



PHYSICAL ACTIVITY AWARENESS AND PRACTICES AMONG MEDICAL STUDENTS: A COMPREHENSIVE SURVEY

Dr Neha Nagaraj*

Postgraduate, Dept. Of Community Medicine, Sri Siddhartha Medical College.

*Corresponding Author

Dr Gopinath S

Senior Resident, Dept. Of Community Medicine, Sri Lalithambigai Medical College.

KEYWORDS :

INTRODUCTION

Physical inactivity is a leading risk factor for noncommunicable diseases (NCDs) and death worldwide, increasing the risk of conditions such as cancer, heart disease, stroke, and diabetes by 20–30%. It is estimated that four to five million deaths per year could be averted if the global population were more active. Alarming, one in four adults and four out of five adolescents fail to engage in sufficient physical activity. Women and girls generally exhibit lower levels of physical activity than their male counterparts, further exacerbating health inequalities. Additionally, older adults and people living with disabilities are less likely to be active, missing out on the physical, mental, and social health benefits that physical activity provides.

Physical inactivity also imposes a significant burden on society through increased medical costs and reduced productivity. Estimates from 2016 indicate that physical inactivity cost the global health system approximately US\$ 54 billion and resulted in US\$ 14 billion in economic losses.

Physical activity encompasses all forms of movement and can be integrated into daily life through activities such as walking, cycling, sports, and active recreation. Regular physical activity is essential for preventing and managing NCDs, maintaining a healthy body weight, and improving mental health and quality of life. However, medical students often face barriers to physical activity, including hectic schedules, study stress, procrastination, lack of knowledge, and unhealthy habits such as smoking and alcohol consumption. This study aims to assess the levels of physical activity among medical students of a tertiary medical college and identify factors associated with physical inactivity.

Methodology

Study Design

This cross-sectional survey was conducted at a tertiary medical college in south India.

Study Population

The study population comprised students, including those enrolled in MBBS, nursing, and BDS programs.

Sampling Method

A convenient sampling method was used.

Sample Size

Based on an expected prevalence of physical inactivity of 50%, with a 95% confidence interval and 5% absolute precision, the sample size was calculated to be 384.

Study Procedure

Classrooms of MBBS, nursing, and BDS students were visited, and students were requested to participate in the study. An online link to a self-administered questionnaire was shared in the respective WhatsApp groups. The questionnaire included details on sociodemographic factors, knowledge and attitudes toward physical activity, and the International Physical Activity Questionnaire (IPAQ). Data were extracted into MS Excel after collection.

RESULTS

A total of 309 participants were included in the study, with a median age of 20 years (range 18–27) (Fig 1). Among the participants, 64% were females, 80% came from an urban background, and 75% belonged to nuclear families. Additionally, 20% reported consuming

alcohol, 12% used tobacco, and 7% had various comorbidities (Table 1).

Knowledge regarding physical activity was high among the participants, with 89% recognizing the need for at least three days of physical activity per week. Furthermore, 89% believed that the curriculum should be modified to include sessions promoting physical activity, and 37% felt that cycling should be mandatory on campus (Table 2).

Approximately 12% of the participants were very active, while 3% did not engage in any physical activity. Of the total, 29% performed vigorous physical activity for one to three days a week. Moreover, 67% walked at least three days a week, and 30% walked at least once a week.

DISCUSSION

This study assessed physical activity levels among medical students, aligning the data with recommended physical activity levels. The majority of the participants were MBBS students, with a notable increase in female participation. It was observed that 72.7% of students walked to their classes more than three times a week, and 75.2% did not own a vehicle. Additionally, 61.3% worked out three to five times a week, and 91% acknowledged that exercising improves heart and lung health.

Compared to a study conducted by the International Journal of Advanced Research on physical activity among university students in Mumbai, which found that 60.49% engaged in moderate exercise, 43.35% in easy exercise, and 19.16% in vigorous exercise, our study revealed that 12% of participants were very active and 29% engaged in vigorous physical activity. The higher vigorous activity levels in our study may be attributed to increased awareness and upcoming sports meet during data collection. However, it is concerning that not all students were physically active, highlighting the need for institutional and societal interventions to promote physical activity.

CONCLUSION

In conclusion, approximately 12% of participants were very active, and 3% did not engage in any physical activity. While 29% performed vigorous physical activity for one to three days a week, the knowledge and attitudes regarding physical activity were generally satisfactory among the participants. There is a need for active interventions from institutions and society to further improve physical activity levels among students.

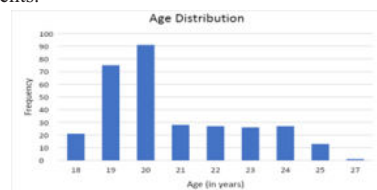


Figure 1 : Age distribution of the study participants. (N=309)

Table 1: Sociodemographic and clinical characteristics of study participants (N=309)

Characteristics	Proportion
Gender	
Male	36
Female	64

Type of family	
Nuclear	75
Joint	17
Three generation	5
Extended Family	3
Place of residence	
Urban	70
Rural	20
Metropolitan	10
Tobacco users	12
Alcohol users	20
Students with comorbidities	7

Table 2: Knowledge and attitude of study participants regarding physical activity (N=309)

Characteristics	Proportion
Cycling should be mandatory in the college	
Yes	37
No	24
May be	39
Curriculum should include sessions to improve physical activity	
Yes	89
No	11
How many days a person should workout	
Once a week	11
3 - 5 days	61
Everyday	28

REFERENCES

1. World Health Organization. WHO guidelines on physical activity and sedentary behaviour. Geneva: WHO; 2020. Available from: <https://www.who.int/publications/i/item/9789240015128>
2. Park K. Park's textbook of preventive and social medicine. 25th ed. Jabalpur: Banarsidas Bhanot Publishers; 2019.
3. International Physical Activity Questionnaire (IPAQ) - Short Form. Available from: <https://journals.plos.org/plosone/article/file?type=supplementary&id=info:doi/10.1371/journal.pone.0207248.s001>
4. Armstrong T, Bull F. Development of the World Health Organization Global Physical Activity Questionnaire (GPAQ). J Public Health. 2006;14(2):66-70. Available from: <https://ihealth-2d.org/wp-content/uploads/2020/07/Development-of-the-GPAQ.pdf>
5. Jambusaria S, Bhadra S, Sanghvi S. Physical activity among university students in Mumbai. Int J Adv Res. 2018;6(3):1152-9. Available from: <https://www.ijariit.com/manuscripts/v6i3/V6I3-1562.pdf>