

# Optimizing Health Literacy:

Improving Health and Reducing Health Inequities

A selection of information sheets from The Health Literacy Toolkit  
for Low- and Middle-Income Countries



**World Health  
Organization**

Regional Office for South-East Asia



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Cover and inside design, and layout: RoscherCreative

## Suggested citation

Dodson S, Good S, Osborne RH. Optimizing health literacy: improving health and reducing health inequities: a selection of information sheets from the health literacy toolkit for low- and middle-income countries. New Delhi: World Health Organization, Regional Office for South-East Asia, 2015.

## Keywords

1. Health literacy
2. Public Policy
3. Health Promotion
4. Social Determinants of Health

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Printed in India

WHO Library Cataloguing-in-Publication data  
World Health Organization, Regional Office for South-East Asia.

Optimizing health literacy: improving health and reducing health inequities: a selection of information sheets from the health literacy toolkit for low- and middle-income countries.

ISBN: 978-92-9022-474-7

(NLM classification: WA 590)

# Optimizing Health Literacy:

## Improving Health and Reducing Health Inequities

A selection of information sheets from  
The Health Literacy Toolkit for Low- and Middle-Income Countries

Editors: Sarity Dodson, Suvajee Good and Richard Osborne



## Overview

This series of information sheets introduces health literacy, its relevance to public policy, and the ways it can be used to inform the promotion of good health, the prevention and management of communicable and noncommunicable diseases, and the reduction of health inequities. It provides information and links to further resources to assist organizations and governments to incorporate health literacy responses into practice, service delivery systems, and policy.

The selection of information sheets found in this pack have been drawn from The Health Literacy Toolkit for Low- and Middle-Income Countries. World Health Organization (WHO) (Dodson S, Good S & Osborne RH [ed], 2015).

## Audience

This publication seeks to inform:

- governments, politicians and policy makers at all levels
- academic institutions
- public, civil society, and non-governmental organizations, and practitioners
- relevant private sectors promoting health and well-being
- communities, community-based organizations and social networks
- WHO and other UN partners
- development organizations.

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## Foreword

Education improves lives. Reading and writing are precious skills for many people in the world, and can have long-lasting benefits for future generations. We have learned from our public health experiences that educating women reduces child mortality and improves maternal and child health. However, understanding health-related information requires knowledge, experience, and skills, and accessibility of health information. This means that information needs to be not only available, but also readable and comprehensible. Health practitioners' communication with patients and family members can be part of the therapeutic process, however, knowledge of health, health services, and resources will depend on levels of health literacy.

Health literacy plays an important role in how well individuals can access the health system and receive quality care. The World Health Organization recognized the importance of health literacy and included explicit calls for action in the Seventh Global Conference on Health Promotion in Nairobi in 2009. Since 1998, WHO had defined health literacy as “the cognitive and social skills which determine the motivation and ability of individuals to gain access to, understand and use information in ways which promote and maintain good health”.



Credit: WHO / SEARO

Although initially the responsibility for health literacy was focused on individuals, there is increasing recognition that governments, health and community service providers, researchers, and consumer groups are also equally accountable. Equitable and achievable access to health care must be promoted at the individual, organizational and policy levels to achieve globally agreed agendas such as the Millennium Development Goals (MDG).

The Nairobi Call to Action for Closing the Implementation Gap in Health Promotion 2009 identified five key strategies and actions for reducing health inequities and poverty and improving health and quality of life through health promotion implementation. One of the five key strategies was to improve health literacy and health behaviours by designing health interventions based on health, social and cultural needs. Development of health literacy interventions is an important strategy for assisting organizations to make health care and services more accessible, and for empowering people to improve their own health literacy, as well as that of their families and their communities.

Health literacy interventions have been implemented in most high-income countries. There are several tools that have been used to measure health literacy and assess how well individuals understand health information. However, these tools inadequately capture the breadth of the WHO definition of health literacy, and do not provide the necessary data for lower- and middle-income countries to make decisions about effective health literacy interventions for individuals and communities. Deakin University, in collaboration with the

WHO Regional Office for South-East Asia, developed health literacy measurement tools which are suitable for use in low- and middle-income countries. The Information and Support for Health Actions Questionnaire (ISHA-Q) and Health Literacy Questionnaire (HLQ) are being used to better understand the health literacy strengths and difficulties of people from a range of socioeconomic and ethnic backgrounds, and of people living with disability or with long-term health conditions. The understanding generated through assessment of health literacy enables researchers and service providers to co-create health literacy responses that empower people to seek appropriate health and social services, as well as make health care and services more accessible.

The WHO Regional Office for South-East Asia has commissioned Deakin University to develop a toolkit for health literacy that can be used to guide health literacy initiatives in low- and middle-income countries. The selection of information sheets found in this pack have been drawn from “The Health Literacy Toolkit for Low- and Middle-Income Countries”, and provide an introduction to health literacy and the approaches that may be used to assess responses to health literacy. Enhanced health literacy and improved responsiveness to health literacy needs can contribute to reducing health inequity and improving the health of populations.

Dr Poonam Khetrpal Singh  
Regional Director  
WHO South-East Asia



# 1

## What is health literacy?

Health literacy is the term used to describe the ability to engage with health information and services.



