

The logo for eLILY2 features the text 'eLILY2' in a white, sans-serif font. The 'e' is lowercase and smaller than the 'LILY2'. The 'LILY2' is in all caps. The text is positioned over a white diagonal band that runs from the top-left towards the bottom-right. Along this band, there are several blue stars, similar to the European Union flag, arranged in a slightly curved line.

eLILY2

COMPERATIVE NATIONAL SURVEY REPORT

CYPRUS UNIVERSITY OF TECHNOLOGY
LIMASSOL, DECEMBER 2020



Co-funded by the
Erasmus+ Programme
of the European Union

COMPERATIVE NATIONAL SURVEY REPORT



PARTNERS

- **CYPRUS UNIVERSITY OF TECHNOLOGY:** Dr Areti Efthymiou, Dr Melina Evripidou, Ioanna Menikou , Dr Theologia Tsitsi, Dr Maria Karanikola, Dr Evridiki Papastavrou
- **NATIONAL AND KAPODISTRIAN UNIVERSITY OF ATHENS:** Dr Venetia Velonaki, Dr Athina Kalokairinou
- **UNIVERSITY OF HUMANITIES AND ECONOMICS IN LODZ:** Daria Modrzejewska, Amanda Aszukalska
- **OSTRAVA UNIVERSITY** Dr Jakub Dolezel, Dr Renata Zelenikova
- **KLAIPEDA STATE COLLEGE:** Eglé Brezgyté

CYPRUS UNIVERSITY OF TECHNOLOGY
LIMASSOL, DECEMBER 2020

TABLE OF CONTENTS

<i>COMPERATIVE NATIONAL SURVEY REPORT</i>	2
<i>PARTNERS</i>	2
Abstract	4
1. Introduction	5
National strategies on health literacy issues or policy networks.....	6
Published research on health literacy or ehealth literacy among nurses or other healthcare professionals.....	9
Erasmus + funded projects on the use of ict among nurses or other healthcare professionals.....	13
2. Literature review of health literacy students' curricula	15
Results.....	15
3. Integration of the results in the draft curriculum	18
Proposed eHealth literacy training modules	19
Proposed eHealth literacy training modules and sections	19
4. Conclusions	21
5. References	22

ABSTRACT

Health literacy and ehealth literacy training is a new and underdeveloped domain in nursing education field. The aim of this report is to propose a health literacy training program for nurses working with older people. The comparative national survey of each partner country was explored, including national strategies, published research, and funded projects in each country. Additionally, a review was conducted to find health literacy training in health professions education. As this report gives an overview on health and ehealth literacy research and curricula, its results were used to develop the proposed modules and sections of a health literacy and ehealth literacy training program for nurses working with older people.

1. INTRODUCTION

Low health literacy is associated with increased health care costs and negative health outcomes, such as high risk of mortality, frequent readmissions and difficulty to follow treatments plans (Mantwill & Schulz, 2015; Huang et al., 2020; Miller, 2016). The Office of the Disease Prevention and Health Promotion (2010) recognized the importance of health literacy and as a result, developed ‘The National Action Plan for Health Literacy’ which encourages the incorporation of the health literacy in the curriculum of the health care studies.

In an effort to enhance the nurses’ skills with regard to the empowerment of low health literacy patients, we have developed the eLILY2 project. a 2-years Erasmus+ funded project, aiming to provide a blended training programme (class sessions and elearning course) for nurses working with older people. The e-learning programme will facilitate the class goals and will include selected modules that will assist nurses training. The project is coordinated by the Cyprus University of Technology, founded in 2004, the leading university in Cyprus. Four other partners participate in the consortium: National and Kapodistrian University of Athens the leading academic institution in Greece with experts in the field of health literacy, University of Humanities and Economics in Lodz, one of the largest non-public universities in Poland and a pioneer of e-learning in the country, University of Ostrava, a public research university in Czech Republic with an extended research area, and Klaipeda State College the third largest university of applied sciences in Lithuania. All partners have an extensive research activity and involvement in national and international projects.

This report summarizes the comparative national surveys as provided by the Partners and introduce the first steps for the development of the draft curriculum.

