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An Exploration of the Association Between the Physical Activity and Academic Performance in Internship Medical Students

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Abstract: Objectives: Previous studies have indicated the positive effect of physical activity and sports on different aspects of health, such as muscle endurance and sleep cycle. However, in university students, particularly medical students, who have limited time and a stressful lifestyle, there have been limited studies exploring this matter with proven statistical results. In this regard, this study aims to find out how regular physical activity can influence the academic performance of medical students during their internship period. Methods: This was a descriptive-analytical study. Overall, 160 medical students (including 80 women and 88 men) voluntarily participated in the study. The Baecke Physical Activity Questionnaire was applied to determine the student's physical activity levels. The student's academic performance was determined based on their total average academic scores. The data were analyzed in SPSS version 16 software using the independent t-test, Pearson correlation, and linear regression. Results: The average age of the students was 26.0±1.5 years. Eighty-eight students (52.4%) were male, and 142 (84.5%) were single. The student's mean total average academic score was 16.2±1.2, and their average physical activity score was 8.3 ± 1.1 . The student's average academic score was not associated with their gender (P=0.427), marital status (P=0.645), and age (P=0.320). However, married students had a significantly lower physical activity level compared to single students (P=0.020). The results indicated a significant positive correlation between student's physical activity levels and average academic scores (r=+0.410 and P<0.001). This correlation was independent of the student's age, gender, and marital status based on the regression analysis. Conclusion: The results of the current study suggested that the physical activity level in medical students was low to moderate in most cases, and there was a significant direct relationship between student's physical activity level and academic performance, independent of age, gender, and marital status.

Keywords: exercise, education, physical activity, academic performance

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