Health literacy – a heterogeneous phenomenon: a literature review

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Background and aim: A growing responsibility on the part of individuals to make decisions in health issues implies the need of access to health information and personal skills to comprehend the information. Health literacy comprises skills in obtaining, understanding and acting on information about health issues in ways that promote and maintain health. A lack of health literacy may have effects at both the individual and societal levels. There are thus reasons for health care professionals to gain a comprehensive understanding of health literacy. The aim of this review was to explore how health literacy is described in the scientific literature and to give a synthesis of its different meanings.

Methods: The review was based on approximately 200 scientific articles published 2000–2008. The analysis process was inspired by the methods of narrative literature review. Findings and conclusions: Two different approaches to health literacy became visible, one in which health literacy is expressed as a polarized phenomenon, focusing on the extremes of low and high health literacy. The definitions of health literacy in this approach are characterized by a functional understanding, pointing out certain basic skills needed to understand health information. The other approach represents a complex understanding of health literacy, acknowledging a breadth of skills in interaction with the social and cultural contexts, which means that an individual’s health literacy may fluctuate from one day to another according to the context. The complex approach stresses the interactive and critical skills needed to use information or knowledge as a basis for appropriate health decisions. We conclude that health literacy is a heterogeneous phenomenon that has significance for both the individual and society. Future research will aim at the development of assessments that capture the breadth of skills and agents characteristic for health literacy as a complex phenomenon.

Keywords: client centred, decision-making, health behaviour, health education, health information seeking, literature review, participation, person centred, public health.

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Background

Access to information is becoming increasingly important for individuals’ health decisions. Recovery after illness, sickness absence and rehabilitation also involve decisions that are likely to be better if based on relevant information. Furthermore, there seems to be a growing and sometimes implicit obligation on the part of individuals to search for information themselves, to understand rights and responsibilities and to make decisions in health issues (1). The purpose in this approach is to enable individuals to promote health or solve health problems by themselves or to be an active partaker and negotiator in health care interventions and decisions (2). Decisions in health issues may be complicated, as described by, e.g. Länsimies-Antikainen et al. (3), however, considering the increasing amount of information available about health, illness and health care. A crucial feature of an individual’s access to and benefit of health information is his or her level of health literacy, defined by the WHO as the cognitive and social skills that determine the motivation and ability of individuals to gain access to, understand and use information in ways that promote and maintain good health (4). In concrete terms, health literacy may involve, e.g. understanding reasons for medical examinations or surgery or grasping the meaning of information about consent, prevention, diagnosis and treatment (5, 6). It also includes reading and understanding the text on medicine labels, appointment slips, medical

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instructions, insurance forms and other kinds of health-related information (6–10). Basically, health literacy involves the ability to read and the numerical skills needed to act on information or advice on health issues in ways that promote and maintain health (5, 11, 12).

A lack of health literacy may have effects at many levels, from the individual to the societal. Examples suggest that health literacy is less common in specific population groups, e.g. elderly persons, individuals with short or uncompleted education, immigrants and prisoners (8, 15), and an analysis published in 1998 estimated US health care costs resulting from low health literacy at more than 50 billion dollars per year (16). Thus, there are reasons for the health care system and its professionals to reflect on how health information is communicated and whether health promotion and preventive health interventions are carried out in ways such that groups with different levels of health literacy may be reached. Furthermore, interest in health literacy has increased during the past decade. According to the Scopus database, the number of articles that include ‘health literacy’ in their titles has increased from 13 in 1999 to 171 in 2009, which suggests that health literacy is an emerging issue among health care professionals.

To be able to take a systematic approach to health care problems that may be associated with individuals’ skills in obtaining, understanding and interpreting health-related information, it is necessary to gain a comprehensive understanding of health literacy.

**Aim**

The aim of this literature review was to explore how health literacy is described and used in the contemporary scientific literature and to give a synthesis of its different meanings to make a comprehensive delineation of health literacy.

