

Impact of Virtual Learning During the COVID-19 Pandemic on Pharmacy Students' Perceived Learning and Wellbeing

Carter Jesiel, PharmD Candidate 2023¹; Cecily Vivas, PharmD Candidate 2023¹; Mickayla Clark, PharmD, BCPS¹; Trang (Susan) Nguyen, PharmD, BCACP¹

¹Roseman University of Health Sciences College of Pharmacy

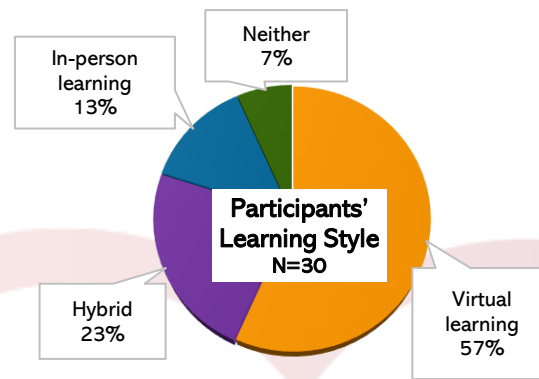
Purpose

In response to the coronavirus disease-2019 (COVID-19) pandemic, educational institutions were forced to swiftly switch from face-to-face instruction to online instruction. Along with responsibilities outside of the classroom, finding an appropriate virtual learning platform and quickly interpreting how to utilize it effectively became a struggle for some educators and students.¹ Previously conducted studies regarding the impact of COVID-19 evaluated medical students to assess perception and satisfaction regarding virtual learning and another study looked at the impact of wellbeing on graduating pharmacy students during the pandemic, both in a traditional school curriculum.¹⁻⁵ The goal of this study is to expand on this literature and assess how the learning and wellbeing of pharmacy students' in an accelerated PharmD program was affected by the COVID-19 pandemic and implementation of virtual learning into the curriculum.

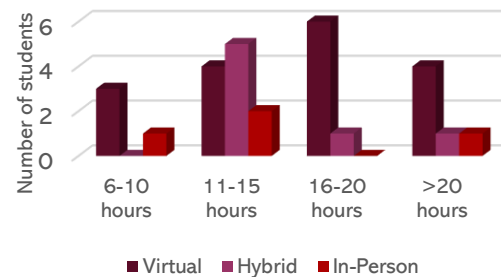
Methods

An electronic survey was sent to the Class of 2023 students, currently enrolled at Roseman University of Health Sciences College of Pharmacy (RUCOP) accelerated PharmD program on the Henderson, Nevada Campus. Students at RUCOP had the option to attend class in-person, virtually, or hybrid during this time and questions were directed based on what method they chose to attend class. A variety of questions were asked to assess the impact of virtual learning during the 2020-2021 academic year on their learning and wellbeing. Descriptive statistics were used to analyze the results.

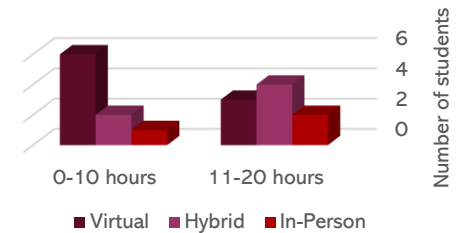
Results



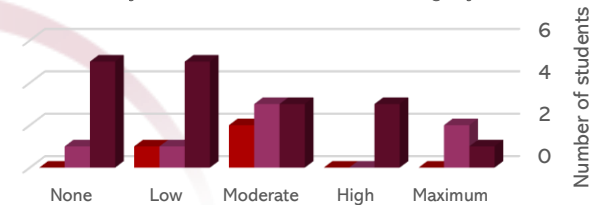
Hours Studied Per Week Outside of School Hours



Hours Worked Weekly While Enrolled in Pharmacy School



Analysis of Burnout from Each Learning Style



* Burnout defined as: No burnout (no change in behavior or habits), Low burnout (slightly tired and feeling overwhelmed at times), Moderate burnout (I could use a break sometimes, but I think I am doing okay), High burnout (I just want to take a nap when I know the workload I have), Maximum burnout (I just want to give up sometimes this is way too much)⁴

Conclusion

All methods of delivering education including in-person, virtual, and hybrid appear to be similar with regards to student-perceived learning; however, there were some key differences. Notably, those that chose the hybrid method worked more hours at their place of employment and spent more time studying outside of class. There did appear to be a trend of less burnout in those in the virtual group compared to the other groups. Potential limitations of this study include small sample size and recall bias.

References

1. Draugalis JR, Johnson EJ, Urice DR. Challenges and Lessons Amid the COVID-19 Pandemic at One College of Pharmacy. *Am J Pharm Educ.* 2020;84(6):ajpe8157.
2. Abbasi MS, Ahmed N, Sajjad B, et al. E-Learning perception and satisfaction among health sciences students amid the COVID-19 pandemic. *Work.* 2020;67(3):549-556.
3. Elbesheshy R, Gim S, Quattrocchi E. Impact of COVID-19 on graduating U.S. pharmacy students in the early epicenter of the pandemic in New York City. *Explor Res Clin Soc Pharm.* 2021;4:100085.
4. Britt HR, Koranne R, Rockwood T. Statewide improvement approach to clinician burnout: Findings from the baseline year. *Burnout Research.* 2017;7:29-35.
5. Alomar M, Palaian S, Shanabieh S. Perceived Stress and Quality of Life Among Final-Year Pharmacy Students in the United Arab Emirates During COVID-19 Pandemic Lockdown. *Adv Med Educ Pract.* 2021;12:1361-1369.