CAPAGE
Capacity for Active Ageing

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Health Literacy Assessments






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Content

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In this document we use materials from the following HELPE documents:

- Framework_ Results IO1:

- Assessments_HL_Clients.pdf
- HELPE_Health Literacy Questionnaire for Students_v2

1. Introduction/Purpose

This document aims to demonstrate the ability to assess health literacy, including digital health literacy, in clients and patients—particularly among older adults. With the growing integration of digital platforms in healthcare, it is essential for healthcare professionals to accurately evaluate both traditional and digital health literacy to ensure effective communication, informed decision-making, and optimal health outcomes.

The content focuses on equipping learners with the skills to select and apply appropriate assessment tools tailored to evaluate the health literacy needs of diverse populations. Special emphasis is placed on addressing the unique challenges faced by older adults in navigating both conventional and digital health information environments.

A further document will address the evaluation of students' health literacy and the utilisation of their competencies in interacting with older adults.

2. Assessments for Clients

Health professionals have the key responsibility in promoting patients' health literacy (HL) to help them navigate through the health care system. This includes assisting patients in finding, understanding, and using health information. Health care professionals, including physiotherapists in their role as health promoters and educators, should assess patients' health literacy in order to provide them with appropriate health information (McCormack et al., 2013) and adjust their communication and treatment methods to the client's individual HL level.

A literature review on "Assessments for clients" has already been carried out in the Erasmus+ HELPE project. The literature research on assessments focused on the following clients: older adults, people with low economic status, people with migration backgrounds, and chronic diseases. The results of this will be adopted here and adapted for use in Sri Lanka.

Many of the assessments found are very general. But here the assessments are divided according to the patient groups.

The main tools to evaluate HL in **older people** are (Berens et al., 2016; Chesser et al., 2016; Vogt et al., 2018):

a) the Health Literacy Survey European Questionnaire (HLS-EU-Q),
b) Test of Functional Health Literacy in Adults (TOFHLA),
c) Short-Test of Functional Health Literacy in Adults ((S-)TOFHLA),
d) Rapid Estimate of Adult Literacy in Medicine (REALM),
e) SAHL S&E (Short Assessment of Health Literacy—Spanish and English),
f) Short Assessment of Health Literacy—Spanish and English) (SAHL S&E),
g) Newest Vital Sign (NVS)

To measure HL in people with **chronic diseases**, mainly used are (Fraser et al., 2013; Miller, 2016; Puente-Maestu et al., 2016; Rheault et al., 2019; Shaw et al., 2012):

a) the Health Literacy Questionnaire (HLQ),
b) (S-)TOFHLA),
c) REALM,
d) SAHLSA, and
e) NVS

To measure HL in people with **low economic status** are used (Berkman et al., 2011; Stormacq et al., 2019; Toçi et al., 2014):

a) the TOFHLA,
b) (S)-TOFHLA,
c) REALM and
d) NVS

To measure HL among people with a **migration background** are used (Quenzel et al., 2016; Zhang et al., 2020):

a) the HLQ and
b) HLS-EU

Seven of the listed assessments (FCCHL, HELMA, HLAT, HLS-EU-Q47, HLS-EU-Q16, HLS-EU-Q6, HLQ) can be categorized as self-reported assessments and the other four are performance-based measurements (NVS, REALM, SAHL S&E, S-(TOFHLA). All the assessments are available in English. The following assessments cover all dimensions of health literacy and can be described as multidimensional: FCCHL, HELMA, HLAT, HLS-EU-Q (47-item-version, 16-item-version and 6-item- version) and the HLQ. Frequently applied HL assessments are the HLS-EU-Q and the HLQ. The HLS-EU was developed to identify and compare the levels of health literacy in the European population.

In Sri Lanka, several health literacy assessment tools have been adapted and validated to evaluate health literacy across diverse populations for research purposes. The HLS-EU-Q16 was 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). Other than these assessments, 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). These tools are typically not standardized for broad use but are tailored for specific studies

The HLQ is one of the most widely used HL assessments, it is a multidimensional assessment, and it demonstrates overall good measurement properties (Schie & Nieuwenhuis, 2021). The summation of the HLQ items within each dimension provides scale summary scores, with each scale representing one distinct component of health literacy. The HLQ describes nine 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; and (9) Understanding health information well enough to know what to do.