All partners searched for their national strategies on health literacy issues or policy networks, published research on health literacy or ehealth literacy among nurses or other healthcare professionals, and Erasmus+ funded projects on the use of ICT among nurses or other healthcare workers in their country. Results of the five national searches are presented below. eHealth Literacy was initially defined by Norman, C.D. & Skinner, H.A. (2006) as a concept including 6 core dimensions: 3 analytic and 3 context specific: traditional, media and information literacy as analytic and computer, scientific and health literacy as context specific.

The specific framework is known as Lily framework and has accepted critic in recent years, as doesn't include parameters of Web 2.0 (C. Norman, 2011).

The most recent definition of eHealth literacy is : *The ability to locate, understand, exchange, and evaluate health information from online environments in the presence of dynamic contextual factors and to apply the knowledge gained across ecological levels for the purposes of maintaining or improving health* (Paige et al., 2018).

NATIONAL STRATEGIES ON HEALTH LITERACY ISSUES OR POLICY NETWORKS

In the **Cyprus** context, there is several national strategies in disease promotion and prevention domains, for a variety of topics such as, breast feeding, cancer, rheumatic diseases, rare diseases, smoking, diabetes, dementia, children' accidents and children's rights, and reproductive health of young people. The Health Literacy work in Cyprus, has been started by the Nursing Department of the Cyprus University of Technology. The first meetings held on health literacy was organized on 28-29th September 2017 by the Department, in an attempt to discuss the terminology in the framework of the PhD research: 'The Association of Health Literacy and Electronic Health Literacy with Self-Efficacy, Coping, and Caregiving Perceptions Among Carers of People With Dementia: Research Protocol for a Descriptive Correlational Study'. In the 2nd day, a consensus meeting was held with the participation of experts from Greece and Cyprus, including Barbara Kondili and Charalambos Magoulas, researchers of the HLS-EU project on behalf of Greece. The final decision on the terminology has been adopted by Greece and Cyprus.

Regarding **Czech Republic** national strategies on Health Literacy, the country has a 'National Strategy for Health Protection and Promotion and Disease Prevention', a policy framework of measures for public health. In this national strategy, health literacy is one of the key cross-sectional topics that permeate all three health areas: health care, disease prevention and health promotion. A Health Literacy survey was carried out in 2014 by the National Institute of Public Health (NIPH) for the implementation of the strategy, financially supported by the Czech Ministry of Health and the Czech WHO Country Office. The survey followed the HLS-EU comparative survey methodology, conducted in eight European member countries in the early

2010s. Health literacy was assessed in the areas of health care, disease prevention and health promotion. The survey concluded that 59.4% of participants had limited health literacy. In specific, 49.5% had limited health literacy in the health care domain, 54.1% in the disease prevention domain, and 64.3% in the health promotion domain. Furthermore, in 2015, a project called “Health Literacy of the Senior Citizens” was conducted, financed from the national budget through a Czech Ministry of Labour and Social Affairs programme “Support for Publicly Beneficial Activities of Nationwide Senior and Pro-Senior Citizen Organizations”. In addition, in 2015 and 2016, the “Health Literacy for the Public by Individual Age Groups” was carried out, financially supported by the Czech Ministry of Health through the National Health Programme – Health Promotion Projects. There is also the Institute for Health Literacy in Czech Republic, which is a non-profit organization that aims to promote and improve health literacy. In 2017, the institute organized the 1st National Conference on Health Literacy. It also coordinates activities of the Health Literacy Alliance whose mission is to promote communication between citizens and public administration workers, patients and health professionals, as well as those who make a joint effort to define the main problems in the area of health literacy and find useful solutions. Health literacy has also been actively dealt with, by some of the Czech universities such as the University of South Bohemia in České Budějovice, the Palacký University Olomouc and, to a limited extent, the University of Ostrava. On the internet, a Czech e-learning course on financial issues and health literacy for the public is freely available. This project was supported by Charles University and co-funded by the European Union and Czech national budget.

In the **Greece** context, there is not any national strategy strictly related to health Literacy. However, Greece is a part of the Action Network Measuring Population and Organisational Health Literacy (M-POHL), but not partner at the HLS19 project.

