The effect of visual acuity and anemia on academic performance of pharmacy students

Ahmed T Alahmar, Fadia Radi, Asawer Ali and Fairah Abudlaziz
University of Babylon, Iraq

Background: Reduced visual acuity and anemia have been implicated in student’s poor academic performance along with other medical conditions.

Aim: The aim of this study was to estimate the prevalence of reduced visual acuity and anemia among pharmacy students at University of Babylon, Iraq and their effects on students’ academic performance.

Methods: Ninety-five students (25 males and 70 females) who met the inclusion criteria were screened for refractive errors using Snellen chart. A subset of 48 students (18 males and 30 females) was also screened for anemia and RBC indices were estimated by hematology autoanalyzer. The student’s average grades of four subjects (out of 40) were compared between different subgroups.

Results: The prevalence of refractive errors among students was 10.5% and the prevalence of anemia was 18.7% (average Hb 11.26±1.13 g/dl). The student’s average grades did not differ among students with reduced visual acuity as compared to those with normal visual acuity (24.69±3.16 vs. 25.65±4.01, respectively). Student’s grades also did not differ between students with anemia in comparison with those without anemia (26.50±3.73 vs. 25.77±3.83, respectively).

Conclusions: Refractive errors and anemia are prevalent among pharmacy students. Our study demonstrated no difference in student’s grades among students with refractive errors or anemia in comparison with normal students, which could be due to mild forms of these conditions.