Two self-reported assessments could be found for digital health literacy (Kayser et al., 2018; Norman & Skinner, 2006):

- eHLF (e-health literacy framework)
- eHEALS (The eHealth Literacy Scale)

3. Discussion of the Assessments for Clients

A wide spectrum of Health Literacy assessments was found in the literature review from HELPE project. HL assessments were based on self-reports (FCCHL, HELMA, HLAT, HLS-EU, HLQ) as well as on observed performance (NVS, REALM, SAHL S&E, S-(TOFHLA)). Assessments for unidimensional (functional- or interactive- or critical health literacy) as well as for multidimensional (covering functional-, interactive- and critical HL, e.g. HLQ) were identified. Most of the tools were designed as screening tools in clinical practice and they focused on measuring functional HL. The HL measurement tools should be able to analyse the determinants and consequences of limited HL and offer the basis for the evaluation of interventions to improve HL (Nutbeam, 2017). Recent studies have shown some challenges. Voigt-Barbarowicz & Brütt (2020) investigated in a systematic review the agreement between patients' and healthcare professionals' assessments of patients' HL. They identified that health care professionals had difficulty to determine clients' HL adequately. Most of the reviewed studies showed substantial variations between the HL assessed by clients themselves (self-reported) and the ones assessed by health professionals. The clients' HL was significantly overestimated by health professionals, or there were discrepancies between patients' and health professionals' assessments of clients' HL. The authors were concerned that these differences might lead to communication problems (Voigt-Barbarowicz & Brütt, 2020). A Dutch study on the management of limited HL found similar results (Murugesu et al., 2018). In their research report, they described the challenges that healthcare providers had faced mainly regarding the insufficient recognition of people with limited health skills and the fact that the patients could not communicate their complaints clearly or often did not understand the information provided by the healthcare provider and therefore were not able to participate in decisions on treatment. This raises the question of what HL-assessments should examine and how do health professionals recognise people with limited HL. The Dutch report recommends not focusing extensively on patients' education level, age, ethnic background or other sociodemographic determinants, but rather integrate the handling (e.g. shared decision making and self-management) in the assessing tools (Murugesu et al., 2018). Clients' HL-competencies are context specific, and the HL measurement instruments should focus more on that specificity. Different measurement tools are needed for different age groups and life stages, even if the structure of the HL concept remains constant (Nutbeam, 2017).

Although it is evident from the literature that social determinants/education levels are related to functional health literacy, it is also known that interactive- and critical health literacy are context specific (Murugesu et al., 2018). Taking into account the context specificity of health literacy assessments, it is recommendable in practice to train health care providers' communication skills/competencies in order to use for example tools such as Teach Back method, to prove patients' understanding/comprehension. These trainings could provide a practical way to increase health care providers' capacity to identify and respond to patients' health literacy needs. Another important recommendation was to consider patients' capacity to act and not to focus only on capacity to think, read and understand information (Murugesu et al., 2018; Rademakers & Heijmans, 2018). Comprehensive multidimensional health literacy assessments that cover all dimensions of HL seem to

be more applicable in research projects and be less suitable as a context specific assessing tools in health care practice.

Another option that Health Care Professionals (HCPs), especially physiotherapists, can use in clinical practice but did not show up in the literature review is the Conversational Health Literacy Assessment tool (CHAT). It is used to identify patients' HL needs and preferences. Based on the domains of the HLQ, the CHAT was developed in which the HCPs use ten open-ended questions (e.g., Who do you usually go for health care?) to have a structured conversation with patients that target five HL domains (O'Hara et al., 2018). CHAT seems to be a feasible and efficient tool for assessing health literacy needs among individuals with different socio-demographic characteristics and with different diagnoses (Jensen et al., 2021) and can easily be adapted in the physiotherapeutic process.

