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*