



The Role of Health Literacy in COVID-19 Vaccine Hesitancy

Letter to editor:

Today, health literacy is recognized as an important indicator in health care outcomes and costs that is also essential for maintaining and promoting health. Health literacy is widely considered as a health determinant and a public health priority. Low health literacy is associated with poor health outcomes, wider inequalities, and higher health costs (1). Health literacy empowers people to play an active role in maintaining health, especially in times of crisis. It also plays an effective role in promoting people's participation in health activities, rising personal responsibility in health care, improving people's attitudes toward health, and accepting coronavirus disease 2019 (COVID-19) vaccines (2).

Regarding immunization, the World Health Organization (WHO) has declared vaccine hesitancy as a "growing challenge for immunization programs" (3). Indeed, COVID-19 vaccine hesitancy is an important threat to public health. Studies have reported a relationship between distrustful attitudes towards vaccination programs and reluctance to receive a COVID-19 vaccine (4, 5). Therefore, public health officials and governments should provide comprehensive information on vaccines to reduce possible inconsistencies and mistrust of information about vaccine efficiency and safety (6).

Rumors and superstitions are known to be the causes of COVID-19 vaccine hesitancy. There are false rumors claiming that the vaccines contain infertility agents, microchips or infectious agents such as the human immunodeficiency virus (5). Negative claims about the vaccine's effectiveness have also resulted in vaccine hesitancy. Rumors of COVID-19 vaccine side effects often challenge health policies, government/non-government interventions, and international health agencies such as the WHO (7). Whether or not a person believes in COVID-19 misinformation depends on the person's health literacy and their risk perception. The spread of these rumors have been facilitated by the social media. People with low health literacy even help generate these rumors due to lack of knowledge of reliable scientific references.

In the aspect of knowledge and information, low health literacy leads to unsanitary individual behaviors and unsocial behaviors (8) such as avoiding wearing masks after vaccination, avoid regular hand washing, participation in social gatherings, and encouraging others to do such unhealthy behaviors (9).

Due to the lack of enough evidence, it is recommended to evaluate relationship of health literacy with COVID-19 vaccine hesitancy. On the other hand, health literacy improves social responsibility and thinking beyond personal interests, ultimately improving COVID-19 vaccine acceptance. Therefore, promoting health literacy is more crucial than ever before to strengthen confidence in COVID-19 vaccines.

References

1. Vozikis A, Drivas K, Miliotis K. Health literacy among university students in Greece: determinants and association with self-perceived health, health behaviours and health risks. *Arc Public Health*. 2014;72(1):1-6. [View at publisher] [Google Scholar] [DOI] [PMID]
2. Nguyen TT, Le NT, Nguyen MH, Pham LV, Do BN, Nguyen HC, et al. Health Literacy and Preventive Behaviors Modify the Association between Pre-Existing Health Conditions and Suspected COVID-19 Symptoms: A Multi-

- Institutional Survey. *Int J Environ Res and public health*. 2020;17(22):8598. [View at publisher] [Google Scholar] [DOI] [PMID]
3. World Health Organization (WHO). (2015). Vaccine hesitancy: a growing challenge for immunization programmes. Retrieved from: <https://www.who.int/news/item/18-08-2015-vaccine-hesitancy-a-growing-challenge-for-immunization-programmes>
4. Fadda M, Albanese E, Suggs LS. When a COVID-19 vaccine is ready, will we all be ready for it?. *Int J of Public Health*. 2020;65(8): 711–712. [View at publisher] [Google Scholar] [DOI] [PMID]
5. Turhan Z, Dilcen HY, Dolu İ. The mediating role of health literacy on the relationship between health care system distrust and vaccine adherence during COVID-19 pandemic. *Curr Psychol*. 2021; ;40(4):1-10. [View at publisher] [Google Scholar] [DOI] [PMID]
6. Biasio LR, Bonaccorsi G, Lorini C, Pecorelli S. Assessing COVID-19 vaccine literacy: a preliminary online survey. *Hum.Vaccines Immunother*. 2021;17(5):1304-12. [View at publisher] [Google Scholar] [DOI] [PMID]
7. Islam MS, Kamal A-HM, Kabir A, Southern DL, Khan SH, Hasan SM, et al. COVID-19 vaccine rumors and conspiracy theories: The need for cognitive inoculation against misinformation to improve vaccine adherence. *PLOS ONE*. 2021;16(5):1-17. [View at publisher] [Google Scholar] [DOI] [PMID]
8. Ardakani MF, Sotoudeh A. Inadequate Health Literacy and the Role of Cyberspace in the Tendency to Use Alcohol in the Prevention of Coronavirus. *Int J High Risk Behav Addict*. 2021;10(1):e103366. [View at publisher] [Google Scholar] [DOI]
9. Flannery PL. Evaluation of Emergency Department Nurse Self-Efficacy in Assessing Health Literacy: Grand Canyon University 2020. [View at publisher] [Google Scholar]

Moradali Zareipour ^{*1}, Mojtaba Fattahi Ardakani ², Mohammad Saeed Jadgal ³, Mina Tasouji Azari ⁴

1. Department of Public Health, School of Health, Khoy University of Medical Sciences, Khoy, Iran
 2. Diabetes Research Center, Shahid Sadoughi University of Medical Sciences, Yazd, Iran
 3. Department of Public Health, School of Nursing and Midwifery, Iranshahr University of Medical Sciences, Iranshahr, Iran
 4. Department of English Language, Islamic Azad University, Tabriz, Iran
- Correspondence: Department of Public Health, School of Health, Khoy University of Medical Sciences, Khoy, Iran
Tel: +989141878294, E-mail: z.morad@yahoo.com