



School of Nursing

# Knowledge of Infection Prevention and COVID-19 Among Elms College Students By Madison Zigmont and Aleksandra Kagan

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**Introduction** Knowledge of infection control pertains to community safety, as people are often misinformed about specific precautionary measures. This includes understanding disease transmission, incubation period, and best evidence practices to prevent cross-contamination. Incorrect hand washing, personal protective equipment use, and poor compliance all contribute to disease outbreaks.

**Objectives** To examine knowledge deficits regarding infection prevention and COVID-19 among students and to determine interventions that will improve compliance on campus, thereby decreasing disease transmission.



**Background** Amidst the current COVID-19 pandemic, correct infection control knowledge and adherence are necessary among the public in slowing the progression of transmission. It is crucial for all members of society to value their role in protecting not only themselves, but others as well. Evaluating knowledge on proper hygiene practices is essential when assessing the community's readiness to protect against COVID-19 outbreaks. Populations such as college campuses are especially susceptible to disease outbreak due to the lack of compliance among students. Additionally, this population is at increased risk due to their tendency to obtain information from non-reputable sources, such as social media. According to the literature, correct knowledge has a positive correlation with compliance rates.

**Interventions** We sent a 13 item Google Forms survey to all Elms College students' email addresses. The first three questions provided demographic data on the respondents.

The remaining 10 questions assessed students knowledge of infection prevention concepts. Nine of the 10 questions assessed knowledge of evidence based practice regarding COVID-19. The 10 knowledge based questions were each worth one point if answered correctly.

**Results** The survey was completed by 118 students. 62 respondents identified themselves as a "Nursing or Science Major." The remaining 56 were "Other" majors. The average score of the survey was 7.36 out of 10 points. Over 80% of the students correctly answered questions regarding correct length of hand washing, main transmission route of COVID-19, when do symptoms of COVID-19 appear after exposure, and that it is necessary to continue wearing a face mask after being vaccinated against COVID-19. Only 27% of students correctly answered that "Air in a room can be contaminated with COVID-19 after an infected person has left the room for up to 3 hours." Thirty-nine percent correctly answered that "Wearing a face mask reduces your risk of contracting/transmitting COVID-19 by 95%."

**Conclusion** Overall, Elms College students have good knowledge of basic concepts of infection prevention.. On average, students correctly identified methods to prevent COVID-19, such as wearing face masks and eye protection. They also performed well on questions regarding vaccination, as the majority understood that a vaccine will not give you COVID-19. These results suggests that students are obtaining their information from reputable sources and value protecting others.