In **Poland**, there is a National Health Program (NHP), which is one of the main assumptions of the Act on Public Health, which started on December 3, 2015. Thanks to its implementation, Polish people are more aware of the importance of a healthy lifestyle and a pro-health behavior. The NHP is a strategic document for public health, and therefore the basis for activities in this area. The objectives of the NHP are the life extension, health-related quality of life improvement, and social inequalities in health reduction of Polish people. The operational goals of the program include the improvement of diet, nutritional status and physical activity;

the prevention and problem solving related to the use of psychoactive substance behavioral addictions, and other risky behaviors; the prevention of mental health problems and improvement of the mental well-being; the reduction of health risks resulting from physical, chemical and biological hazards in the external environment, workplace, residence, recreation and science; the promotion of healthy and active aging; and the improvement of reproductive health.

One of the key documents in **Lithuania** which emphasizes the importance of public health at the state level, is 'Lithuanian Health Program for 2014-2025'. It enshrines long-term commitments to a healthier society, sets goals and objectives for health activities, and achieves health indicators. The strategic goal of the Health Program is to achieve that in 2025 the country's population would be healthier and live longer, by creating a safer social environment, reducing health inequalities and social exclusion, creating a health-friendly physical work and living environment, and ensuring more efficient health care focused on the needs of the population. Furthermore, 2014-2020 period was provided to increase the physical activity of the population of the country, to develop healthy eating habits, to carry out harmful habits and prevention of mental disorders, to develop healthy lifestyles and health public infrastructure that increases literacy, promote the development of health knowledge, implement targeted goals measures to strengthen and preserve public health (Javtokas et al., 2014).

The Minister of Health of the Republic of Lithuania defines health literacy as cognitive and social skills that determine the motivation of individuals and competence to receive and understand information and to use it in all ways to strengthen and maintain good health. (Minister of Health of the Republic of Lithuania 2017 July 28 order no. V-918, Regarding Priority 8 of the Operational Program for Investment Funds of the European Union Funds for 2014–2020 Implementing Measures No. 1 "Increasing Social Inclusion and Combating Poverty" 08.4.2., - Description of funding conditions for ESFAR-630 projects "Promoting a healthy lifestyle at regional level" approval, TAR, 31/07/2017, No. 12847)".

PUBLISHED RESEARCH ON HEALTH LITERACY OR EHEALTH LITERACY
AMONG NURSES OR OTHER HEALTHCARE PROFESSIONALS

Authors, year	Aim	Target
Cyprus		
Christodoulou A., Ajzajian J., Su D., Wang H., Roupa Z., Farazi PA., 2019	The awareness of human papilloma virus and cervical cancer prevention among Cypriot female healthcare workers	Female healthcare workers
Evrpidou M. , Merkouris A. , Charalambous A., Papastavrou E.	To advance the level of knowledge, promote positive attitudes of nurses and reduce care deficits towards people with dementia through the implementation of a training programme.	Nurses
Antoniades A., Nicolaidou I., Spachos D., Mylläri J., Giordano D., Dafli E., Mitsopoulou E., Schizas CN., Pattichis C., Nikolaidou M., Bamidis P., 2015	(1) To describe one instantiation of the mEducator BPN solutions (mEducator3.0 - "MEDical Education LINked Arena" MELINA+) with a focus on the metadata schema used, as well as on other aspects of the system that pertain to usability and acceptance, and (2) to present evaluation results on the suitability of the proposed metadata schema for searching, retrieving, and sharing of medical content and with respect to the overall usability and acceptance of the system from the target users.	Four different countries (ie, Greece, Cyprus, Bulgaria and Romania), with a total of 126 participants.
Fountouki A. et al., 2012	Special article discussing the educational role of the nurses in a Greek Scientific Journal «Το βήμα του Ασκληπιού»	-
Prodromou M., Koukoularis I., Koutelekos G., Lavranos G. et TNP network, 2018	Development of a new tool in Health Professionals cultural sensitivity	Health professionals

