in Sri Lanka

- The HLS-EU-Q16 translated into Sinhala language and validated among adults with diabetes and hypertension (Pathirathna et al., 2020)
- eHealth Literacy Scale (eHEALS) has been validated for Sinhala-speaking health science students and working-age adults (Seneviratne et al., 2022; Jayasinghe A., et al., 2021).
- some locally developed context-specific questionnaires are being used to assess,
 - maternal health literacy, non-communicable diseases (NCDs), and school-based health education (Perera et al., 2013).

Conversational Health Literacy Assessment Tool (CHAT)

Table 2 Conversational Health Literacy Assessment Tool (CHAT) Questions

Supportive professional relationships	1. Who do you usually see to help you look after your health?
	2. How difficult is it for you to speak with <i>[that provider]</i> about your health?
Supportive personal relationships	3. Aside from healthcare providers, who else do you talk with about your health?
	4. How comfortable are you to ask <i>[that person]</i> for help if you need it?
Health information access and comprehension	5. Where else do you get health information that you trust?
	6. How difficult is it for you to understand information about your health?
Current health behaviours	7. What do you do to look after your health on a daily basis? (Prompt for diet, sleeping habits, medication, and treatment plan)
	8. What do you do to look after your health on a weekly basis? (Prompt for exercise, physical activities, social activities, and visits to healthcare professionals)
Health promotion barriers and support	9. Thinking about the things you do to look after your health, what is difficult for you to keep doing on a regular basis?
	10. Thinking about the things you do to look after your health, what is going well for you?

References

Image 1: <https://www.amnhealthcare.com/blog/nursing/travel/diabetes-care/>

Image 2: <https://nightingale.edu/blog/public-health-nurse.html>

Image 3. Filled questionnaire from PowerPoint® for Microsoft 365 MSO (Version 2205 Build 16.0.15225.20172) 64 Bit)

Image 4. [Questionnaire](#) by [upklyak](#) from [freepik](#), free license by [freepik](#)

Image 5. Person types on smartphone from PowerPoint® for Microsoft 365 MSO (Version 2205 Build 16.0.15225.20172) 64 Bit)

All icons/pictograms from PowerPoint® for Microsoft 365 MSO (Version 2205 Build 16.0.15225.20172) 64 Bit)

Literature 1

- Bunge, M., Mühlhauser, I., & Steckelberg, A. (2010). What constitutes evidence-based patient information? Overview of discussed criteria. *Patient Education and Counseling*, 78(3), 316–328. <https://doi.org/10.1016/j.pec.2009.10.029>
- Ennis, K., Hawthorne, K., & Frownfelter, D. (2012). How Physical Therapists Can Strategically Effect Health Outcomes for Older Adults With Limited Health Literacy. *Journal of Geriatric Physical Therapy*, 35(3), 148–154. <https://doi.org/10.1519/JPT.0b013e31823ae6d1>
- Hironaka, L. K., & Paasche-Orlow, M. K. (2008). The implications of health literacy on patient-provider communication. *Archives of Disease in Childhood*, 93(5), 428–432. <https://doi.org/10.1136/adc.2007.131516>
- Jayasinghe, A., et al. (2021). Validation of the eHealth Literacy Scale among working-age population in Sri Lanka. *Sri Lanka Journal of Medicine*, 29(2), 17–24.

Literature 2

- Lopez-Olivo, M. A., & Suarez-Almazor, M. E. (2019). Digital Patient Education and Decision Aids. *Rheumatic Disease Clinics of North America*, 45(2), 245–256. <https://doi.org/10.1016/j.rdc.2019.01.001>
- Mantwill, S., & Schulz, P. J. (2017). Low health literacy and healthcare utilization among immigrants and non-immigrants in Switzerland. *Patient Education and Counseling*, 100(11), 2020–2027. <https://doi.org/10.1016/j.pec.2017.05.023>
- Pandit, A. U., Tang, J. W., Bailey, S. C., Davis, T. C., Bocchini, M. V., Persell, S. D., Federman, A. D., & Wolf, M. S. (2009). Education, literacy, and health: Mediating effects on hypertension knowledge and control. *Patient Education and Counseling*, 75(3), 381–385. <https://doi.org/10.1016/j.pec.2009.04.006>
- Pathirathna, M. L. R., Muthukuda, N. C. G., & Gunawardena, N. S. (2020). Validity and reliability of the Sinhala version of the 16-item European Health Literacy Survey Questionnaire (HLS-EU-Q16) among patients with chronic diseases in Sri Lanka. *Asian Journal of Medicine and Health*, 18(8), 46–56.

