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Health literacy in Europe

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I. Background

In recent years, the interest in 'health literacy' (HL) has notably increased across modern health societies.

Almost every people life aspect deals with issues about health and citizens whom are expected to actively take a wide range of health decisions for themselves and their families; this includes decisions on health behaviors, nutrition, medication, choice of providers and treatments [1,2,3].

In this context, several studies have been published on this topic but there is no unanimously accepted definition of the concept. According to a systematic review, a comprehensive definition capturing the essence of the 17 definitions identified in the literature could be as follows: *"Health literacy is linked to literacy and entails people's knowledge, motivation and competences to access, understand, appraise, and apply health information in order to make judgments and take decisions in everyday life concerning healthcare, disease prevention and health promotion to maintain or improve quality of life during the life course"* [3].

Many studies have also focused on developing and validating generic measurement instruments to assess Health literacy in the European and extra-European area.

A literature review published in 2014 shows that, from an overall perspective, almost all identified instruments apply a multi-dimensional measurement (often print and numeracy literacy) and most of them utilize a mixed measurement approach (objective and subjective measurement) with a multidimensional construct enhancing the comprehensiveness of tools measuring health literacy [4].

Why is health literacy so important? Because low health literacy is associated with several adverse health outcomes, including low health knowledge, increased incidence of chronic illness, poorer intermediate disease markers, and less than optimal use of preventive health services.

Particularly, in a recently updated review, limited health literacy has been "consistently associated with increased hospitalizations, greater emergency care use, lower use of mammography, lower receipt of influenza vaccine, poorer ability to demonstrate taking medications appropriately, poorer ability to interpret labels and health messages, and, among seniors, poorer overall health status and higher mortality" [5].

Given these relevant implications, the concept of health literacy has remarkably gained recognition as well as the important consideration to design materials and tailored programs for addressing gaps and improving health, both at the global and local level.

Indeed, as the same time as building policies and planning interventions to support the strengthening of limited health literacy, an appropriate and valid measurement of health literacy in medical-epidemiological research is essential [2].

In this research, we aimed to provide a comprehensive measurement of the health literacy in the European countries and then highlight the main needs for interventions.

II. Searching for evidence

Methodology

The search process was carried out in two steps.

The first step consisted of a systematic review of the literature in order to identify all the available data on the topic. The literature review was performed between March 2018 and April 2018 through the main electronic databases PubMed and Scopus.

The search string used was [(health literacy*) OR (health* AND literacy*) AND europ*].

For the detailed search strategy, see Annex 1: Flowchart PRISMA.

Eligibility criteria. Articles were considered eligible if the study focused on measuring the health literacy level in European countries and were in English language. No restrictions were applied to type of publication (e.g. editorials papers, short reports, systematic review, conference proceedings, commentaries, books reviews, dataset).

Study selection. A total of 1126 articles were retrieved from electronic databases and records published after 2000.

After removing duplicates, 656 articles were screened for titles/abstracts and 627 were excluded because not relevant.

Two authors reviewed abstracts and full texts of the resulting 29 articles and 8 articles were further excluded with reasons (out of topic, not providing sufficient details).

Disagreements were resolved by a third reviewer who approved the final list of 21 articles.

Data collection. In the second step, two authors independently extracted data and results from the included articles using a summary table to identify the key points of each article; the most relevant themes were discussed with a third researcher.

Results

At the end of our literature search, 21 articles were included in this systematic review.

With the aim of illustrating the health literacy level in European countries, the analysis of the included studies focused on the country/countries considered in the study, the characteristics of the population (i.e. general population), the instrument used to measure health literacy and the results of each study [Table 1].

a) Measurement tools for health literacy

Health literacy can be measured and assessed at different levels, but it is difficult to structure a tool that takes into account the full set of skills and knowledge associated with it; a valid measure of health literacy, indeed, should allow comparison across cultures, population groups and living environment.

Most of the developed instruments are commonly used to directly measure an individual's literacy in relation to health outcomes and almost all instruments apply a multi-dimensional measurement and a mixed measurement approach (objective and subjective measurement).

Recently, some researchers have attempted to evaluate health literacy with simple screening questions or health-related oral literacy rather than administering entire questionnaires. On the other hand, computer-assisted testing is a promising tool because it allows more accurate measurement of individual capacity and it is comprehensive of the core literacy skills (reading, writing, speaking, listening).

Given the variety and heterogeneity of available instruments, an overview of the most popular tools is showed below.

The European Health literacy survey tool (HLS-EU)

The European Health literacy survey tool [6] is a survey available in more versions. The core version includes the 47 matrix items related to 12 subdomains and it is called **HLS-EU-Q47**. The version **HLS-EU-Q86** includes the HLS-EUQ47 as well as a background section with items relating to selected health literacy determinants and outcomes as described in the HLS-EU conceptual model. It also entails the items from the Newest Vital Sign in order to measure functional health literacy.

A shorter version has been prepared as a result of the analysis of the European Health Literacy Survey data. It contains 16 selected items which is called **HLS-EU-Q16**. Another 25-item version has been proposed and used recently and it is called **HLS-EU-Q25**.

All the different versions are used to assess four dimensions of health literacy: access, understanding, appraisal and application of health information in three different situations/domains: health promotion, disease prevention and cure of disease. Participants are asked to assess, in a scale ranging from 1 (unable, implying least health literacy score) to 5 (without any difficulty, maximal health literacy score), their level of difficulty with regard to access, understanding, appraisal and application of health information.

The General Health Literacy Score is calculated as follows: 0-25 “inadequate”; 25-33 “problematic”; 33-42 “sufficient”; 42-50 “excellent” and it is used to assess the general HL level.

The Health literacy Questionnaire (HLQ)

The Health literacy Questionnaire (HLQ) [7] consists of 44 questions and can be either self-administered or orally administered. The HLQ assesses nine dimensions and provides nine scale scores. Each score gives insight into the strengths and limitations of the respondent, but the scores are most powerful when viewed together to show the ‘health literacy profile’ of the respondent.

Test of Functional Health Literacy in Adults (TOFHLA)

The TOFHLA [8] is a 2-part test that is available in both English and Spanish.

The first part provides participants with medical information or instructions about various scenarios, such as instructions on a prescription label or instructions about preparation for a diagnostic procedure. Participants review the scenarios and then answer questions that test their understanding of the information in the scenarios.

The second part of the TOFLHA is based on the Cloze method in which participants are given passages of text about medical topics with selected words deleted and replaced with blank spaces. The participants must fill in the blank spaces using words selected from a multiple-choice list of options, identifying the words most appropriate to the context of the passage. TOFHLA scores can range from 0 to 100, with higher scores indicating better literacy.

