

Prevalence of Physical Inactivity Among The Students of University Institute of Diet and Nutritional Sciences, University of Lahore

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Abstract:

Physical inactivity is perceived as an essential result of sedentary lifestyle which leads to various health problems especially obesity.

Objective:

Aim of the study was to assess the prevalence of physical inactivity among students of University Institute of Diet and Nutritional Sciences (UIDNS), from The University of Lahore (UOL).

Methods:

A cross sectional survey was conducted with the sample size of 200 students of both genders by selecting the convenient sampling technique from UIDNS, at University of Lahore, Lahore. The survey was conducted during February 2017. The ages of students were between 18 to 22 years. Out of 200 total students, 38 were males while 162 were females. Data was collected from the pre-tested questionnaire. Data was analyzed with the help of Microsoft Office Excel 2007 and minitab17. The results were derived by frequency, mean and average.

Results:

According to the results of statistical analysis of questionnaires, 69% of the respondents were physically inactive and only 31% of them were physically active; the percentage of physically inactive students is 56% higher than the physically active students at UIDNS, at the UOL, Lahore.

Conclusions:

From the current survey, it has been concluded that prevalence of physical inactivity is being higher among the students of UIDNS. The results revealed that the percentage of physically inactive students is 69% higher than the physically active students.

Keywords:

Physical inactivity, sedentary lifestyle, students,

physical activity.

Introduction:

Physical inactivity is defined as, “a state in which bodily movement is minimal, it is referred to energy expenditure; inactivity represents a state in which energy expenditure approximates resting metabolic rate” (WHO, 2002). Globally, around 31% of adults aged 15 and over were inadequately active in 2008 (28% males and 34% females). Physical inactivity has been distinguished as the fourth driving danger factor for worldwide mortality, (6% of deaths world widely) is one of the major reason of public health issue. Approximately 3.2 million of mortality each year are attributable to lack of physical activity.^{1,2} Physical inactivity and its associated health problems have substantial economic consequences for health care systems. Physically inactive population are at both economic and medical risk for various chronic ailments and conditions including coronary illness, stroke, colon malignancy, diabetes, osteoporosis and. morbid obesity.³ Additionally, physical inertia is assessed to be the foremost cause for more or less 21–25% for breast and colon tumors, 27% of diabetes and around 30% of ischemic coronary illness burden.⁴ Financial outcome of physical inertia affects people, organizations and countries. Physical activity likewise has economic importance particularly as far as diminished health care expenditures, expanded profitability and in addition more advantageous physical and social conditions.^{3,4} Physical activity is defined as any bodily movement produced by skeletal muscles that involves energy expenditure, moreover, is positively correlated with physical fitness.³ Physical activity incorporates practice and in addition different exercises which involve bodily

movement and are done as a component of playing, working, dynamic transportation, house errands as well as recreational exercises.^{5,6} The physical inactivity is persuaded by means of the age, gender, type of job, the level of awareness and the socioeconomic status of a person.⁷

Lee et al. conducted a study to assess the social and health factors association with level of physical activity among male and female Kuwaiti students. The results showed that 44.8% males and 55% females were physically inactive. 13% male students and 10.5% female students were obese. Females were more physically inactive as compare to male.⁸ Kibet et al. conducted a study among Kenya students, which revealed that overall 37.8% of the respondents used three or more hours every day sitting and viewing television, playing workstation games, conversing with friends, or doing other sedentary activities. Hence they were physically inactive.⁹ Another investigation from Kenya carried out by Figaji among students concluded that 12% of the respondents were physically active for only about approximately 1 hour per day in a week.¹⁰ A study conducted in USA by Simons-Morton et al. explicated that young students invest their free time taking part in an assortment of spare time activities that take in viewing TV and playing computer games for at least 24 hours per week, therefore they were more physically inactive.¹¹

The purpose of this investigation might have been to determine the predominance rate for physical inactivity level among the students of UIDNS at UOL. The outcome would serve as a technique to raise mindfulness around the vitality and significance of physical activity, as well as knowing what is required to obtain a healthy lifestyle.

