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COVID-19 Related Health Literacy: Knowledge and Anxiety

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Abstract

Background

The COVID-19 pandemic demonstrated how a fast-spreading pandemic coupled with an “infodemic” (too much information including false or misleading information during a disease outbreak) can give rise to confusion and uncertainty regarding appropriate health behavior. Under such circumstances, the importance of health literacy is even more evident. There is also an urgent need to promote health literacy in the general population and, in particular, in vulnerable populations, to prepare them for future health crises. Health literacy means the knowledge and personal skills that enable people to access, understand, appraise and use information and services in ways that promote and maintain good health and well-being for themselves and those around them.

Goals

1. To estimate the distribution of COVID-19 related health literacy along four dimensions: finding information, understanding the information, assessing its reliability, and making health related decisions based on the information
2. To examine the relationship of COVID-19 related health literacy with sociodemographic and health-related characteristics
3. To examine the relationship of COVID-19 related anxiety with sociodemographic and health-related characteristics

Method

This national study was conducted in Israel as part of an international health literacy survey involving 17 European countries. Data collection for the study was conducted by the Myers-JDC-Brookdale Institute in the second half of December 2020 through a survey encompassing 1,315 respondents, both Jews and Arabs. The Jewish respondents were asked to fill in a self-administered online questionnaire in Hebrew while telephone interviews were conducted in Arabic with the Arab respondents. Once the data was collected, the sample was weighted according to the cross-sectional distribution of the following variables in the population: gender, age, religion, district of residence, and the peripherality index of the locality of residence, based on Central Bureau of Statistics data. The education variable was not taken into account in the sample weighting due to statistical considerations, and as a result, adults with a low level of education are underrepresented. The bivariate relationship was analyzed using the χ^2 test, and the multivariate relationship was analyzed using logistic regression.

Findings

The study findings show that approximately one out of three (35%) of the respondents reported difficulty in assessing the reliability of information about ways to protect themselves against the COVID-19 pandemic. This was the highest percentage found with respect to any of the four dimensions: only 9% of respondents reported difficulty with finding information, 10% reported difficulty with understanding the information and 24% reported difficulty with making health related decisions based on the information.

It was also found that the probability of a reported low level of COVID-19 related health literacy was relatively high in the following populations:

- Non-ultra-Orthodox Jews (OR=2.0), compared with Arabs
- People with low economic status (OR=1.7), compared with people with medium to high economic status
- People who evaluated their social status as low-medium (ranked 1-5) (OR=2.0), or high (ranked 6-7) (OR=1.5) compared with those who evaluated their social status as very high (ranked 8-10)

It was further found in the study that the probability of reported COVID-19 related anxiety was higher in the following populations:

- Those who reported a low level of COVID-19 related health literacy (OR=1.5), compared with those who reported a medium-high level of COVID-19 related health literacy
- Women (OR=1.4), compared with men
- Adults aged 45+ (OR=1.3), compared with younger adults
- Non-ultra-Orthodox Jews (OR=3.3), compared with Arabs and ultra-Orthodox Jews
- People with low economic status (OR=1.6), compared with people with medium-high economic status

Summary and Conclusions

Studies of the disparities in health literacy at times of health crises (such as the COVID-19 pandemic) can contribute to preparation for similar future challenges. In particular, they can help policymakers focus on population groups in need of mediated access to information, understanding of the information, assessment of its reliability, and use of the information. To this end, the following steps should be taken by policymakers:

- Act to enhance the public's ability to distinguish between reliable and unreliable information.
- Adapt the content and recommendations published by the official bodies to vulnerable populations, such

as people with low socioeconomic status, and possibly also invest additional resources adapted to these populations to make it easier for them to implement the guidelines.

- Conduct additional studies to corroborate the finding regarding the disparities in health literacy between Jews and Arabs in Israel. To this end, knowledge questions should be added to the questionnaire to assess the ability of these two population groups to appraise information and make health related decisions based on the information, in order to protect themselves and others in their community against future pandemics.