Literature 2

- Perera, W. K. K. M., et al. (2013). Development of a tool to assess maternal health literacy in Sri Lanka. *Journal of the College of Community Physicians of Sri Lanka*, 18(1).
- Quenzel, G., Vogt, D., & Schaeffer, D. (2016). Unterschiede der Gesundheitskompetenz von Jugendlichen mit niedriger Bildung, Älteren und Menschen mit Migrationshintergrund. *Das Gesundheitswesen*, 78(11), 708–710. <https://doi.org/10.1055/s-0042-113605>
- Sørensen, K., Pelikan, J. M., Röthlin, F., Ganahl, K., Slonska, Z., Doyle, G., Fullam, J., Kondilis, B., Agrafiotis, D., Ueters, E., Falcon, M., Mensing, M., Tchamov, K., Broucke, S. van den, & Brand, H. (2015). Health literacy in Europe: Comparative results of the European health literacy survey (HLS-EU). *The European Journal of Public Health*, 25(6), 1053–1058. <https://doi.org/10.1093/eurpub/ckv043>
- Sørensen, K., Van den Broucke, S., Fullam, J., Doyle, G., Pelikan, J., Slonska, Z., Brand, H., & (HLS-EU) Consortium Health Literacy Project European. (2012). Health literacy and public health: A systematic review and
- Seneviratne, C. C., et al. (2022). Development and validation of the Sinhala version of the e Health Literacy Scale (Si-eHEALS) among health science students in Sri Lanka. *PLOS ONE*, 17(4), e0266612.

Health Literacy

Health literacy recognition on micro level

Learning outcomes

You are able to:

- describe a tool for assessing your own health literacy and know how to use it
- use a tool to reflect on your own health literacy/communication skills

Why should PT students health literacy communication skills be assessed?

To Improve Patient Understanding and Compliance

To support Diverse Literacy Levels

To Prepare for Real-World Practice

To Promote Patient-Centered Care

To Reduce Health Disparities

To Enhance Digital Health Adoption

To Build Reflective and Adaptive Clinicians

FH JOANNEUM
University of Applied Sciences

jamk | University of
Applied Sciences

SANTA MARIA
HEALTH SCHOOL
Healthcare Education Centre

UNIVERSIDADE DA CORUÑA



Self assessment

Questionnaire (pre/post assessment)

Reflection tool

Health Literacy Questionnaire for Students (pre/post assessment)

- to evaluate health literacy competences of nursing students
- Includes elements from
 - existing questionnaires (IMPACCT Project)
 - 6 function model of medical communication (de Haes & Bensing, 2009)

Health Literacy Questionnaire for Students (pre/post assessment)

Items:

- (A) Knowledge about HL
- (B) Adjustment of communication and patient educational skills to patients with limited HL
- (C) Awareness of own attitude towards using HL communication skills and/or teaching strategies
- (D) Confidence in using HL communication and patient educational skills

Health Literacy Questionnaire for Students (pre/post assessment)

Please indicate how much you know about limited health literacy. Choose only one answer.

I know where to find information on limited health literacy.							
	1	2	3	4	5	6	7
	Strongly disagree						Strongly agree
1. I understand the challenges that patients with limited health literacy can have							
2. I know which groups are more likely to have limited health literacy							

Health Literacy Questionnaire for Students - Adjustment of communication

- Fostering the relationship
- Gathering information
- Providing information
- Shared decision making
- Enabling self-management
- Responding to emotions

Health Literacy Questionnaire for Students - Awareness of own attitude



What is your opinion/ attitude on using health literacy communication skills and/or teaching strategies? Give an example of a specific interaction with a patient with low health literacy. Reflect on your own competences?

Health Literacy Questionnaire for Students - my confidence in using HL communication and patient educational skills

How confident are you in your ability to:							
	1 Not at all <u>confi-</u> dent	2	3	4 neutral	5	6	7 Very <u>confi-</u> dent
38. adjust your communication and patient educational skills to patients with limited health literacy							
39. engage with the patient in a personal though							

Health Literacy Questionnaire: Reflection tool

- The aim is to use this reflection tool during internships and practical training at the university.
 - Self-assessment
 - Peer-assessment
 - Teacher/supervisor assessment

Literature

- de Haes, H., & Bensing, J. (2009). Endpoints in medical communication research, proposing a framework of functions and outcomes. *Patient education and counselling*, 74(3), 287-294.
<https://doi.org/10.1016/j.pec.2008.12.006>
- Health Literacy Centre Europe. (2021). *IMPACCT*. Retrieved from <http://healthliteracycentre.eu/impacct/>