### Methods

This review had a narrative, integrative approach, inspired by Baumeister (17), Green et al. (18), Broom et al. (19) and Whittemore & Knaf (20). The intent of narrative and integrative reviews is to summarize primary studies or theoretical literature to provide a comprehensive understanding of a specific phenomenon (17, 19, 21, 22). The goal of the analysis process in these forms of reviews is a qualitative synthesis of the data rather than a separation into its constituent parts (Polkinghorne 1995). This involves interpretation based on published findings rather than primary data, and the results are qualitative rather than quantitative (20, 23). Our review included the different stages in Whittemore’s and Knaf’s framework for integrative reviews (20) of which four are accounted for in the method section. The stage of problem identification is included in the introduction, and the stage of presentation is treated in both the results and method sections (Tables 1 and 2).

### Literature search and data evaluation

The literature search and the extraction process were guided by Green et al.’s (18) summarized instructions for writing narrative literature reviews. The process started with a literature search using the search word health literacy in electronic databases with the limitations that the term should be found in the title (and in the abstract, when this was possible) of articles published 2000–2008. Databases used in the search were Cinahl, Pubmed/Medline, PsycINFO and Eric. The search strategy was deliberately designed to capture a broad range of references. These database searches resulted in a total of 592 findings in the four databases.

The next step was to locate the texts’ interest in health literacy, based on geographical origin and the professional field in question. The majority of the articles found in the literature search were written in the United States. Other countries represented with more than single articles were Australia, New Zealand, Canada and the United Kingdom. One article written in Scandinavia was found. The greater

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proportion of the findings was published in scientific journals with an emphasis on health, more specifically, health promotion, health and patient education. Another large part of the findings was published in journals connected to nursing or caring, sometimes related to specific diagnoses. Journals in the fields of paediatrics, geriatrics and school health were represented by only a few articles. Occasional articles were found in journals in the fields of library science, ethics, radiology, pharmacology and odontology. The classification of interest in health literacy, based on geographic origin and professional field, is given in Tables 1 and 2.

The evaluation and extraction process started with a prescreen of the articles by one reviewer (the first author). The purpose of this extraction process was to assess the relevance of each article identified according to questions based on the aim of the review. These questions, which also served as inclusion criteria, concerned how and when the concept of health literacy was used and how it was understood. Other questions had to do with the measurability of health literacy, levels of health literacy and empirical findings related to the concept. After this prescreening for relevance, a total of 200 articles remained. This constituted the body of the literature used for the analysis process.

Data analysis

The focus in the stages of data analysis was on how the different aspects of the phenomenon relate to one another, based on the aim of creating an informative understanding of the phenomenon (20, 24). The methods developed for qualitative design are used for data analysis in reviews with an integrative approach (20), and the basis for our analysis was the methods described by Whittemore (20), Patton (25) and Starrin & Svensson (26). The phases in the analysis with an integrative approach are data reduction, data display, data comparison and conclusion drawing and verification (20). Data reduction includes dividing the data into logical subgroups as well as extracting and organizing data, i.e. relevant data of each subgroup classification are extracted from all primary data sources. Data display means converting the extracted data from individual sources into displays that visualize patterns and relationships and serve as a starting point for interpretation. Data comparison involves an iterative process of examining data in and out of context to identify patterns, themes or relationships. Finally, conclusion drawing and verification moves the interpretive effort from the description of patterns and relationships to higher levels of abstraction (20).

The first step of our analysis was a more careful examination of the text on the basis of the questions named above. The articles were considered in full in this step and, during the examination, some new literature appeared, generated by statements or comments that were given references in the articles. The additional literature had the form of official and policy documents, screening instruments, Internet websites et cetera and was added to the literature examined. On the other hand, in several articles, the understanding and use of the concept ‘health literacy’ referred to the same origins or definitions. This was the main reason for exclusion of articles or other form of literature in the analysis. Other reasons for exclusion in this step were that the articles did not give any answers to the questions named above or insufficient descriptions/definitions of the term health literacy or were written in other language than English.