For evaluation of digital health literacy, the Digital Health Literacy Instrument (DHLI) is available. It was not shown in the literature search, as it was found additionally during a hand search at a later stage. It is a self-assessment instrument with 21 items in seven domains and has additional performance-based components (van der Vaart & Drossaert, 2017). The digital health literacy measurement instruments are mainly based on respondents' self-report and are thus limited in their objectivity and validity. The DHLI could be an option for measuring digital health literacy, although validation studies suggest revision points.

4. Health literacy Assessments for older adults in Sri Lanka

Health literacy among older adults in Sri Lanka is an emerging area of focus, especially given the country's rapidly aging population. While specific, standardized health literacy assessments tailored exclusively for older adults are limited, several studies have explored related aspects such as medication adherence, social support, and quality of life, which are intrinsically linked to health literacy.

5. Health literacy Assessments for students

In the HELPE Project (Erasmus+ HELPE: 2020-1- AT01-KA203-HE-078086) two questionnaires to evaluate health literacy competences of physiotherapy students were developed: a questionnaire for pre/post assessment and a questionnaire as a reflection tool.

Health Literacy Questionnaire for students (Pre/Post Assessment):

This questionnaire is used to evaluate the health literacy competences of physiotherapy students. The questionnaire includes elements from the HL questionnaire and the video observation tool of the IMPACCT project and the 6-function model of medical communication (de Haes & Bensing, 2009). The questionnaire consists of 2 general questions and 47 items and covers the topics/learning outcomes:

(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

The entire questionnaire can be found in Appendix A.

Health Literacy Questionnaire: reflection tool

In the course of intensive discussions with students, experts, and colleagues, the need for a "checklist" for practical applications was expressed several times. Therefore, the video observation was included in the reflection questionnaire. The aim is to use it as a reflection tool during internships and practical training at the university.

The entire reflection questionnaire and observation tool can be found in Appendix B

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Appendix A Questionnaire for Students

Questionnaire: Your health literacy consultation and educational skills

INTRODUCTION

Dear Student,

We ask you to fill in this questionnaire on Health Literacy (HL) consultation skills. HL refers to the knowledge, motivation, and competencies of individuals to access, understand, and apply health information for taking decisions for their own health. Those abilities are influenced by various social, environmental, and educational factors.

Client groups with limited HL require an individual therapeutic and communication approach from the physiotherapist. To respond to this requirement, physiotherapists need to acquire solid HL competencies during their education.
Health literacy consultation skills are defined as the communication and teaching strategies that have been described as effective with limited health literacy clients. These include plain language communication, which is the avoidance of medical jargon, Teach-Back (let the clients explain the information in their own words to check understanding) and include skills related to shared decision making and promoting self-management.

In order to evaluate your HL competence in your physiotherapy bachelor studies, we will ask you about the following topics on different times during your study.

- General questions
- Your knowledge of health literacy

- Your consultation skills focused on health literacy
- Your opinion on using health literacy consultation skills (attitude)
- Your confidence in using health literacy consultation skills

We ask you to fill out this questionnaire two times: 1) before and 2) after HL competence training. Your answers are confidential and will be saved under your unique number. Answers will not be linked to your name or student number. For the quality of the research, we use different questionnaires. Because of this, some questions may look similar, and some response scales differ from each other. It takes about 15 minutes to answer the questions.

General questions

In which year of your study program are you?	o 1 o 2 o 3 o 4 o more
How many months of internship have you completed so far?	o 0-2 o 3-6 o 7-9 o 10-12 o 13-15

A. Knowledge about health literacy

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 **Strongly disagree**	**2**	**3**	**4**	**5** **Strongly agree**
1. I understand the challenges that clients with limited health literacy can have					
2. I know which groups are more likely to have limited health literacy					

3. I can name several health outcomes associated with limited health literacy					

B. I can adjust my communication and client educational skills to clients with limited health literacy

The following communication and educational skills have been described as effective with clients with limited health literacy/digital health literacy. Therefore, please indicate on which level you use the following health literacy communication skills during conversations with simulated clients or in internships/practices. Choose only one answer.

