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Research approaches to Coronavirus-Related Health Literacy: A narrative review

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Abstract

Introduction: One of the proposed indicators for the prevention and control of COVID-19 pandemic disease; is having health literacy components in both dimension Coronavirus-Related Health Literacy and e-health literacy. This study aimed to review the scientific literature related to dimensions studied in Coronavirus-Related Health Literacy.

Methods: This study is a narrative review. The articles addressed Coronavirus-Related Health Literacy searched in Scopus and Web of Science (WoS), and then reviewed.

Results: Studies in the field of Coronavirus-Related Health Literacy are considered in 4 dimensions: covid-19 vaccine hesitancy and Impacts of coronavirus-related health literacy; Special person in societies and Observance of the items regards to coronavirus-related health literacy; knowledge, Attitudes, behavior, perceptions, beliefs and Practices regards to coronavirus-related health literacy and Creating criteria in coronavirus-related health literacy and evaluating with it.

Conclusion: Most studies were in the field of knowledge, Attitudes, behavior, perceptions, beliefs and Practices regards to coronavirus-related health literacy. Due to COVID-19 pandemic disease is a common and highly contagious disease, the need for accurate information and optimal Coronavirus-Related health literacy is more important than ever.

Keywords: COVID-19, Coronavirus, Coronavirus-Related Health Literacy

Introduction:

In late 2019, a new strain of coronavirus called COVID-19 was reported from Wuhan, China, which caused a great deal of anxiety and panic among the people of the world as the disease spread rapidly in China and then to other parts of the world. The World Health Organization (WHO) states that the virus was causing a public health emergency around the world (1). The rapid spread of the virus, the lack of vaccines in the early stages of the outbreak, and the lack of specific treatment have left countries with large numbers of infected people and challenges in the areas of health, economics, politics, and society. Some of these challenges are directly and indirectly related to people's health literacy, and improving health literacy can solve or reduce some of these challenges. Health literacy has been recognized in recent years as an important skill for making the right health decisions in difficult situations for patients. Health literacy means obtaining health information from the right sources and using it to interpret our information properly to improve our health. (2) Health literacy helps a person make better management and control of their health by making informed choices. Health literacy is not only related to the individual but can also be effective as one of the social components of health and affect society. (3) So, one of the proposed indicators for the prevention and control of COVID-19 pandemic disease; is having health literacy components in both dimension Coronavirus-Related Health Literacy and e-health literacy. This type of literacy is highly specialized and, as the title suggests, includes coronavirus-related health literacy and differs from general health literacy. Due to COVID-19 pandemic disease is a common and highly contagious disease, the need for accurate information and optimal Coronavirus-Related health literacy is more important than ever. Understanding of public health recommendations, applying protective measures against infection with coronavirus, and navigating COVID-19-related health information environments are currently of elevated importance (4). During the pandemic corona outbreak, coronavirus-related health literacy studied from different dimensions. Therefore, this study is an attempt to examine the dimensions studied in Coronavirus-Related Health Literacy.

Methods

This research is a narrative review conducted in 2022. Keyword related to the research topic were searched in well-known international databases includes Scopus and Web of Science (WoS). After removing the overlaps, all articles about the challenges and dimensions of Coronavirus-Related Health Literacy were critically evaluated. Research data were extracted from these articles.

Results:

Studies in the field of Coronavirus-Related Health Literacy are considered in 4 dimensions: covid-19 vaccine hesitancy and Impacts of coronavirus-related health literacy (Table 1), Special person in societies and Observance of the items regards to coronavirus-related health literacy (Table 2), knowledge, Attitudes, behavior, perceptions, beliefs and Practices regards to coronavirus-related health literacy (Table 3) and Creating criteria in coronavirus-related health literacy and evaluating with it (Table 4).

Table 1: COVID-19 vaccine hesitancy (Dimentiom 1)

| | |
|---|--|
| covid-19 vaccine hesitancy and Impacts of coronavirus-related health literacy | Van Duong T, Lin CY, Chen SC, Huang YK, Okan O, Dadaczynski K, Lai CF. Oxford COVID-19 Vaccine Hesitancy in School Principals: Impacts of Gender, Well-Being, and Coronavirus-Related Health Literacy. Vaccines. 2021 Sep;9(9):985.(5) |
|---|--|

Table 2: Special persons and observance of components regards to coronavirus-related health literacy (Dimentiom 2)

| | |
|--|--|
| Special person in societies and Observance of the items regards to coronavirus-related health literacy | Eronen J, Paakkari L, Portegijs E, Rantanen T. Coronavirus-related health literacy and perceived restrictiveness of protective measures among community-dwelling older persons in Finland. Aging Clinical and Experimental Research. 2021 Aug;33(8):2345-53(6) |
|--|--|

