

## FOCUS ON

# Health Literacy and Health Promotion



Published: April 2024

## Introduction

Health literacy is recognized as having impacts on health. While not a new concept to health promotion—it was included in the World Health Organization’s (WHO) Health Promotion Glossary in 1998<sup>1</sup>—health literacy is not widely incorporated into health promotion practice. This Focus On aims to provide an introduction to health literacy, including the factors that influence health literacy. The information here is beneficial to those who work in health promotion, community health, health education, and public health as a whole.

## Background

Health promotion aims to address the social conditions in which people live, learn, work and play, so that people can gain more control over their health and its determinants.<sup>2,3</sup> These social conditions are shaped by the structural and social determinants of health.<sup>3,4</sup> Structural determinants include political, cultural and economic structures, colonization, ongoing colonialism, cultural discrimination and systemic racism.<sup>5</sup> In Canada, recognized social determinants are employment and working conditions; education and literacy; childhood experiences; physical environments; social supports and coping skills; healthy behaviours; access to health services; biology and genetic endowment; gender; culture and racism.<sup>6</sup> Health promotion's foundational document, the Ottawa Charter for Health Promotion, provides a framework for addressing these determinants, called action areas: building healthy public policy, creating supportive environments, strengthening community action, developing personal skills, and re-orienting health services.<sup>2</sup>

Health literacy is particularly linked to the action area “developing personal skills” as it involves supporting individuals and communities to understand and critically use health information and develop skills to improve their health.<sup>7</sup> This goes beyond simply providing information to individuals and communities with the assumption that they will *be able* to take action on it.<sup>8</sup> Rather, the action area emphasizes that individuals must *understand* the health information they are provided, and use that information to make healthy choices.<sup>7</sup> Developing personal skills also involves creating opportunities for people to critically discuss health information, and develop and practice concrete skills.<sup>9</sup>

Health literacy is generally described as a set of 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 their good health.<sup>1</sup> In Canada, health literacy is an essential determinant of health, which is associated with other determinants that impact health improvement, eliminate inequities, and empower health.<sup>10</sup> Individuals with low health literacy are less likely to engage in behaviours that support health.<sup>11</sup> Low health literacy is also linked to lack of access to health care, less use of preventative care, increased use of health services, higher hospitalization rates, and poor medication adherence.<sup>12-14</sup> Having low health literacy is linked to health issues such as poorer overall health, poorly managed health conditions, and among the elderly, increased mortality.<sup>13-15</sup>

This Focus On will explore health literacy in the context of health promotion and identify factors that influence health literacy for health promoters to consider when planning initiatives, programs, policies and services (defined here as ‘health promotion responses’).

## Methods

The search strategy for this Focus On was developed by Public Health Ontario Library Services and used a number of databases (MEDLINE, Ovid PsycINFO, EBSCOhost SocINDEX, and Elsevier's Scopus). To provide the most up-to-date evidence in the literature, the search focused on articles from 2021 forward. Articles in English, from OECD countries, and relevant to a health promotion context were included. Articles retrieved through the search were assessed for eligibility. Full-text articles were reviewed and relevant information was extracted from each article. We have also drawn on key references from the selected papers. The details of the search strategy are available upon request.

## Results

Eight papers were selected for inclusion. All were primary studies. The studies were conducted Germany,<sup>16</sup> the United States (2),<sup>12,17</sup> Spain,<sup>11</sup> Australia,<sup>18</sup> Finland,<sup>19</sup> Canada<sup>10</sup> and the U.K.<sup>20</sup> The studies examined different population groups, ranging from the general population,<sup>12,16</sup> to specific immigrant/migrant populations,<sup>10,17,18</sup> grade nine students,<sup>19</sup> and patients at a medical clinic.<sup>11</sup> One study identified subjects at birth and followed them to adulthood.<sup>20</sup> A list of included papers can be found in Appendix A.

