

Evaluation of Sport Spaces in Iranian Medical Science Universities

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Abstract: Because of its crucial role in man's physical and mental fitness, physical education is considered to be of great importance, especially in the youth. This survey was conducted with the aim of investigating the sport spaces of Iranian Medical Science Universities (SSIMD). The necessary data were collected from forty-two Medical Science Universities affiliated with the Iranian Ministry of Health and Medical Education through valid questionnaire, and further analysed by deductive methods. This study covered 110590 students, 71159 of which were girls. Results of the survey revealed the per capita sport places (PCSP) to be 2.21 m². Golestan University and Shahrekord University had the lowest (5.35 m²) and the highest PCSP (5.35 m²) among Iranian Medical Science Universities respectively. According to this study, the total surface area of sport places for all Medical Science Universities was 238776 m². Results of this research point out that the level of PCSP for Iranian Medical Science Universities is not adequate, especially for girls, and it is concluded that certain plans are required for the development of such spaces.

[Sokhtehzari S, Haddadi F, Monazami AH, Rostami-Nejad M, Javeri A, Goudarzi M. **Evaluation of Sport Spaces in Iranian Medical Science Universities.** *Life Sci J* 2021;18(6):35-40] (ISSN:1097-8135).
<http://www.lifesciencesite.com>. 5.doi:[10.7537/marslsj180621.05](https://doi.org/10.7537/marslsj180621.05).

Keywords: per capita sport places, medical science universities, covered sport places, uncovered sport places, multifunctional saloons, specific sport saloons

1. Introduction

In postmodern societies, where one's personality is more reflected in his/her leisure sport activities rather than occupational values, sport and recreation not only contribute to the formation of civilizations' social environmental institutions, but also influence the life of every individual citizen (1). Nowadays, sport activities are considered as indispensable parts of life and regarded as one of the most common means of recreation, which reveals a better and more extensive understanding of the physical and psychosocial importance of sports. It is no longer required, as it was in the past, that people's engagement in sports be suggested by sport experts, but the chiefly important duty of sport experts today is rather to create and manage appropriate settings for sport and recreational activities (2). A sport place created for the purpose of physical activity or recreation is also an essential social place, which contributes to the public health and prosperity of individuals of every society. For maximum and most effective utilization of these facilities, it is necessary

that they be accessible to all classes of the society (3). Numerous studies have suggested that the accessibility of sport places and providing guidelines on the settings of physical activities correlate with people's consistent participation in those activities (1).

Lack of enough sport spaces and their inefficient distribution in proportion to the urban population, besides the insufficiency of national governmental resources required for the development of sport places, are major problems facing modern cities, especially big ones. According to the most recent studies, sport spaces in large cities are far below international standards, which necessitate the emergence of a new viewpoint on construction management and development of sport places. (4). In a study conducted by Moore and colleagues, it was pointed out that the number of recreational centers is fewer in neighborhoods with minorities than in the neighborhoods of white people. Furthermore, recreational facilities in high-income neighborhoods are 4/5 times bigger than those in low-income neighborhoods. (5) Most physical education officials

are not content with the existing sport facilities and equipment in proportion to the number of sportspeople included, and argues that the facilities and the equipment are not at the desired level. Despite the quantitative growth in the construction of sport places in recent years, appropriate methods for their protection and efficient utilization has not received enough attention from managers and officials, provided that the annual utilization of sport places might even be less than their depreciation within a given year (7). For most sport settings except the sport saloons, average earnings of those living in remote areas from sport places have been proportionally low. Moreover, it has been suggested that people living in distant areas from sport places actually lead more sedentary lifestyles; however, no report has been made regarding a stronger passion for sports in those living near sport centers (8). Because of more transportation problems and lack of credit in the future, it can be predicted that green areas inside the city, parks, uncovered pools, and school yards would be transformed into multifunctional sport places (9). Thus, the purpose of this research was to evaluate the sport places in medical science universities across the country.

