
Public Health Literacy Defined

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Abstract: Public health literacy is an emerging concept necessary to understand and address the broad array of factors, such as climate change, globalization, and poverty, that influence the public's health. Whereas health literacy has traditionally been operationalized as an individual-level construct, public health literacy takes into account the complex social, ecologic, and systemic forces affecting health and well-being. However, public health literacy has not yet been fully articulated. This paper addresses this gap by outlining a broad, new definition of public health literacy. This definition was developed through an inductive analytic process conducted in 2007 by a multidisciplinary research team, and two expert-panel sessions were convened to assess the consensual validity of the emergent definition. Based on this process, public health literacy is defined as the degree to which individuals and groups can obtain, process, understand, evaluate, and act on information needed to make public health decisions that benefit the community. Three dimensions of public health literacy—conceptual foundations, critical skills, and civic orientation—and related competencies are also proposed. Public health literacy is distinct from individual-level health literacy, and together, the two types of literacy form a more comprehensive model of health literacy. A five-part agenda is offered for future research and action aimed at increasing levels of public health literacy.

(Am J Prev Med 2009;36(5):446–451) © 2009 American Journal of Preventive Medicine

Introduction

The current health literacy movement seeks to improve health outcomes and reduce health disparities through improved health communication systems and health education programs. This movement has gained momentum in the past decade, highlighting the gaps between known treatment, prevention, and health promotion strategies and the health behaviors and outcomes of individuals.^{1–3} However, the current aims of the movement cannot be fully achieved without accounting for the broad array of influences on health, such as global climate change, globalization, and poverty.

A new type of health literacy is needed—public health literacy. The purpose of this paper is to clarify what this concept means. This paper outlines the limitations of current conceptions of health literacy^{1–8} and proposes a definition of public health literacy. Key dimensions and associated competencies of public health literacy are articulated, and several mechanisms for achieving public health literacy are suggested.

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Limitations of Current Conceptions of Health Literacy

As defined by the IOM, health literacy is “the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions.”² Concerned with strengthening the patient–provider relationship, health literacy efforts focus on enhancing communication and health maintenance skills so that individuals and families can make improved health-related decisions and can better adhere to medical regimens.

This formulation of health literacy is problematic because “it focuses attention on and appears to limit the problem of health literacy to the capacity and competence of the individual.”² Accordingly, health literacy is an “individual-level construct”⁹ that “begins and ends with the patient.”¹⁰ Low levels of health literacy are consequently attributed to patient deficits in reading or numeracy skills or both (although it is acknowledged that providers’ ineffective communication strategies also play a role). Measures of health literacy^{11,12} reflect this formulation by assessing individual skill in medical word recognition, text comprehension, and numeracy.

Low levels of health literacy are, by definition, related to deficiencies among individuals, and corrective efforts tend to focus on improving interpersonal communication strategies, ranging from face-to-face conversations to innovative web-based software, that facilitate

information exchange between patients and providers.⁹ Although important, solutions focused solely on the “therapeutic dyad” pay insufficient attention to the complexity of social factors that often exist in populations with widespread health illiteracy.¹³ These individual-level health literacy initiatives may do very little to achieve the ultimate goal of promoting equitable health status because “they do not address the root causes of health illiteracy,” such as socioeconomic disparities and unequal access to high quality education.¹³ Moreover, a low level of health literacy may not be the most important barrier for people to overcome when trying to improve their health status. Other barriers, such as lack of access to care and treatment and the requisite time and financial resources related to health-seeking behaviors may present greater challenges to individuals.¹⁴ These barriers are unlikely to be mitigated by enhanced communication systems.

A more fundamental limitation of the current conceptualization of health literacy is its focus on secondary and tertiary rather than primary prevention of disease. This “clinical approach to health literacy” strives to improve medication regimen adherence and encourage lifestyle changes after individuals have already become ill.¹⁵ In addition, the social, political, environmental, and economic forces that have an impact on health are often omitted from health literacy research and practice.