Score of <60 represents ‘inadequate’ literacy, 60 to 74 represents ‘marginal’ literacy, and >75 represents ‘adequate’ literacy.

Rapid Estimate of Adult Literacy in Medicine (REALM)

The REALM [9] is a word-recognition test in which patients are presented with a list of 66 medical words beginning with easy words (e.g. fat, flu, pill) and progressing to more difficult words (e.g. osteoporosis, impetigo, potassium). Patients are asked to read through the list and pronounce each word out loud.

The examiner scores the patient on the number of words pronounced correctly. No attempt is made to determine if patients actually understand the meaning of the words. The number of correctly pronounced words is then used to assign a grade-equivalent reading level. Scores 0 to 44 indicate reading skills at or below the 6th grade level, scores from 45 to 60 represent skills at the 7th or 8th grade level, and scores above 60 indicate skills at the high-school level or higher. Because so many patient handouts and forms are written at the high-school level or higher, patients with scores ≤ 60 are considered at risk for misunderstanding written information provided to them.

Newest Vital Sign (NVS)

This tool [8] was developed from a series of scenarios. Patients were given health-related information, which the patients read and then demonstrated their ability to use the information by answering questions about the scenarios. The questions were scored as either correct or incorrect according to a scoring key provided to the interviewers. The score associated with the correct answers, ranging from 0 (minimum) to 6 (maximum), indicate the overall level of health literacy of the subject.

Set of Brief Screening Questions (SBSQ)

This tool [10] consists of three statements. Responses are scored on a 5-point Likert scale from 0 to 4, added, and averaged. The response of 'somewhat' or less provided optimum sensitivity and specificity and is considered as an optimal screening threshold in most studies. This means that an average score of 2 indicates inadequate health literacy, and a score >2 indicates adequate health literacy. Several versions of this instrument have been developed and adopted recently, each with only one question. chosen to detect an inadequate level of HL.

Functional Communicative and Critical Health Literacy scale (FCCHL)

Communicative health literacy refers to the cognitive and literacy skills which, together with social skills, can be used to actively participate in everyday activities, to extract information and derive meaning from different forms of communication and to apply new information to changing circumstances. Critical health literacy refers to the more advanced cognitive skills which, together with social skills, can be applied to critically analyze information, and to use this information to exert greater control over life events and situations. The FCCHL [11] measures these three constructs by 14 statements using 4-point Likert scales (1–4) as response options.

The total score is obtained by summing item scores and dividing by the total number of items.

The Short Assessment of Health Literacy for Spanish Speaking Adults (SAHLSA)

The SAHLSA [12] includes 50 items that explore recognition and comprehension of common medical terms, using multiple-choice questions designed by an expert panel. The SAHLSA-50 score is associated with the physical health status of Spanish-speaking participants and has shown good internal reliability and test-retest reliability.

The SAHLSA score ranges from 0 to 50 and a higher score indicates higher HL.

Short Assessment of Health Literacy for Brazilian Portuguese-speaking Adults (SAHLPA)

It is a shorter and translated version of the SAHLSA. All the correct responses score 1 point and all the other responses score 0 points, thus SAHLPA-18 and SAHLPA-23 scores range between 0 and 18 points and 0 and 23 points, respectively [13].

b) Health literacy in European countries

Most of the 21 studies included in this systematic review focused on the health literacy assessment of one country each, except for two large surveys [15,16] that were conducted in more countries at the same time.

Only one study [16] concerned eHealth literacy instead of general health literacy and therefore its results are described separately.

For the other studies, the results are reported by country.

Albania. *Toci et al.* [17], in 2014 used a questionnaire to assess HL level in a sample of 239 individuals in Albania, consisting of three parts: general demographic and socioeconomic information; HL questionnaire based on HLS-EU-Q47 instrument; HL questionnaire based on the TOFHFLA instrument. Overall, mean value of TOFHFLA was 76.32 ('adequate') and mean value of general HLS-EU-Q was 32.8 ('problematic'). In 2015, the same authors [18] evaluated the HL level in a larger sample of 1154 individuals aged ≥ 18 years and showed that this country had a 'sufficient' level of HL (mean: 34.4) according to the General Health Literacy score of the European Health Literacy survey with 47 items (HLS-EU-Q47).

Austria. *Sorensen et al.* [15], describing the results of the huge European Health Literacy project which involved 8 EU countries, showed that Austria had an 'inadequate' level of HL (mean: 31.95) according to HLS-EU-Q86.

Belgium. *Vandenbosch et al.* [19] used the HLS-EU-Q16 tool to assess HL level in Belgium. A score of 0 to 8 is considered as indicating 'insufficient' health literacy, a score between 9 and 12 as 'limited' health literacy, and a score of 13 or more as 'sufficient' health literacy. On a sample of 9617 individuals, the majority of people (58.5%, N=5629) had a 'sufficient' HL level.

Bulgaria. Bulgaria was one of the 8 EU countries involved in the European Health Literacy Project. *Sorensen et al.* [15] reported that this country had an 'inadequate' HL level (mean: 30.50) according to HLS-EU-Q86; it was the lowest mean of the 8 countries investigated in the project.

Denmark. In 2015, *Emtekær Hæsum et al.* [20] assessed the HL level in Danish patients with chronic obstructive pulmonary disease using TOHFLA tool: these 42 patients were categorized as having an 'inadequate' level of health literacy with a mean score of 47.09 (26.2%, N=11), as having a 'marginal' level of health literacy with a mean score of 67.38 (19.0%, N=8) and the majority of them as having an 'adequate' level of health literacy with a mean score of 86.30 (54.8%, N=23). A few years later, *Aaby A.* [21] assessed HL level in 3116 individuals with cardiovascular diseases.

Only two of the nine subscales of HLQ tool were included in the survey, namely “Understanding health information well enough to know what to do” and “Ability to actively engage with healthcare providers”. Scale scores were calculated as the mean score of the number of items answered in that particular subscale: “Understanding health information well enough to know what to do” mean was 2.92; “Ability to actively engage with healthcare providers” mean was 2.97. Both of them indicate an ‘adequate’ level of HL.

Germany. *Sorensen et al.* [15] in 2015 showed that globally the general population in Germany had a ‘sufficient’ (mean: 34.49) HL level according to HLS-EU-Q86 and 46.3% of the sample had a limited HL level. Two years later, *Schaeffer D.* [22] used the HLS-EU-Q47 tool to assess again the HL level in 2000 German people and in his study this percentage was higher, around 54.3%.

Greece. *Sorensen et al.* [15] showed in their survey that the Greek general population had a ‘sufficient’ (mean: 33.57) HL level and that 13.9% of the sample had ‘inadequate’ level of HL according to the HLS-EU-Q86 tool. Similar to that result *Efthymiou et al.* [23], in 2017, showed that only the 8.4% of a sample of 107 older Greek people had an ‘inadequate’ HL level.