Credit: WHO / SEARO / Nursila Dewi

Health literacy brings together many concepts that relate to what people and communities need in order to make effective decisions about health for themselves, their families and their communities.<sup>1-6</sup>

**Health literacy** refers to the personal characteristics and social resources needed for individuals and communities to access, understand, appraise and use information and services to make decisions about health, or that have implications for health. Health literacy includes the capacity to communicate, assert and enact these decisions.<sup>7</sup>

Health-related decisions may be about a person's own health, the health of another person, or the health of the community. These decisions may be made either by a group of people (e.g., a family or community) or an individual. The health literacy of individuals and communities influences (and is influenced by) health behaviours and the characteristics of society and the healthcare system.<sup>2-5</sup> Further, it is context- and content-specific, so health literacy in one setting, or relating to one health decision, will be different from another.<sup>4</sup>

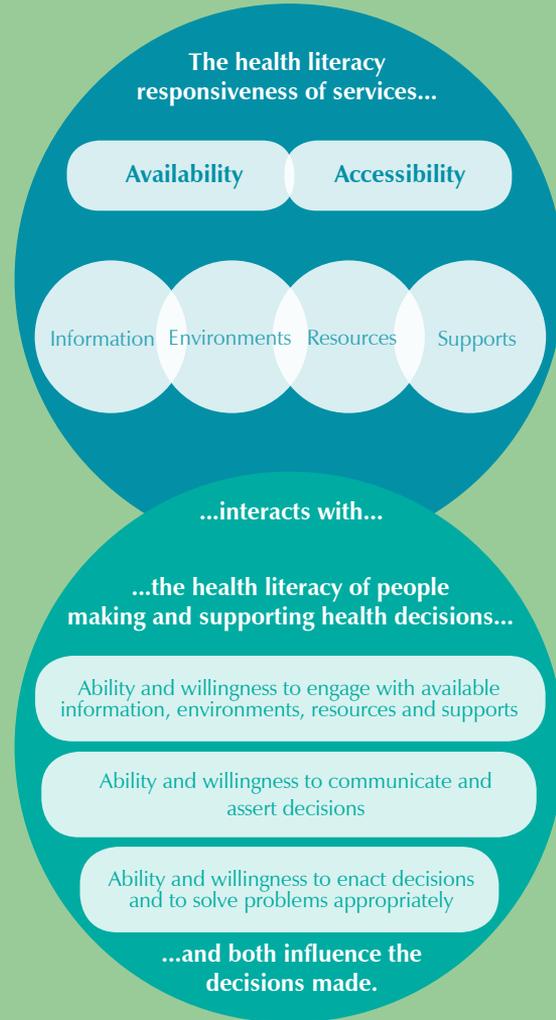
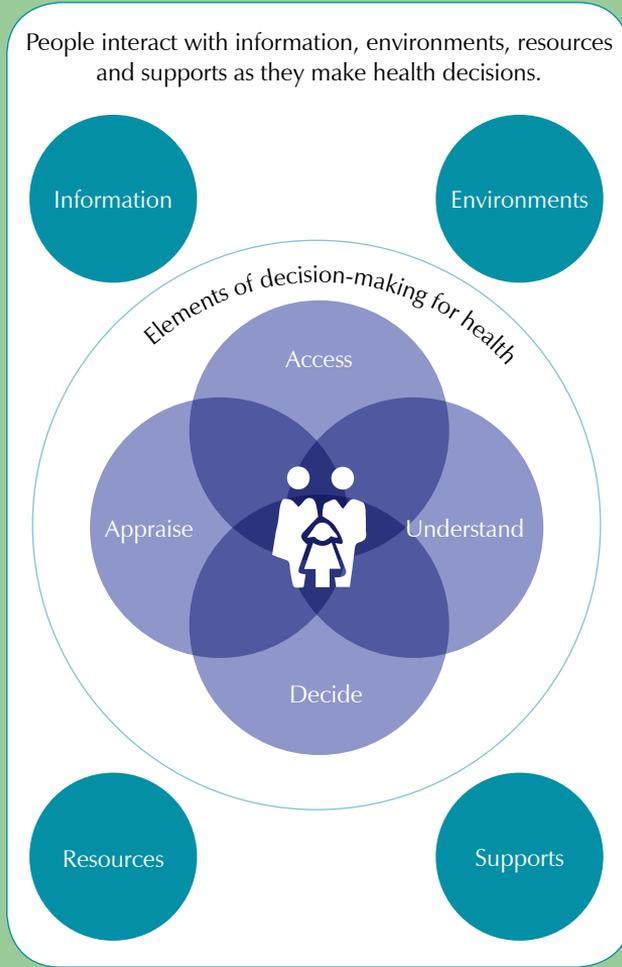
Individuals and communities have health literacy strengths and limitations that influence how effectively they engage with health information and services. Health and social service systems can also have strengths and limitations in their responsiveness to the health literacy of the people they serve.<sup>6,8</sup>

**Health literacy responsiveness** describes the way in which services, environments and products make health information and support available and accessible to people with different health literacy strengths and limitations.<sup>7</sup>



# The interaction between health literacy and the health literacy responsiveness of services<sup>7</sup>

Health decision-making process



Health Literacy Responsiveness

Health Literacy

## References

1. Nutbeam D. Health promotion glossary. World Health Organization (WHO), Oxford University Press, Great Britain, 2014 (<http://www.who.int/healthpromotion/about/HPR%20Glossary%201998.pdf> [accessed 28 November 2014]).
2. Sorensen K, Van den Broucke S, Fullam J, Doyle G, Pelikan J, Slonska Z, et al. Health literacy and public health: a systematic review and integration of definitions and models. BMC Public Health 2012,12:80 (<http://www.biomedcentral.com/1471-2458/12/80> [accessed 28 November 2014]).
3. Freedman DA, Bess KD, Tucker HA, Boyd DL, Tuchman AM, & Wallston KA. Public health literacy defined. Am J Prev Med 2009, 36(5): 446-451 ([http://www.ajpmonline.org/article/S0749-3797\(09\)00092-0/fulltext](http://www.ajpmonline.org/article/S0749-3797(09)00092-0/fulltext) [accessed 28 November 2014]).
4. Smith SK, Nutbeam D and McCaffery KJ. Insights into the concept and measurement of health literacy from a study of shared decision-making in a low literacy population. J Health Psychol 2013, 18(8):1011-1022 (<http://hpgq.sagepub.com/content/18/8/1011.long> [accessed 28 November 2014]).
5. Osborne RH, Batterham R, Elsworth GR, Hawkins M, Buchbinder R. The grounded theory, psychometric development and initial validation of the Health Literacy Questionnaire (HLQ). BMC Public Health 2013, 13:658 (<http://www.biomedcentral.com/1471-2458/13/658> [accessed 28 November 2014]).
6. Batterham RW, Buchbinder R, Beauchamp A, Dodson S, Elsworth GR and Osborne RH. The OPTimising HEalth LIterAcY (Ophelia) process: study protocol for using health literacy profiling and community engagement to create and implement health reform. BMC Public Health 2014, 14:694 (<http://www.biomedcentral.com/1471-2458/14/694> [accessed 28 November 2014]).
7. Dodson S, Beauchamp A, Batterham RW and Osborne RH. Information sheet 1: What is health literacy? In Ophelia Toolkit: A step-by-step guide for identifying and responding to health literacy needs within local communities. Part A: Introduction to health literacy. 2014. Deakin University, Melbourne (<http://www.ophelia.net.au> [accessed 28 November 2014]).
8. Brach C, Dreyer B, Schyve P, Hernandez LM, Baur C, Lemerise AJ, et al. Attributes of a Health Literate Organization. Washington, DC. Institute of Medicine 2012 ([https://www.iom.edu/-/media/Files/Perspectives-Files/2012/Discussion-Papers/BPH\\_HLit\\_Attributes.pdf](https://www.iom.edu/-/media/Files/Perspectives-Files/2012/Discussion-Papers/BPH_HLit_Attributes.pdf) [accessed 28 November 2014]).