To reach its full potential and affect health outcomes, the health literacy movement should incorporate the growing body of literature focused on social determinants of health^{16–21} and population health perspectives.^{22–24} Those concerned with improving the level of public health literacy ought to attend to “upstream” or macro-level determinants of health and well-being as a complement to the individually oriented perspectives that currently dominate the health literacy movement.^{25–28} This shift in focus would move beyond the examination of low levels of health literacy as a public health concern^{2,4–7,29} and instead give primacy to understanding and addressing societal-level factors that influence the public’s health.

Public Health Literacy Defined

It is proposed that health literacy be reconceptualized to include two broad components: individual-level health literacy, which is already well developed, and public health literacy, as defined in this paper. The definition of public health literacy, as well as the corresponding dimensions and competencies, emerged through an inductive analytic process conducted in 2007 by a multidisciplinary research team. Building on the principles of Rudolf Virchow, a nineteenth-century German physician and public health official who understood disease to be fundamentally a social problem,^{30–32} the team first evaluated concepts from the health

literacy movement through the lenses of public health, social determinants of health, and population health.

These three terms were operationalized to refine the scope of the analytic process. Public health was defined as: the practice of preventing disease and promoting good health within groups of people, from small communities to entire countries.³³ The social determinants of health are defined as: the “causes of the causes”—the fundamental structures of social hierarchy and the socially determined conditions these structures create in which people grow, live, work, and age.³⁴ Population health is defined as: the health outcomes of a group of individuals, including the distribution of such outcomes within a group.²²

After reviewing the health literacy literature, the research team developed a preliminary definition of public health literacy and its dimensions and competencies. Two expert-panel sessions were convened to assess the consensual validity of the preliminary definition. The experts included public health officials, global health researchers, biologists, virologists, advanced practice nurses, community health workers, and physicians.

Existing scholarship broadens the concept of health literacy to account for the social, environmental, and systemic forces affecting the health of individuals and the public. Zarcadoolas et al.,⁶ for example, speak of civic literacy as the “skills and abilities that enable citizens to become aware of public issues, participate in critical dialogue about them, and become involved in decision making processes.” Nutbeam⁵ defines critical health literacy as the “cognitive and skills development outcomes which are oriented towards supporting effective social and political action, as well as individual action.” Gazmararian et al.²⁹ have drawn attention to the concept of public health literacy and have called for a more precise definition of “what it means to be public health literate.” They present public health literacy as an ethical imperative and suggest that people who are public health literate will be better able to appreciate the ways that health issues “affect themselves, their community, and society at large.”²⁹ More recently, Pleasant and Kuruvilla¹⁵ have emphasized that health literacy should include knowledge of public health concepts.

Unfortunately, this clear academic shift in focus from the individual to the public has not taken hold in research initiatives, clinical interactions, or public messages related to health concerns. The dominance of the biomedical model may be a barrier to the adoption of broader conceptualizations of health literacy, situating disease and illness within individual bodies and focusing on treatment of acute conditions rather than on strategies of prevention.^{35,36} An additional barrier may be the term “public.” Public health literacy is often interpreted as health literacy **for** the public (or the mass distribution of individual-level health literacy) rather than literacy **about** public health. An example is

Table 1. Comparison of individual health literacy versus public health literacy

	Health literacy	
	Goal: to promote health and reduce disparities among individuals, families, communities, and societies	
	Individual health literacy	Public health literacy
Definition	The degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions ²	The degree to which individuals and groups can obtain, process, understand, evaluate, and act upon information needed to make public health decisions that benefit the community
Target population	Patients	The public
Purpose	Improve health of individuals	Improve health of public
Primary aims	Enhance health communication systems; encourage healthy behaviors	Engage more stakeholders in public health efforts; address social and environmental determinants of health

the American Medical Association's commentary on the recent call for improving public health literacy in America, which responded to the call by underscoring the need for better communication mechanisms between patients and providers.³⁷ Notwithstanding the importance of promoting individual-level health literacy at the population level, this strategy alone is too narrow.