Italy. In 2015, *Palumbo et al.* [24] validated the HLS-EU-Q86 survey in the Italian context and showed that the HL level in a sample of the Italian general population (N= 1000) was ‘inadequate’ in 17,3%, ‘problematic’ in 37,3%, ‘sufficient’ in 39,5% and ‘excellent’ in 5,9%. The mean HL score was 31.6, below the European score.

Kosovo. *Toci et al.* [25], in 2014, used a 25-item questionnaire derived from the HLS-EU-Q47 to assess the HL level in a sample of 1730 people aged > 65 years. The mean value of the overall health literacy score was 76.5 (minimum: 25 - maximum:125) indicating a low health literacy level; moreover, all subscale scores (access, understanding, appraisal and application) were significantly lower among individuals who perceived a poorer health status or with a presence of chronic conditions.

Ireland. This country resulted to have a ‘sufficient’ HL level (mean: 35.16) in the HLS-EU-Q86 survey described by *Sorensen et al.* [15] in 2015 where it was ranked among the countries with the highest health literacy level.

Netherlands. *Fransen et al.* [26], in 2011, enrolled 289 patients, 201 with coronary artery disease (CAD) and 88 with type 2 diabetes mellitus (T2DM), to measure their HL level using several tools at the same time.

According to the REALM-D scores, only 19% of the patients had difficulty reading (defined as a 7-8th grade-equivalent reading level). It also showed a ceiling effect with 23% of the patients exhibiting the maximum score of 66.

In the NVS-D test, 56% of the patients scored one or no items correctly, which suggested a high likelihood of low health literacy. Moreover, 31% of the patients did not answer any of the six items correctly, indicating a floor effect.

In the FCCHL-D test, 72% of the patients scored 3 points or less, indicating low subjective health literacy.

In the SBSQ-D test, 5% of the patients scored low, indicating low subjective health literacy as defined by this measure.

In this case, the SBSQ-D showed a ceiling effect with 42.5% of the patients exhibiting the maximum score.

Two years later, *van der Heide et al.* [27], in 2013, used HLS-EU-Q47 to assess HL level in the Netherlands. Concerning the four competences of accessing, understanding, appraising and applying health information, the mean scores were considered 'sufficient' except for applying that registered a 'problematic' score. The mean scores per item were however all close to 3 (equal to being perceived as easy).

In line with these results, *Sorensen et al.* [15] reported the Netherlands as the country with the highest mean (37.06) in the HLS-EU-Q86 survey compared to the other seven EU countries and the lowest percentage of people with 'inadequate' HL (1.7%). In the same year, *Husson et al.* [28] confirmed again these findings: assessing the prevalence of health literacy (HL) among 1626 colorectal cancer (CRC) survivors, they showed that only 224 patients (14%) had low subjective HL, 725 patients (45%) had medium HL and 677 patients had a high HL (42%).

Poland. *Sorensen et al.* [15] in 2015 showed that the Polish general population had a 'sufficient' HL level (mean= 34.45) compared to the other seven EU countries. *Slonska et al.* [29], in the same year, analyzed data coming from this part of the HLS-EU-Q86 Project to assess the HL level in elderly people. They found that the elderly aged 65 and more were at highest risk of low health literacy. In fact, the highest percentage (61.3%) of people with 'limited' health literacy was found in the elderly aged 65 and more.

Portugal. In 2016, *Espanha et al.* [30] validated the HLS-EU-Q86 survey used in the European Health Literacy Project. They showed that in the case of the General Health Literacy Index, Portugal was characterized by the presence of 11% of respondents with an 'inadequate' level of health literacy, around 38% with a 'problematic' HL, 8.6% with an excellent HL and 41.4% with a 'sufficient' level of health literacy. Compared to the HLS-EU data, Portugal is situated below the average for the countries in the European study. In accordance with this result, one year later, *Paiva et L.* [31] assessed the HL level in Portugal using the Portuguese adapted version of the instrument NVS. The sample analyzed included physicians (N=53), health researchers (N=45), other researchers (N=50) and the general population (N=101). They found that while physician, health researchers and other researchers had an 'adequate' HL level (100% and 88.9%, respectively), only the 18.8% of the general population had that same HL level and the 57.4% were classified as having an 'high likelihood of limited HL'. The same findings were showed also by *Pires C. et al.* [32] in 2018 when they assessed HL level in a sample of 484 Portuguese adults, showing that around half the participants (53%) were classified as having 'inadequate' health literacy with the SAHLPA-23.

Spain. *Sorensen et al.* [15] in 2015 showed that Spain in the HLS-EU-Q86 Project had globally a 'sufficient' HL level (mean=32.88) compared to the other seven EU countries with one of the lowest percentages of 'inadequate' HL (7.5%).

Switzerland. *Franzen et al.* [33], in 2013, used one question of the SBSQ ("When you get written information on a medical treatment or your medical condition, how often do you have problems understanding what it is telling you?") to assess functional HL level in 493 patients with type 2 diabetes. The results showed that half of the participants declared "never having problems in understanding written information" related to their medical condition. In contrast, 7.3% of the participants often or always had problems understanding written information. Similar findings

were showed also by *Zuercher et al.* [34], two years after, using the same tool used to assess functional HL level in a similar sample. Again, half of the participants (52.5%) reported never having problems understanding medical information (good FHL), whereas 40.7% reported having problems occasionally or sometimes (medium FHL) and 6.8% often or always (poor FHL).

United Kingdom. In 2007 *Von Wagner et al.* [35] used the TOFHLA tool in a sample of 719 participants; only 5.7% (N=41) were classified as having 'inadequate' HL level and only 5.7% (N=41) as having 'marginal' HL level, while all the other participants as having 'adequate' HL level.

eHealth literacy. eHealth literacy (alternatively known as eHealth skills or digital health literacy) is a concept considered separately from the general health literacy by scientific researchers; in particular, it includes "the ability to search and locate health information online, and also to understand, apply and use this information" [36].

In this context, the core problem is the incapacity of distinguishing between biased non-evidence-based information and unbiased evidence-based information sources.

This study [16] reports the results of a multinational survey conducted among the 28 EU Member States where 26566 participants were interviewed by CATL (computer-assisted telephone interviews).

eHealth was measured via five questions which largely matched the eHEALS scale, the wide-spread tool commonly used to assess individual's self-perceived skills at finding, evaluating and applying electronic health information to health problems [37].

These five questions were: (i) knowing how to seek the Internet for health information; (ii) knowing where to find reliable health online sources; (iii) understanding the terminology of health online information; (iv) being able to identify the quality of the health information; and (v) knowing how to use it.