*Source: Dodson S, Beauchamp A, Batterham RW and Osborne RH. Information sheet 1: What is health literacy? In Ophelia Toolkit: A step-by-step guide for identifying and responding to health literacy needs within local communities. Part A: Introduction to health literacy. 2014. Available from [www.ophelia.net.au](http://www.ophelia.net.au).*

# 2

## The relevance of health literacy for public policy

Effective responses to health literacy issues can improve health outcomes and reduce health inequities.



Credit: WHO / SEARO / Gary Hampton

*“A healthy population is a key requirement for the achievement of society’s goals. Reducing inequalities and the social gradient improves health and well-being for everyone.*

*Good health enhances quality of life, improves workforce productivity, increases the capacity for learning, strengthens families and communities, supports sustainable habitats and environments, and contributes to security, poverty reduction and social inclusion. Yet escalating costs for treatment and care are placing unsustainable burdens on national and local resources such that broader developments may be held back.”<sup>1</sup>*

Adelaide Statement on Health in All Policies. WHO, Government of South Australia, Adelaide 2010

Health outcomes result from multi-directional relationships among attributes of communities and community members, and the educational, environmental, economic and social service systems, products and infrastructures available to communities. The Health in All Policies (HiAP) approach recognizes that some of the main drivers of health lie outside the healthcare system.<sup>1</sup> Information and services required to make informed health-promoting choices do not always reside within the healthcare system.

Consideration of the health literacy of communities within all policies will encourage the development of services, environments and products that:

1. enhance the ability of individuals and communities to engage with information and supports for health; and
2. improve the availability and accessibility of this information and support.

Actions to address health literacy issues will strengthen communities and reduce social and health inequities.

**Health literacy is a potentially modifiable contributor to health inequities.**

Studies have shown correlations between low health literacy\* and:

- increased hospital admissions and readmissions<sup>2</sup>
- poorer medication adherence and increased adverse medication events<sup>3</sup>
- less participation in prevention activities<sup>4,5</sup>
- higher prevalence of health risk factors<sup>6,7</sup>
- poorer self-management of chronic diseases and poorer disease outcomes<sup>8</sup>
- less effective communication with healthcare professionals<sup>9</sup>
- increased healthcare costs<sup>10</sup>
- lower functional status<sup>11</sup> and
- poorer overall health status<sup>12,13</sup> including increased mortality.<sup>14</sup>

Studies also suggest that differences in health literacy abilities may explain observed health inequities among people of different race and educational attainment.<sup>12,15</sup>

To date, the evidence base for the link between health literacy and health outcomes includes studies from a wide range of countries from all regions of the world, including low- and middle-income countries.<sup>7,16</sup>

*\*Note: Measures of health literacy used in many of these studies focused on a limited range of health-related literacy and numeracy skills.*

**Key resources:**

Berkman ND, Sheridan SL, Donahue KE, Halpern DJ, Viera A, Crotty K, Holland A, Brasure M, Lohr KN, Harden E, Tant E, Wallace I, Viswanathan M. **Health Literacy Interventions and Outcomes: An Updated Systematic Review.** Evidence Report/Technology Assessment No. 199. Prepared by RTI International–University of North Carolina Evidence-based Practice Center under contract No. 290-2007-10056-I. AHRQ Publication Number 11- E006. Rockville, MD. Agency for Healthcare Research and Quality. March 2011

**Link:** <http://www.ahrq.gov/research/findings/evidence-based-reports/er199-abstract.html>

Pleasant, A. **Health Literacy Around the World: Part 1 Health Literacy Efforts Outside of the United States.** Institute of Medicine Roundtable on Health Literacy 2012

**Link:** <http://www.iom.edu/~media/Files/Activity%20Files/PublicHealth/HealthLiteracy/2012-SEP-24/WorldHealthLit.pdf>

**The Nairobi Call to Action for Closing the Implementation Gap in Health Promotion**<sup>17</sup> identifies five key strategies and actions for reducing health inequities and poverty, and improving health and quality of life:

1. Building capacity for health promotion
2. Strengthening health systems
3. Partnering and intersectorial action
4. Community empowerment
5. Health literacy and health behaviours

To advance the **health literacy and health behaviours** strategy, policy is needed to generate actions that:

- support empowerment, e.g., by ensuring communities can access and act on knowledge and overcome any barriers;
- embrace information and communication technologies; and
- build and apply the evidence base, e.g., by developing systems to monitor, evaluate, document and disseminate health literacy.<sup>17</sup>