The examination of the texts continued until the literature no longer generated new variations of answers to the questions compared with the literature considered to that time. This occurred after considering approximately two-thirds of the articles. The next step was to re-screen the remaining one-third of the literature identified to ensure that no further variations appeared. As this did not happen, this step of the analysis was stopped. The first author was responsible for the major part of the analysis up to this point, and the data were in this step in the form of fragments of text and comprised outcomes of scientific investigations, conclusions, definitions, statements, discussions et cetera.

The third step of the analysis process was to gain an overall understanding of health literacy as it had been described; here, the text fragments were considered both de-contextualized and in their original context. They were
also compared to find similarities and differences. This process of searching for relations and patterns prepared the way for the final step, which comprised a formulation of qualitative categories and an identification of two different ways of approaching health literacy (27). Although the first author carried out the major part of the analysis, there was a continuous exchange throughout the process between the two authors about the content of the discussions, the interpretations and the themes that emerged.

**Results**

It became clear during the analysis process that the concept of health literacy was used, explained and understood in different ways in the literature. However, our analysis resulted in a division along two approaches, ‘health literacy as a polarized phenomenon’ and ‘health literacy as a complex phenomenon’. In the following, we give an account of these approaches and attempt to shed light on these two different ways of viewing health literacy.

**Health literacy as a polarized phenomenon**

The extremes of low/inadequate and high/adequate health literacy were often confronted with each other in the studies to offer explanations for and draw conclusions about causes and effects (10, 11, 28–34). The contrast between the extremes was in fact the point of departure in several of the studies (10, 11, 29–31). This polarization is possible as a result of a functional understanding of health literacy, which was described to be comprised of individual basic skills needed to understand health information and to navigate in the health care system (11, 35). The approach to health literacy as a polarized phenomenon will be accounted for in three themes – ‘Focusing on personal skills’, ‘Focusing on extremes’ and ‘A narrow outlook’.

**Focusing on personal skills**

Characteristic of the approach towards health literacy as a polarized phenomenon was its focus on basic functional skills such as reading, writing and numeracy (11, 14, 36). The definitions of health literacy that represented this approach were uncomplicated and emphasized the need of such skills to understand or act on health care information or to function in the health care environment (5, 11, 12, 14, 36). The focus on personal skills suggests that health literacy in this approach was understood as something that belongs to the individual, and the form of information mentioned, e.g. labels on pill bottles, dosing schedules, health insurance forms, instructions for chronic disease management et cetera, locates this view of health literacy to a medical context (10, 11, 29, 30, 33, 37–40).

The skills mentioned provide the basis for identifying persons’ health literacy, and persons and population groups with low health literacy are identified by assessing the computation and reading comprehension needed to understand health concepts or terms as they appear in patient information, medicine labels and prescriptions, informed consent forms et cetera (8, 10, 11, 15, 33, 41, 42). On the grounds of this polarized approach and this form of assessment, it is claimed that immigrants, older people, prisoners or persons with few years of school are more likely to have low health literacy (42).

The assessments used to identify low or high health literacy most frequently named in the literature are the Test of Functional Health Literacy in Adults (TOFHLA) (37), the Rapid Estimate of Adult Literacy in Medicine (REALM) (38) and the Health Activities Literacy Scale (HALS) (43). All these tests were judged to be reliable and easy to administer (44). The TOFHLA self-assessment is a multiple choice test that measures the comprehension of health-related concepts described in a medical context, e.g. patient information (37). REALM is used to identify patients with low health literacy and assesses the reading comprehension of 66 de-contextualized health-related words (38).