2. Material and Methods

The statistical population of this research consisted of all universities and higher education institutes affiliated with the Ministry of Health and Medical Education. In order to determine the actual per capita sport places, as the chief purpose of this descriptive study, all these universities (42 universities) constituted the research sample. The variables of this study included the number of students with regarding to their gender, the surface area of sport spaces, the per capita sport places, and the ownership conditions of these sport places as whether to be absolute, transferred or rented. The number of students in each university and regarding the gender was mentioned in table 1. In this survey, researchers-devised questionnaire were used to collect the necessary data, in which questions were designed based on the purpose of the research. After the questionnaire was primarily designed, specific recommendations were solicited from professors and experts in the sport management field on the matter. Ultimately, the questionnaire was designed in 7 pages to obtain information around multifunctional sport saloons, specific sport saloons, other than those included in multifunctional saloons, projects being underway, pools, football grounds, uncovered sport places, and athletics tracks. Moreover, further explanation on the study was provided for universities' physical education directors through telephone calls for universities outside Tehran, and

direct meetings for those located in Tehran. Ultimately, the data have been expressed in frequency, the median and standard deviation, and further processed to accomplish a deductive interpretation through one-way analysis of variance.

3. Results

Universities of Tabriz, Shiraz, Mashhad, and Kerman respectively had the highest amount of sport space for multifunctional saloons, and universities of Ahwaz, Tabriz, and Tehran had the highest amount of sport space for specific sport saloons respectively (table 2). Results of the survey reveal that all sport saloons are held by absolute ownership and none by transferred or rent ownership.

All multifunctional sport saloons (100%) are currently active; however, among the 42 universities affiliated with the Ministry of Health and Medical Education, the only universities with swimming pools are the universities of Shahid Beheshti (1800 square meters covered pool), Shiraz (2400 m² covered pool and 960 m² uncovered pool), Kashan (2400 m² covered pool), Tehran (3600 m² covered pool), Tabriz (2600 m² covered pool), Ahwaz (2400 m² covered pool), and Birjand (500 m² uncovered pool). The University of Social Welfare Sciences also has 1000 m² uncovered pool but is currently inactive.

Only 14 universities had grassed football ground (Shiraz, Ahwaz, Mazandaran, Mashhad, Esfahan, Tehran, Shahre Kord, Zanjan, Kermanshah, Yazd, Rafsanjan, University of Social Welfare, Kerman, and Kashan), among which the University of Shiraz, with 11000 m², had the largest space devoted to grassed football ground. None of the universities affiliated with the Ministry of Health and Medical Education had any athletics track. The universities of Tehran, Ahwaz, and Mashhad respectively had the largest total sport places; moreover, after the amount of sport space was divided by the number of students for the *per capita sport places* (PCSP) to be calculated, it was pointed out that the universities of Shahre Kord, Zanjan, and Mazandaran respectively had highest amount of per capita sport places. The median per capita sport places of all Iranian medical science universities was figured at 2.21 m², among which Golestan University with 0.30 m² had the lowest, and Shahre Kord University with 5/35 m² had the highest PCSP. It was also figured out that by the completion of sport spaces currently being under construction, the median PCSP was increased substantially from 2/21 to 4/18 m². The median per capita sport places for boys was 4.15±3.06 and for girls was 1.05±0.72 m². This differences was statistically significant (P= 0.0001) Hamadan University with a PCSP of 0.41 m² for boys had the lowest, and Shahre Kord University with that

of 12.87 m² had highest amount of per capita sport places for boys. The median per capita sport places for girls was figured at 1.05 m². Gonabad University

with a PCSP of 0 for girls ranked the last, and the University of Arak with that of 2.93 m² had highest amount of PCSP for girls.