## References

1. Adelaide Statement on Health in All Policies. WHO, Government of South Australia, Adelaide 2010 ([http://www.who.int/social\\_determinants/hiap\\_statement\\_who\\_sa\\_final.pdf](http://www.who.int/social_determinants/hiap_statement_who_sa_final.pdf) [accessed 28 November 2014]).
2. Mitchell SE, Sadikova E, Jack BW, Paasche-Orlow MK: Health literacy and 30-day post-discharge hospital utilization. *J Health Commun* 2012, 17 Suppl 3:325-338 (<http://www.tandfonline.com/doi/abs/10.1080/VA2RKlYVfZs> [accessed 28 November 2014]).
3. Lindquist LA, Go L, Fleisher J, Jain N, Friesema E, Baker DW: Relationship of health literacy to intentional and unintentional non-adherence of hospital discharge medications. *J Gen Intern Med* 2012, 27(2):173-178 (<http://link.springer.com/article/10.1007%2F11606-011-1886-3> [accessed 28 November 2014]).
4. von Wagner C, Knight K, Steptoe A, Wardle J: Functional health literacy and health-promoting behaviour in a national sample of British adults. *J Epidemiol Community Health* 2007, 61(12):1086-1090 (<http://jech.bmj.com/content/61/12/1086.long> [accessed 28 November 2014]).
5. Adams RJ, Piantadosi C, Ettridge K, Miller C, Wilson C, Tucker G, Hill CL: Functional health literacy mediates the relationship between socio-economic status, perceptions and lifestyle behaviors related to cancer risk in an Australian population. *Patient Educ Couns* 2013, 91(2):206-212 ([http://www.pec-journal.com/article/S0738-3991\(12\)00488-0/abstract](http://www.pec-journal.com/article/S0738-3991(12)00488-0/abstract) [accessed 28 November 2014]).
6. Yamashita T, Kart CS: Is diabetes-specific health literacy associated with diabetes-related outcomes in older adults? *Journal of diabetes* 2011, 3(2):138-146 (<http://onlinelibrary.wiley.com/doi/10.1111/j.1753-0407.2011.00112.x/abstract;jsessionid=44684E25F8CFAAD74A6E0699DB62FD63.f01t01> [accessed 28 November 2014]).
7. Aung MN, Lorga T, Srikrajang J, Promtingkran N, Kreuangchai S, Tonpanya W, Vivara-kanon P, Jaiin P, Praipaksin N, Payaprom A: Assessing awareness and knowledge of hypertension in an at-risk population in the Karen ethnic rural community, Thasongyang, Thailand. *Int J Gen Med* 2012, 5:553-561 (<http://www.dovepress.com/assessing-awareness-and-knowledge-of-hypertension-in-an-at-risk-popula-peer-reviewed-article-IJGM> [accessed 28 November 2014]).
8. Schillinger D, Grumbach K, Piette J, Wang F, Osmond D, Daher C, Palacios J, Sullivan GD, Bindman AB: Association of health literacy with diabetes outcomes. *JAMA* 2002, 288(4):475-482 (<http://jama.jamanetwork.com/article.aspx?articleid=195143> [accessed 28 November 2014]).
9. Schillinger D, Bindman A, Wang F, Stewart A, Piette J: Functional health literacy and the quality of physician-patient communication among diabetes patients. *Patient Education & Counseling* 2004, 52(3):315-323 (<http://www.sciencedirect.com/science/article/pii/S0738399103001071> [accessed 28 November 2014]).
10. Herndon JB, Chaney M, Carden D: Health literacy and emergency department out-comes: a systematic review. *Annals of Emergency Medicine* 2011, 57(4):334-345 ([http://www.annemergmed.com/article/S0196-0644\(10\)01465-4/abstract](http://www.annemergmed.com/article/S0196-0644(10)01465-4/abstract) [accessed 28 November 2014]).
11. Wolf MS, Gazmararian JA, Baker DW: Health literacy and functional health status among older adults. *Arch Intern Med* 2005, 165(17):1946-1952 (<http://archinte.jamanetwork.com/article.aspx?articleid=486704> [accessed 28 November 2014]).
12. Howard DH, Sentell T, Gazmararian JA: Impact of health literacy on socioeconomic and racial differences in health in an elderly population. *J Gen Intern Med* 2006, 21(8):857-861 (<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1831584/> [accessed 28 November 2014]).
13. Tokuda Y, Doba N, Butler JP, Paasche-Orlow MK: Health literacy and physical and psychological wellbeing in Japanese adults. *Patient Educ Couns* 2009, 75(3):411-417 ([http://www.pec-journal.com/article/S0738-3991\(09\)00151-7/abstract](http://www.pec-journal.com/article/S0738-3991(09)00151-7/abstract) [accessed 28 November 2014]).

14. Sudore RL, Yaffe K, Satterfield S, Harris TB, Mehta KM, Simonsick EM, Newman AB, Rosano C, Rooks R, Rubin SM et al: Limited Literacy and Mortality in the Elderly. The Health, Aging and Body Composition Study. Journal of General Internal Medicine 2006, 21:806-812 (<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1831586/> [accessed 28 November 2014]).
15. Sentell TL, Halpin HA: Importance of Adult Literacy in Understanding Health Disparities. Journal of General Internal Medicine 2006, 21:862-866 (<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1831569/> [accessed 28 November 2014]).
16. Bourne PA, Morris C, Charles CA, Eldemire-Shearer D, Kerr-Campbell MD, Crawford TV: Health literacy and health seeking behavior among older men in a middle-income nation. Patient Relat Outcome Meas 2010, 1:39-49 (<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3417896/> [accessed 28 November 2014]).
17. Nairobi Call to Action for Closing the Implementation Gap in Health Promotion. Nairobi: 7th Global Conference on Health Promotion; October 2009 (<http://www.who.int/healthpromotion/conferences/7gchp/en/> [accessed 28 November 2014]).

# 3

## Responding to the health literacy needs of communities

Policies and practices must promote identification of health literacy issues and the implementation of targeted responses.



