

## Abstract

**Background:** The COVID-19 pandemic and related public health measures have had a significant impact on people's mental health. As the importance of health literacy (HL), which is the ability to obtain and apply health information, has increased enormously, reports have been emerging that HL is associated with mental health and is a potential protective factor for it. However, studies describing HL from the perspective of mental health protection are still limited. Furthermore, due to the novelty of this research field, there is no integrated evidence on the association between HL and mental health in the context of the pandemic.

**Objectives:** This scoping review aimed to provide a compendium of the existing knowledge regarding the association between HL and mental health during the COVID-19 pandemic.

**Methods:** A systematic database search of PubMed, Embase, CINAHL, PsycINFO, WHO COVID-19 database, medRxiv, and RsyArXiv was performed from November 2019 to October 2021. Inclusion criteria considered all primary studies published during the COVID-19 pandemic and quantitative studies that presented the results on the association between HL and mental health outcomes. No restrictions on target population, country, and language were applied. Two reviewers screened and extracted the data independently. Results were integrated descriptively and narratively.

**Results:** In total, 31 studies were included in this scoping review. All were cross-sectional studies, yet there was heterogeneity among the characteristics of included studies. Twenty-one studies reported that HL played a protective role against mental health. In other words, the inverse association was reported such that people with higher HL were less likely to have

mental health problems, and lower HL was one of the risk factors for undesirable psychological conditions. By contrast, in the eight studies that reported the positive association, higher HL was associated with higher health-related quality of life and psychological well-being. In addition, two studies indicated that higher levels of fear and anxiety were related to higher HL scores. There were three studies that ultimately found no association. Due to the methodological limitations and concerns identified in many of the included studies, the interpretation and generalization of the results of this review should be interpreted with caution.

**Conclusion:** This review supports the possibility of a bidirectional association between HL and mental health during the COVID-19 pandemic, and the findings may suggest that the importance of enhancing HL from the perspective of mental health protection. Future research directions include investigations in diverse samples, improving the quality of research, and longitudinal or qualitative designs. Further evidence needs to be accumulated for the development of effective policies, education, and interventions.

**Keywords:** COVID-19, SARS-CoV-2, health literacy, mental health, scoping review