

Prevalence of Physical Inactivity in Students of Sargodha Medical College

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Received date: March 15, 2018; **Accepted date:** May 5, 2018; **Published date:** May 8, 2018

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Abstract

The objective of this study was to evaluate the prevalence of physical inactivity and its related effects in students of Sargodha Medical College.

A survey of 200 students from different departments of Sargodha Medical College was carried out. The departments included in this study were MBBS, DPT, DHND, DSMLE and AHS.

Data obtained was analyzed using Descriptive Statistics and the duration of our study was 10 months (Feb 2017 to November 2017).

Mean age of participants was 21. Out of 200 students, 147 were boarders and 53 were day scholars, 47.5% students suffer often from the musculoskeletal aches, 31% students feel pain in neck/head area, 39% feel pain at back, 20% feel pain in shoulder area and 10% suffer pain at knee/ankle area. Similarly 16% students participate in sports or games while 50% do not participate in any sports or games. 32% perform exercise or physical activity to feel better, 33% perform for good health, 29% perform for good physique while 5.5% do not perform any exercise or physical activity. 58% spend their leisure time by using mobile phones, 10.5% spend by reading books, 27.5% spend by watching TV, laptops and 4% do shopping, hangouts. Students 23% walk daily, 35.5% walk 2-3 times a week, 11% walk 4-6 days a week and 30.5% do not walk a mile or more at a time without resting.

This Study concluded that only 11.5% students are physically active while 52.5% students are physically inactive.

Keywords: Physical activity; Physical inactivity; Exercise; Immobility

Introduction

Physically activity is any work performed by muscles that uses energy and results in various health benefits including physical, mental, social and emotional [1]. According to health and human services 2008 physical activity refers to movement that enhances health. Physical activity plays a key role in reducing the physical stress placed on body by various factors i.e. tiredness, depression, feeling of being sick, and lethargy [2]. Physical activity may be planned and structured to improve and individual health and quality of living that involves movement of muscles that cause energy expenditure and results in various health benefits like enhanced cardiac function, increased muscle performance during occupational and domestic activities. Many types of physical activities help in improving the quality of life like aerobic activities to improve heart and lungs function, muscle strengthening, bone strengthening, stretching etc. "Physical inactivity is lack of sufficient physical activity to maintain healthy balanced life that results in various health disparities like fatigue, obesity, hypertension, cardiac dysfunction etc." [3]. In US National Health Interview "adults are classified as inactive if they did not report any sessions of light to moderate or vigorous leisure time physical activity at least 10 times a day [4]. Sedentary lifestyle now a day's leads to physical inactivity which is due to increased urbanization that ultimately decrease participation in more useful work for body

(physical activity) that results in multi-system physical disaster. There are different types of physical activities that engage our body and improve our strength like walking, jumping, bicycling, swimming and dancing. These are kind of aerobic exercises. Physical exercise causes sweating that increase our breathing rate and also heart beats at faster rate than the normal. It improves our cardiovascular system and makes oxygen delivery quickly and efficiently. In aerobic exercise, usually large muscle group are involved, therefore can be maintained for longer period of time. The benefits of physical activity are difficult to be ignored. Everyone gets benefits from physical activity and exercise regardless of age and gender.

Methodology

A cross sectional observational study was conducted among students of Sargodha Medical College through face to face interview by using self-structured questionnaire. Informed consent was obtained from students. Duration of study was 10 months (Feb 2017 to November 2017). We used self-structured questionnaire for demographic status, history of physical inactivity. Convenient sampling was used during data collection. 200 students participated in the study.

Results

The age group was 18-25 years. Mean age of the participants were 21.21 years. Out of 200 students 40 were male and 160 were female

students. Mean Weight of the participants was 56.5 kg and mean height was 5 feet 3 inches. The data was collected by the 3 departments of Sargodha Medical College. 60 students (30%) were from DPT (Department of Physical Therapy) (Table 1).

| | N | Minimum | Maximum | Mean | Std. Deviation |
|---------|-----|---------|---------|-------|----------------|
| Age | 200 | 18 | 25 | 21.21 | 1.52233 |
| Valid N | 200 | | | | |

Table 1: The average age of the participants. Mean age was 21.21 years.