Public health literacy is defined here as the degree to which individuals and groups can obtain, process, understand, evaluate, and act upon information needed to make public health decisions that benefit the community. Although it parallels the IOM's definition of health literacy, the definition of public health literacy differs in the following ways:

- An emphasis on evaluation underscores the importance of being able to judge or determine the significance, worth, or quality of information related to the health of the public.
- The addition of action assumes that individuals and groups have agency and thus the power to organize activities to accomplish public health goals and objectives through civic engagement.
- An emphasis on public health decisions goes beyond the set of health literacy skills related to accessing, interpreting, and using health information for individual health purposes. These individual-level skills contribute to, but are insufficient for, the societal-level perspective public health literacy requires.
- An emphasis on community acknowledges that individuals are embedded in environmental and social contexts. This emphasis differs from the conceptualization of individual-level health literacy, which most often treats individuals, and even their families, as decontextualized units.

In this definition, public health literacy is purported to be distinct from, but related to, individual-level health literacy. Together, the two types of literacy form an expanded framework for health literacy. Table 1 depicts health literacy as a broader concept inclusive of two unique types of literacy that converge to achieve

the broader goal of promoting health and reducing health disparities among individuals, families, communities, and societies.

Dimensions of Public Health Literacy

Three dimensions of public health literacy are identified: conceptual foundations, critical skills, and civic orientation. Each dimension has corresponding competencies. Public health literacy is socially, spatially, and temporally located. It consists of various types of knowledge and skills, including experience and oral traditions, as well as reading, writing, arithmetic, and higher education. Public health literacy is as much citizen-based as it is expert-driven, and it can take multiple forms, from voting to organizing grass-roots initiatives to establishing healthy policies and structures. The target population for promoting public health literacy is the entire public, not just public health and medical officials. The competencies within each dimension are not hierarchic, but rather summative: The greater the number of competencies, the higher the level of public health literacy and the greater the capacity to improve public health outcomes.

Dimension 1: Conceptual Foundations

The conceptual foundations dimension includes the basic knowledge and information needed to understand and take action on public health concerns. An individual or group demonstrating public health literacy at a conceptual level is able to define and discuss:

- core public health concepts such as primary prevention, health promotion, and population health;
- public health constructs such as prevalence, risk factors, probability, and ORs, and the relationship of each of these to morbidity and mortality; and
- ecologic perspectives and the multiple pathways through which disease is transmitted and health is promoted.

Conceptual foundations of public health literacy call for a different kind of knowledge than that needed to promote individual health—knowledge that may be gained from sources ranging from classroom sessions to folklore. Such knowledge may or may not be technical in nature, but in all cases it is focused on health promotion and disease prevention at the population level. People or groups with high levels of public health literacy would focus on prevention rather than treatment and would take into account the multiple factors affecting health, including the role of community settings and structures, as well as individual behaviors and lifestyles.

Dimension 2: Critical Skills

The critical skills dimension relates to the skills necessary to obtain, process, evaluate, and act upon information needed to make public health decisions that benefit the community. An individual or group demonstrating public health literacy on this dimension is able to:

- obtain, evaluate, and utilize public health information from a variety of sources (e.g., health practitioners, media, social networks);
- identify public health aspects of personal and community concerns (e.g., urban planning, agricultural practices, violence);
- communicate information about health conditions and actions (e.g., smoking, obesity, handwashing) not only as a personal concern but also as a problem affecting the larger community; and
- assess who is naming and framing public health problems and solutions and describe the ways in which such framing is biographically, culturally, spatially, temporally, and institutionally bounded.

Critical skills focus on promoting the health of the community rather than the health of individuals. In doing so, citizens are able to understand public health aspects of personal and community concerns. In addition, people or groups with high levels of public health literacy have the skills to communicate personal health conditions in terms of problems affecting the broader community and to shift conversations and actions about public health concerns from individual-level to community-level change. These skills tend to refocus discourse about public health problems as well as corresponding actions to reveal the biographic, cultural, spatial, temporal, and institutional constraints on understandings of public health.

Dimension 3: Civic Orientation

The civic orientation dimension ensures that “the public” remains at the center of public health literacy and includes the skills and resources necessary to address

health concerns through civic engagement. An individual or group demonstrating public health literacy from a civic perspective is able to:

- articulate that the burdens and benefits of society are not fairly distributed;
- evaluate who benefits and who is harmed by public health efforts or lack thereof;
- communicate that current public health problems are not inevitable and can be changed through civic action; and
- address public health problems through civic action, leadership, and dialogue.