Fostering the relationship – I engage with the client in a personal though professional way					
	1 Never	**2 Rarely**	**3 Occasio-nally**	**4 Some-times**	**5 Every time**
4. I greet the client in a manner that is personal and friendly (e.g. ask client how s/he likes to be addressed, use client's name).					
5. I ask the client what he/she hopes to achieve by attending therapy.					
6. I attempt to elicit all of the client's concerns					
7. I show interest in how the problem is affecting the client's life					
8. I encourage clients to ask additional questions					
9. I consider working with a (professional) interpreter, if necessary.					

Gathering information – I have appropriate skills to identify and to gather adequate information from clients with limited health literacy					
	1 Never	**2 Rarely**	**3 Occasio-nally**	**4 Some-times**	**5 Every time**
10. I use instruments/ questionnaires to identify clients with limited health literacy					
11. I identify behavior typically exhibited by people with limited health literacy					
12. I consider limited health literacy: do you need help to fill in forms? Cues: missed appointments,					

excuses, and inconsistent information.					
13. I encourage the client to discuss his/her concerns by using active listening techniques (e.g., using various continuers such as Aha, tell me more, go on).					
14. I observe non-verbal cues to gather information about (not) understanding information					
15. I create a shame-free environment by using normalization.					
16. I am sensitive to and capable of gathering information about the illness beliefs and the possible influence of personal/ environmental problems on physical problems (and I explain these facts to the client)					
17. I ask about the (cultural) background and taboos of the client which may influence their (illness)believes about cause and treatment and their coping style					

Providing information – I have appropriate skills to provide clear information to people with limited health literacy					
	1 Never	**2 Rarely**	**3 Occasio-nally**	**4 Some-times**	**5 Every time**
18. I speak slowly and in short sentences					
19. I use plain, understandable, non-medical language					
20. I show or draw pictures					
21. I use nonverbal communication to support the given information					
22. I limit the amount of information provided and ask the client to repeat it					
23. I check if the client understands the information (teach back, show me, chuck and chunk techniques, ASK me 3)					
24. I pause after giving information with the intent of allowing the client to react to and absorb the information given					

25. I judge whether written health information is appropriate for clients with limited health literacy					
26. I involve the client in the process of examination and treatment, so that he/she knows what and why I am doing it					

Shared decision making – I involve clients with limited health literacy in shared decision making					
	1 Never	**2 Rarely**	**3 Occasio-nally**	**4 Some-times**	**5 Every time**
27. I confirm the request for help and indicate that I we will discuss the various treatment options together.					
28. I reassure the client that I will support and provide clear information, so that the client is enabled to participate in decision-making.					
29. I discuss the treatment options and the likely benefits, and harms of each option with the client.					
30. I support clients to explore 'what matters most to them', considering the client's: values, preferences and circumstances.					
31. I support the client to make an informed decision together (when necessary, after time to absorb and to discuss with significant others)					

Enabling self-management- I apply strategies adjusted to clients' level of health literacy to enable self-management					
	1 Never	**2 Rarely**	**3 Occasio-nally**	**4 Some-times**	**5 Every time**
32. I assess barriers and facilitators related to therapy compliance (e.g. illness believes, shame, level of education, influence of the family, taboos, cultural influences etc.)					
33. I involve the client in formulating personalized goals and action plans					
34. I use the influence of the social context in a beneficial way					

35. I check whether the follow up – plans for the subsequent sessions are understood and accepted					

Responding to emotions – I respond to verbal and nonverbal emotional expressions					
	1 Never	**2 Rarely**	**3 Occasio-nally**	**4 Some-times**	**5 Every time**
36. I openly encourage or am receptive to the expression of emotion (e.g., by using continuers or appropriate pauses (verbal or nonverbal signals indicating that it is okay to express feelings)					
37. I recognize emotional expressions					
38. I identify, verbalize and accept feelings					
39. I am open-minded and elicit clients' concerns and needs and explore possible taboos with them					

