



ABSTRACT

Knowledge of Hepatitis B and C Virus Infections and Vaccination Awareness among University Students in Palestine: A Cross-Sectional Study

Amal Awatlha¹, Majdia Aslan¹, Nameer Alassa¹, Raed Halaqa¹, Malak Thweib¹, Ibrahim Ghannam².

¹ Fourth year BSC students, Department of Medical Laboratory Technology, Faculty of Health professions, Al-Quds University, Palestine.

²Lecturer - Department of Medical Laboratory Sciences, Al-Quds University, Palestine.

Correspondence should be addressed to Amal Awatlha; amal.awatlha@students.alquds.edu

Background: Hepatitis B (HBV) and C (HCV) infections are major global health issues, causing approximately 1.3 million deaths annually worldwide. In Palestine, understanding knowledge gaps among university students is crucial for developing targeted interventions. This study aimed to investigate students' knowledge of these infections and related vaccination practices among university students in Palestine.

Methods: A cross-sectional study was conducted during October and November 2024 across Palestinian universities, including Al-Quds University (71.9% of participants), An-Najah, Birzeit University, and seven other institutions. A total of 420 students (83.1% female; mean age 20.9 years) from medical (56.9%), non-medical (30%), and other specialties (13.1%) completed a validated electronic questionnaire. Knowledge was assessed using standardized scoring systems for HBV (17 questions) and HCV (16 questions). Chi-square tests and multinomial logistic regression were used to analyze associations and determine odds ratios.



Results: Overall, 53.1% demonstrated moderate knowledge of HBV, while 53.8% showed low knowledge of HCV. A significant association was found between knowledge of HBV and HCV ($p < 0.001$). Medical students exhibited significantly higher knowledge for both HBV (OR=5.96, 95% CI: 2.78-12.77) and HCV (OR=5.19, 95% CI: 2.53-10.65) compared to other specialties (all $p < 0.001$). First-year students showed significantly lower knowledge compared to senior students for both viruses (HBV: OR=0.07, 95% CI: 0.02-0.23; HCV: OR=0.11, 95% CI: 0.04-0.30; all $p < 0.001$). Only 34.3% reported receiving HBV vaccination, with lack of awareness being the primary barrier (30.2%). Social media (73.8%) and workplace initiatives (63.6%) were identified as the most effective information channels.

Conclusion: This study reveals significant knowledge gaps regarding viral hepatitis among Palestinian university students, particularly in non-medical disciplines. The strong correlation between HBV and HCV knowledge suggests that comprehensive educational interventions addressing both infections simultaneously may be more effective. Targeted interventions utilizing social media platforms and workplace programs are recommended, along with curriculum revisions to incorporate viral hepatitis education in early academic years.