

Awareness of Physical Activity and Current Physical Activity Level in College Going Students: A Cross Sectional Survey

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Abstract: ***Background:** Physical inactivity is most leading cause of mortality worldwide in adults. It's required to check level of awareness and physical activity level among students and accordingly to conduct major steps towards active and healthy lifestyle among adults. **Aim and Objectives:** Aim of the study is to examine campus student's awareness for the physical activity and to explore the relationship between awareness and current levels of physical activity. **Methodology:** The participants who were volunteer to participate in survey included in the study. Awareness of physical activity is assessed by using researcher based on ACSM guidelines. The awareness survey included 10 true or false questions about physical activity guidelines. Current physical activity is assessed using the short International Physical Activity Questionnaire (IPAQ). **Statistical Analysis:** Descriptive statistics is used to describe the awareness and activity behaviours of participants. Frequencies are used to analyse the awareness of physical activity level. Pearson's product moment coefficient was calculated to determine the relationship between knowledge of physical activity and current physical activity level. **Result:** A total of 250 participants included in the study. Mean of age is 20 years old and 142 males and 108 females were participated. On an average 75.44% of participants have awareness of physical activity in daily life but most of them are not maintaining high level of physical activities. **Conclusion:** In spite of having awareness physical activity level students are physical inactive.*

Keywords: Physical activity, Awareness, Exercise, Knowledge

1. Introduction

Physical activity is defined as any bodily movement produced by the contraction of skeletal muscles that result in a substantial increase over resting energy expenditure. Adults between the ages of 18-65 years should receive the American College of Sports Medicine (ACSM) recommendation for physical activity. ACSM recommends promoting and maintain health; all healthy adults aged 18–65 year need moderate-intensity aerobic physical activity for a minimum of 30 minutes on five days each week or vigorous-intensity aerobic activity for a minimum of 20 min on three days each week. It is also beneficial for adults to incorporate two or three days of muscular strengthening and endurance training. [1]

Disease outcomes inversely related to regular physical activity in prospective observational studies include cardiovascular disease, thromboembolic stroke, hypertension, type 2 diabetes mellitus, osteoporosis, obesity, colon cancer, breast cancer, anxiety and depression. [1] Physical inactivity has been identified as the fourth leading risk factor for global mortality causing an estimated 3.2 million deaths globally. [1] In India, around overall 392 million individuals are inactive. [2] Globally, around 31% of adults aged 15 and over were insufficiently active in 2008 (men 28% and women 34%). [3] The purpose of the study was to examine campus student's awareness of physical activity and to explore the relationship between knowledge of physical activity and current levels of physical activity.

2. Methodology

A total of 250 students (Convenient sampling method) from the campus participated in the study. The students who were volunteer to participate in the survey included in the study. Completion of the surveys was implied consent to participate in the study. The study was conducted through two surveys. Knowledge of physical activity was assessed by using researcher based on ACSM guidelines.

The knowledge survey included 10 true or false questions about physical activity guidelines and benefits. Current physical activity was assessed using the International Physical Activity Questionnaire (IPAQ). The questions asked pertaining to the individual's physical activity level. Physical activity was assessed by asking how many minutes or how often does an individual participate in the activity.

The IPAQ survey is valid and reliable according to Booth et al. (2003) for the test-retest reliability for the short form IPAQ ($p=0.76$).

Survey was distributed to the 3 main institute of the campus. This allowed the surveys not to be bias toward any specific major, program, or college. The students were asked to fill out the surveys at the location and return it to the researcher. This method was chosen so that one researcher could effectively and efficiently administer the survey to a diverse group of campus students.

3. Results

Descriptive statistics is used to describe the awareness and activity behaviours of participants.

Frequencies are used to analyse the awareness of physical activity level. Pearson's product moment coefficient was calculated to determine the relationship between knowledge of physical activity and current physical activity level.

Table 1: Baseline Data

Number of Participant involved	Number of Male	Number of Female	Mean age of participants
250	142	108	20

A total of 250 students were participated in survey from which 142 were male and 108 were female. Mean age of participants were 20 as shown in table 1.

As shown in Table 2 majority of the students answered questions that pertained to the knowledge of physical activity correctly resulting in high knowledge of physical activity scores, except they have less awareness about resistance training recommendation.

The Pearson's Product Moment Correlation coefficient was used to examine the relationship between knowledge of physical activity and current physical activity levels (IPAQ score). $r = 0.2535$, $p = 0.4797$. The results indicated that there was not a significant relationship between the IPAQ score and knowledge of physical activity.

Table 2: Frequencies - awareness of physical activity survey

Question	Correct	Incorrect
Physical activity is defined as movement produced by the muscle that increases energy expenditure.	90.8 %	9.2 %
Recommendation for moderate-intensity aerobic physical activity is a minimum of 30 minutes on five days each week.	81.6 %	18.4 %
Recommendation for resistance training is five days each week.	37.6%	62.4%
Resistance training can improve muscle strength.	86.0%	14.0%
Physical activity can improve quality of life.	87.2%	12.8%
Depression and anxiety can increase by physical activity.	93.2%	6.8%
Major muscle group should not be stretched.	53.6%	46.4%
Risk of musculoskeletal injuries increases as the intensity and amount of the activity increases.	66.0%	34.0%
Women should not participate in physical activity.	95.2%	4.8%
High Blood pressure can be reduced by physical activity.	63.2%	36.8%

4. Discussion

The purpose of this study was to examine university student's knowledge of physical activity and to explore the relationship between knowledge of physical activity and current levels of physical activity. Physical activity and knowledge of physical activity was shown to

have no significant relationship indicated by the correlation value. Although students have a high level on knowledge about physical activity this does not mean that they participate in high levels of physical activity.

The results from this study are similar to the results of the study conducted by Knox et al. [6] which found that there is not a relationship between knowledge of physical activity and physical activity participation.

Some of the possible limitations to this study were the self-reported physical activity values, knowledge of physical activity questions. Students provided their perceived physical activity level and their weekly amount of physical activity. As per this study it's important to motivate individuals for doing adequate physical activities in daily life to prevent health care risk factors associated with physical activity.

5. Conclusion

Based on this study, new methods need to be examined to encourage students to participate in physical activity. Since this study indicated that there was no relationship between knowledge and physical activity, educators should find new ways to promote physical activity on college campuses.

6. Acknowledgement

Authors acknowledge all the participants who took part in the survey.

7. Conflict of Interest

Author declares no conflict of interest.

References

- [1] Haskell WL *et al.* Physical activity and public health: updated recommendation for adults from the American College of Sports Medicine and the American Heart Association. *Circulation*. 2007; 116:000–000.
- [2] Anjana et al.: Physical activity and inactivity patterns in India – results from the ICMR-INDIAB study (Phase-1) [ICMR-INDIAB-5]. *International Journal of Behavioral Nutrition and Physical Activity* 2014 11:26.
- [3] WHO Physical Activity and Diet Fact Sheet. http://www.who.int/dietphysicalactivity/factsheet_inactivity/en/ Accessed 19 June 2017.
- [4] Booth ML. Assessment of Physical Activity: An International Perspective. *Research Quarterly for Exercise and Sport*. 2000, 71 (2): 114-20.
- [5] Ward T. Student knowledge of physical activity on campus. *Oklahoma AHPERD* 2014; 51(2): 23-26.
- [6] Knox, G. J *et al.* Effects of a novel school-based cross-curricular physical activity intervention on cardiovascular disease risk factors in 11- to 14-year-olds: the activity knowledge circuit. *American Journal of Health Promotion*. 2012 27(2), 75-83.