

Trend of physical activity level among medical students of B.J. Medical College, Ahmedabad

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Abstract

Introduction: Non communicable diseases (NCD) will account for 73% of deaths and 60% of the global disease burden by 2020. Physical activity plays a major role in the prevention of these non-communicable diseases. The stress involved in meeting responsibilities of becoming a physician may adversely affect the exercise habits of students.

Aims and Objectives: The current study aimed to study the trend of physical activity level among undergraduate medical students.

Methodology: A cross sectional study was conducted among 200 undergraduate medical students. Quota sampling method was used to identify 50 students from each of the four odd semesters. A pre-tested, semi-structured questionnaire was used to collect the data. Epi-Info 7 was used for data entry and statistical analysis and results are expressed as percentages and proportions.

Observations & Discussion: In our study, 55% were 20 to 22 years old. Over half of the students were utilizing the sports facilities provided by the university in the campus. Majority of students 138 (69%) had normal body mass index (BMI), (43) 21% were overweight. Of the 65% who were currently exercising, the practice of physical activity was more among boys as compared to girls (68% v/s 32%). Lack of time (22 %), laziness (57 %), and exhaustion from academic activities (7 %) were identified as important hindering factors among medical students who did not exercise.

Conclusions: A longitudinal study to follow-up student behavior throughout their academic life is needed to identify the factors promoting physical activity among students

Recommendations: Students are encouraged to use bicycle on campus, involve in sports activity, yoga and exercise sessions.

Keywords:Body mass index, lack of time, medical students, physical activity

1. Introduction

Physical inactivity is an important risk factor for the development of several chronic diseases including coronary artery disease, hypertension, diabetes, cancers, obesity, and osteoporosis [1]. This mainly occurs due to the changing lifestyles of people. In an academically demanding environment of college, students tend to do less physical activity [2].

One published study conducted on junior doctors from India did not explore the knowledge about physical activity or patterns of physical activity [3]. Another published from India which reported the patterns of physical activity did not explore if any students made an attempt to change their lifestyle.

In an academically demanding environment of college, students tend to do less physical activity [4]. Amongst this college population, it is assumed that the medical students have a greater knowledge about healthy lifestyle and dietary habits when compared to other students. One of the most important factors for predicting the physical condition of medical students is their own attitudes toward health promotion, illness prevention, and exercise [4].

However, there is no evidence to indicate that this knowledge translates into practice in terms of maintaining good health. Healthy habits among medical students are even more important as they are future physicians and the students who personally ignore adopting healthy lifestyle are more likely to fail to establish health promotion opportunities for their patients. Also, medical students have been shown to exhibit early risk factors for chronic diseases [5,6].

With this background in mind, the current study was designed to assess the attitude and practices of medical students regarding physical activity and to determine the motivating and hindering factors for the practice of physical activity. To assess the perceptions and knowledge regarding physical activities

2. Methods and Materials

Study design: Cross sectional, Study area: B.J. Medical College, Ahmedabad, Study period: 10th august- 5thSeptember 2014. Sample size: 200 undergraduate medical students. Data analysis were done using Excel and Epi-Info 7th version. Results were expressed in numbers and percentages. Chi-square test was applied. $p < 0.05$ was considered as statistically significant.

3. Results

Table 1: Age and Gender wise distribution of participants (n=200)

	Frequency(n=200)	Percentage (%)
Age (years)		
17-19	76	38%
20-22	110	55%
23-25	14	7%
Gender		
Male	103	51.5%
Female	97	48.5%
	200	100%

Table 2:BMI of the study participants (n=200)

	Male	Female	Total
BMI			
<18.5	11	5	16(8%)
18.5-24.9	56	82	138(69%)
25-29.9	33	9	42(21%)
>30	3	1	4(2%)
	103	97	200(100%)

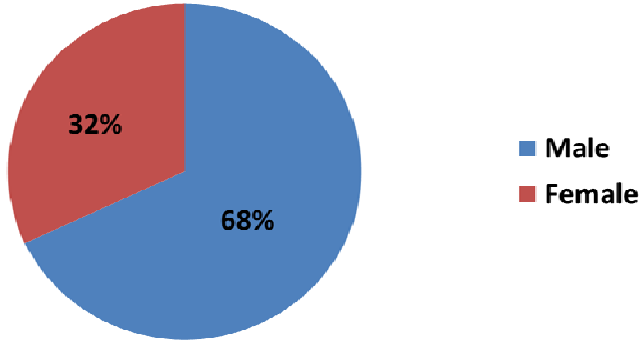


Fig 1: Practice of physical activity among students (n=200)

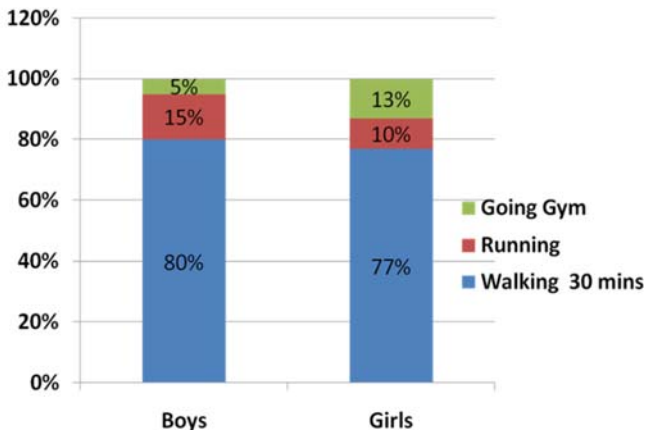


Fig 2: Types of physical activity among medical students (n=200)

Table 3: Factors affecting practice of physical activity among student (n=200)

Factors	N (%)
If no, reasons	
Laziness	40 (57)
No time	15(22)
Exhaustion from academic activity	5 (7)
Affecting studies	10(14)
Enrolled for Physical Activity	
Yes	130(65)
No	70 (35)
If yes, reasons (n=130)	
Burn calories	43 (33.3)
Mental peace	39 (30.5)
Increases stamina	28 (20.8)
Keeps me fit	20 (15.3)

Table 4: Grading of physical activity (n=200)

Type	Semester		Chi-square
	2 nd	4 th	
Low	33(63)	20(37)	4.37 p=0.11 Non significant
Moderate	32(51)	31(49)	
High	28(52)	26(48)	

Conclusions

Most of the students fall into moderate physical activity group. Health-related benefits were the driving force for doing physical activity.

Recommendations

A longitudinal study to follow-up student behavior throughout their academic life is needed to identify the factors promoting physical activity among students.

References

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