**Focusing on extremes**

States of low/inadequate and high/adequate health literacy were confronted with one another in the literature, and further examples are given of research that investigates relations between these two extremes and results of health interventions, health care utilization et cetera (29, 31, 39, 40, 45). Relations are reported between health literacy levels and knowledge of diseases, symptoms, self-care strategies or complications, e.g. in hypertension and diabetes (39, 40). An example of this is a comparison of patients with diabetes, in which almost all (94%) of those with adequate health literacy recognized symptoms of low glucose levels, whereas only half of those with inadequate health literacy had the same knowledge (39). Other research on distinctions between states of the extremes reports low ratings of health and an increased risk of hospitalization or health care use among people with low health literacy as compared with those with high health literacy (29–31, 33, 34, 46). Low health literacy is also described as corresponding to poor adherence to medication regimens and a lack of use of preventive health services compared with states of adequate or high health literacy (10, 42). It is furthermore stated that low health literacy should be associated with risks for medical mistakes owing to problems in distinguishing objective information from incorrect, misleading information or information with a commercial interest (6). On the other hand, high health literacy is associated with good knowledge about diseases and health and to adherence to advice on care and self-care (1, 5, 16, 47, 48).

Based on the approach of health literacy as a polarized phenomenon, conclusions are drawn in the literature that
low health literacy is discouraging for both individuals and the society as a whole (16, 48). On the individual level, low health literacy may lead to unnecessary suffering owing to inappropriate decisions in health care matters. On the societal level, it may mean economic loss as a result of expenses for health care (16, 48) in the form of, for example, unnecessary health care visits and increased use of inpatient care or emergency room care (33, 39, 46). Some articles discuss the contribution of health literacy to well-founded decisions and empowerment, and conclusions are drawn that high health literacy has a positive influence in these areas while low health literacy has the opposite effect (1, 13, 47, 49, 50).

A narrow outlook

The focus on functional skills, which characterizes health literacy as a polarized phenomenon, is criticized in the literature for its narrow outlook. The literature shows examples of research that argue that this functional view of health literacy is influenced too heavily by medicine and does not take sufficient note of cultural aspects or communication skills. A conclusion is that medical jargon or vernacular issues are ignored, and, for these reasons, this narrow outlook places the responsibility of functioning communication on the patient rather than focusing on shared responsibility (51). Criticism of the functional approach as a narrow outlook is expressed in more ways, with claims that, in this perspective, patients are expected to learn areas of expertise and behaviours that are provider-defined, instead of health care issues being communicated using the patient’s base of knowledge (52). The forms of measurements used are also criticized for underrating skills in understanding other forms of information than written text and because of their emphasis on reading comprehension rather than on skills in communicating, analysing and valuing health information (43, 53, 54).

Health literacy as a complex phenomenon

Following this approach means acknowledging health literacy as a dynamic phenomenon with multidimensional interrelations, depending on the social or cultural context. Besides functional skills, this approach stresses the interactive and critical skills needed to use information or knowledge as a basis for appropriate health decisions. The complex approach to health literacy will be described in three themes – ‘Acknowledging the complexity’, ‘The significance of the context’ and ‘Shared responsibility’.

Acknowledging the complexity

Research representing this nonreductionist approach both acknowledges and emphasizes the complexity of health literacy, which is articulated in terms of skills, knowledge, capability and actions. In this complex approach, abilities to interpret, use and communicate information about health, health care and other services are seen as a basis for appropriate health decisions (5, 11, 14, 35, 36, 49). Specific skills pointed out are critical thinking, analysis, decision-making and problem solving used in combination with social skills in communicating and questioning (14, 35). These skills are described as decisive for an individual’s ability to act in ways that promote and maintain health and to increase both personal and public health (5, 11, 35). This complex view suggests that health literacy is located in a health or social context, in which individuals or groups act autonomously on the basis of information from all directions.

One example of a definition that acknowledges the complexity of health literacy is WHO’s (35), which describes it as the achievement of a level of knowledge, personal skills and confidence that makes it possible to take action to improve personal and community health by changing personal lifestyles and living conditions. The definition further emphasizes that health literacy means more than reading comprehension and understanding figures and clarifies the influence of health literacy as a determinant of peoples’ personal, social and cultural development (35). Another definition that emphasizes complexity states that health literacy concerns a wide range of skills and competence needed to make informed choices and decisions to reduce health risks and increase quality of life (55). The skills mentioned in this definition represent four different domains: fundamental literacy, science literacy, civic literacy and cultural literacy. Examples of skills or knowledge included in these domains are: skills in reading, speaking and writing; knowledge of scientific concepts; an understanding of technology; and uncertainty about the absolute truth of scientific information. Focusing on the complexity of health literacy also means including abilities that enable persons to become aware of public issues, to become involved in the decision-making process and to have an awareness that health decisions can impact public health (55, 56).

