



Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

COVID-19: health literacy is an underestimated problem



Lancet Public Health 2020

Published Online

April 14, 2020

[https://doi.org/10.1016/S2468-2667\(20\)30086-4](https://doi.org/10.1016/S2468-2667(20)30086-4)

Rapid development of coronavirus disease 2019 (COVID-19) into a pandemic has called for people to acquire and apply health information, and adapt their behaviour at a fast pace.¹ Health communication intended to educate people about the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and how to avoid getting or spreading the infection has become widely available. Most valuable information is created in an easy-to-understand manner that offers simple and practical solutions, such as washing hands, maintaining physical distance², and where to find information about the latest recommendations, and advice. Unfortunately, there is also complex, contradictory, and false information.¹ Similarly, individuals are considered able to acquire, understand, and use this information in a sound and ethical manner—ie, to be health literate.

However, the COVID-19 infodemic¹ has highlighted that poor health literacy among a population is an underestimated public health problem globally. For instance, in Europe, nearly half of adults reported having problems with health literacy and not having relevant competencies to take care of their health and that of others.³ Health literacy is already seen as a crucial tool for the prevention of non-communicable diseases with investments in education and communication sought to be sustainable, long-term measures starting early in the life course.⁴ However, when COVID-19 emerged rapidly, two aspects became striking. First, globally, health literacy is as important for the prevention of communicable diseases as it is for non-communicable diseases. Second, along with system preparedness, individual preparedness is key for solving complex real-life problems. In this pandemic, it is difficult, yet possible, to take the time to enhance health literacy because immediate action is required by governments and citizens.

For countries to secure health-care services for the most susceptible individuals, many people have adopted policies that restrict physical contact by banning events, sizing limits for group gatherings, and even issuing stay-at-home orders. Governments and health authorities are pleading for individual responsibility in avoiding all unnecessary risks for infection with or spread of SARS-CoV-2. During these times, the discussion around human rights and personal freedom, democracy, social

responsibility, and public health action are put to the test. Amid the pandemic, it is difficult to agree with the argument made by Wikler⁵ that “if people know they are taking risks but accept them as the price of pursuing goals to which they assign higher priority, then it is not the business of public health to insist that health be valued above all”.⁵ This argument might be true under different circumstances, but now, irrational behaviour in non-compliance with COVID-19 policies, which might be motivated by misperception of risks⁶ or other personal priorities, allows a so-called free rider problem.⁷ This issue has been widely discussed in the context of vaccination,⁸ but it can also occur during the COVID-19 outbreak by deliberately neglecting precautions and protective behaviour. Most people act in a socially responsible way and with solidarity, thus creating a collective good of infection-free space and decreased infection risk. The so-called free riders enjoy the benefits themselves of others complying with the given policies (ie, decreasing risks)⁷; however, they travel, hang around in groups, and ignore pleas for protective and preventive behaviour, feeling a false sense of invulnerability.⁹ Nonetheless, as the risk of becoming infected is dependent on other people’s compliance with the guidelines and the risk of others is dependent on commitment to joint efforts, unwillingness to contribute to collective good is unfair on other members of society.^{8,10} In the COVID-19 pandemic, this behaviour does injustice, especially to high-risk groups, people with diseases, and the health workforce trying to treat these patient groups and save their lives.

Health literacy might help people to grasp the reasons behind the recommendations and reflect on outcomes of their various possible actions. However, taking social responsibility, thinking beyond personal interests, and understanding how people make choices—aspects such as ethical viewpoints and behavioural insights—should also be considered within the toolbox of health literacy. Solidarity and social responsibility should not only be accounted for by the general population and decision makers, but also by those individuals who produce and share misleading and false information about SARS-CoV-2.

The development of health literacy is even more topical than ever to prepare individuals for situations

that require rapid reaction. Above all, health literacy should be seen in relation to social responsibility and solidarity, and is needed from both people in need of information and services and the individuals who provide them and assure their accessibility for the general population.

We declare no competing interests.

Copyright © The Author(s). Published by Elsevier Ltd. This is an Open Access article under the CC BY-NC-ND 4.0 license.

**Leena Paakkari, Orkan Okan*
leena.paakkari@jyu.fi

Faculty of Sport and Health Sciences, University of Jyväskylä, Jyväskylä 40014, Finland (LP); and Interdisciplinary Centre for Health Literacy Research, Bielefeld University, Bielefeld, Germany (OO)

- 1 Zarocostas J. How to fight an infodemic. *Lancet* 2020; **395**: 676.
- 2 Prem K, Liu Y, Russell TW, et al. The effect of control strategies to reduce social mixing on outcomes of the COVID-19 epidemic in Wuhan, China: a modelling study. *Lancet Public Health* 2020; published online March 25. [https://doi.org/10.1016/S2468-2667\(20\)30073-6](https://doi.org/10.1016/S2468-2667(20)30073-6).
- 3 Sorensen K, Pelikan JM, Röthlin F, et al. Health literacy in Europe: comparative results of the European Health Literacy Survey (HLS-EU). *Eur J Public Health* 2015; **25**: 1053-58.
- 4 Nutbeam D. Discussion paper on promoting, measuring and implementing health literacy: implications for policy and practice in non-communicable disease prevention and control. 2017. World Health Organization. <https://www.who.int/global-coordination-mechanism/working-groups/background.pdf?ua=1> (accessed April 2, 2020).
- 5 Wikler D. Personal and social responsibility for health. *Ethics Int Aff* 2002; **16**: 47-55.
- 6 May T. Public communication, risk perception, and the viability of preventive vaccination against communicable diseases. *Bioethics* 2005; **19**: 407-21.
- 7 Buchanan JM. The demand and supply of public goods, vol 5. Chicago: Rand McNally, 1968.
- 8 Cullity G. Moral free riding. *Philos Pub Aff* 1995; **24**: 3-34.
- 9 Gunia A. Millennials aren't taking coronavirus seriously, a top WHO official warns. <https://time.com/5807073/millennials-coronavirus-who/> (accessed Mar 28, 2020).
- 10 van den Hoven M. Why one should do one's bit: thinking about free riding in the context of public health ethics. *Public Health Ethics* 2012; **5**: 154-60.