Each item was measured on a 4-point scale from 1=totally disagree through 4=totally agree.

Considering the individuals' self-assessment of eHealth skills results on knowing how to navigate the Internet to find health information, substantial variations appear across Member States. Cyprus reported the highest percentage of people totally agreeing on having this search skill (72%) followed by Sweden (69%). Meanwhile, Poland, Latvia and Italy showed the lowest percentages, the latter of which with about half percentage of the leading countries (30%). (For the detailed results by country, see Annex 3: Table 2. Individuals' self-assessment of eHealth Skills).

For the other questions, the results revealed a quite complex pattern in which only Internet experience and self-reported health status influence all skills in a similar manner. The more frequently people seek health information online, the more likely they report themselves as high-skilled. Moreover, people with better self-reported health status also indicated higher skills. As to socioeconomic characteristics, the pattern differed across skills. In particular, younger respondents tended to report higher levels of skills compared to older people for three skill categories considered. Nevertheless, older respondents were better able to understand health terminology.

More educated respondents appeared to achieve better self-reported skills; the ability to search, distinguish information quality and understand technology.

To sum, this survey highlighted that the most vulnerable groups within each country are the sick, least educated and eldest.

III. Conclusions

It is well-known that increasing the level of HL in the population can be an effective strategy to improve the correct use of healthcare services, to enhance the effectiveness of treatment, and thus to improve people's health status and outcomes.

The aim of this systematic review was to provide a comprehensive measurement of the health literacy in European countries and an initial insight in the more critical groups in order to identify promising areas of intervention.

Regarding the 20 articles assessing general health literacy, a huge variety of questionnaires have been adopted to measure it. Indeed, the most used tool was the HLS-EU instrument in all the available versions; particularly, four studies including the European survey adopted the longest questionnaire HLS-EU-Q87 [15,24,29,39], four studies used the HLS-EU-Q47 version [17,18,22,27], two studies employed the shortest HLS-EU-Q16 [19,23] and one study adapted a version with 25 items (HLS-EU-Q25) [25]. On the other hand, four studies assessed the health literacy through a subjective measure, the SBSQs, generally made of three statements, but only one study used all the questions [26]; the other three employed one question each [28,33,34]. Finally, three studies adopted the TOFHLA test [17,20,35], two studies the NVS [26,31], one study an adapted version of the HLQ [21], one study the REALM [26] and one study the FCCHL [26].

Only two studies used at the same time more than one test [17,26].

Most of the studies investigated the general population without particular characteristics [15,17,18,19,22,24,27,29,30,32,35], two of which were focused on the older people. [23,25]

The others enrolled specific patients' groups with relevant diseases (e.g. cardiovascular diseases, type 2 diabetes mellitus, colorectal cancer) [20,21,26,28,33,34]. Only two studies involved more than one group of people in the same survey [26,31].

The largest survey [15] focused on eight European countries and its methodology was replicated afterwards in other three countries [24,29,30] in order to expand the comparability of these results.

However, given the heterogeneity of the methods used to assess HL across the countries and in the same country where more studies took place, the differences in the target population or setting and the differences in the HL scales, it is difficult to provide a detailed comparison of the European countries.

Surely, there are countries such as The Netherlands and Ireland where the proportion of people with 'limited' HL level (inadequate or problematic) is considerably lower than other States in Europe. Also Denmark, Belgium and United Kingdom recorded 'adequate' scores of HL. Notably, Switzerland registered a high level of HL in more than half the patients of two studies.

By contrast, Italy, Austria, Portugal and Bulgaria registered the highest percentages of 'limited' HL.

Kosovo was another country with a low level of HL.

Spain was particular; it recorded a low proportion of people with 'inadequate' HL but more than 50% of people with 'problematic' HL.

Poland, Germany and Greece recorded a similar score of 'limited' HL slightly below the 50% in the European survey: only Poland maintained the same finding in a following study, while the other two registered a worsening in the limited health literacy category of 5-10%.

In general, the distribution of health literacy varies considerably across countries, with only few states with an 'adequate' level of HL. A similar finding was found also in the eHealth literacy survey, where substantial variations appeared across Member States and where there are only few leading countries. Nevertheless, a common pattern of vulnerability for the sick, the least educated and eldest was found in all the surveyed countries.

Therefore, there is a strong need to address these deficit and inequalities by European and national health planners or policymakers. Fundamental is the support of appropriate and targeted public health and health promotion strategies of intervention to strengthen citizens' and patients' personal knowledge, motivation and competences to take well-informed health decisions.

IV. Conflict of interests and funding

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interests.

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V. References

- [1] Kickbusch, Ilona, and Daniela Maag. "Health literacy." (2008): 204-211.
- [2] World Health Organization. "Health literacy: the solid facts. 2013." WHO Regional Office for Europe: Copenhagen (2014).
- [3] Sørensen, K., Van den Broucke, S., Fullam, J., Doyle, G., Pelikan, J., Slonska, Z., & Brand, H. (2012). Health literacy and public health: a systematic review and integration of definitions and models. *BMC public health*, 12(1), 80.
- [4] Altin, S. V., Finke, I., Kautz-Freimuth, S., & Stock, S. (2014). The evolution of health literacy assessment tools: a systematic review. *BMC public health*, 14(1), 1207.
- [5] N. D. Berkman et al., «Health literacy interventions and outcomes: an updated systematic review», *Evid. ReportTechnology Assess.*, n. 199, pagg. 1–941, mar. 2011
- [6] Hls-Eu Consortium. (2012). Comparative report of health literacy in eight EU member states. The European health literacy survey HLS-EU.