Methods:

A cross sectional survey was conducted with the sample size of 200 students of both genders by selecting the convenient sampling technique from UIDNS, at University of Lahore, Lahore. The survey was conducted during February 2017. The ages of students were between 18 years to 22 years. Out of 200 total students, 38 were males while 162 were females. Data was collected from the pre-tested questionnaire. The research questionnaire was separated into two different segments;

section-A comprised of the questions regarding physical activity at university, section-B comprised of the questions regarding physical activity at home. Data were analyzed by the help of Minitab 17 and Microsoft Office Excel 2007. The results were derived by frequency and average.

Results:

The final analysis of physical inactivity levels of university students revealed that 69% of the respondents were physically inactive and only 31% of them were physically active; the 60% of the respondents were physically inactive in home while is 80% of the students were physically inactive at university time, which higher than the physically active students at Doctor of Diet and Nutritional Sciences, at the University of Lahore The ages of students were between 18 years to 22 years as shown in table 1

Age (year)	No of students	Cumulative Frequency
18	68	34
19	48	24
20	40	20
21	24	12
22	20	10

Table 1: Distribution of respondents by Ages

According to figure 1 out of 200 students 38 were males and 162 were females.

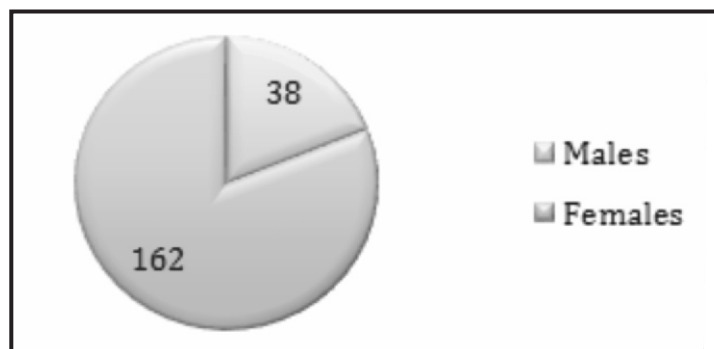


Figure1: Gender of Respondents

Section-A

1. Student's behavior about spending free time in university

Data analysis of the survey revealed that 44% of respondents spent their free lectures by sitting in a group & chat. 18% of the students spent their time eating in cafeteria and 13% respondents spent their time in library.

Only 10% of respondents spent their free lectures by using computer lab. Hence, 85% respondents were physically inactive where as only 15% of respondents were physically active.

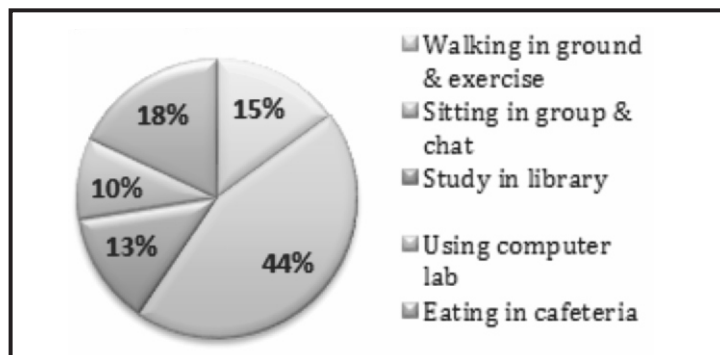


Figure 2: Distribution of student's behavior about spending free time in university

2. Student's involvement in sports and exercise at university

Data analysis revealed that 17.5% of respondents often attended gym at university, 14.5% played badminton, and 8.5% played table tennis, 7.5% played cricket. Moreover 52% of respondents were not involved in any kind of sports and exercise at university.

Hence the results showed that 52% respondents were physically inactive whereas 48% respondents were physically active.