Civic engagement calls for awareness of the ways that public goods, resources, burdens, and benefits are distributed; it is the first step toward civic action to advocate on behalf of the public’s health.

Pathways to Public Health Literacy

Creating a population that is public health literate is critical, and the potential pathways for achieving this goal are numerous. First, efforts ought to focus on formal educational systems, including elementary and high schools, junior colleges, and 4-year colleges and universities. This type of training would be aimed at preparing people to become not necessarily public health professionals but rather more informed members of the public, and would thus prepare students to effectively address public health concerns from myriad perspectives (e.g., at work, as a voter, as a parent). Examples of this type of approach are already being developed.^{38,39}

Second, there is a need to increase levels of public health literacy among the public at large. This increase may occur through the media (e.g., newspapers, magazines, television, radio, websites), along with community-based or work-based initiatives. Recent efforts related to the 2008 PBS TV documentary series *Unnatural Causes: Is Inequality Making Us Sick?* (www.unnaturalcauses.org) are exemplary of this type of training. This seven-part series has been used by government agencies, community-based organizations, faith-based groups, and others to explore racial and socioeconomic inequities in health and inspire groups to take action in an effort to redress these injustices.

Finally, targeted training may be needed for professionals not formally trained in public health but whose work influences the health of the public. Efforts may target a specific health concern, such as childhood obesity, and then work to ensure relative stakeholders (e.g., school administrators, grocery store owners, legislators, media) are provided with opportunities to become more public health literate.

An Agenda for the Future

Public health literacy is important, and the challenge is to identify effective strategies for increasing it. A five-part agenda for future public health literacy research and action is proposed. First, as advocated by Gazmararian et al.,²⁹ measures of public health literacy should be developed. The three dimensions outlined above may be useful in the development of effective assessment instruments that would identify the extent to which individuals and groups are public health literate. Research would also explore the relationship between individual-level health literacy and public health literacy. Second, investigators should explore the full impact of low levels of public health literacy on both society and the decisions of various stakeholders in the healthcare system—consumers, providers, advocates, educators, administrators, policymakers, and elected officials.

Third, efforts should be made to promote the incorporation of public health literacy into health literacy programs, formal educational systems, and informal educational networks. Interventions aimed at helping the public become more public health literate should be developed, implemented, and evaluated. Fourth, individuals and groups need to be empowered to translate increased public health literacy competencies into actions that will help resolve some of society's more pressing health issues and alleviate social injustices.

Finally, a broader model of health literacy should be put into practice. This expanded model would emphasize the interconnections between individual-level and societal-level constructs and highlight the ways that these constructs combine to influence the health and well-being of individuals and communities. This interactive model would enlarge the set of tools for devising short- and long-term health solutions for both individuals and the public.

Conclusion

Social, environmental, and systemic forces, such as globalization, climate change, recessions, and bioterrorism, are exacerbating old health problems and creating new ones. A health literacy framework that emphasizes how individuals can change their own behavior to improve their health status is not sufficient to address these problems. All members of society need to deepen their understanding of how the health and well-being of individuals, families, communities, and societies are dependent on a complex array of social, environmental, and political forces. Without public health literacy, our society will struggle in its efforts to identify and address the health challenges of the future.

Preparation of this paper was facilitated by grants from the Vanderbilt University Center for Ethics and the Vanderbilt University Center for Medicine, Health, and Society. The authors thank Lynn Lentz for her assistance, and for their inspiration and feedback on earlier versions of the paper, we thank: Bettina Beech, Barbara Clinton, Ernie Drucker, Pyser Edlesack, Julie Gazmararian, John Hamilton, Elizabeth Heitman, Abelardo Moncayo, Russell Rothman, Alfredo Vergara, and Sten Vermund. We thank the anonymous reviewers and the editor for their thoughtful comments.

No financial disclosures were reported by the authors of this paper.

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