- [7] Osborne, R. H., Batterham, R. W., Elsworth, G. R., Hawkins, M., & Buchbinder, R. (2013). The grounded psychometric development and initial validation of the Health literacy Questionnaire (HLQ). *BMC public health*, 13(1), 658.
- [8] Weiss, B. D., Mays, M. Z., Martz, W., Castro, K. M., DeWalt, D. A., Pignone, M. P., ... & Hale, F. A. (2005). Quick assessment of literacy in primary care: the newest vital sign. *The Annals of Family Medicine*, 3(6), 514-522.
- [9] Assessing Health Literacy in Clinical Practice. Available at: https://www.medscape.org/viewarticle/566053_5
- [10] Chan, Alex. "Health literacy screening instruments in adults with cardiovascular disease and their importance to the nursing profession." *Australian Journal of Advanced Nursing*, The 32.2 (2014): 14.
- [11] Ishikawa, H., Takeuchi, T., & Yano, E. (2008). Measuring functional, communicative, and critical health literacy among diabetic patients. *Diabetes care*, 31(5), 874-879.
- [12] Lee, S. Y. D., Bender, D. E., Ruiz, R. E., & Cho, Y. I. (2006). Development of an easy-to-use Spanish health literacy test. *Health services research*, 41(4p1), 1392-1412.
- [13] Apolinario, D., Braga, R. D. C. O. P., Magaldi, R. M., Busse, A. L., Campora, F., Brucki, S., & Lee, S. Y. D. (2012). Short assessment of health literacy for Portuguese-speaking adults. *Revista de Saúde Pública*, 46(4), 702-711.
- [14] Chew, L. D., Griffin, J. M., Partin, M. R., Noorbaloochi, S., Grill, J. P., Snyder, A., ... & VanRyn, M. (2008). Validation of screening questions for limited health literacy in a large VA outpatient population. *Journal of general internal medicine*, 23(5), 561-566.
- [15] Sørensen, K., Pelikan, J. M., Röthlin, F., Ganahl, K., Slonska, Z., Doyle, G., ... & Falcon, M. (2015). Health literacy in Europe: comparative results of the European health literacy survey (HLS-EU). *European journal of public health*, 25(6), 1053-1058.
- [16] Vicente, M. R., & Madden, G. (2017). Assessing eHealth skills across Europeans. *Health policy and technology*, 6(2), 161-168.
- [17] Toçi, E., Burazeri, G., Sørensen, K., Kamberi, H., & Brand, H. (2014). Concurrent validation of two key health literacy instruments in a South Eastern European population. *The European Journal of Public Health*, 25(3), 482-486.
- [18] Toçi, E., Burazeri, G., Myftiu, S., Sørensen, K., & Brand, H. (2015). Health literacy in a population-based sample of adult men and women in a South Eastern European country. *Journal of Public Health*, 38(1), 6-13.
- [19] Vandenbosch, J., Van den Broucke, S., Vancorenland, S., Avalosse, H., Verniest, R., & Callens, M. (2016). Health literacy and the use of healthcare services in Belgium. *J Epidemiol Community Health*, jech-2015.
- [20] Hæsum, E., Korsbakke, L., Ehlers, L., & Hejlesen, O. K. (2015). Validation of the Test of Functional Health Literacy in Adults in a Danish population. *Scandinavian journal of caring sciences*, 29(3), 573-581.
- [21] Aaby, A., Friis, K., Christensen, B., Rowlands, G., & Maindal, H. T. (2017). Health literacy is associated with health behaviour and self-reported health: A large population-based study in individuals with cardiovascular disease. *European journal of preventive cardiology*, 24(17), 1880-1888.
- [22] Schaeffer, D., Berens, E. M., & Vogt, D. (2017). Health literacy in the German population: results of a representative survey. *Deutsches Ärzteblatt International*, 114(4), 53.

- [23] Efthymiou, A., Middleton, N., Charalambous, A., & Papastavrou, E. (2017). 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. *JMIR research protocols*, 6(11).
- [24] Palumbo, R., Annarumma, C., Adinolfi, P., Musella, M., & Piscopo, G. (2016). The Italian health literacy project: insights from the assessment of health literacy skills in Italy. *Health policy*, 120(9), 1087-1094.
- [25] Toci, E., Burazeri, G., Jerliu, N., Sørensen, K., Ramadani, N., Hysa, B., & Brand, H. (2014). Health literacy, self-perceived health and self-reported chronic morbidity among older people in Kosovo. *Health promotion international*, 30(3), 667-674.
- [26] Fransen, M. P., Van Schaik, T. M., Twickler, T. B., & Essink-Bot, M. L. (2011). Applicability of internationally available health literacy measures in the Netherlands. *Journal of Health Communication*, 16(sup3), 134-149.
- [27] van der Heide, I., Rademakers, J., Schipper, M., Droomers, M., Sørensen, K., & Uiters, E. (2013). Health literacy of Dutch adults: a cross sectional survey. *BMC public health*, 13(1), 179.
- [28] Husson, O., Mols, F., Fransen, M. P., Poll-Franse, L. V., & Ezendam, N. P. M. (2015). Low subjective health literacy is associated with adverse health behaviors and worse health-related quality of life among colorectal cancer survivors: results from the profiles registry. *Psycho-Oncology*, 24(4), 478-486.
- [29] Słowska, Z. A., Borowiec, A. A., & Aranowska, A. E. (2015). Health literacy and health among the elderly: status and challenges in the context of the Polish population aging process. *AnthropologicAI review*, 78(3), 297-307.
- [30] Espanha, R., & Ávila, P. (2016). Health Literacy Survey Portugal: A Contribution for the Knowledge on Health and Communications. *Procedia Computer Science*, 100, 1033-1041.
- [31] Paiva, D., Silva, S., Severo, M., Moura-Ferreira, P., & Lunet, N. (2017). Limited health literacy in Portugal assessed with the Newest Vital Sign.
- [32] Pires, C., Rosa, P., Vigário, M., & Cavaco, A. (2018). Short Assessment of Health Literacy (SAHL) in Portugal: development and validation of a self-administered tool. *Primary health care research & development*, 1-18.
- [33] Franzen, J., Mantwill, S., Rapold, R., & Schulz, P. J. (2013). The relationship between functional health literacy and the use of the health system by diabetics in Switzerland. *The European Journal of Public Health*, 24(6), 997-1003.
- [34] Zuercher, E., Diatta, I. D., Burnand, B., & Peytremann-Bridevaux, I. (2017). Health literacy and quality of care of patients with diabetes: A cross-sectional analysis. *Primary care diabetes*, 11(3), 233-240.
- [35] von Wagner, C., Knight, K., Steptoe, A., & Wardle, J. (2007). Functional health literacy and health-promoting behaviour in a national sample of British adults. *Journal of Epidemiology & Community Health*, 61(12), 1086-1090.
- [36] C. D. Norman e H. A. Skinner, «eHealth Literacy: Essential Skills for Consumer Health in a Networked World», *J. Med. Internet Res.*, vol. 8, n. 2, giu. 2006.
- [37] C. D. Norman e H. A. Skinner, «eHEALS: The eHealth Literacy Scale», *J. Med. Internet Res.*, vol. 8, n. 4, nov. 2006.