### What is Health Literacy?

All but one paper included a definition of health literacy. Three definitions were used in the papers: the previously mentioned WHO 1998 definition,<sup>1</sup> Sørensen et al.,<sup>21</sup> and Healthy People 2030.<sup>22</sup> The definitions have many commonalities, with each including pre-requisites and characteristics that individuals require in order to; find and access information; understand it; and act on the information in order to improve health. Given the similarity of the definitions, we present the one developed by Sørensen et al. in a systematic literature review of health literacy and public health published in 2012:

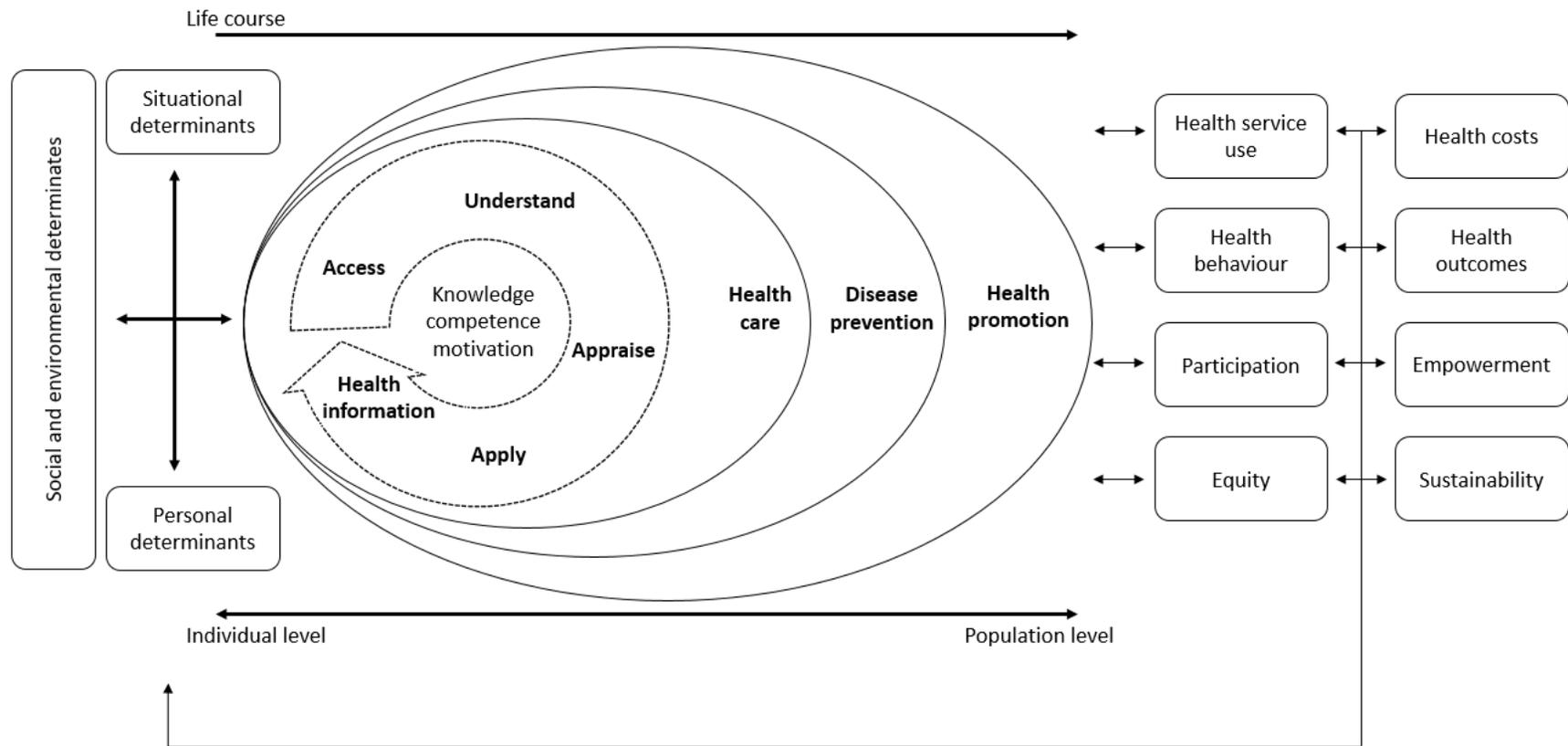
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Health literacy is linked to literacy and entails people's knowledge, motivation and competences to access, understand, appraise, and apply health information in order to make judgments and take decisions in everyday life concerning healthcare, disease prevention and health promotion to maintain or improve quality of life during the life course.<sup>21</sup>

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The same authors developed a conceptual model of health literacy, which encompasses the main dimensions of health literacy, the competencies related to it, the factors (proximal and distal) that contribute to those competencies, and the pathways that link health literacy to health outcomes (Figure 1). The model includes the domains of health care, disease prevention, and health promotion.<sup>21</sup>

**Figure 1: Integrated Model of Health Literacy**



Source: Sørensen K, Van den Broucke S, Fullam J, Doyle G, Pelikan J, Slonska Z, et al; (HLS-EU) Consortium of Health Literacy Project European. Health literacy and public health: a systematic review and integration of definitions and models. BMC Public Health. 2012;12:80. Available from: <https://doi.org/10.1186/1471-2458-12-80>. Reproduced under the CC-BY License.

