

Low health literacy is costing health

Health literacy is a critical determinant of health

The growing intent to empower individuals to take control over their own health and the overwhelming volume of health information and misinformation underscore the importance of health literacy. However, health information made available to the public often fails to consider the ways individuals comprehend and act on the information, or the potential negative effects of misinformation.

In order to successfully deal with the uncontrolled flow of health information and misinformation, further investment in health literacy is required as this constitutes a distinct challenge beyond information communication and health education.

Health literacy represents the personal knowledge and competencies that accumulate through daily activities, social interactions and across generations. Personal knowledge and competencies are mediated by the organizational structures and availability of resources that enable people to access, understand, appraise, and use information and services in ways that promote and maintain good health and well-being for themselves and those around them.

Low health literacy is a major public health concern

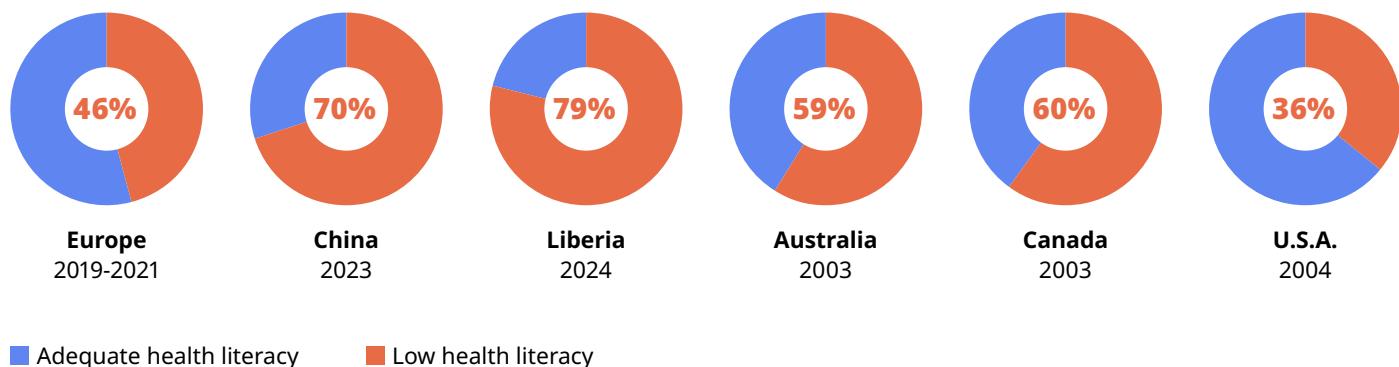
Although data on health literacy remains scarce and is mostly stemming from high-income countries¹, it shows that:

- 46% of the population in Europe has low health literacy (HLS19 Consortium of the WHO Action Network M-POHL, 2021).²
- Almost nine out of ten adults in the United States do not achieve proficient health literacy levels (Kutner et al., 2006).
- Three in five adults had low levels of health literacy in Australia and Canada (Australian Bureau of Statistics, 2008, Canadian Council on Learning 2007).
- While population health literacy in China has steadily improved, seven in ten adults still struggle with health literacy today (National Health Commission of the People's Republic of China, 2024).
- The first assessment of population health literacy in Liberia revealed low levels of health literacy for 79% of adults (Liberia, 2024).³

1. The health literacy surveys conducted in the USA, Australia, Canada, Europe, China and Liberia follow different models of health literacy, including the way health literacy is scored. The European, Chinese and Liberian models and scores can be compared, the Australian and Canadian models and scores can be compared, while the US model and scoring vary from the other country or regional surveys.

2. The European survey included 17 countries: Austria, Belgium, Bulgaria, Czech Republic, Denmark, France, Germany, Hungary, Ireland, Israel, Italy, Norway, Portugal, Russian Federation, Slovakia, Slovenia and Switzerland.

3. As measured with the full version of the health literacy survey, HLS19-Q47 (<https://m-pohl.net/tools>).



Generally, high-income countries where data on health literacy is available recognize that health literacy is important. However, the low levels of health literacy are a demonstration that current efforts are inadequate and unless improved, public health will remain suboptimal.