Table 1. The number of students with regard to university and gender

name of university	boys	Girls	Total
Shahid Beheshti	3150	5850	9000
Tehran	3850	5050	8900
Iran	2380	4420	6800
Mashhad	2135	3965	6100
Esfahan	2030	3770	5800
Shiraz	1820	3380	5200
Tabriz	1750	3350	5100
Ahwaz	1680	3120	4800
Kerman	1505	2795	4300
Kermanshah	1505	2795	4300
Hamadan	1260	2340	3600
Kashan	963	1787	2750
Mazandaran	945	1755	2700
Yazd	945	1755	2700
Lorestan	480	1560	2400
Babol	840	1560	2400
Zahedan	823	1527	2350
Gilan	805	1495	2300
Oroomiye	920	1380	2300
Ghazvin	777	1443	2220
Shahre Kord	648	1202	1850
Zanjan	595	1105	1700
Kordestan	543	1007	1550
Ardabil	508	942	1450
Birjand	580	870	1450
Bandar Abbas	473	777	1350
Ilam	540	810	1350
Rafsanjan	473	877	1350
Arak	528	792	1320
Semnan	455	845	1300
Yasooj	455	485	1300
Golestan	427	793	1220
Booshehr	440	660	1100
Social Welfare Sciences	385	715	1100
Shahrood	315	585	900
Sabzevar	320	480	800
Fasa	338	412	750
Jahrom	270	330	600
Ghom	248	302	550
Gonabad	248	302	550
Zabol	225	275	500
Bojnoord	194	236	430

Table 2. Per capita total sport places of Medical Science Universities

Statistical Value	Minimum	Maximum	Standard Deviation Median
Gender			
Boys	0.41	12.87	06.15±3.4
Girls	0	2.93	72.05±0.1
Total	0.30	5.35	24.21±1.2
Under Construction	0	13.00	98.87±1.2
PCSP after Completing Underway Projects	0.94	13.97	84.18±2.4

Table 3. Comparison of PCSP for different university types

Statistical Value	N	SD±M	df	F	P
University Type					
One	10	04.21±1.2	2.39	0.620	0.543
Two	15	60.47±1.2			
Three	17	97.97±0.1			

