

Poster #3

Research Study

Title: “The Effects of Sociodemographic and Academic Factors on Student Performance in a Post Baccalaureate Pre-Medical Program”

Bryan Cabrera; Javier Garcia; Javier Valdes; Noël C Barengo, MD; Tracey Weiler, PhD

Category: Medical Education

Keywords: Demographic factors; Student performance; Post Baccalaureate Pre-Medical Program

Introduction and Objective. Although the association of demographics and student performance has been studied, the evidence supporting their impact on Medical Student performance is inconsistent. The literature outlines medical school selection criteria that help predict performance. However, there is a gap in the literature for post-baccalaureate programs. Herbert Wertheim College of Medicine offers the Graduate Certificate in Molecular and Biomedical Sciences (GCP) Post-Baccalaureate program, and our objective was to determine if there is an association between factors and student performance.

Methods. This was an observational, non-concurrent cohort study of GCP students that enrolled in the program between 2016 and 2019. The population of 161 graduate students who completed both semesters of the GCP program in the first four cohorts were included in this study. Exclusion criteria consisted of those who did not complete the survey or those whose full set of information was not collected in its totality (n=27). Self-reported factors from an in-person questionnaire were collected. Unadjusted and adjusted logistic regression analysis was used to calculate odds ratios (OR) and 95% confidence intervals (CI).

Results. Thirty-nine participants (29.1%) were part of the high-performance group. Four factors were associated with high performance. Students who did not receive a Pell-Grant had an OR 3.03 (95% CI 1.17-7.82). Students in non-biology majors had an OR 2.41 (95% CI 1.11-5.21) for having a positive performance. Those who did not take the microbiology previously had lower odds of having a positive performance when compared with reference, OR 0.299 (95% CI 0.105 – 0.847). Finally, students living more than 12.9 miles away from campus have an OR 2.80 (95% CI 1.04- 7.52) for performing positively when compared with reference group.

Conclusions-Implications. Our results can be used by admissions committees of post-baccalaureate programs to maximize the performance of their selected cohort as well as to identify student that may need help preemptively. More research into how these factors affect medical student performance is needed to formulate a well-rounded, evidence-based model.