

Best Practice Advisory to Improve Adherence to Hepatitis B Vaccination Guidelines in
Undergraduate Nursing Students

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On my honor, I pledge that I have neither given nor received any unauthorized assistance
on this paper. Cheryl Nelson 4/18/2021

Abstract

Background and Purpose: Hepatitis B vaccination is effective in preventing transmission of the virus. The risk of acquiring the hepatitis B virus through an occupational exposure is greater for healthcare students compared with healthcare workers; however, students do not have the same access to vaccination as healthcare employees. Only a small percentage of undergraduate nursing students provide documentation of hepatitis B immunity according to evidence-based guidelines. The purpose of the project was to increase documentation of hepatitis B immunity in undergraduate nursing students by implementing a best practice advisory and educating providers.

Methods: This quality improvement project used a Pre-/Post- intervention design. Participants included students in undergraduate nursing program who attended the community college wellness clinic. The clinic providers received education about the *Advisory Committee on Immunization Practice* recommendations for hepatitis B immunization and the best practice advisory. The advisory was embedded in the electronic health record to prompt initiation of the immunization protocol during the student's *Allied Health Review* visit. Hepatitis B vaccination and titers were ordered as indicated. The rate of documentation of baseline HBV immunization status, the rate of HBV vaccinations and the rate of positive titers were measured. A Chi Square test was used to evaluate if the rate of HBV vaccinations and the rate of positive titers improved post implementation of a best practice advisory.

Results: A total of 71 undergraduate nursing students were included in this project - Fall 2019 (n=33) and Fall 2020 (n=38). Documentation of hepatitis B vaccination and titers increased in the post- intervention Fall 2020 cohort (21.8% [8]) compared with the Fall 2019 cohort (12% [4]); although the increase was not statistically significant ($p = .317$). The number of titers

increased significantly ($p=.004$), between Fall 2019 (24% [8]) and Fall 2020 (57.9% [22]) though the increase of positive titers was not statistically significant ($p = .307$).

Conclusion: Educating providers and embedding a best practice advisory improves documentation and implementation of hepatitis B immunization guidelines.

Implications: This project prompted faculty to make revisions in the hepatitis B immunization requirements policy for undergraduate healthcare students.

Keywords: Hepatitis B, immunization, titers, undergraduate, healthcare students