Czech Republic		
Rolantová A., Kajanová, J. Maňhalová, 2019	To assess the health and the use of healthcare in association with health literacy in the Romany minority living in the Czech Republic.	Adults, Romany people
R. Belešová, D. Filausová, M. Trešlová, 2020	To compare the level of health literacy in selected groups of individuals, particularly in adults and the poor.	Adults aged 18-64 years old
Brabcová I., Hajduchová H., Šedová L., Bártlová S., Motlová, L., 2018	To assess the correlations among selected indicators in the elderly above 65 and their level of health literacy	Adults aged above 65 years with a permanent address in the South Bohemian Region
Filausová, M. Trešlová, M., 2018	To monitor the level of health literacy in relation to health status	Adults aged 18-70 years old
Greece		
Xesfingi S, Vozikis A., 2016	To assess the eHealth literacy level of Greek citizens, using the eHealth Literacy Scale (eHEALS), and to explore the factors that shape it and are associated with it	General population
Konstantinidis ST, Li S, Traver V, Zary N, Bamidis PD., 2017	To identify the actions needed to boost the acquisition of IT competences by healthcare workforce	Healthcare workforce
Efthymiou A, Middleton N, Charalambous A, Papastavrou E., 2019	To adapt the eHealth Literacy Scale (eHeals) for carers of people with dementia, who speak Greek as their native language and live in Greece and Cyprus, and to test the reliability and validity of the scale for carers.	Carers of People With Chronic Diseases
Efthymiou A, Middleton N, Charalambous A, Papastavrou E., 2017	To investigate the level of eHealth literacy and health literacy of primary and secondary carers of people with dementia, to explore the	Primary and secondary carers of people with

	association between health and eHealth literacy, as well as their association with the caregiving variables: self-efficacy, coping, and caring perceptions.	dementia in Cyprus and Greece.
Efthymiou A, Menikou I, Stylianides A, Geronikola N, Ilieva I, Kancheva I, Tagliani M, Seneca R, Mintus B, Sakka P, Papastavrou E., 2020	To integrate stakeholders' knowledge and expertise in a curriculum on eHealth Literacy Learning Skills among Carers of People with Dementia.	Carers of People with Dementia
Li S, Bamidis PD, Konstantinidis ST, Traver V, Car J, Zary N., 2019	To identify and prioritize actions needed to improve the IT skills of healthcare workforce across the EU	Healthcare workforce
Griebel L, Kolominsky-Rabas P, Schaller S, Siudyka J, Sierpinski R, Papapavlou D, Simeonidou A, Prokosch HU, Sedlmayr M., 2017	The evaluation of the eHealthMonitor (an eHealth approach that provides individual users with health information) in three European countries (Germany, Greece, and Poland) by medical professionals and laypersons with respect to numerous acceptance factors.	Highly educated people. Medical professionals (physicians and professional caregivers of dementia patients, physicians of CVD patients and physicians of COPD patients) and Laypersons (family caregivers of dementia patients, CVD patients, COPD patients as well as healthy citizens)
Poland		
Czerska I., 2015	The presentation of the tools of the modern patient service. Latest changes in the organization of the health care in Poland are discussed. The attention is paid to the development of the health care system computerization. New features, platforms and portals friendly and helpful to patients are presented. An aspect of the modern psychiatric care is also introduced. The future projects of the further modernization and improvement of the patient service are listed. Finally, the	

	problem of dehumanization of medicine as a consequence of excessive bureaucracy, digitization and commercialization of the health care is outlined.	
Małgorzata Pabiś M., Barbara Slusarska Mirosław Jerzy Jarosz, Danuta Zarzycka, 2010	To present the scope of the preparation of nurses for health education of patients in the Polish health care system.	245 professionally active nurses
Jurczak A., Prażmo J., Wieder-Huszla S., Branicka- Woźniak D., Brodowski J, Grochans E., 2017	To analyze opinions of patients and medical staff about e-health services	340 patients and medical staff in West Pomeranian Voivodeship
Lithuania		
Šveikauskas, 2005	To analyze health literacy education system	Patients and nurses
D. Zagurskienė, I. Misevičienė, 2010	To evaluate and to compare patients' opinions about health information given to patients by nurses, considering the patients' health literacy level	1030 patients and 436 nurses from two regions of Lithuania
Javtokas Z., Sabaliauskas R., Žagminas K., Umbrasaitė J., 2013	To examine the main sources of health information	General population
Health Training and Disease Prevention Center School of Health, 2018	To examine the health literacy of Lithuanian population	General population
Sąlyga, J. Kazlauskienė, L., Žiliukas, G. Majauskytė D, 2018	To define the link between outpatients' health literacy and harmony, and its connection with sociodemographic indexes	201 outpatients