VI. Annexes

Figure 1. PRISMA Flow-chart

Research, selection and analysis FLOWCHART of the articles included in the systematic review.

search string: [(health literacy*) OR (health* AND literacy*) AND europ*]

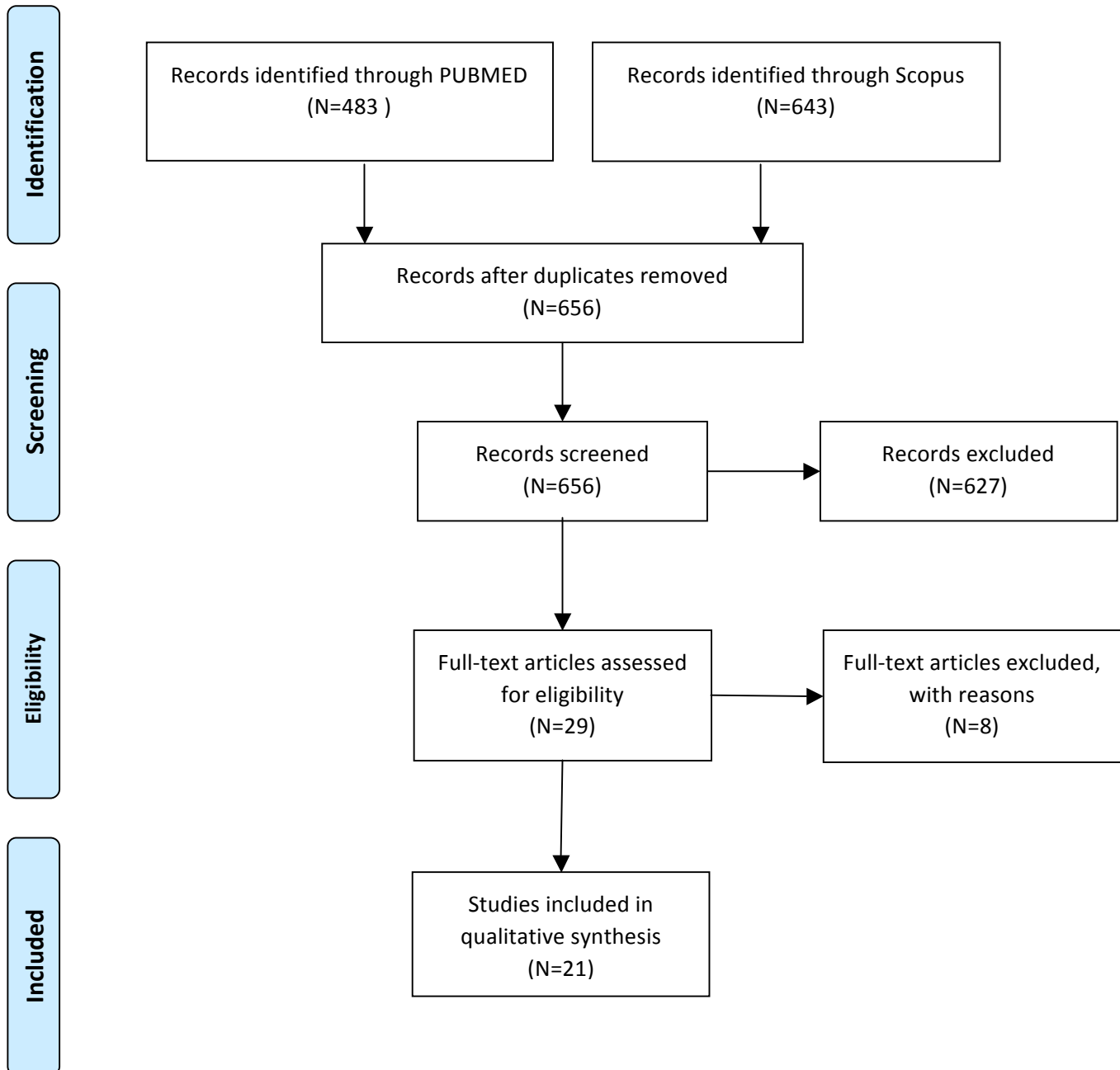


Table 1. Characteristics of Included Studies

First Author, Year of Publication	Country	Setting and N	Methods	Results					
					Inadequate	Problematic	Sufficient	Excellent	Mean
Sorensen K, 2015 [15]	Austria Bulgaria Germany Greece Ireland Netherlands Poland Spain	General population (N=8000)	HLS-EU-Q86 Score: 0–25: inadequate 25–33: problematic 33–42: sufficient 42-50: excellent						
				Austria	18.2%	38.2%	33.7%	9.9%	31.95
				Bulgaria	26.9%	35.2%	26.6%	11.3%	30.50
				Germany	11.0%	35.3%	34.1%	19.6%	34.49
				Greece	13.9%	30.9%	39.6%	15.6%	33.57
				Ireland	10.3%	29.7%	38.7%	21.3%	35.16
				the Netherlands	1.8%	26.9%	46.3%	25.1%	37.06
				Poland	10,2%	34.4%	35.9%	19.5%	34.45
				Spain	7.5%	50.8%	32.6%	9.1%	32.88
Ervin T, 2014 [17]	Albania	General population aged>18 years (N=239)	HLS-EU-Q47 Score: 0–25: inadequate 25–33: problematic 33–42: sufficient 42-50: excellent TOFHLA Score: 0-59: inadequate 60-74: marginal 75-100: adequate	HLS-EU-Q47 Mean value: 32.8					
				TOFHLA Mean value: 76.32					
Toci E, 2015 [18]	Albania	General population (N=1154)	HLS-EU-Q47 Score 0–25: inadequate 25–33: problematic 33–42: sufficient 42-50: excellent	Mean=34.4 HL level was significantly higher among younger, highly educated and better-off participants.					

Vandenbosch J, 2015 [19]	Belgium	General population (N=9617)	HLS-EU-Q16 <u>Score:</u> 0-8 insufficient 9-12: limited >13: sufficient	Insufficient HL: 11.5% (N=1111) Limited HL: 29.6% (N=2847) Sufficient HL: 58.5% (N=5629)
Korsbakke Emtækær Hæsum L, 2014 [20]	Denmark	Patients with chronic obstructive pulmonary disease (N=42)	TOFHLA <u>Score:</u> 0-59: inadequate 60-74: marginal 75-100: adequate	Inadequate HL: 26.2% (N=11) Marginal HL: 19.0% (N=8) Adequate HL: 54.8% (N=23)
Aaby A, 2017 [21]	Denmark	Patients with cardiovascular diseases (N=3116)	HLQ-2 dimensions <u>Score:</u> <2: Inadequate HL >2: Adequate HL	Understanding health information well enough to know what to do: mean 2.92 Ability to actively engage with healthcare providers: mean 2.97
Schaeffer D, 2017 [22]	Germany	General population (N=2000)	HLS-EU-Q47 <u>Score</u> 0–25: inadequate 25–33: problematic 33–42: sufficient 42-50: excellent	Limited HL: 54.3% (N=1086) Inadequate: 9.7% (N=194) Problematic: 44.6% (N=892) Not limited HL: 45.7% (N=914) Sufficient: 38.4% (N=768) Excellent: 7.3% (N=146)
Efthymiou A, 2017 [23]	Greece	General population older people (N=107)	HLS-EU-Q16 <u>Score:</u> 0-8 insufficient 9-12: limited >13: sufficient	Sufficient HL: 45.8% (N=49) Problematic HL: 45.8% (N=49) Inadequate HL: 8.4% (N=9)
Palumbo R, 2015 [24]	Italy	General population (N=1000)	HLS-EU-Q86 <u>Score:</u> 0–25: inadequate 25–33: problematic 33–42: sufficient 42-50: excellent	Inadequate HL: 17.3% (N=173) Problematic HL: 37.3% (N=373) Sufficient HL: 39.5% (N=395) Excellent HL: 5.9% (N=59) Mean HL: 31.6