Table 3: knowledge, Attitudes, behavior, perceptions, beliefs and Practices regards to coronavirus-related health literacy (Dimentiom 3)

| | |
|--|--|
| <p>knowledge, attitudes, behavior, perceptions, beliefs and Practices regards to coronavirus-related health literacy</p> | <p>An L, Bacon E, Hawley S, Yang P, Russell D, Huffman S, Resnicow K. Relationship Between Coronavirus-Related eHealth Literacy and COVID-19 Knowledge, Attitudes, and Practices among US Adults: Web-Based Survey Study. <i>Journal of Medical Internet Research</i>. 2021 Mar 29;23(3):e25042.(7)</p> |
| | <p>Niu Z, Qin Z, Hu P, Wang T. Health Beliefs, Trust in Media Sources, Health Literacy, and Preventive Behaviors among High-Risk Chinese for COVID-19. <i>Health Communication</i>. 2021 Feb 10:1-9.(8)</p> |
| | <p>Niu Z, Wang T, Hu P, Mei J, Tang Z. Chinese public's engagement in preventive and intervening health behaviors during the early breakout of COVID-19: Cross-sectional study. <i>Journal of medical Internet research</i>. 2020;22(8):e19995.(9)</p> |
| | <p>Roozenbeek J, Schneider CR, Dryhurst S, Kerr J, Freeman AL, Recchia G, Van Der Bles AM, Van Der Linden S. Susceptibility to misinformation about COVID-19 around the world. <i>Royal Society open science</i>. 2020 Oct 14;7(10):201199.(10)</p> |
| | <p>Paludnevičienė R, Knight T, Firl G, Luttrell K, Takayama K, Kushalnagar P. Perception of COVID-19 Physical Distancing Effectiveness and Contagiousness of Asymptomatic Individuals: Cross-sectional Survey of Deaf and Hard of Hearing Adults in the United States. <i>Journal of Medical Internet Research</i>. 2021;23(2):e21103.(11)</p> |

Table 4: Creating criteria in coronavirus-related health literacy and evaluating with it (Dimention 4)

| | |
|--|---|
| <p>Creating criteria in coronavirus-related health literacy and evaluating with it</p> | <p>Okan O, Bollweg TM, Berens EM, Hurrelmann K, Bauer U, Schaeffer D. Coronavirus-related health literacy: A cross-sectional study in adults during the COVID-19 infodemic in Germany. <i>Int J Environ Res Public Health</i>. 2020 Aug 1;17(15):1–20.(4)</p> |
|--|---|

Discussion:

We have two types of health literacy. The first one is “the degree to which individuals have the ability to find, understand, and use information and services to inform health-related decisions and actions for themselves and others” and the second one is “Organizational health literacy is the degree to which organizations equitably enable individuals to find, understand, and use information and services to inform health-related decisions and actions for themselves and others”.(12) The new definitions are slightly different from the old ones because they emphasize on people’s ability to use health information rather than just understand it. They focus on the ability to make “well-informed” decisions rather than “appropriate” ones. Incorporate a public health perspective and Acknowledge that organizations have a responsibility to address health literacy (12) .

Now a days, Coronavirus-related health literacy has become increasingly important with the outbreak of COVID-19. Due to COVID-19 pandemic disease is a common and highly contagious disease, the need for accurate information and optimal Coronavirus-Related health literacy is more important than ever. So it is important to address the studied dimensions of coronavirus-related health literacy. Most studies were in the field of knowledge, Attitudes, behavior, perceptions, beliefs and Practices regards to coronavirus-related health literacy. However, it is also important to pay attention to the components of Coronavirus-Related health literacy as a special criteria for evaluating the rate of health literacy of societies in this pandemic disease. Okan and coworkers designed a coronavirus-related health literacy measure (HLS-COVID-Q22). Internal consistency was very high ($\alpha = 0.940$; $p = 0.891$) and construct validity suggests a sufficient model fit, making HLS-COVID-Q22 a feasible tool for assessing coronavirus-related health literacy in population surveys.(4) It seems that assessing the level of coronavirus-related health literacy of individuals in the community is an important issue for researchers to determine the rate of this special kind of literacy and furthermore, this studies can Provide valuable information for health policy makers to decide more effective. Also, Awareness of health authorities and related institutions of the current situation of coronavirus-related health literacy can lead to Effective and purposeful planning to promote the situation.

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Sciences, Shahid Beheshti University of Medical Sciences, Tehran, Iran. The ethical code is IR.SBMU.RETECH.REC.1400.111.

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