ERASMUS + FUNDED PROJECTS ON THE USE OF ICT AMONG NURSES OR OTHER HEALTHCARE PROFESSIONALS

Title	Beneficiary or Partner	Description
Cyprus		
Erasmus+ Tender4Life	Cyprus University of Technology	Profiling of careworkers and blended training including humane and social care and ICT skills
Boosting the skills of youth to deal with stress at work	Centre for Advancement of Research and Development in Educational Technology Ltd- Cardet Http://Www.Cardet.Org/	BooStress developed a vocational training package to equip current and prospect young workers with stress management skills, in the context of health and safety framework, and build their capacity to address relevant challenges in their work environment.
EUROTEQ - clinical measurement literacy for EUROpean Transparency and EQuality in health	Neapolis University	The objectives of this project are to (i) develop, (ii) test (iii) implement and (iv) disseminate the training package for HCP, patient organisations and other relevant stakeholders, enabling them to facilitate person-centred care and support the inclusion of patient and public involvement, especially those from socially disadvantaged groups, in health research. A further objective is to produce a functional training programme, reflective of the sociocultural diversity across Europe. The project aims to make the training material accessible to a broad range of HCP and other relevant stakeholders and will do so through multi-mode delivery.

Czech Republic		
No related Erasmus+ project		
Greece		
eLily	<p>Cyprus University of Technology, Cyprus</p> <p>Athens Association of Alzheimer's Disease and Related Disorders, Greece</p> <p>Szczecińska Szkoła Wyższa Collegium Balticum, Poland</p> <p>Alzheimer Bulgaria, Bulgaria</p> <p>Anziani e non Solo, Italy</p>	To enhance ehealth literacy learning skills among carers of older people and people with dementia
Poland		
Digital & Innovation Skills Helix in Health	Fundacja Klaster Lifescience Krakow	
Lithuania		
No related Erasmus+ project		

2. LITERATURE REVIEW OF HEALTH LITERACY STUDENTS' CURRICULA

As a second step and after the comparative surveys among the project partners, a literature review was conducted using a combination of online and offline procedures to find resources locating health literacy curricula for nursing students. Electronic search included CINAHL and PsycInfo databases. The search terms used included combinations of the following phrases or keywords: “health literacy”, “ehealth literacy” AND “health professional student* AND “nurs* OR pharmac* OR doctor*OR medic*,curricul* OR “course outline”. The titles and abstracts from the searches were analyzed to identify those that met the eligibility criteria: papers on health literacy or ehealth literacy curriculum offered to health field students. The articles which met the inclusion criteria were included in the study, and references from retrieved articles were examined for additional studies.

Moreover, universities' and organizations' websites published in Greek or English language were examined for health literacy or ehealth literacy courses delivered online, face to face, or blended.

Finally, offline search procedures included the review of national health studies curricula in a variety of universities or organizations, and the review of health literacy applications.

The review procedure lasted one month (October).

RESULTS

Electronic database search retrieved 13 studies which met the inclusion criteria. Additionally, we identify five ERASMUS+ projects aiming in the health literacy and ehealth literacy education in health professional students. In total, literature search retrieved 18 studies. In the tables below, studies characteristics of the included papers and projects are presented (table 1 & table 2).

AUTHORS/ YEAR	COUNTRY	POPULATION	TRAINING DESCRIPTION
Bloom et al., 2015	USA	4 th year medical students	Interactive workshop on screening tools and communication techniques in caring for patients with low HL
Cailor & Chen, 2015	USA	1 st year pharmacy students	HL and cultural competency concepts were integrated throughout 3 concurrent courses: self-care, introduction to pharmacy practice, and pharmacy practice lab
Chen et al., 2013	USA	3 rd year pharmacy students	Class presentation, in-class activities, and videos on HL definition and importance, tools for assessing HL, evaluation of written materials
Devraj et al., 2010	USA	3 rd year pharmacy students	As a part of the 'Health promotion and literacy' course. It addresses themes such as HL measurement, communication with people with low HL, assessment of written materials
Farrell, 2011	USA	Medical students and interns	Workshop on HL and communication with people with limited HL
Ha & Lopez, 2014	USA	3 rd year pharmacy students	As a part of the laboratory course 'Applied pharmacy care V'. It addressed themes such as HL and patient safety, risk factors for limited HL, identifying people with limited HL
Harper et al., 2007	USA	Medical students	Impact of HL, screening tests for HL, communication with people with low HL
Hernes, K & Ott, V., 2018	USA	Undergraduate nursing students	Communication with patients with limited HL
Jackson et al., 2010	USA	Dental students	Oral HL and how to assess written materials