77 students (38%) were from the department of MBBS. 63 students (31%) were from the department of DHND/AHS/DSMLE. 11.5% students perform exercise on daily basis while 52.5% students do not perform exercise on daily basis. 17% students perform exercise often while 19% perform seldom which shows that the ratio of inactive students is high as compared to active students. Out of 200 students 23% walk daily, 35.5% walk 2-3 times a week, 11% walk 4-6 days a week and 30.5% do not walk a mile or more at a time without resting. Out of 200 students 47.5% students suffer often from the musculoskeletal aches, 29% suffer very often while 23.5% do not suffer from any musculoskeletal aches (Table 2).

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|--------|-----------|---------|---------------|--------------------|
| Valid | Male | 40 | 20 | 20 | 20 |
| | female | 160 | 80 | 80 | 100 |
| | Total | 200 | 100 | 100 | |

Table 2: The percentage of male and female in the study.

11.5% students perform exercise on daily basis while 52.5% students do not perform exercise on daily basis. 17% students perform exercise often while 19% perform seldom which shows that the ratio of inactive students is high as compared to active students (Table 3).

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|--------|-----------|---------|---------------|--------------------|
| Valid | Yes | 23 | 11.5 | 11.5 | 11.5 |
| | No | 105 | 52.5 | 52.5 | 64 |
| | Often | 34 | 17 | 17 | 81 |
| | Seldom | 38 | 19 | 19 | 100 |
| | Total | 200 | 100 | 100 | |

Table 3: Do you perform exercise on daily basis?

Discussion

Results of this study show that physical inactivity remains a problem among students. Sedentary lifestyle now a day's lead to physical inactivity which ultimately decrease participation in more useful work for body (physical activity) that results in multi-system physical disaster. Physically inactive people are at increased risk of having different MSK problems, obesity and many chronic diseases like diabetes, hypercholesterolemia, CHD etc. This problem should not be

ignored and must be highlighted. So in future we might design different exercise programs and awareness of benefits of physical activity and lifestyle modification to resolve it and ultimately improving their quality of life. Sameer et al (2007) reported physical inactivity among obese attendants in the Aga Khan University Hospital (AKUH), Karachi [5]. Among 350 study participants 254 (72.6%) were found to be physically inactive. Rupps et al (2012) studied physical exercise in southern Germany. 2187 subjects randomly selected aged 18-65. Overall, 38.9% of the participants reported no physical exercise [6].

Recommendation and Suggestions

As physical inactivity is a modifiable risk factor among students, self-awareness is important so that students should take part in physical activity and sports. On the other hand seminars should be arranged to aware the people, electronic media also plays an important role in this regard. Universities should aware students to guide them. Government should establish gym and sport centers for this purpose. In our study, it is recommended that further research should be done in this aspect and large sample size should be selected from different cities from Pakistan not restricted to few areas. Lack of time was another barrier. Study should be repeated with to include more samples from different universities of Pakistan. Results of this study can be generalized to Sargodha medical college, to generalized in whole population it should be conducted on larger population with improve sample size collections. There is increased proportion of inactivity among the medical students, some interventions and protocols should be established in local population to meet these problems. Interventional studies are recommended for further studies to see the effects of activity on fitness, mood and bio-psycho-social health.

Limitations

- In this study only the students of Sargodha Medical College were included.
- Sample of 200 students is not sufficient as this was an observational study.
- It should be expanded. Some students were reluctant and non-cooperative to share their information.
- Study was single centered. We cannot generalize the results on whole populations

Conclusion

It was found that only 11.5% students are physically active while 52.5% students are physically inactive so the prevalence of physical inactivity among students of Sargodha Medical College is quite high. Out of 200 students, 147 were boarders and 53 were day scholars, 47.5% students suffer often from the musculoskeletal aches, 31% students feel pain in neck/head area, 39% feel pain at back, 20% feel pain in shoulder area and 10% suffer pain at knee/ankle area. Similarly 16% students participate in sports or games while 50% do not participate in any sports or games. 32% perform exercise or physical activity to feel better, 33% perform for good health, 29% perform for good physique while 5.5% do not perform any exercise or physical activity. 58% spend their leisure time by using mobile phones, 10.5% spend by reading books, 27.5% spend by watching TV, laptops and 4% do shopping, hangouts, 23% walk daily, 35.5% walk 2-3 times a week,

11% walk 4-6 days a week and 30.5% do not walk a mile or more at a time without resting.

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