

Exercise Habits of Medical Students: A case study of Shariati Hospital in Isfahan

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Abstract: Physical activity and exercise has been reported as an important aspects of healthy life style. Medical student as the individuals who will be the future doctors and deal with the health of the community are important in this regard. They should be healthy and should have good knowledge and attitude toward health promotion and exercise. Despite the importance about improving exercise in medical students, there are paucity of researches in this field. This study was carried out to evaluate the exercise interest and habits of medical students in NIA University. This study was carried out in Shariati hospital studying medical students in fourth year of medicine in NIA University. Eighty medical students aged 24.2+/-0.2(M+/-SEM) filled out the questionnaire assessing the information about age, sex, exercise interests, habits and barriers. Data were analyzed by SPSS-18 statistical software using descriptive statistics. The response rate was 85%. Fifty percent of the students reported to have interest in at least one kind of sports and only 47.8% performed exercise. Regular exercise habit was detected among 15.9% of the students. 26% reported exercise performance three or more times a week. Having not enough time, huge medical tasks, inappropriate time scheduling were reported as the reasons for inadequate exercise. The students who practiced professionally were 4.2%. The rest of the students practiced mostly for health, recreation, physical fitness or other reasons. These results reveal poor and inappropriate exercise habit among medical students in our study. An appropriate program for motivation and exercise promotion in this population is recommended.

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1. Introduction

The role of physical activity and exercise in the state of health of the people has gained more attention than ever before. The result of the previous researches show that a proper physical activity has an important role in preventing chronic diseases and reducing the mortality rate caused by them (1-3). In addition to that, physical activity and exercise can improve the quality of people's lives and play a positive role in societies from mental, social and economical aspects (1-3).

Studies have shown that a lack of physical activity could be considered as a risk factor for the cardiovascular diseases. On the other hand, physical activity can be effective on preventing and reducing complications of diseases such as coronary artery diseases, diabetes, hypertension, obesity and anxiety (1-3). Therefore, today most of the studies are concentrated on finding ways in order to make the physical activity as a habit in people. Studies have shown that physical activity is not effective unless it becomes as a habit for a person. To have an interest in exercising and to do a particular kind of sports for particular reasons might have an important role in making it as a habit. An interest in physical activity

has a special relation with the type of the activity and the person's perception of it (4). In a research conducted in 1996 by Chen and his colleagues in Hawaii in order to assess the factors which influence the continuity of having an interest in physical activity in college students, it was shown that keeping the interest in physical activity depends on the mental perception of the person about it and the value of that kind of sports in their mind. On the other hand, it was revealed that keeping the interest to the activity depends on the person and the type of activity that they do. In addition, they suggested the trainers to consider these characteristics and interests when planning for training courses (4). Therefore, identifying the sports interests and habits in people, paying attention to them and finding the obstacles on the way can help the trainers better to plan things more precisely.

Medical students as people who are faced with health problems of the society are the matter of concern in this issue. Studying medicine takes a long time to finish and it includes an important part of students' lives. Studies have shown that medical students face a significant changes in their physical and sports activities after entering the medical

university. In a research conducted in 2002 by Ball and his colleagues on 54 medical students in the United States, it is shown that the rate of exercise and physical activity has meaningfully reduced after entering the university (5). In addition to that, studies have shown that having a proper motive for a particular sports field can have an important role in improving the physical activity level of a person. In a research conducted in 2001 by Deflandre and his colleagues in France, the effect of morphological, biological, psychological and environmental factors on practicing an organized sport was considered. Results showed that female students whom had a greater motive for sports assignments had more physical activity than the others did (6). The great burden of subjects to study, insufficient time and lack of proper planning are some of the reasons, which are said to have an effect on the failure in participating in physical activities and playing sports in medical students.

Since medical students are the main elements of the health and therapy system and their state of health is of significant value, despite the importance of this issue, there are very few numbers of studies conducted in the field of their exercise habits and the ways to improve them.

Since these habits and interests differ from one culture to another, therefore studying on them in each country is very important.

This study was conducted with the intention of determining the interests and exercise habits of the medical students studying medicine at our university. Awareness of the interests and exercise habits of

medical students can help the planners and authorities to find better ways to increase motivation and proper facilities relevant to the students' interests and exercise habits. This issue might help them live more actively than before.

2. Methods

This study was conducted among a group of fourth year medical students of NIA University studying medicine at Shariati Hospital in Isfahan. The group was composed of 80 students aged 24.2 \pm 0.2(M \pm SEM). All of the students who studied in fourth year of medicine curriculum were interviewed and asked them to fill out the questionnaire which earning information about their exercise interests and habits. They were asked to fill out a questionnaire which was made to evaluate exercise habits of the students. This questionnaire considers variables including age, sex, interest in exercising, practicing sports, order in sports assignments and different sports of each students' field of interest, the number of times in which the student likes to spend time exercising that sport in a week period, duration of each session, reasons for choosing that particular type of sport, the place where the person has learned that activity in and the reasons for playing any kinds of sports.