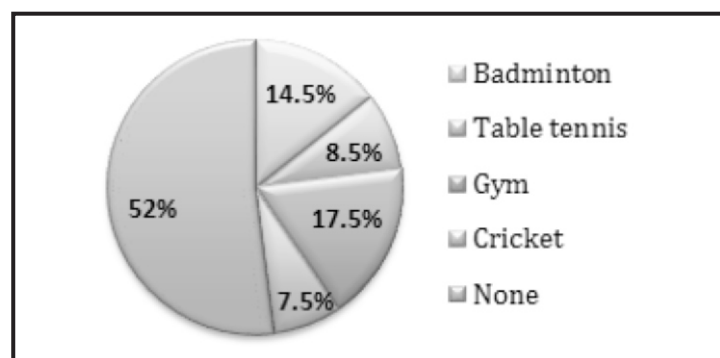


Figure 3: Distribution of students involved in sports /exercise at university

3. Students exchanging class-rooms in a day at University

The data analysis concluded that 39% of respondents exchanged 1-2 class-rooms, 22% exchanged 2-3 class-rooms, and 18% exchanged 3-4 class-rooms in a day at university. However 9% of respondents exchanged 4-5 class-rooms 12% of respondents exchanged more than 5 class-rooms in a day at university. Hence it was revealed that 88% respondents were slightly physically inactive at university were as 12% respondents were active at

university.

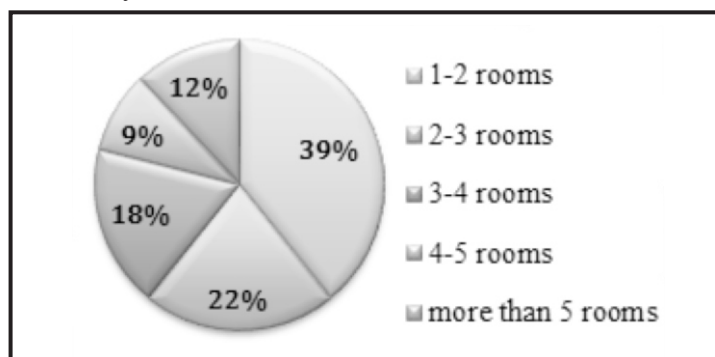


Figure 4: Distribution of students exchanging class-rooms in a day

Section-B

4. Student's behavior for spending leisure time at home

From the data analysis it was concluded that 39% of respondents were using mobile phone and other gadgets in their leisure time at home. Moreover 33.5% of respondents were using computer, 12% were watching TV, 9.5% were sleeping in their leisure time at home. Only 6% of respondents played indoor games in their leisure time. Hence, 94% respondents were physically inactive in leisure time at home.

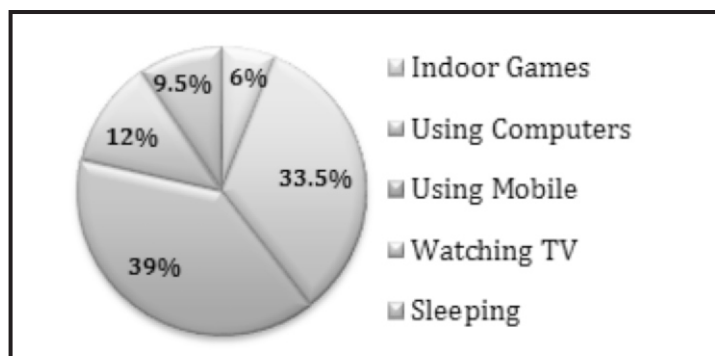


Figure 5: Distribution about student's behavior for spending leisure time at home

5. Student's time distribution for using electronic gadget a day

The data analysis concluded that 5% of respondents were using electric gadgets for 4-5 hours daily, 7.5% of respondents were using electric gadgets for 5-6 hours, and 22.5% of respondents were using electric gadgets for 7-8 hours. Moreover 29% of respondents were using electric gadgets for 7-8 hours and 36 % of respondents use electric gadgets for maximum 10-12 hours daily. Hence the student spend their maximum hours in using electronic gadgets in a day, therefore 65% respondents were physically inactive whereas 35% respondents were

physically active.