The significance of the context

The definitions found in the complex approach to health literacy make it clear that the skills mentioned must not be regarded in isolation. Rather, as health literacy varies depending on the context and setting, the context is decisive for whether a person’s skills contribute to health literacy. Thus, it is possible for the same individual to be health literate in one context or society but not in another (1, 11, 37). This means that deficiencies in health literacy may be quiet and hidden, difficult to discover, which in turn may mean that persons with deficiencies risk being given prejudiced or discriminating treatment (58–60).
Expressions of the significance of the context were found in debate articles, reports and statements. An example of this is the report of the Committee on Health Literacy at the US Board on Neuroscience and Behavioral Health, 2004 (1), which states that health literacy should be seen from an ecological perspective as individuals interact with educational systems, health systems and social and cultural factors. Thus, health literacy is an issue for society as a whole instead of a view in which the responsibilities for increasing health literacy lie solely on the individual and the health care system (1). In a debate article, one researcher claims that health literacy may be seen as an issue of social justice as the benefit of the health information provided depends on its readability and cultural sensitivity (57).

**Shared responsibility**

When health literacy is approached as a complex phenomenon, the responsibility to make improvements of the health literacy level is not only to be borne by the individual but also by the health care system and as a commitment in adult education (57). In discussions, researchers criticize the health care system for placing the responsibility for obtaining and understanding health information on the persons seeking care (10, 57, 61). Those researchers also argue that health professionals use unfamiliar words and instructions and that health-related information is presented in a way that is beyond the reading comprehension of many adults, which may mean that clients must deal with information about unfamiliar things in an unfamiliar, scientific language (10, 57, 61). Measures to improve health literacy mentioned in the literature include, e.g. the development of more readable health information materials, strategies aiming at changing attitudes and using new technology (45, 52, 62–64). The effects of such measures are contradictory (65, 66). However, the use of education videos and pictograms to impart health information to women with low literacy was effective (45, 63).

**Discussion**

The large number of scientific studies and policy documents found in the literature to date indicates the significance of health literacy in the medical and public health perspectives. Furthermore, interest in the issue is increasing.

The two approaches that describe health literacy either as a polarized or a complex phenomenon with its own characteristics indicate that health literacy or a lack of health literacy may appear in many different forms and situations. Following the polarized approach may mean viewing states of health literacy as a permanent condition, difficult to improve, while the complex approach offers possibilities to view health literacy as a dynamic phenomenon that fluctuates depending on the state of the individual, the situation, the culture or the environment. Following that approach would be more appropriate and make more sense in a changeable world in which health research outcomes in the form of explanatory models are replacing previously accepted and understood knowledge from one day to the next. Such rapid changes may put health literacy abilities out of the running, leading to uncertainty about health decisions and, at worst, inappropriate or inaccurate decisions.