C. Awareness of own attitude towards using health literacy communication skills and/ or teaching strategies

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

D. My confidence in using health literacy communication and client educational skills

How confident are you in your ability to:	1 Not at all confident	2	3 neutral	4	5 Very confi-dent
40. adjust your communication and client educational skills to clients with limited health literacy					
41. engage with the client in a personal though professional way					
42. identify and gather adequate information from clients with limited health literacy					
43. provide clear information to clients with limited health literacy					
44. involve clients with limited health literacy in shared decision making					
45. apply strategies adjusted to the clients' level of health literacy to enable their self-management					
46. respond to verbal and nonverbal emotional expressions					
47. create a shame free environment for clients with limited health literacy					
48. stimulate clients with limited health literacy to manage their own health					

Thank you very much for your cooperation!

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Appendix B Reflection tool

Reflection Tool
Questionnaire & video observation: Your health literacy consultation and educational skills

INTRODUCTION

HL refers to the knowledge, motivation, and competencies of individuals to access, understand, and apply health
information for taking decisions for their own health. Those abilities are influenced by various social, environmental, and educational factors.

Client groups with limited HL require an individual therapeutic and communication approach from the physiotherapist. To respond to this requirement, physiotherapists need to acquire solid HL competencies during their education.
Health literacy consultation skills are defined as the communication and teaching strategies that have been described as effective with limited health literacy clients. These include, plain language communication, which is the avoidance of medical jargon, Teach-Back (let the client explain the information in their own words to check understanding) and include skills related to shared decision making and promoting self-management.

- Your knowledge of health literacy
- Your consultation skills focused on health literacy
- Your opinion on using health literacy consultation skills (attitude)
- Your confidence in using health literacy consultation skills

This tool is made to help you reflect on your own competences.
It consists of a combination of a questionnaire and a video-observation tool.

You can use the questions for self-assessment, peer-assessment, or teacher/ supervisor assessment as well in learning activities at school as during your internships.

General questions

In which year of your study are you?	o 1 o 2 o 3 o 4 o more
How many months of internship have you completed?	o 0-2 o 3-6 o 7-9 o 10-12 o 13-15

A. Knowledge about health literacy

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 Strongly disagree	2 Disagree	3 Neither agree/ nor disagree	4 Agree	5 Strongly agree
1	I understand the challenges that clients with limited health literacy can have					
2	I know which groups are more likely to have limited health literacy					
3	I can name several health outcomes associated with limited health literacy					

B. I can adjust my communication and client educational skills to clients with limited health literacy

The following communication and educational skills have been described as effective with clients with limited (digital) health literacy. Please indicate on which level you use the following health literacy communication skills during conversations with simulated clients or in internship/practices. Choose only one answer.

	Fostering the relationship – I engage with the client in a personal though professional way	1 Not present/ Acquired	2 Partially present/ acquired	3 Present/ acquired to a minimal degree	4 Clearly present and largely acquired	5 Fully present/ acquired
4	Client is greeted in a manner that is personal and friendly (e.g. asks how the client likes to be addressed, uses client's name).					
5	Determining what the client hopes to achieve by attending therapy.					
6	Attempts to elicit the full range of the client's concerns.					
7	Showing interest in how the problem is affecting client's life.					
8	Encouraging clients to ask additional questions.					
9	Consider working with a (professional) interpreter, if necessary.					
Examples from video observation						

Gathering information – I have appropriate skills to identify and to gather adequate information from clients with limited health literacy		1 Not present / acquired	2 Partially present / acquired	3 Present/ acquired to a minimal degree	4 Clearly present and largely acquired	5 Fully present / acquired
10	Using instruments/ questionnaires to identify clients with limited health literacy.					
11	Identifying behavior typically exhibited by people with limited health literacy.					
12	Considering limited health literacy: do you need help to fill in forms? Cues: missed appointments, excuses, inconsistent information.					
13	Encouraging the client to expand in discussing his/her concerns by using active listening techniques (e.g., using various continuers such as Aha, tell me more, go on).					
14	Observing cues related to non-verbal communication to gather information about (not) understanding information.					
15	Creating a shame-free environment by using normalization.					
16	Being sensitive and capable in gathering information about the illness beliefs and the possible influence of personal/ environmental problems on physical problems (and in explaining this to the client).					
17	Asking about the (cultural) background and taboos of the clients which may influence their (illness)beliefs about cause and treatment and their coping style.					
Examples from video observation						

