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The Pre-entry Program at UTMSH: Effect on Academic Performance of First-Year Medical Students

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Introduction: The Pre-Entry Program at The University of Texas Medical School at Houston is presented to assist entering students who are judged to be at risk for academic difficulty. It requires a significant commitment of time on the part of faculty, staff and students. The effectiveness of this program needs to be evaluated.
Purpose: The purpose is to determine the effect of the Pre-Entry Program on the academic achievement and attrition of at-risk medical students during their first year of medical school.
Methods: This was a causal-comparative study of students invited to the Pre-Entry Program between 1999 and 2005. Students were self-selected into two groups, attendees (n = 174) and decliners (n = 81). The proportion of students with unsatisfactory performance and the rate of attrition from the first year class were compared for each group by a Pearson chi-square test. An analysis of covariance was used to compare the academic achievement as measured by the National Board of Medical Examiners (NBME) Subject Examinations in Biochemistry, Gross Anatomy and Physiology using Medical College Admission Test scores as the covariate.
Results: There were no statistically significant differences in the incidence of unsatisfactory performance or in the rates of attrition from the first-year class between accepters and decliners or in the mean performances of the two groups on the NBME Examinations in Biochemistry and Physiology. The decliners had a statistically significant higher mean performance on the NBME Gross Anatomy Examination ($p = .04$), although the effect size ($d = 0.29$) was not educationally significant.
Conclusions: The effect of the Pre-Entry Program on the academic performance and attrition rate of at-risk first-year medical students is minimal. The program should remain voluntary and further studies should be performed to determine the non-academic effects of the program.