Credit: WHO /Christopher Black

## United Nations Economic and Social Council Ministers Declaration July 9, 2009:

“We stress that health literacy is an important factor in ensuring significant health outcomes and in this regard call for the development of appropriate action plans to promote health literacy.”<sup>1</sup>

### Key message 1:

“Scale up effective health literacy interventions in order to accelerate progress towards the achievement of the health-related MDGs and public health commitments, including the consideration of developing a regional action plan to promote health literacy.”<sup>1</sup>

### Key message 2:

“Develop a country-specific set of recommendations on the core content areas of health literacy and a set of guidelines for undertaking measurement.”<sup>1</sup>

### Key message 3:

“To increase the level of health literacy and reduce maternal and child mortality, HIV infections, under-nutrition as well as tobacco use, unhealthy diet and physical inactivity, actions must be taken by different professional groups in the health, education and other sectors. Key stakeholders within and outside the government sector at the national, regional and global levels must also be involved.”<sup>1</sup>

The council set out five key messages conveying “how effective health literacy interventions can be scaled up so as to accelerate progress toward the achievement of the health-related Millennium Development Goals [MDGs] and public health goals and commitments”.<sup>1</sup>

### Key message 4:

“Actions should be taken to develop and deploy relevant and sustainable national information programmes based on the available technologies in the countries. There should also be collaboration among countries in the region to share best practices. Key indicators should be developed to measure and evaluate the benefits of information and computing technology [ICT] as a tool for enhancing health literacy in the region.”<sup>1</sup>

### Key message 5:

“To inform policy development and practice in building capacity so as to be able to develop and implement interventions to enhance health literacy, immediate actions are required to examine what capacity building areas are relevant and how the capacity of those areas can be built in countries at different levels of development, given the different social, economic, and political contexts of the countries in the Region, and the different health issues that the countries confront.”<sup>1</sup>

## Considerations for the development and implementation of health literacy interventions in low- and middle-income countries

Low- and middle-income countries face hurdles to achieving a range of development and public health goals. Addressing the health literacy of individuals and communities, and barriers to people's access to health information and services is critical to improving health and development outcomes.<sup>1</sup>

### Effective health literacy interventions respond to local needs and give consideration to local contexts.

Local needs may range from the simplification of public health messages relating to diabetes prevention, or to the reduction of stigma associated with Ebola infection. Local contexts may vary in many ways, including the structure and function of healthcare systems, the use and availability of mass media (e.g., newspaper, radio, television, the internet), and cultural norms and learning preferences.

**Co-creation of health literacy interventions with local stakeholders is an effective way to engage the community and discover novel solutions.** For example, in Thailand, the Population and Community Development Association has used Thai humour to effectively raise public attention about taboo subjects such as contraception and HIV awareness.<sup>2</sup>

### Using available health and social resources optimizes the sustainability and scalability of health literacy interventions.

Novel approaches to increasing the availability, affordability and quality of healthcare services are often used in low- and middle-income countries to address gaps in public services.<sup>2</sup> Health care that is appropriate to and based within communities can decrease operating costs, increase staff availability and empower the local community.



## References

1. Health literacy and the Millennium Development Goals: United Nations Economic and Social Council (ECOSOC) regional meeting background paper (abstracted). J Health Commun 2010, 15 Suppl 2:211-23 (<http://www.tandfonline.com/doi/abs/10.1080/VA7yGVbGDZs> [accessed 28 November 2014]).
2. Bhattacharya O, Khor S, McGahan A, Dunne D, Daar AS, Singer AP. Innovative health service delivery models in low and middle income countries – what can we learn from the private sector? Health Research Policy and Systems 2010, 8:24 (<http://www.health-policy-systems.com/content/8/1/24> [accessed 28 November 2014]).

## 4

## The Ophelia approach to optimizing health literacy

The Ophelia approach is a system that supports the identification of community health literacy needs, and the development and testing of potential solutions. It allows easy application of evidence-based health promotion approaches to the field of health literacy.



Credit: WHO / SEARO /Shehzad Noorani

**The Ophelia approach**<sup>1,2</sup> involves the collaboration of a wide range of community members, community leaders, and workers to develop health literacy interventions that are based on needs identified within a community. Each Ophelia project seeks to improve health and equity by increasing the availability and accessibility of health information and services in locally-appropriate ways.

**Ophelia means**  
Optimizing  
Health  
Literacy and  
Access to health  
information and services

### Key resource:

Batterham RW, Buchbinder R, Beauchamp A, Dodson S, Elsworth GR and Osborne RH. **The OPTimising HEalth LIterAcY (Ophelia) process: study protocol for using health literacy profiling and community engagement to create and implement health reform.** BMC Public Health 2014, 14:694

**Link:** <http://www.biomedcentral.com/1471-2458/14/694>

The logo for Ophelia features the word "ophelia" in a white, lowercase, cursive script. Below the letter "i" is a simple white smiley face. To the right of the word, the website address "ophelia.net.au" is written in a clean, white, sans-serif font.

ophelia  
ophelia.net.au

## Examples of Ophelia projects working to optimize health literacy

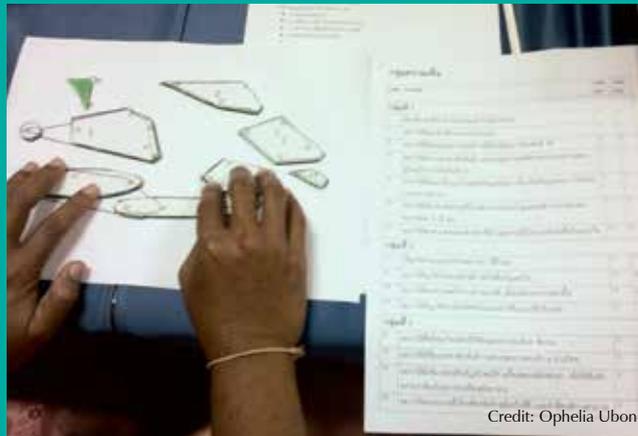
The participatory, systematic and grounded nature of the Ophelia approach ensure its suitability for health literacy projects conducted across a broad range of settings, including communities within low- and middle-income countries.