Mantzagania n et al., 2017	USA	Pharmacy students	HL definition, impact of low HL, identifying people with limited HL, assessment tools for HL, assessment of written materials, communication with people with limited HL
Ogrodnick, MM et al., 2020	USA	1 st year respiratory therapy students	HL concept, communication with people with limited HL
Coleman et al., 2016	USA	1 st year medical students	HL epidemiology, health communication, strategies improving spoken and written communication
Beyer & Thomson, 2016	USA	Postgraduate nutrition students	Online module on evaluation of internet health information and web-based health resources, assessment of HL, spoken and written communication with patients with low HL

Table 1. Studies characteristics of the electronic search

Project Name	Aim
eHealth Eurocampus	To support the development of innovative teaching material and activities that will improve the relevance and quality of higher education in the field of eHealth by adapting curricula to labour market needs, while providing students with skills of entrepreneurship through innovative and learner-centred methods
HIS4HE	The eHealth Eurocampus supports the development of innovative teaching material and activities that will improve the relevance and quality of higher education in the field of eHealth by adapting curricula to labour market needs, while providing students with skills of entrepreneurship through innovative and learner-centred methods.
CERF	The European Reference Framework (ERF) identifies and defines, for the first time at the European level, those eight (8) Key Competences (KC)

	that citizens require for their personal fulfillment, social inclusion, active citizenship and employability in our knowledge-based society
IC-HEALTH	4 UNITS: Introduction to digital health literacy, co-creation : Knowledge base, Co-creation in IC-Health, Results of co-creation process
LEARNING FOR LIFE	Learning for Life is an education initiative that promotes healthy lifestyle behaviours and builds digital health literacy skills among intermediate elementary students and families, in BC. Learning for Life provides students with competencies to use technology to support their health, to critically assess information provided through technology, and to balance technology usage with the promotion of healthy lifestyle behaviours, using up to date Canadian guidelines.

Table 2. ERASMUS+ Projects characteristics

3. INTEGRATION OF THE RESULTS IN THE DRAFT CURRICULUM

All the members of Cyprus University of Technology team discussed the findings of the literature review, integrated the information found from other health literacy curricula and concluded to four proposed modules. These modules will be used to receive feedback and obtain the opinion of health literacy experts during the eDelphi survey. After that, the modules and their contents will be readapted taking into consideration the information retrieved by experts in the field.