Greenberg (51) questions the benefit of making distinctions between low and high health literate persons. Our suggestion, in agreement with Greenberg, is that it would be more adequate to understand health literacy as a dynamic continuum ranging between the polarities of high and low health literacy. The largest part of the population, at least in countries such as in Scandinavia that have a high general literacy (15), probably represents not only individuals with low/inadequate or high/adequate health literacy. Rather, most people almost certainly have a health literacy level somewhere between the two polarities. Viewing health literacy as a complex and dynamic phenomenon transfers it from the medical context to a context of public, everyday health. Thus, in practice, it may be misdirected to concentrate the identification of persons with low health literacy to persons from specific population groups (8, 15). Hence, professionals involved in individuals' issues that concern their health must be aware of the fluctuating health literacy of every individual and reflect over their own contribution (negative or positive) to an individual's level of health literacy in the specific situation. The approach of a complex view of health literacy may also mean that the medical perspective loses force as a real solution to health problems. Instead, it opens a more client or individual-driven cooperation or negotiation in communication about health issues, where questions and treatment suggestions are based on the individual's knowledge acquired from, for example the Internet, TV, magazines, personal communication or experience. A shared responsibility in such communication would be to make the most of the health literacy that exists in the specific situation. This is in accordance with a client or negotiation centred perspective, whose essence is respect for the individual's own thoughts and implies the individual's active participation, with interventions guided by interactions built on respect, shared power and negotiation (67, 68). Health literacy is described as having an influence on self-efficacy and empowerment (1, 13, 47, 49, 50) but, reasonably, this does not solely depend on functional abilities to read and comprehend medical information but rather on the possibilities to discuss health issues and the commission of the individual to make well-founded decisions based on his or her own knowledge.
A more dynamic and complex view of health literacy may prepare the way for an openness to different perspectives that may influence health for the single individual. According to our findings, however, health literacy is also a matter for society, as a health literate population is important for public health as a whole and consequently for public finances (1, 4). Population-based surveys have been conducted to study health literacy but, to the present, have used the polarized approach to the phenomenon, using, e.g. the National Assessment of Adult Literacy (NAAL) (69). This assessment measures literacy, i.e. reading comprehension of texts and documents concerning clinical matters, preventive health care and health care navigation in the health care system (69). Using this kind of measurement means neglecting the complexity of health literacy as described in our results and agrees with the criticism of a narrow-minded concentration on the ability to understand written information instead of focusing on verbal communication, an ability to analyse and value information et cetera (43, 53). However, efforts are being made to develop instruments to also measure the critical dimension of health literacy. The European Health Literacy Survey (70) project is developing a measurement instrument that includes the dimension of critical health literacy. The instrument will be used to measure health literacy in European regions, which so far has not been carried out.

A world in continuous change means increasing demands on both individuals and professionals to understand and follow recent research in the health field. Not only new research findings, but also changes in the welfare system, can influence decisions about health, and new principles in social security may at the worst affect the situation of both individuals and families. With adequate health literacy, it would be possible for individuals to follow and understand the meaning of changes from the viewpoint of their own social situation. Interventions to improve health literacy discussed in the literature (45, 52, 62–64) focus primarily on the readability of health information. A recent research project that studied the experiences of factors contributing to women’s health literacy and informed decisions during sick leave showed that being coached was perceived as promoting health literacy and informed decision-making (L. Mårtensson and G. Hensing, unpublished data). Coaching, when it was most supportive, was performed by a spokesperson or advocate who was independent of and neutral in the association with the social insurance office, the health care system and the workplace. Adequate health literacy may thus be achieved in various ways. According to the same study, significant others are also viewed as contributing to health literacy and informed decision-making (Mårtensson and G. Hensing, unpublished data). These results agree with the complex approach, suggesting that health literacy is a context-dependent phenomenon. Thus, creativeness is needed to develop interventions and methods that aim to increase and, if possible, stabilize individuals’ health literacy level. A health literate individual in the full sense would probably have greater opportunities and abilities to make well-founded decisions and make appeals against the decisions of authorities, e.g. a certain form of compensation, disablement benefit or allowance for home equipment. Such support may influence health and in turn increase health literacy even more.

Health literacy is a concept related to other concepts. The most obvious seems to be mental health literacy, which is an extension of the idea as compared to viewing health literacy as a functional ability. Besides reading and calculating skills, it includes knowledge about perceptions of psychiatric diseases and ideas about how and where these diseases can be treated (71, 72). Another related concept is health competence, which involves healthy behaviour and a health promoting lifestyle, e.g. effective solutions to health problems, self-maintenance for a healthy life, successful ways to improve health, the fulfilment of health goals et cetera (73, 74). Health competence seems to deal with motivation and strategies for lifestyle and behaviour rather than the ability to obtain, read, interpret, understand and act on health information. A third concept with a close relation to health literacy is health education. From the perspective of the complex approach, this might be included in health literacy as a part of the individual’s context (35). However, according to health literacy as a functional ability, health education might be seen as a strategy to improve low health literacy.