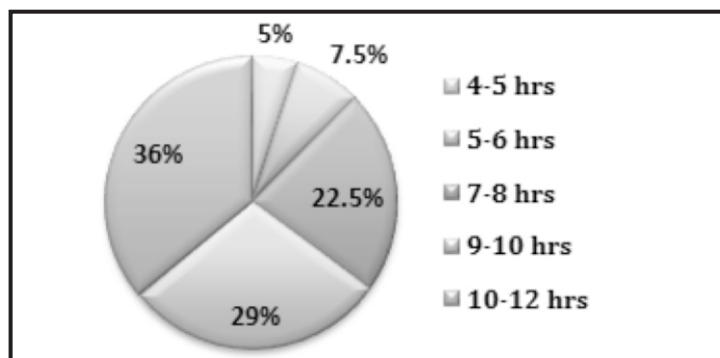


Figure 6: Distribution of time among students for using electronic gadget a day

6. Student's doing walk in a day

Data analysis revealed that 47.5% of respondents walk for only 15 minutes daily. Moreover 27.5% of respondents walk for 30 minutes, 13.5% of respondents walk for 60 9.5% minutes, 9.5% of respondents walk for 90 minutes, 2% of respondents walk for 120 minutes daily. Hence the result showed that 75% of the respondents are inactive during a day and 25% of the respondents are active during day.

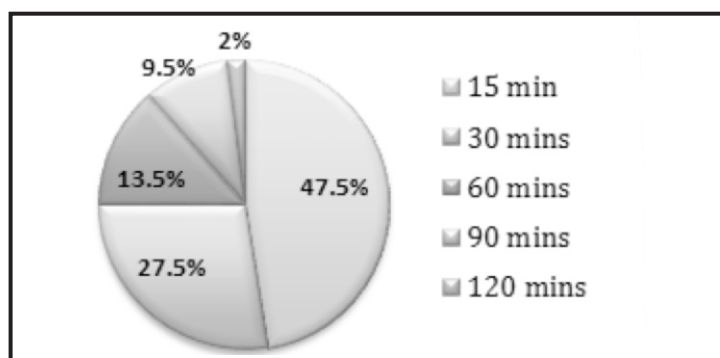


Figure 7: Student's doing walk in a day

Discussion:

According to the results of this study, it was determine that 80% of the students in the department of Diet and Nutritional Sciences were found inactive during university hours. Similarly a study conducted by Lee et al also highlighted the same results like physical inactivity of students is higher than physical inactivity and concluded that 44.8% males and 55% females were physically inactive at high secondary school⁸. According to the other results of this study that 60% of the university students were physically inactive at their homes after attending the university. Similar results were also highlighted in a study performed by Kibet et al. on the student at home showed that 37.8% of the students spent three or more hours per day in sitting and watching

television, playing computer games, talking to friends, or doing other sedentary activities. Therefore they were physically inactive.⁹ The similar study conducted by Figaji at Kenya among students concluded that 12% of the students were physically active only about approximately 60 minutes per day in a week.¹⁰ Moreover, similar results were highlighted by Simons-Morton et al. also explicated that young students spend their free time engaging in a variety of spare time activities like watching television and playing video games for a minimum of 24 hours per week, therefore they were also physically inactive.¹¹ So, overall results of our study determine that 69% of students in the department of Diet and Nutritional Sciences are physically inactive whereas 31% are physically active.

Conclusions:

It has been concluded that prevalence of physical inactivity is being higher (69%) than the physical activity (31%) among the students of University Institute of Diet and Nutritional Sciences at the University of Lahore, Lahore. The results revealed that the percentage of physically inactive students is higher than the physically active students. The reasons behind such a low physical activity level are; their sedentary lifestyles, restricted social environment, building construction, travelling obstacles, lack of importance of physical education. The physical inactivity among the students is much more alarming, so there is an immense need to create awareness through health education for its prevention and also to provide counseling for engagement in the physical activities.

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