PROPOSED EHEALTH LITERACY TRAINING MODULES

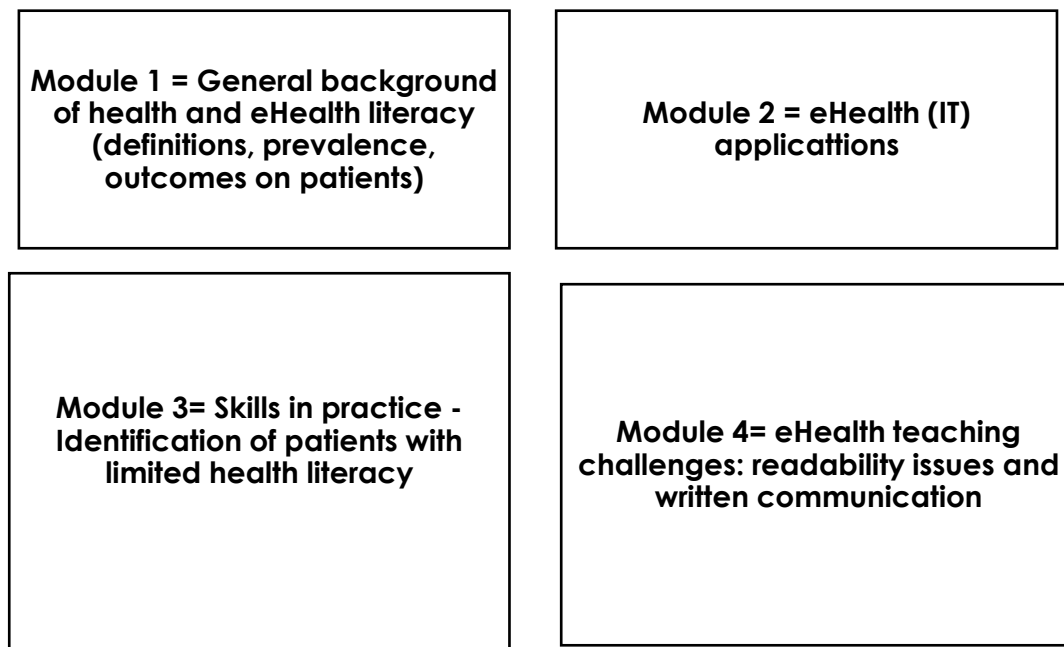


Fig 1. The first version of eHealth literacy training among nurses working with older people

PROPOSED EHEALTH LITERACY TRAINING MODULES AND SECTIONS

Suggested Training Modules	Suggested Sections
1. General background of health and eHealth literacy (definitions, prevalence, outcomes on patients)	1.1 Most common theories and definitions of Health literacy / Compare and contrast literacies
	1.2 Introduction to eHealth Literacy/ eHealth literacy training skills (Use and operate media, information and seeking skills)/Learn how to search reliable online health information and scientific resources
	1.3 Factors associated with HL and HL epidemiology
	1.4 Impact of low health literacy on patient outcomes, health system, and costs
	1.5 HL and Patient Safety (e.g. medication adverse events, medication use)
2. eHealth (IT) applications	2.1 Discussing available technologies for rehabilitation (globally/nationally) examples
	2.2 Robotics on eHealth (globally/nationally) supporting older people

	2.3 Assisted living technologies(globally/nationally) supporting older people
	2.4 Privacy and security issues (e.g. exchange of information, personal data, medical data)
3. Skills in Practice - Identification of patients with limited health literacy	3.1 Learn how to administer the most used instruments for measuring health literacy and eHealth available nationally
	3.2 Training on how to identify common signs that indicate low health literacy/ •Observation of patient behavior / •Training on how to recognise the key differences between skilled and poor readers
	3.3 Communicate and cooperate with low health literacy adults (Oral and written communication)- • Best practices- skill-building workshop (use of plain language, teach-back method, AkaMe3-training programme encouraging patients and families to ask 3 specific questions to providers)
	3.4 Communication skills of social media
4. e-Health teaching challenges: readability issues and written communication	4.1 How to produce and present information material (lectures, printed material, discharge instructions, leaflets, health forms, use of pictures, create a pill card for the patient) for low health literacy adults
	4.2 Learn and teach how to identify "plain language" resources/ and evaluate the difficulty of written material with common tools to assess written material
	4.3 Overview of prescription labeling laws available from international and European organisations (or nationally)
	4.4 Methods for verification of patient understanding of health care information taught (actionability and uderstandability, misunderstandings and misinterpretations of information cited in the literature, dosage instructions using patients testimonials)
	4.5 Available interventions (exercise: Design an intervention)
	4.6 Cultural aspects and strategies to promote HL and eHL (explain the need for healthcare professionals to be culturally competent/ health beliefs on self-care, communicate with a culturally diverse patient, cross-communication challenges, identify how race and culture relate to health

4. CONCLUSIONS

In conclusion, the comparative national survey of each partner and a literature review were used as a framework to develop a draft health literacy and ehealth literacy curricula for nurses working with older people.

Consistent with our findings were the results of a systematic review conducted to identify health literacy training interventions in health professions education (Saunders et al., 2019). Twenty-eight studies were included in the systematic review. Most of them were from USA. There was a variation on health students' disciplines, such as medicine, pharmacy, physiotherapy, nutrition, dentistry. Pharmacy students was the most frequent target group, while nursing students represented only 10% (n=3) of the studies included in the review. The training interventions varied in terms of instructional approaches and number of training sessions. Given the fact that the findings of our review are in accordance with a previous systematic review, the theoretical framework used to develop the material of the suggested curricula is appropriate and well-established. However, a more systematic review will follow targeted in nurses and nursing students.

