Group A1.3

Physical activity and academic performance among medical undergraduates at the para clinical phase of the faculty of medicine University of Kelaniya; A cross sectional study

Group A1.3 ,Research team
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Introduction

MBBS course is a time - consuming process and it has heavy study work load to do. This leads to decreased in physical activities among the medical students.
According to WHO criteria adult aged 18-64 should do at least 150 minutes of moderate or 75 minutes of vigorous intensity physical activity throughout the week or an equivalent combination. Many studies show that physical activities could aid educational and learning abilities and physical activities are associated with the selected advantages in cognitive function and given positive results.

Objectives

To determine level and type of physical activities and association between academic performance among medical undergraduates at the para clinical phase of the faculty of medicine University of Kelaniya.

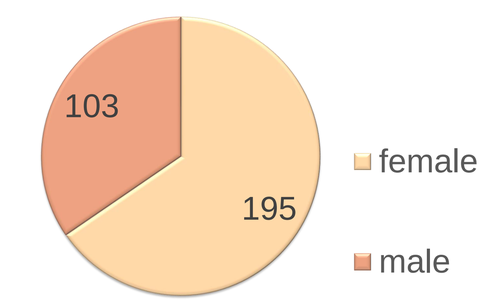
Method

Study design: Cross-sectional study
Study setting: Faculty of Medicine University of Kelaniya
Study period: From 15th November 2019 to 15th December 2019
Study population: Students of 27th and 28th batches of faculty of Medicine University of Kelaniya. (170 + 165=335)
Sample size: N=292 (Winpepi)
Sample Technique: Sample size is less than our population. Then we take all the students of batch 27th and 28th .Therefore, no sample technique .
Data collection method: Self-administered questionnaire on physical activities (IPAQ) and academic performance
Data analysis: Categorical data analysis (for both physical activity and academic performance) by using SPSS (Version 25) programming.

Results

Description of Study Participants (N=298)

Gender distribution:
Male - 103 (34.6%)
Female - 195 (65.4%)

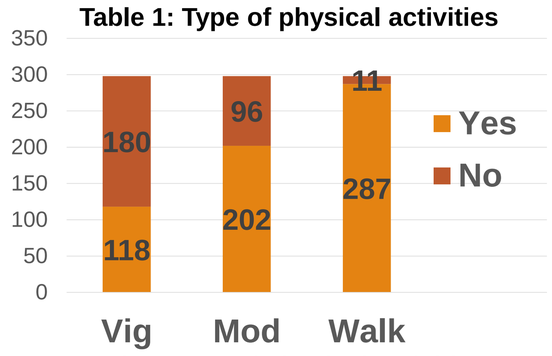


Graph 1: sex distribution of participants

Type of physical activities (N=298)

Type of activity	Yes	No
Vigorous	118	180
Moderate	202	96
Walking	287	11

Table 1: Type of physical activities

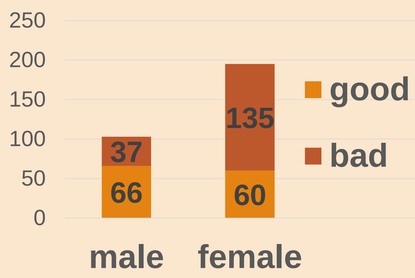


Graph 2: type of physical activities

Level of physical activities (N=298)

Students with adequate physical activities –126 (42.3%)
Students with inadequate physical activities –172 (57.7%)

Gender distribution:



Graph 2: sex distribution of level of physical activities

	adequate	inadequate
Male	66 (22.1%)	37 (12.4%)
Female	60 (20.1%)	135 (45.3%)

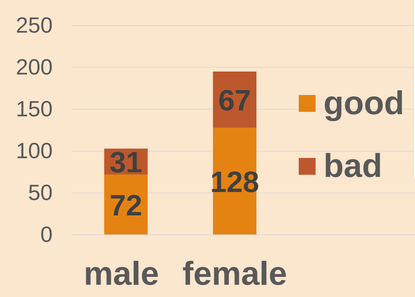
Table 2: sex distribution of level of physical activities

X^2=30.64 DF=1 p=0.00 p < 0.05
Significant association is present

Level of academic performance (N= 298)

Students with adequate academic performance –200 (67.1%)
Students with inadequate academic performance –98 (32.9%)

Gender distribution:



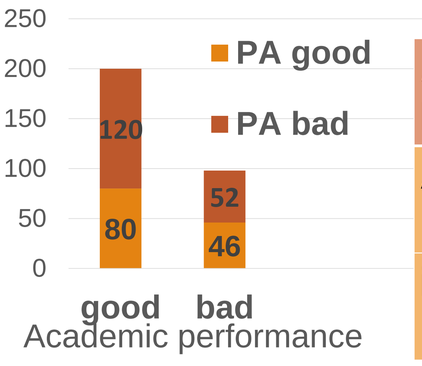
Graph 3: sex distribution of level of academic performance

	adequate	inadequate
Male	72 (24.2%)	31 (10.4%)
Female	128 (43%)	67 (22.5%)

Table 3: sex distribution of level of Academic performance

X^2=0.555 DF=1 p=0.456 p > 0.05
No significant association between gender and academic performance

Association between physical activities and academic performance (N= 298)



Graph 4: association between physical activities and academic performance

Aca.Per / Phy.Act	Adequate	Inadequate
Adequate	80 (26.8%)	46 (15.4%)
inadequate	120 (40.3%)	52 (17.4%)

Table 4: association between physical activities and academic performance

X^2=1.298 DF=1 p=0.255
p > 0.05
There is no statistically significant association between physical activities and academic performance

Conclusion

According to the study, majority of the participants are physically inactive. Compared to female students physical activity of the male students is high. Majority of the students are involving with walking. A significant association between gender and physical activity level can be seen while an association can not be seen between physical activity and academic performance.

Recommendations

Female students should be encouraged to do more physical activities. Physical health related seminars and exercise programs will bring preferable results. After implementing these actions this study can be repeated to see the improvement.

References

1) Sciences" 25 (5): 88–102. Supervision, Association, and Curriculum Development Alexandria. n.d. No Title.

2) Q-en, C, and Surajudeen Abiola A. 2018. "The Relationship between Levels of Physical Activity and Academic Achievement among Medical and Health Sciences Students at Cyberjaya University College of Medical"

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