

Perceptions, Knowledge, and Behaviors Related to COVID-19 Among Social Media Users: Cross-Sectional Study

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Background: Social media is one of the most rapid and impactful ways of obtaining and delivering information in the modern era.

Objective: The aim of this study was to rapidly obtain information on public perceptions, knowledge, and behaviors related to COVID-19 in order to identify deficiencies in key areas of public education.

Methods: Using a cross-sectional study design, a survey web link was posted on the social media and messaging platforms Instagram, Twitter, and WhatsApp by the study investigators. Participants, aged ≥ 18 years, filled out the survey on a voluntary basis. The main outcomes measured were knowledge of COVID-19 symptoms, protective measures against COVID-19, and source(s) of information about COVID-19. Subgroup analyses were conducted to determine the effects of age, gender, underlying illness, and working or studying in the health care industry on the perceived likelihood of acquiring COVID-19 and getting vaccinated.

Results: A total of 5677 subjects completed the survey over the course of 1 week. "Fever or chills" (n=4973, 87.6%) and "shortness of breath" (n=4695, 82.7%) were identified as the main symptoms of COVID-19. Washing and sanitizing hands (n=4990, 87.9%) and avoiding public places and crowds (n=4865, 85.7%) were identified as the protective measures most frequently used against COVID-19. Social media was the most utilized source for information on the disease (n=4740, 83.5%), followed by the World Health Organization (n=2844, 50.1%). Subgroup analysis revealed that younger subjects (<35 years), males, and those working or studying in health care reported a higher perceived likelihood of acquiring COVID-19, whereas older subjects, females, and those working or studying in non-health care areas reported a lower perceived likelihood of acquiring COVID-19. Similar trends were observed for vaccination against COVID-19, with older subjects, females, and those working or studying in non-health care sectors reporting a lower likelihood of vaccinating against COVID-19.

Conclusions: Our results are indicative of a relatively well-informed cohort implementing appropriate protective measures. However, key knowledge deficiencies

exist with regards to vaccination against COVID-19, which future efforts should aim at correcting.