Credit: Mothers Unite

Identifying health literacy needs and developing local responses to health emergencies in Lavender Hill, an informal settlement, Cape Town: Ophelia South Africa

<http://www.mothersunite.org.za/efar/>



Credit: Ophelia Ubon

Optimizing health literacy needs of people in Thailand (Warin Chamrap, Ubon Ratchatani): An Ophelia project



Credit: National Hauora Coalition

Health literacy and Whanau Ora Outcomes:  
Ophelia New Zealand

[www.nhc.maori.nz](http://www.nhc.maori.nz)



Credit: Ophelia Victoria

Optimizing health literacy to improve health and equity:  
Ophelia Victoria

[www.ophelia.net.au](http://www.ophelia.net.au)

## The Ophelia principles

The Ophelia principles guide Ophelia projects and ensure that, at each phase, the potential to improve health and equity through health literacy responses is optimized.<sup>2</sup>

### Ophelia projects must:

- 1 Focus on improving health and wellbeing **outcomes**
- 2 Focus on increasing **equity** in health outcomes and access to services for people with varying health literacy needs
- 3 Prioritize **local wisdom, culture and systems**
- 4 Respond to **locally-identified health literacy needs**
- 5 Respond to the **varying and changing health literacy needs** of individuals and communities
- 6 Engage all relevant stakeholders in the **co-creation** and implementation of solutions
- 7 Focus on improvements at, and across, **all levels of the health system**
- 8 Focus on achieving **sustained improvements** through changes to environments, practice, culture and policy

## The Ophelia phases: 1 to 3

Each phase of the Ophelia process<sup>1,2</sup> is drawn from three well-established methodological approaches: intervention mapping<sup>3</sup>, quality improvement collaboratives<sup>4-8</sup>, and realist synthesis.<sup>9-14</sup> Tools and resources have been developed to support implementation of each phase.



Health literacy data are systematically collected from a representative cross section of the community using a health literacy questionnaire and/or locally appropriate qualitative techniques. These data are analyzed and presented to stakeholders for discussion and interpretation. Effective local practices and innovative intervention ideas are then identified.

Local stakeholders make decisions about local priorities for action. Interventions with potential to respond to local health literacy limitations or improve information and service access and availability are designed and planned.

Health literacy interventions are applied within quality improvement cycles, where organizations develop and implement trials, and actively improve the effectiveness, local uptake and sustainability of the interventions.

## References

1. Batterham RW, Buchbinder R, Beauchamp A, Dodson S, Elsworth GR and Osborne RH. The OPTimising HEalth LiterAcY (Ophelia) process: study protocol for using health literacy profiling and community engagement to create and implement health reform. *BMC Public Health* 2014, 14:694 (<http://www.biomedcentral.com/1471-2458/14/694> [accessed 28 November 2014]).
2. Dodson S, Beauchamp A, Batterham RW and Osborne RH. Information sheet 7: The Ophelia Approach to optimising health literacy. In *Ophelia Toolkit: A step-by-step guide for identifying and responding to health literacy needs within local communities. Part A: Introduction to health literacy*. 2014. Deakin University, Melbourne (<http://www.ophelia.net.au> [accessed 28 November 2014]).
3. Bartholomew LK, Parcel GS, Kok G. Intervention mapping: a process for developing theory- and evidence-based health education programs. *Health Educ Behav* 1998, 25(5):545–563 (<http://heb.sagepub.com/content/25/5/545.abstract> [accessed 28 November 2014]).
4. Nadeem E, Olin SS, Hill LC, Hoagwood KE, Horwitz SM. Understanding the components of quality improvement collaboratives: a systematic literature review. *Milbank Q* 2013, 91(2):354–394 (<http://onlinelibrary.wiley.com/doi/10.1111/milq.12016/abstract> [accessed 28 November 2014]).
5. Hulscher ME, Schouten LM, Grol RP, Buchan H. Determinants of success of quality improvement collaboratives: what does the literature show? *BMJ Qual Saf* 2013, 22(1):19–31 (<http://qualitysafety.bmj.com/content/22/1/19.long> [accessed 28 November 2014]).
6. Schouten LM, Hulscher ME, van Everdingen JJ, Huijsman R, Grol RP. Evidence for the impact of quality improvement collaboratives: systematic review. *BMJ* 2008, 336(7659):1491–1494 (<http://www.bmj.com/content/336/7659/1491> [accessed 28 November 2014]).
7. Franco LM, Marquez L. Effectiveness of collaborative improvement: evidence from 27 applications in 12 less-developed and middle-income countries. *BMJ Qual Saf* 2011, 20(8):658–665 (<http://qualitysafety.bmj.com/content/20/8/658> [accessed November 2014]).
8. Knight AW, Ford D, Audehm R, Colagiuri S, Best J. The Australian Primary Care Collaboratives Program: improving diabetes care. *BMJ Qual Saf* 2012, 21(11):956–963 (<http://qualitysafety.bmj.com/content/early/2012/06/15/bmjqs-2011-000460.abstract> [accessed November 2014]).
9. Greenhalgh T, Wong G, Westhorp G, Pawson R. Protocol–realist and meta-narrative evidence synthesis: evolving standards (RAMESES). *BMC Med Res Methodol* 2011, 11:115 (<http://www.biomedcentral.com/1471-2288/11/115> [accessed 28 November 2014]).
10. Rycroft-Malone J, McCormack B, Hutchinson AM, DeCorby K, Bucknall TK, Kent B, Schultz A, Snelgrove-Clarke E, Stetler CB, Titler M, Wallin L, Wilson V. Realist synthesis: illustrating the method for implementation research. *Implement Sci* 2012, 7:33 (<http://www.implementationscience.com/content/7/1/33> [accessed 28 November 2014]).
11. Pawson R, Greenhalgh T, Harvey G, Walshe K. Realist review – a new method of systematic review designed for complex policy interventions. *J Health Serv Res Policy* 2005, 10 (Suppl 1):21–34 ([http://hsr.sagepub.com/content/10/suppl\\_1/21.long](http://hsr.sagepub.com/content/10/suppl_1/21.long) [accessed 28 November 2014]).
12. Pawson R. *Evidence-based policy: a realist perspective*. London. Thousand Oaks, Calif: SAGE 2006 (<http://www.sagepub.com/books/Book227875> [accessed 28 November 2014]).
13. Pawson R, Tilley N. *Realistic evaluation*. London. Thousand Oaks, Calif: SAGE 1997 (<http://www.uk.sagepub.com/books/Book205276> [accessed 28 November 2014]).

