

**Surveying Student Health Professionals to Assess Source of Information Utilization early
during the COVID-19 Pandemic**

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Conflicts of Interest: Dr. Dellavalle is a Joint Coordinating Editor for Cochrane Skin, a dermatology section editor for UpToDate, a Social Media Editor for the Journal of the American Academy of Dermatology (JAAD), a Podcast Editor for the Journal of Investigative Dermatology (JID), coordinating editor representative on Cochrane Council, and is editor-in-chief for JMIR Dermatology. Dr. Sivesind is a Section Editor for JMIR Dermatology.

Title: Surveying Student Health Professionals to Assess Source of Information Utilization early during the COVID-19 Pandemic

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Abstract:

Background:

During the COVID-19 pandemic, news outlets and social media were utilized as extensive methods for the dissemination of information about the pandemic, identification of new scientific studies, and sharing of diagnostic and treatment options. However, it is exceedingly vital to ensure that the information derived from these sources is accurate, peer-reviewed, and obtained from a reliable source. For example, although social media can have numerous advantages, it can portray information that is not current, exaggerated, or falsified. This can induce fear, stress, and invalid perceptions regarding the COVID-19 virus. It is of the utmost importance for healthcare professionals to obtain their information from reliable sources. Healthcare professionals have a predominant role in relaying information to patients, providing necessary treatment, and minimizing the spread of the virus. Therefore, inaccurate information can have dire effects. Our study aims to investigate the information sources utilized by students in healthcare professions and the extent to which students feel like they are well-informed.

Methods:

Survey questions were developed to assess student attitudes, perceptions, and behaviors surrounding the pandemic and were provided to participants in April 2020 after review and approval by educational offices at the University of Colorado Anschutz Medical Campus. The questionnaire was delivered anonymously through the Qualtrics

platform. Dental, Graduate, Medical, Nursing, Physician Assistants, Pharmacy, and School of Public Health students responded to the survey (total n=302). Self-reported Likert scale frequencies of COVID-19 information source usage were analyzed by student age group, gender, training program, how well-informed students felt about COVID-19, and minutes spent per day learning about the pandemic in the month leading up to the survey using Pearson's chi-squared. Significant correlations warranted further examination.

Results:

How well-informed students felt was significantly correlated with gender ($p=0.01$, men were more likely to feel informed) and greater time spent per day on COVID-19 learning ($p=0.0003$). More time spent was significantly correlated with older age ($p = 0.02$, more students age 31 and older dedicated >40 minutes/day to learning about the virus), reading local public health department updates ($p=0.009$), government/Centers for Disease Control updates ($p=0.02$), and studying coronavirus-related coursework ($p=0.01$). Older students were also more likely to read newspapers ($p = 0.0002$) and scientific literature ($p = 0.0002$) for information, and less likely to use social media ($p = 0.01$) or rely on friends and family ($p = 0.001$). Women were slightly more likely to consult friends and family as a source of COVID-19 news ($p =0.01$). Lastly, MD program students more often utilized coursework ($p=0.0004$) and other healthcare professionals ($p=0.0003$) as resources, as compared to students in other training programs.

Conclusion: Assessing sources of information student healthcare professionals utilize is

paramount due to their future roles of promoting wellness and preventing disease. Our results indicate that gender and age play a significant role in feeling more informed and time spent learning about COVID-19, respectively. Training program also had an impact on sources of information used. Further research can be done to identify ways to make reliable sources more accessible to healthcare professionals.