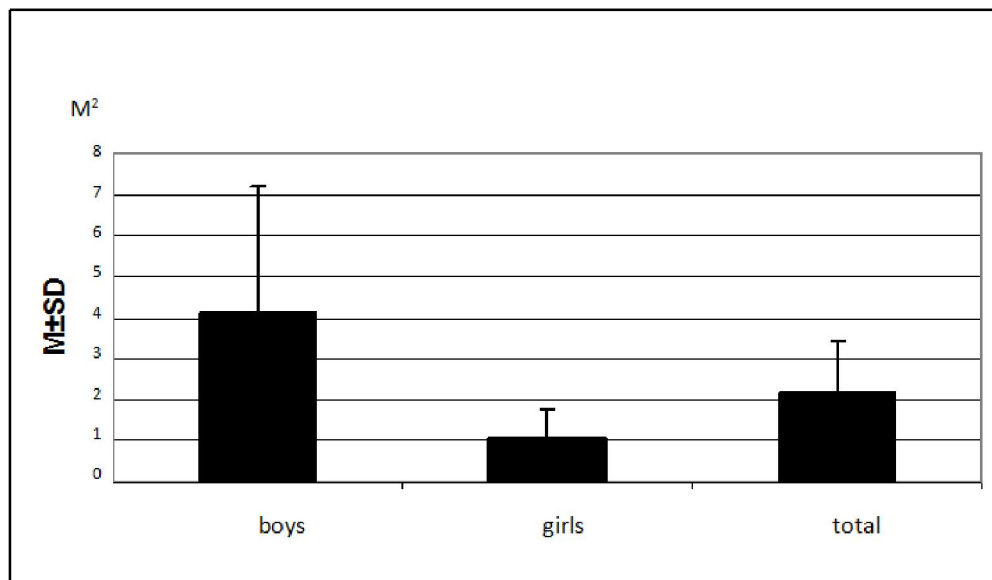


Figure 1. The median per capita total sport place according to the gender

The median per capita covered sport places for all medical science universities was figured at 0.97 m², among which Zabol University had no covered sport places, and Arak University with 2.73 m² had the highest amount of per capita covered sport places. The median per capita covered sport places for boys was 1.17 m². Zabol University had no per capita covered sport places, and the University of Arak had the highest amount (2.95 m²) of per capita covered sport places for boys. The median per capita covered sport places for girls was 0/85 m². The universities of Zabol, Fasa, Sabzevar, Jahrom, and Bojnoord did not have such a space, and Arak University had the highest amount (2.58 m²) of per

capita sport places for girls. The median per capita uncovered sport places were Figured (Figure 1) at 1 m².

The University of Shahrood, Golestan, Gilan, and Tabriz had no uncovered sport places, and Shahre Kord University with 3.89 m², had highest amount of per capita uncovered sport places. The median per capita uncovered sport places for boys and girls were respectively figured at 3.04 and 0.20 m². Shahre Kord University had the highest amount (11.11 m²) of such a per capita space for boys, and the University of Kordestan, had the highest amount (1.19 m²) of the per capita uncovered sport places for girls. As reflected by the results of the survey, the

statistical gap between per capita sport places for boys and girls was statistically significant (Figure 1). However, there is not a considerable statistical difference between per capita sport places of type 1, 2 or 3 medical science universities (table 3) ($P < 0.05$).

4. Discussions

Physical education has always been the special importance in Iranian universities, and the youth of 18-25 years of age as a mindful, future-making generation of the society have always advocated the pursuit of happiness, physical and mental fitness, mobility, excitement, and the management and productivity of leisure time (11). Apparently, having this generation involved in sport activities to accomplish the previously mentioned goals requires fundamental organization, adequately funding appropriate sport places, and the recruitment of people power specialized in university physical education. As primary settings for performing sport activities, sport places and their conditions directly influence the quality of the performance of exercise and the matches and competitions that are held in these settings (12). The construction of sport places requires much time and tact. The occurrence of mistakes and negligence in organizing, designing, constructing, and supplementing sport facilities will lead to waste of time, energy, and funds, which would consequently cast unpleasant effects on the future administration of sport plans and ultimately on wholesome recreation (10).

Results of this research underscore the fact that most Iranian universities lack the appropriately sufficient sport places, which not only imposes defects on public health and hygiene, but due to the proportionally higher number of students, will also cause lack of enthusiasm for them to utilize such spaces. Because of the insufficiency of sport spaces and the resultant limited time allowed for each sport team to exercise, a decrease in the quality of match performance and an increase in the percentage of injuries could be anticipated. This study suggests that the distribution of uncovered and covered sport spaces in universities does not follow any specific pattern, so that the PCSP of central big universities are not necessarily higher, and contrary to expectations may even be lower than that of some remote universities.

Among the limitations of the research were lack of a standard questionnaire on the subject of the research, lack of coherent and confirmed information from relevant organizations, and inaccessibility to some of the universities, because of which questionnaires were sent to the addresses of their physical education directors and subsequently filled out by them.

Due to lack of sufficient uncovered sport places in universities and a greater proportion of girl students to boys, it is recommended that for better utilization of these spaces, more time be allowed primarily for girl students, and secondarily for sports of more popularity among students. Furthermore, because the insufficiency of covered sport spaces, necessary actions have to be undertaken to modify the utilization of universities' uncovered sport spaces for multiple sport fields to be performed, and to complete the ongoing projects dealing with the construction of covered sport places. The quantitative and qualitative increase in student numbers besides the expansion of universities' extracurricular activities and patterns of sports facilities to non-university centers, underscore the necessity of revising and paying attention to sport establishments and their spatial settings.

Acknowledgements:

Authors are grateful to the Iranian Ministry of Health and Medical Education for scientific support to carry out this work. This paper is resulted from MSc thesis of Saied Sokhtehzari.

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2/12/2021