Toci E, 2014 [25]	Kosovo	General population aged >65 years (N=1730)	HLS-EU-Q25 25: minimum score 125: maximum score	Mean HL: 76.5 The mean value of HL was significantly lower among participants with a poorer self-perceived health status and with the presence of chronic conditions.																																																												
Fransen MP, 2011 [26]	the Netherlands	Patients (N=289): - with coronary artery disease (N=201) - with type 2 diabetes mellitus (N=88)	<p>REALM-D Score: 0-18: < 3rd grade education 19-44: 4-6th grade education 45-60: 7-8th grade education 61-66: high school education</p> <p>NVS-D Score: 0-1: high likelihood of limited HL 2-3: possibility of limited HL 4-6: adequate HL</p> <p>SBSQ-D Score: <2: Inadequate HL >2: Adequate HL</p> <p>FCCHL-D Score: <3: Inadequate HL >3: Adequate HL</p>	<table border="1"> <thead> <tr> <th>REALM-D</th> <th>TOT</th> <th>CAD</th> <th>T2DM</th> </tr> </thead> <tbody> <tr> <td>< 3rd grade</td> <td>0% (N=0)</td> <td>0% (N=0)</td> <td>2% (N=1)</td> </tr> <tr> <td>4-6th grade</td> <td>2% (N=5)</td> <td>1% (N=2)</td> <td>3% (N=3)</td> </tr> <tr> <td>7-8th grade</td> <td>17% (N=50)</td> <td>17% (N=33)</td> <td>18% (N=17)</td> </tr> <tr> <td>High school</td> <td>81% (N=228)</td> <td>82% (N=164)</td> <td>77% (N=64)</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>NVS-D</th> <th>TOT</th> <th>CAD</th> <th>T2DM</th> </tr> </thead> <tbody> <tr> <td>High likelihood of limited HL</td> <td>56% (N=159)</td> <td>52% (N=103)</td> <td>68% (N=57)</td> </tr> <tr> <td>Possibility of limited HL</td> <td>23% (N=65)</td> <td>24% (N=48)</td> <td>20% (N=17)</td> </tr> <tr> <td>Adequate HL</td> <td>21% (N=58)</td> <td>24% (N=48)</td> <td>12% (N=10)</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>SBSQ-D</th> <th>TOT</th> <th>CAD</th> <th>T2DM</th> </tr> </thead> <tbody> <tr> <td>Inadequate HL</td> <td>5% (N=11)</td> <td>5% (N=11)</td> <td>not assessed</td> </tr> <tr> <td>Adequate HL</td> <td>95% (N=190)</td> <td>95% (N=190)</td> <td>not assessed</td> </tr> </tbody> </table> <table border="1"> <thead> <tr> <th>FCCHL-D</th> <th>TOT</th> <th>CAD</th> <th>T2DM</th> </tr> </thead> <tbody> <tr> <td>Inadequate HL</td> <td>73% (N=146)</td> <td>73% (N=146)</td> <td>not assessed</td> </tr> <tr> <td>Adequate HL</td> <td>27% (N=55)</td> <td>27% (N=55)</td> <td>not assessed</td> </tr> </tbody> </table>	REALM-D	TOT	CAD	T2DM	< 3 rd grade	0% (N=0)	0% (N=0)	2% (N=1)	4-6 th grade	2% (N=5)	1% (N=2)	3% (N=3)	7-8 th grade	17% (N=50)	17% (N=33)	18% (N=17)	High school	81% (N=228)	82% (N=164)	77% (N=64)	NVS-D	TOT	CAD	T2DM	High likelihood of limited HL	56% (N=159)	52% (N=103)	68% (N=57)	Possibility of limited HL	23% (N=65)	24% (N=48)	20% (N=17)	Adequate HL	21% (N=58)	24% (N=48)	12% (N=10)	SBSQ-D	TOT	CAD	T2DM	Inadequate HL	5% (N=11)	5% (N=11)	not assessed	Adequate HL	95% (N=190)	95% (N=190)	not assessed	FCCHL-D	TOT	CAD	T2DM	Inadequate HL	73% (N=146)	73% (N=146)	not assessed	Adequate HL	27% (N=55)	27% (N=55)	not assessed
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van der Heide I, 2013 [27]	the Netherlands	General population aged >15 years (N=925)	HLS-EU-Q47 Score 0-25: inadequate 25-33: problematic 33-42: sufficient	Concerning the four competences of assessing, understanding, appraising and applying health information, the mean scores were considered sufficient except for applying that registered a problematic score. Assessing: mean 35.2 Understanding: mean 36.8																																																												