**Methodological considerations**

As the intent of the study was to gain a comprehensive understanding of the meaning and use of the concept of health literacy, a systematic literature review method was not useful. Neither would a concept analysis have been appropriate, as our research questions had to do with health literacy in a broader sense, as the aim also included measurements and empirical findings related to health literacy. The method chosen, which is inspired by a narrative literature review (17), is thus judged to be appropriate.

Questioning texts written for other reasons than the purpose of a particular study involves a risk of misinterpretation or misunderstanding. However, the aim of the review, i.e. to gain a comprehensive picture of health literacy, was kept in focus during all parts of the study process. Furthermore, the text fragments remained unmodified in the analysis process, where the intention was to find similarities and differences and to search for relations and patterns, rather than to interpret the essential meaning of the fragments. The analysis process gave the impression of concordant views of the phenomenon, and we therefore suggest that our results give a true picture of health literacy as it is understood and used.
The body of literature included scientific articles, policy documents, Internet websites et cetera that correspond to the broad research questions and the narrow form employed for the review. This broadness may influence the credibility of the results, however, and there is a risk that health literacy, as it is presented in the results section, is understood on a superficial level. The literature extraction process was stopped although one-third of the total body of literature remained. This means that we may have limited the possibilities to find patterns in the way that health literacy is understood or that we missed some variations in the use of the concept of health literacy. Further, our intention to examine health literacy from a broad perspective may mean that we made interpretations and generalizations without sufficient evidence.

Conclusions

On the basis of the review of contemporary scientific literature and policy statements, we can conclude that health literacy is a heterogeneous phenomenon with relations to different fields. Two different approaches to health literacy became visible – one in which health literacy is expressed as a polarized phenomenon and the other that has a more a complex understanding of the phenomenon. The former approach seems to be seen in a medical context, where certain personal skills decide whether an individual is health literate or not. The other approach means acknowledging a broadness of skills in interaction with the social and cultural contexts. Thus, in this complex approach, an individual’s health literacy may fluctuate from one day to another according to conditions and contexts. The most important skills in this understanding of health literacy are interpretation, valuation, communication and interaction skills because of their significance in decision-making.

According to the literature, improving health literacy, on the basis of a complex view of the phenomenon, is a responsibility to be shared between society and individuals/groups. Thus, interventions aimed at improving health literacy need to be directed to the individual, the general population, health care professionals and policy makers to increase awareness of health literacy. This can increase their awareness of the phenomenon to change attitudes. Such awareness may inspire to and result at development of measures that guarantee the access of relevant, multifaceted health-related information, presented in ways that make it intelligible for individuals and groups in various life situations and with different ethnic, educational or social background. Health care professionals aware of themselves as important agents to improve health literacy can apart from give information also encourage and support individuals in valuing the information on the basis of their conditions, situations or earlier experiences, all in favour of informed and independent decision-making.

Shedding light on health literacy and its different aspects in practice promotes a client-centred approach.

There is a potential in health literacy, not yet fully understood and still with a need for more research. Potential improvements related to increased health literacy at different levels are more reflective approaches in policy making, compliance to instructions or prescriptions and to a more effectively used health care system. Future research should aim to study the manifestation of health literacy in concrete situations and cultures. Thus, there must be a continued development of assessments that capture the broadness of both skills and agents characteristic for health literacy as a complex phenomenon.

Author contribution

Lena Mårtensson was responsible for data collection, data management, data analysis and wrote the manuscript as first author. Gunnel Hensing initiated a study of the concept, applied for funding and contributed as a discussion partner during the analysis process. She also had the role of a critical reviser of the manuscript. Both authors were responsible for the study design.

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