5. REFERENCES

- Beyer, C., and Thomson, JS. (2016). Promoting health literacy within a graduate-level nutrition curriculum. *Emerald Group Publishing Limited*, vol.44(2), pp.122-131.
- Bloom-Feshbach, K., Casey, D., Schulson, L., Gliatto, P., Giftos, J., and Karani, R. (2015). Health literacy in transitions of care: an innovative objective structured clinical examination for fourth-year medical students in an internship preparation course. *Journal of General Internal Medicine*, vol.31(2), pp.242-246.
- Cailor, S.M., and Chen AMH. (2015). Immediate and longitudinal effects of incorporating health literacy and cultural competency into a yearlong pharmacy curriculum. *Currents in Pharmacy Teaching and Learning*, vol.7, pp.292-301.
- Chen, AMH., Noureldin, M., and Plake, KS. (2013). Impact of a health literacy assignment on student pharmacist learning. *Research in Social and Administrative Pharmacy*, vol.9, pp.531-541.
- Coleman, CA., Perry, SP., and Bumsted, T. (2016). Long-term effects of a health literacy curriculum for medical students. *Family Medicine*, vol.48(1), pp.49-53.
- Devraj, R., Butler, LM., Gupchup, GV., and Poirier, TI. (2010). Active-learning strategies to develop health literacy knowledge and skills. *American Journal of Pharmaceutical Education*, vol.74(8).
- Farrell, TW. (2011). Review of a geriatric health literacy workshop for medical students and residents. *Journal of American Geriatrics Society*, vol.59, pp.2347-2349.
- Harper, W., Cook, S., and Makoul, G. (2007). Teaching medical students about health literacy: 2 Chicago initiatives. *American Journal of Health Behavior*, vol.31(suppl. 1):S111-S114.
- Ha, H., and Lopez, T. (2014). Developing health literacy knowledge and skills through case-based learning. *American Journal of Pharmaceutical Education*, vol.78(1).
- Hernes K., and Ott, V. (2018). Health literacy education for undergraduate health professions students: a call to action. *Health Literacy Research and Practice*, vol.2(3):e163-e165.
- Huang, Y.M., Pecanac, K.E., Shiyanbola, O.O. (2020). “Why am I not taking medications?” Barriers and facilitators of diabetes medication adherence across different health literacy levels. *Qualitative Health Research*, vol.30(14), pp.2331-2342.
- Jackson, RD., Coan, LL., Hughes, E., and Eckert, GJ. (2010). Introduction of health literacy into the allied dental curriculum: first steps and plans for the future. *Journal of Dental Education*, vol.74(3), pp.318-324.
- Mantwill, S. and Schulz, P.J. (2015). Low health literacy associated with higher medication costs in patients with type 2 diabetes mellitus: evidence from matched survey and health insurance data. *Patient Education and Counselling*, vol.98(12), pp.1625-1630.
- Mantzaganian, C., Friscovsky, E., Best, BM., Singh, RF. (2017). An interactive, multifaceted approach to enhancing pharmacy students’ health literacy knowledge and confidence. *American Journal of Pharmaceutical Education*, vol.81(2).
- Miller, T.A. (2016). Health literacy and adherence to medical treatment in chronic and acute illness: a meta-analysis. *Patient Education and Counseling*, vol.99, pp.1079-1086.
- Norman, C. D., & Skinner, H. A. (2006). eHealth literacy: Essential skills for consumer health in a networked world. *Journal of Medical Internet Research*. <https://doi.org/10.2196/jmir.8.2.e9>.

- Ogrodnick, MM., Feinberg, I., Tighe, E., Czarnonycz, CC., and Zimmerman, RD. (2020). Health-literacy training for first-year respiratory therapy students: a mixed-methods pilot study. *Respiratory Care*, vol.65(1), pp.68-74.
- Saunders, C., Palesy, D., and Lewis, J. (2019). Systematic review and conceptual framework for health literacy training in health professions education. *Health Professions Education*, vol.5, pp.13-29.



Co-funded by the
Erasmus+ Programme
of the European Union

2020-1-CY01-KA202-065962