			42-50: excellent	Appraising: mean 36.7 Applying: mean 28.9																				
Husson O, 2015 [28]	the Netherlands	Patients with colorectal cancer (N=1643)	1-item of SBSQ	Low HL: 14% (N=224) Medium HL: 45% (N=725) High HL: 42% (N=677)																				
Slonska ZA, 2015 [29]	Poland	General population aged>15 years (N=1000)	HLS-EU-Q86 Score: 0–25: inadequate 25–33: problematic 33–42: sufficient 42-50: excellent	Limited HL: 44.6% Sufficient HL: 35.9% Excellent HL: 19.5%																				
Espanha R, 2016 [30]	Portugal	General population (N=2104)	HLS-EU-Q86 Score: 0–25: inadequate 25–33: problematic 33–42: sufficient 42-50: excellent	Limited HL: 49% Inadequate: 11% Problematic: 38% Not limited HL: 51% Sufficient: 41.4% Excellent: 8.6%																				
Paiva D, 2017 [31]	Portugal	Participants: N=249 Physicians (N=53) Health researchers (N=45) Other researchers (N=50) General population (N=101)	NVS-PT Score: 0-1: high likelihood of limited HL 2-3: possibility of limited HL 4-6: adequate HL	<table border="1"> <thead> <tr> <th></th> <th>Physicians</th> <th>Health researchers</th> <th>Other researchers</th> <th>General population</th> </tr> </thead> <tbody> <tr> <td>High likelihood of limited HL</td> <td>0% (N=0)</td> <td>0% (N=0)</td> <td>0% (N=0)</td> <td>57.4%(N=58)</td> </tr> <tr> <td>Possibility of limited HL</td> <td>0% (N=0)</td> <td>11.1% (N=5)</td> <td>8% (N=4)</td> <td>23.8% (N=24)</td> </tr> <tr> <td>Adequate HL</td> <td>100% (N=53)</td> <td>88.9% (N=40)</td> <td>92% (N=46)</td> <td>18.8% (N=19)</td> </tr> </tbody> </table>		Physicians	Health researchers	Other researchers	General population	High likelihood of limited HL	0% (N=0)	0% (N=0)	0% (N=0)	57.4%(N=58)	Possibility of limited HL	0% (N=0)	11.1% (N=5)	8% (N=4)	23.8% (N=24)	Adequate HL	100% (N=53)	88.9% (N=40)	92% (N=46)	18.8% (N=19)
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Pires C, 2018 [32]	Portugal	General population (N=484)	SAHLPA-23 Score: 0-19: inadequate HL 20-23: adequate HL	Inadequate HL: 52.8% (N=256) Adequate HL: 47.2% (N=228)																				

Franzen J, 2013 [33]	Switzerland	Patients aged 35 – 70 years with type 2 diabetes (N=493)	1-item of SBSQ	Low HL: 7.3% (N=36) Medium HL: 42.0% (N=207) High HL: 50.7% (N=250)
Zuercher E, 2017 [34]	Switzerland	Non-institutionalized patients with diabetes (N=381)	1-item of SBSQ	Low HL: 6.8% (N=26) Medium HL: 40.7% (N=155) High HL: 52.5% (N=200)
von Wagner C, 2007 [35]	United Kingdom	General population (N=719)	TOFHLA Score: 0-59: inadequate 60-74: marginal 75-100: adequate	Inadequate HL: 5.7% (N=41) Marginal HL: 5.7% (N=41) Adequate HL: 88.6% (N=637)



Table 2. Individuals' self-assessment of eHealth Skills.

First Author, Year of publication	Country	Setting and N	Methods	Results																																																																																																												
Vincente MR, 2017 [16]	Austria Belgium Bulgaria Cyprus Czech Republic Germany Denmark Estonia Spain Finland France United Kingdom Greece Croatia Hungary Ireland Italy Lithuania Luxembourg Latvia Malta Netherlands Poland Portugal Romania Sweden Slovenia Slovakia	General population aged>14 years (N=26566)	<u>Score:</u> Category 1: Totally disagree Tend to disagree Category 2: Tend to agree Category 3: Totally agree	Q: Do you know how to seek the Internet for health information? <table border="1"> <thead> <tr> <th></th> <th>Category 1</th> <th>Category 2</th> <th>Category 3</th> </tr> </thead> <tbody> <tr><td>Austria</td><td>7%</td><td>36%</td><td>57%</td></tr> <tr><td>Belgium</td><td>6%</td><td>44%</td><td>51%</td></tr> <tr><td>Bulgaria</td><td>4%</td><td>33%</td><td>64%</td></tr> <tr><td>Cyprus</td><td>5%</td><td>23%</td><td>72%</td></tr> <tr><td>Czech Republic</td><td>7%</td><td>45%</td><td>48%</td></tr> <tr><td>Germany</td><td>9%</td><td>40%</td><td>51%</td></tr> <tr><td>Denmark</td><td>5%</td><td>33%</td><td>62%</td></tr> <tr><td>Estonia</td><td>4%</td><td>42%</td><td>55%</td></tr> <tr><td>Spain</td><td>6%</td><td>44%</td><td>49%</td></tr> <tr><td>Finland</td><td>8%</td><td>51%</td><td>41%</td></tr> <tr><td>France</td><td>7%</td><td>46%</td><td>47%</td></tr> <tr><td>United Kingdom</td><td>3%</td><td>37%</td><td>60%</td></tr> <tr><td>Greece</td><td>8%</td><td>43%</td><td>49%</td></tr> <tr><td>Croatia</td><td>5%</td><td>48%</td><td>47%</td></tr> <tr><td>Hungary</td><td>8%</td><td>38%</td><td>54%</td></tr> <tr><td>Ireland</td><td>6%</td><td>40%</td><td>54%</td></tr> <tr><td>Italy</td><td>6%</td><td>64%</td><td>30%</td></tr> <tr><td>Lithuania</td><td>5%</td><td>34%</td><td>61%</td></tr> <tr><td>Luxembourg</td><td>8%</td><td>49%</td><td>43%</td></tr> <tr><td>Latvia</td><td>11%</td><td>52%</td><td>37%</td></tr> <tr><td>Malta</td><td>10%</td><td>31%</td><td>59%</td></tr> <tr><td>Netherlands</td><td>6%</td><td>40%</td><td>54%</td></tr> <tr><td>Poland</td><td>5%</td><td>55%</td><td>39%</td></tr> <tr><td>Portugal</td><td>6%</td><td>34%</td><td>60%</td></tr> <tr><td>Romania</td><td>6%</td><td>33%</td><td>62%</td></tr> <tr><td>Sweden</td><td>2%</td><td>29%</td><td>69%</td></tr> </tbody> </table>		Category 1	Category 2	Category 3	Austria	7%	36%	57%	Belgium	6%	44%	51%	Bulgaria	4%	33%	64%	Cyprus	5%	23%	72%	Czech Republic	7%	45%	48%	Germany	9%	40%	51%	Denmark	5%	33%	62%	Estonia	4%	42%	55%	Spain	6%	44%	49%	Finland	8%	51%	41%	France	7%	46%	47%	United Kingdom	3%	37%	60%	Greece	8%	43%	49%	Croatia	5%	48%	47%	Hungary	8%	38%	54%	Ireland	6%	40%	54%	Italy	6%	64%	30%	Lithuania	5%	34%	61%	Luxembourg	8%	49%	43%	Latvia	11%	52%	37%	Malta	10%	31%	59%	Netherlands	6%	40%	54%	Poland	5%	55%	39%	Portugal	6%	34%	60%	Romania	6%	33%	62%	Sweden	2%	29%	69%
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				<table border="1"> <tr> <td>Slovenia</td> <td>12%</td> <td>38%</td> <td>50%</td> </tr> <tr> <td>Slovakia</td> <td>5%</td> <td>51%</td> <td>44%</td> </tr> </table>	Slovenia	12%	38%	50%	Slovakia	5%	51%	44%
Slovenia	12%	38%	50%									
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