14. Bhaskar R. A realist theory of science. London. New York: Routledge 2008 (<http://www.routledge.com/books/details/9780415454940/> [accessed 28 November 2014]).

*Source: Dodson S, Beauchamp A, Batterham RW and Osborne RH (2014). Information sheet 7: The Ophelia Approach to optimising health literacy. In Ophelia Toolkit: A step-by-step guide for identifying and responding to health literacy needs within local communities. Part A: Introduction to health literacy. 2014. Available from [www.ophelia.net.au](http://www.ophelia.net.au).*

# 5

## Health literacy recommendations for action

Governments, organizations, practitioners and community members must work in partnership to address health literacy issues contributing to poor health outcomes and inequities within local communities.



Credit: WHO / SEARO / Nursila Dewi

## Key messages

1. 'Health literacy' is the term used to describe the ability to engage with health information and services.
2. Individuals and communities have health literacy strengths and limitations that influence how effectively they engage with health information and services.
3. Health and social service systems have strengths and limitations in their responsiveness to the health literacy of the people they serve.
4. Effective responses to health literacy issues can improve health outcomes and reduce health inequities.
5. Policies and practices must promote identification of health literacy issues and the implementation of targeted responses.



Credit: WHO / SEARO / Tom Pietrasik

## Key considerations

The Ophelia principles\*<sup>1</sup> provide guidance to projects and help ensure that, at each phase, the potential to improve health and equity through health literacy responses is optimized.

\* *Ophelia means OPTimizing HHealth Literacy and Access to health information and services.*

1. Dodson S, Beauchamp A, Batterham RW and Osborne RH. Information sheet 7: The Ophelia Approach to optimising health literacy. In Ophelia Toolkit: A step-by-step guide for identifying and responding to health literacy needs within local communities. Part A: Introduction to health literacy. 2014. Deakin University, Melbourne (<http://www.ophelia.net.au> [accessed 28 November 2014]).

## The Ophelia principles:

- 1 Focus on improving health and wellbeing **outcomes**
- 2 Focus on increasing **equity** in health outcomes and access to services for people with varying health literacy needs
- 3 Prioritize **local wisdom, culture and systems**
- 4 Respond to **locally-identified health literacy needs**
- 5 Respond to the **variable and changing health literacy needs** of individuals and communities
- 6 Engage all relevant stakeholders in the **co-creation** and implementation of solutions
- 7 Focus on improvements at, and across, **all levels of the health system**
- 8 Focus on achieving **sustained improvements** through changes to environments, practice, culture and policy

## Key recommendations for action

- 1** develop systems for measuring, monitoring and reporting:
  - the health of communities;
  - health behaviors within communities;
  - community engagement with health and community services;
  - the health literacy responsiveness of organizations; and
  - the health literacy strengths and limitations of communities.

*Note: Use a multi-dimensional measure of health literacy and/or qualitative methods to identify the health literacy strengths and limitations of communities and community members.*

- 2** use available health, health behavior, service engagement, organizational responsiveness, and health literacy data to identify local needs. Identify:
  - groups of people that have poorer health outcomes or less-than-optimal access to services;
  - health issues or behaviors of concern for the community; and/or
  - barriers to service access, equity or availability. These barriers may exist within the health system or they may be broader social or environmental factors.

- 3** engage local, regional and/or national stakeholders in:
  - discussions about local needs and considerations;
  - discussions about universal precautions;
  - determining local priorities for action;
  - identifying interventions and strategies to address priority issues;
  - designing and developing interventions and strategies;
  - implementing and evaluating interventions and strategies; and
  - continuous quality improvement to ensure ongoing effectiveness and sustainability.

- 4** scale up effective interventions and strategies.

- 5** develop and implement policies that promote identification of health literacy issues and the implementation of targeted responses.

- 6** develop and implement policies that promote equitable access to information and services for all community members.

# 6

## Resources for the development of health literacy policies and responses

A growing number of tools and resources are available to assist policy makers, practitioners and organizations to develop and implement health literacy policies and responses.



## Multi-dimensional tools for measuring health literacy

**The Health Literacy Questionnaire (HLQ)** is used to identify the specific health literacy strengths and limitations of people and communities. It examines nine areas of health literacy. The HLQ offers the potential for practitioners, organizations and governments to identify and understand the health literacy profiles of individuals and/or populations as a basis for intervention development. It is suitable for use in a range of different cultures and is available in several languages.<sup>1,2</sup>

Link: [www.ophelia.net.au](http://www.ophelia.net.au)

### Key resource:

Osborne RH, Batterham R, Elsworth GR, Hawkins M, Buchbinder R. **The grounded theory, psychometric development and initial validation of the Health Literacy Questionnaire (HLQ)**. BMC Public Health. 2013;13:658.

Link: <http://www.biomedcentral.com/1471-2458/13/658>



**The nine scales of the Health Literacy Questionnaire (HLQ)<sup>2</sup>**

**The Information and Support for Actions Questionnaire (ISHA-Q)** was developed to measure health literacy in low- and middle-income country settings, and cultures where decision-making about health often occurs as a collective activity of family or peer groups. The ISHA-Q has fourteen core scales and ten supplementary scales for people with chronic illnesses, people with a physical disability, people who are blind and people who are deaf.<sup>3</sup>

Link: [www.ophelia.net.au](http://www.ophelia.net.au)

- Supports and abilities scales (37 questions)
- Barriers scale (4 questions)
- Health actions scales (19 questions)



**The fourteen core scales of the Information and Support for Health Actions Questionnaire (ISHA-Q)<sup>3</sup>**

## Key reports and policies with a focus on health literacy

### **Health Literacy: A Prescription to End all Confusion**

Institute of Medicine, National Academy of Sciences. Washington, DC, 2004 (<http://www.iom.edu/Reports/2004/Health-Literacy-A-Prescription-to-End-Confusion.aspx>).