## Measuring Health Literacy

All of the included studies conducted health literacy assessments of the identified study population. Six tools were cited in the eight papers. Table 1 describes each tool.

**Table 1: Health Literacy Assessment Tools Cited in Included Papers**

Measurement Tool	Description	Paper(s)
Health Literacy Questionnaire (HLQ)	Nine independent indicators of health literacy capturing experiences in attempting to engage with, understand, access and use health information and services. <sup>23</sup>	Garcia-Garcia & Perez-Rivas Feinberg et al. Saleem et al.
Comprehensive Health Literacy European Health Literacy Survey Questionnaire (HLS-EU-Q)	The HLS-EU-Q measures self-reported health literacy. The full questionnaire consists of 47 items (HLS-EU-Q47). A shorter, 16 question version (HLS-EU-16) has also been validated. <sup>24</sup>	Benrens et al. (HLS-EU-Q47) Solis-Trapala et al. (HLS-EU-16)
2003 National Assessment of Adult Literacy (NAAL)	The 2003 NAAL assessed the English literacy of adults in the United States. The survey included items designed to measure health literacy. <sup>25</sup>	Sepassi et al.
Brief Health Literacy Screening Tool (BRIEF)	Four questions designed to identify patients with low health literacy. Three questions were developed and validated by Chew et al. 2004 <sup>26</sup> and a fourth question was added by Haun et al. 2009. <sup>27</sup>	Thapa-Bajgain et al.
Finnish National Agency for Education	National survey of health education learning outcomes and adolescents' health literacy, measured using a broad 55-item paper-and pencil test. <sup>19</sup>	Summanen et al.

## Factors That Influence Health Literacy

Each paper identified characteristics in the study population that were associated with health literacy. These include:

- **Socioeconomic status:** People with higher socioeconomic status had higher health literacy levels.<sup>16,17</sup> For example, all included papers noted that health literacy increased as education levels increased.<sup>10,11,16-20</sup> One study examining grade nine students found that school achievement, educational aspirations (i.e., to study at university) and parents' education levels were associated with higher health literacy levels.<sup>19</sup> Additionally, people with higher incomes had higher health literacy levels.<sup>10,18</sup>
- **Age:** Among adults, younger age groups had higher health literacy than older age groups.<sup>10,11,16,18</sup> For example, two studies noted that health literacy levels were higher in adults under 65 years of age.<sup>10,11</sup> One study, that segmented the study population in ten year age brackets, found that the 26 to 35 and 36 to 45 age groups had higher health literacy than other age groups.<sup>10</sup>
- **Perceived health status:** People with lower self-reported health status had lower health literacy levels.<sup>10,11</sup>
- **Migration/Immigration status:** Three studies found that people who had been born outside of the country of study had lower health literacy rates than those born in the country of study.<sup>16-18</sup>
- **Employment:** People who were employed had higher health literacy levels.<sup>10,17</sup>
- **Gender:** Two studies with very specific study populations noted a relationship between health literacy and gender. One study, examining grade nine students, found that girls had higher levels of health literacy than boys.<sup>19</sup> A study of Nepalese immigrants in Calgary found that women were more likely to have lower health literacy than men.<sup>10</sup>
- **Availability of health care:** Having access to health care afforded through health insurance was associated with higher health literacy.<sup>10,12</sup>
- **Race:** Two American studies specifically examined the relationship between race and health literacy. One study's population, which was representative of the state of Georgia where the study was conducted, did not find a relationship between race and overall health literacy.<sup>12</sup> The results of a national U.S. study found that racial and ethnic minority individuals were more likely to have very low health literacy levels as a result of underlying inequities faced by that population.<sup>17</sup>

## Discussion

We reviewed current literature on the topic of health literacy for health promotion, and identified factors associated with health literacy. These factors include demographics such as age and gender, and factors related to the structural and social determinants of health, such as education, income, access to health insurance, immigration status, employment and socio-economic status. Psychological assets and capacities were discussed much less frequently in the included papers, though many of these are described in the definitions of health literacy that we have reported. These include cognitive and social skills,<sup>1</sup> motivation and ability,<sup>1,22</sup> and knowledge and competence.<sup>21</sup> One of the included studies, Berens et al.<sup>16</sup> examined the effect of self-efficacy on health literacy and found an association between high self-efficacy and health literacy. That is, people who have strong beliefs in their own capacities (i.e., high self-efficacy) also believe that they are able understand health information and take action to improve their health.<sup>16</sup> Authors of this study hypothesize that self-efficacy is itself a determinant of health literacy.<sup>16</sup>