Addressing the rise of health care costs

While it is difficult to make a direct association between health literacy and health care cost, research shows that low levels of health literacy add up to additional costs. Global spending on health reached US\$9.8 trillion in 2021, or 10.3% of global gross domestic product (GDP). While investment in accessibility and quality of health care is non-negotiable, efforts can be made to reduce unnecessary spending and support people with low health literacy, which have consistently found to have:

- higher rates of avoidable emergency room attendance, greater prescription expenditure
- prolonged recovery periods from illness
- increased illness complications (Betz et al., 2008; Berkman et al., 2011; Rasu et al., 2015).

The exponentially increasing costs due to low health literacy are exemplified by data from the United States:

- 3–5% of the total health care expenditure can be attributed to low levels of health literacy; it is estimated that health care costs are \$143 to \$7798 higher per year for a person with limited health literacy compared to one with adequate health literacy (Eichler et al., 2009).
- Moreover, nationally representative estimates of healthcare utilization and expenditure between 2005 and 2008 show that the annual mean expenditure of those with below basic or basic health literacy reaches \$1862, which is significantly higher than for those with above basic health literacy \$1027 (Rasu et al., 2015)
- Customers with low health system literacy have difficulties understanding aspects related to their health insurance coverage, such as out of pocket spending. They require more assistance navigating the complexities of the health-care setting, which leads to an additional \$4.8 billion of yearly

administration costs (Accenture, 2018). Due to declining health system literacy, this has risen to \$10 billion a year (Accenture, 2021).

- Another estimate shows that \$47 billion could be saved every year in terms of medical costs if unnecessary emergency room visits by people with low health literacy decreased to the level of those with adequate health literacy (Accenture, 2021).
- A 2007 study (Vernon et al.) estimated the cost of low health literacy for the US economy as ranging between \$106 billion and \$236 billion annually.

Public health and health literacy interventions can bring high returns of investment

While no comprehensive evidence exists around the return on investment of health literacy interventions, an economic analysis of a health literacy intervention “Better Beginnings, Better Futures” programme in Ontario, Canada suggests promising benefits. The economic analysis in this project revealed that for every \$1 spent on health literacy in schools \$2.30 could be saved. (McDaid, 2017).

Investing in health literacy is expected to:

- reduce frequent visits to care providers, shorten hospital stays, improve self-reported health status and increase health knowledge (Speros 2005).
- generate long-term economic benefits and improve the health outcomes of both children and school staff, and enhance adulthood career opportunities, where health literacy is taught in schools (WHO 2016; McDaid, 2017).

Conclusion

While there is growing evidence supporting the importance and benefits of investing in health literacy in high income countries, it is less clear what the effect of investment would be in low income countries. Several countries have advanced health literacy through a range of interventions and strategies, including national policies and legislative measures, investments in early school settings, adopting criteria for health-literate organizations and improving health care services, as well as other settings, and measuring population-level health literacy to ensure an adequate public health response.

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Development methodology

This product was developed through a literature review to identify/retrieve relevant publications on (#1) economic implications of health literacy (#2) evidence on population health literacy (HL) levels. The team consisted of three researchers, two conducted the initial search and the third validated the initial search results. The researchers were previously involved in research on "HL", "HL care costs", "cost analysis", "survey", "population survey", "HL measurement". Search conducted between September and December 2024. Online databases searched included PubMed, Web of Science, Scopus, CINAHL, ERIC and Google Scholar. Grey literature was searched e.g., reports, websites, fact sheets, policy briefs, and used snowballing techniques i.e. through hand-searching the reference lists of existing publications. Search terms were derived from existing systematic/meta-narrative reviews. Variations of these terms were used linked with using operators OR and/or AND. Search strategies were adapted for each database using specific requirements of the search form/engine for publications released between January 1990 and December 2024. Inclusion criteria for #1 (economic implications), only original research reviews and government documents were considered. Inclusion criteria for #2 (population HL data) only recent studies reporting on national HL and only if studies described results by HL levels were included, e.g., creating a HL (high/very high vs low/very low; excellent, adequate, problematic, inadequate; high, medium, low, etc.).

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