### **Health literacy and the Millennium Development Goals: United Nations Economic and Social Council (ECOSOC) regional meeting background paper (abstracted)**

J Health Commun 2010, 15 Suppl 2:211-23 (<http://www.tandfonline.com/doi/abs/10.1080/VA7yGVbGDZs>).

### **Health Literacy Around the World: Part 1 Health Literacy Efforts Outside of the United States**

Pleasant A. Institute of Medicine Roundtable on Health Literacy, 2012 (<http://www.iom.edu/~media/Files/Activity%20Files/PublicHealth/HealthLiteracy/2012-SEP-24/WorldHealthLit.pdf>).

### **Health Literacy Interventions and Outcomes: An Updated Systematic Review**

Berkman ND et al. Evidence Report/Technology Assessment No. 199. Rockville, MD. Agency for Healthcare Research and Quality, 2011 ([www.ahrq.gov/downloads/pub/evidence/pdf/literacy/literacyup.pdf](http://www.ahrq.gov/downloads/pub/evidence/pdf/literacy/literacyup.pdf)).

### **Health Literacy: The Solid Facts**

Kickbusch I, Pelikan JM, Apfel F, Tsouros A. Copenhagen: World Health Organization, 2013 (<http://www.euro.who.int/en/health-topics/environment-and-health/urban-health/publications/2013/health-literacy.-the-solid-facts>).

### **Making it Easy: a Health Literacy Action Plan for Scotland**

NHS Health Scotland, The Scottish Government, 2014 (<http://www.scotland.gov.uk/Publications/2014/06/9850/downloads>).

### **National Action Plan to Improve Health Literacy**

Office of Disease Prevention and Health Promotion, United States Department of Health and Human Services. Washington, DC, 2010 (<http://www.health.gov/communication/hlactionplan/>).

### **Nairobi Call to Action for Closing the Implementation Gap in Health Promotion**

World Health Organization. Nairobi: 7th Global Conference on Health Promotion, October 2009 (<http://www.who.int/healthpromotion/conferences/7gchp/en/>).

### **Improving Health Literacy for Older Adults: Expert Panel Report**

United States Centers for Disease Control and Prevention. Atlanta, 2009 (<http://www.cdc.gov/healthliteracy/developmaterials/audiences/olderadults/index.html>).

## Key websites with a focus on health literacy

Optimising health literacy and access to health information and services: Ophelia  
**[ophelia.net.au](http://ophelia.net.au)**

Harvard School of Public Health  
**[hsph.harvard.edu/healthliteracy/](http://hsph.harvard.edu/healthliteracy/)**

International Union for Health Promotion and Education (IUHPE)  
**[iuhpe.org/](http://iuhpe.org/)**

The Health Literacy Place  
**[knowledge.scot.nhs.uk/healthliteracy.aspx](http://knowledge.scot.nhs.uk/healthliteracy.aspx)**

Worldwide Universities Network Global Health Literacy Network  
**<http://wun.ac.uk/wun/research/view/literacy-network>**

Centre for Disease Control  
**[cdc.gov/healthliteracy/](http://cdc.gov/healthliteracy/)**

World Health Organization  
**[who.int/healthpromotion/conferences/7gchp/track2/en/](http://who.int/healthpromotion/conferences/7gchp/track2/en/)**

Asian Health Literacy Association  
**[ahls-asia.org/](http://ahls-asia.org/)**

WHO European Healthy Cities Network  
**[euro.who.int/en/health-topics/environment-and-health/urban-health/activities/healthy-cities/who-european-healthy-cities-network](http://euro.who.int/en/health-topics/environment-and-health/urban-health/activities/healthy-cities/who-european-healthy-cities-network)**

### Key resource:

DeWalt DA, Callahan LF, Hawk VH, Brouckson KA, Hink A, Rudd R, Brach C. **Health Literacy Universal Precautions Toolkit.** (Prepared by North Carolina Network Consortium, The Cecil G. Sheps Center for Health Services Research, The University of North Carolina at Chapel Hill, under Contract No. HHS290200710014.) AHRQ Publication No. 10-0046-EF) Rockville, MD. Agency for Healthcare Research and Quality. April 2010.

**Link:** <http://www.ahrq.gov/professionals/quality-patient-safety/quality-resources/tools/literacy-toolkit/healthliteracytoolkit.pdf>

## References

1. Osborne RH, Batterham R, Elsworth GR, Hawkins M, Buchbinder R. The grounded theory, psychometric development and initial validation of the Health Literacy Questionnaire (HLQ). *BMC Public Health* 2013, 13:658 (<http://www.biomedcentral.com/1471-2458/13/658> [accessed 28 November 2014]).
2. Dodson S, Beauchamp A, Batterham RW and Osborne RH. Information sheet 10: About the Health Literacy Questionnaire (HLQ). In *Ophelia Toolkit: A step-by-step guide for identifying and responding to health literacy needs within local communities. Part A: Introduction to health literacy*. 2014. Deakin University, Melbourne (<http://www.ophelia.net.au> [accessed 28 November 2014]).
3. Dodson S, Beauchamp A, Batterham RW and Osborne RH. Information sheet 11: About the Information and Support for Health Actions Questionnaire (ISHA-Q). In *Ophelia Toolkit: A step-by-step guide for identifying and responding to health literacy needs within local communities. Part A: Introduction to health literacy*. 2014. Deakin University, Melbourne (<http://www.ophelia.net.au> [accessed 28 November 2014]).

# Optimizing Health Literacy:

## Improving Health and Reducing Health Inequities

A selection of information sheets from The Health Literacy Toolkit for Low- and Middle-Income Countries

### The WHO Regional Office for South-East Asia

The World Health Organization (WHO) is a specialized agency of the United Nations created in 1948 with the primary responsibility for international health matters and public health. The WHO Regional Office for South-East Asia is one of six regional offices throughout the world, each with its own programme geared to the particular health conditions of the countries it serves.

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