Providing information – I have appropriate skills to provide clear information to people with limited health literacy		**1 Not present/ acquired**	**2 Partially present/ acquired**	**3 Present/ acquired to a minimal degree**	**4 Clearly present and largely acquired**	**5 Fully present/ acquired**
18	Speaking slowly in short sentences.					
19	Using plain, understandable, non-medical language.					
20	Showing or drawing pictures.					
21	Using nonverbal communication to support the given information.					
22	Limiting the amount of information provided and asks to repeat it.					
23	Checking if the client understands the information (teach back, show me, chuck and chunk techniques, ASK me 3).					
24	Pausing after giving information with intent of allowing client to react to and absorb it.					
25	Judging appropriateness of written health information for clients with limited health literacy.					
26	Involving the client in what and why I am doing during examination and treatment.					
Examples from video observation						

Shared decision making –	**1**	**2**	**3**	**4**	**5**

I involve clients with limited health literacy in shared decision making		Not present/ acquired	Partially present/ acquired	Present/ acquired to a minimal degree	Clearly present and largely acquired	Fully present/ acquired
27	Confirming the request for help and indicate that you will discuss the various treatment options together.					
28	Reassuring the client that you will support and provide clear information, so that the client is enabled to participate in decision-making.					
29	Discussing the treatment options and the likely benefits, and harms of each option with the client.					
30	Supporting clients to explore 'what matters most to them', considering the client's: values, preferences and circumstances.					
31	Supporting the client to make an informed decision together (when necessary, after time to absorb and to discuss with significant others)					
Examples from video observation						

Enabling self-management- I apply strategies adjusted to clients' level of health literacy to enable self-management		1 Not present/ acquired	2 Partially present/ acquired	3 Present/ acquired to a minimal degree	4 Clearly present and largely acquired	5 Fully present/ acquired
32	Assessing barriers and facilitators related to therapy compliance (e.g. illness beliefs, shame, level of education, influence of the family, taboos, cultural influences etc.).					
33	Involving the client in formulating personalized goals and action plans.					
34	Using the influence of the social context in a beneficial way.					

35	Checking the understanding and acceptance of the follow up – plans for next time.					
Examples from video observation						

Responding to emotions – I respond to verbal and nonverbal emotional expressions		**1 Not present/ acquired**	**2 Partially present/ acquired**	**3 Present/ acquired to a minimal degree**	**4 Clearly present and largely acquired**	**5 Fully present/ acquired**
36	Openly encouraging or is receptive to the expression of emotion (e.g., through use of continuers or appropriate pauses (signals verbally or nonverbally that it is okay to express feelings.					
37	Recognizing emotional expression.					
38	Identifying, verbalizing and accepting feelings.					
39	To elicit and be open-minded for clients' concerns and needs and explore possible taboos.					
Examples from video observation						

Which skills would you like to develop in the next months? How do you plan to practice these goals?

C. Awareness of own attitude towards using health literacy communication skills and/ or teaching strategies

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

D. My confidence in using health literacy communication and client educational skills

How confident are you in your ability to:		1 Not confident at all	2 Not confident	3 Neither confident nor not confident	4 Confident	5 Very confident
40	adjust your communication and client educational skills to clients with limited health literacy.					
41	engage with the client in a personal though professional way.					
42	identify and gather adequate information from clients with limited health literacy.					
43	provide clear information to clients with limited health literacy.					
44	involve clients with limited health literacy in shared decision making.					
45	apply strategies adjusted to the clients' level of health literacy to enable self-management.					
46	respond to verbal and nonverbal emotional expressions.					

47	create a shame free environment for clients with limited health literacy					
48	stimulate clients with limited health literacy to manage their own health.					

Which learning goals would you like to reach in the next months?

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