Data were sorted after being collected and were analyzed with statistics software SPSS-18. Descriptive statistical methods such as using mean, standard deviation and standard error, frequency, were used to show the results. Tables 1 and 2 shows the results.

Table 1. Exercise interest and performance among medical students

		Percent
Interest in at least one kind of sports	Yes	50
	No	50
Exercise performance	Yes	47.8
	No	52.2

Table 2. Exercise habits of medical student

		Percent
Regular exercise habits	Regular	15.9
	Irregular	80.1
Number of exercise sessions per week	3 times or more	26
	Less than 3 times	74
Exercising professionally	Yes	4.2
	No	96.8

3. Results

This study was carried out in Shariati hospital which is one of the main hospitals that medical students of NIA university pass their clinical courses. All the medical students who studied in fourth year of their medical education program were studied. Questionnaire evaluating the exercise interest and habit was distributed among them, the response rate was 85%. Fifty percent of the students reported to have interest in at least one kind of sports. Only 47.8% of the participants performed exercise. Exercise habits of the students was categorized as regular and irregular physical activities. Regular exercise habit was detected among 15.9% of the students. The other part of research was evaluating the total time and pattern of exercise performed by the research subjects. Among the students only 26% person reported exercise performance three or more times a week, other 74% reported exercise sessions less than 3 times a week or no exercise. The students were requested to write why they do not practice as much as is necessary and the obstacles that make them not to have enough exercise. Having not enough time, huge medical tasks, inappropriate time scheduling were reported as the main reasons for inadequate exercise. The other part of the questionnaires deals with the issue that how much students are engaging in exercise, for this purpose the participants were asked about professional engagement in the exercise. The students who practiced professionally were 4.2% of the participants. The rest of the students practiced occasionally mostly for health, recreation, physical fitness purposes or other reasons.

4. Discussion and Conclusion

In this study only 85% of the students answered the questions in the questionnaire. Others may have found no interest in our research or had other reasons for not participating in our study and this needs more consideration. In the study that was performed by Hultz et al in 2007-2010 in university of British Columbia on medical students to evaluate their physical activity and exercise habits, only 64% of students returned the questionnaires which was lower than our study (7). In the other study that was performed by Standford FC et al in 2010 in university of south Carolina to determine the amount of physical activity and exercise in medical students and attending only 84.8% of participants returned the questionnaires, this was near the response rate of our study (8). It seems that response rate in our study is good in comparison with other similar studies.

Among the students who participated in this study, only half of the students (50% of them) had an

interest in sports activities which this percentage is not satisfactory according to the age of these students. Among all students only 47.6% exercised that is too low when we compare these findings with recommendations for physical activity and exercise for health and wellbeing recommended by Center for Disease Control of United States and US Health and Human services (7). Only about one fourth of students (26%) exercised three or more times a week and this consists approximately half of the students who practiced. It means that only one fourth of the students had somehow suitable frequency of exercise program which this is still lower than the recommended frequency for exercise for health in health guidelines (7). Only Fifteen percent of the students exercised regularly which according to the importance of the role of regular exercising in health and the life style of the people and health guidelines this rate is very low (7). Lack of time and the burden of subjects to study were the most important reasons of not getting enough exercise which concurs with the last researches showing that medical students spend less time exercising due to lack of time and the heavy load of studies (9-11).

The students' intentions of exercising were mostly for health, recreation and physical fitness. Only 4.2% exercised seriously. Serious exercising here has reasons other than health, recreation or fitness.

In previous study physical activity, exercise habit of medical students and the importance of these issue and the factors that can improve physical activity and exercise in medical students were studied (13-25). In the study that was performed in 2011 by Moris A. et al in John Hopkins university on 100 medical students they found out that exercise education has important role in physical activity and exercise of medical students and their well being (14). In study that was performed by Labelo et al in 2009 showed that physical activity and their exercise habit had important roll on their counseling practice in medicine to educate the clients in health issues (16). In study performed by Gerame et al in Palermo, Italy on 445 medical students they showed that only 58% of the students had exercise program which is concurrent with the results of our study (17).

In the study that was performed by Frank E. et al in 2008 on 2316 medical students of different 16 universities of the united states to evaluate physical activity and exercise habit of the medical students, only 80.3% of the students returned the questionnaires which is similar to our study. In that study only 61% of the students exercised in the amount which was suitable according to the recommendations of Center for Disease control of the United States, also it seems

to be more than what we found in our study but still is low according to recommendations of suitable exercises for health (13).

In most of the studies the researches mostly had focused on the amount of physical activity and exercise but less on the exercise interests, patterns and the factors that are important in this regards. We tried in our study to pay attention to others important factors in this regard such as interest in exercising, practicing sports, order in sports assignments and different sports of each students' field of interest, the number of times in which the student likes to spend time exercising that sport in a week period, duration of each session, reasons for choosing that particular type of sport, the place where the person has learned that activity in and the reasons for playing any kinds of sports. These issues may be used for readers of this article as idea for further researches and work.

In conclusion the results of our study show that medical students in this study did not have proper exercise habits; and appropriate planning of medical students' educational and sports authorities is recommended for persuading and promoting sports in this group.

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