While factors associated with health literacy were measured as separate and distinct, several papers noted a complex interrelationship between them.<sup>16,17</sup> For example, employment status, income level and migration/immigration background can be related to the availability and access to health care, even within countries that have public health care systems.<sup>10,12</sup> Underlying structural and systemic inequities faced by racial and ethnic minorities, in particular for those with an immigration/migration background, reduce opportunities for education and employment, as well as for social and economic upward mobility.<sup>17</sup>

Health literacy is often identified as a pathway towards achieving health equity.<sup>16,28</sup> The included papers clearly outline that groups with certain characteristics and backgrounds are more likely to have low health literacy levels, and therefore, can be more susceptible to the associated health risks. Sepassi et al. argues that inequities in social determinants of health are upstream influencers of health literacy, as these inequities reduce opportunities for developing health literacy proficiency.<sup>17</sup>

Health literacy was described in the papers in two ways: as a risk factor, and as an asset.<sup>19,29</sup> In the domain of health care, health literacy was seen as a risk factor for poor health and poor compliance that needed to be identified and managed.<sup>29</sup> In public health and health promotion, health literacy was viewed as an asset for health and well-being.<sup>29,30</sup> Health literacy is an asset that offers autonomy and control over personal health decisions.<sup>19,29,30</sup> Not only can health literacy support individuals in making decisions, it can also support the development of such autonomy and empowerment,<sup>19</sup> and engagement in collective health promotion action.<sup>31</sup> Health literacy can also extend from the personal to the political and policy levels.<sup>31</sup> When decision-makers and funders have high health literacy, they understand health impacts, co-benefits and effective action on the determinants of health.<sup>31</sup>

The definitions of health literacy in the included papers all refer to individuals taking action on health information. It is important to consider that there are factors that enable individuals to act on health information beyond health literacy. Choices are largely shaped by the social conditions previously mentioned: the social and structural determinants of health. Simply providing information, or even building health literacy competencies, ultimately will not alone address the structures that dictate and limit behaviour.<sup>9,32,33</sup>

## Limitations

This Focus On intends to provide a general overview of health literacy and health promotion and describe the factors that can impact it. We did not conduct quality appraisals on the included papers. We included articles published from 2021 onwards and did not include grey literature. More than one study cited that their study population was not representative of the general population and therefore results should be interpreted cautiously. Additionally, as several of the included studies looked at very specific populations (i.e., grade nine students in Finland, Nepalese immigrants in Calgary) it would be difficult to apply the results more broadly.

## Conclusion

This Focus On points to the need to consider the health literacy of the communities health promoters work with, and to engage with those communities to identify how to build health literacy capacity. Knowledge about the determinants of health literacy can inform the design of health promotion responses that include the health promotion action area of building personal skills.<sup>16</sup> Health literacy is widely seen as modifiable: in other words, health literacy skills and capacities can be learned, practiced and improved.<sup>29</sup> Health promoters should consider mitigation strategies and/or incorporating activities that build health literacy into their programs of public health interventions.

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## Appendix A: Summary of Included Papers

Author and Year	Title	County
Berens et al. 2022.	The effect of self-efficacy on health literacy in the German population	Germany
Feinberg et al. 2022.	Strengthening the case for universal health literacy: The dispersion of health literacy experiences across a southern U.S. state	U.S.A.
Garcia-Garcia et al. 2022.	Health Literacy and Its Socio-demographic Predictors: A Cross-Sectional Study of a Population in Madrid (Spain)	Spain
Saleem et al. 2023.	Health literacy in Pakistani migrants in Australia-An emerging and neglected culturally and linguistically diverse community	Australia
Sepassi et al. 2023.	Predicted Health Literacy Disparities Between Immigrant and US-Born Racial/Ethnic Minorities: a Nationwide Study	U.S.A.
Solis-et al. 2023.	Are childhood factors predictive of adult health literacy? A longitudinal birth cohort analysis	UK
Summanen et al. 2022.	Objective health literacy skills among ninth graders in Finland: outcomes from a national learning assessment	Finland
Thapa-Bajgain et al. 2023.	Health literacy among members of the Nepalese immigrant population in Canada	Canada

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## Citation

Ontario Agency for Health Protection and Promotion (Public Health Ontario). Health literacy and health promotion. Toronto, ON: King's Printer for Ontario; 2024.

ISBN: 978-1-4868-7902-1

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