

A Decade of Sports and Exercise Medicine Specialty Program in Iran, Achievements and Challenges

Ramin Kordi,^{1,2} and Navid Moghadam^{3,*}

¹Sports Medicine Research Center, Tehran University of Medical Sciences, Tehran, IR Iran

²Vice President of the Faculty of Sports and Exercise Medicine, Tehran, IR Iran

³Department of Sports Medicine, Iran University of Medical Sciences, Tehran, IR Iran

*Corresponding author: Navid Moghadam, Department of Sports Medicine, Iran University of Medical Sciences, Tehran, IR Iran, E-mail: navid.mgd@gmail.com

Received 2016 August 06; Accepted 2016 September 06.

Keywords: Sports Medicine, Medical Education, Iran

Sports medicine has a long history in traditional Persian medicine. Avicenna, the famous Iranian physician, dedicated several chapters of his medical textbook (Ghanun of medicine) to sports medicine (981 - 1037 AD). However in modern medicine it is only one decade that a four year sports and exercise medicine (SEM) specialty program has been offered in Iran. According to the national Iranian curriculum, the SEM specialty is defined as a clinical specialty which deals with a) prevention, treatment and rehabilitation of sports injuries and diseases in professional and recreational athletes, b) increasing performance levels of athletes, and c) employing exercise and physical activity in prevention, treatment and rehabilitation of disease and health improvement. Therefore this programme aims to train dedicated physicians not only in sports medicine but also in exercise medicine. During a four year specialty programme, physicians as residents are trained to prevent and manage sports and soft tissue musculoskeletal injuries and to serve as a team physician. Residents are also trained to consult in exercise medicine clinics and centres which mainly offer exercise therapy and rehabilitation for cardiopulmonary patients, obesity and metabolic diseases including diabetes and also exercise therapy for common musculoskeletal injuries including spinal and knee pain. Consultation for home based exercise and increasing physical activity are offered by residents in these clinics.

The SEM specialty is offered by four universities in Iran based on a unified curriculum. Clinical rotations of SEM residents are presented in Table 1. Specialty programs are overseen and regularly monitored by sports and exercise medicine board committee to ensure that standards of training are maintained across the country. The committee grants board certificates to trainees upon satisfactory completion of specialty training.

During the last decade 80 SEM specialists have been trained in Iran which work both in private and public sectors. They have served as sports medicine chief offi-

cers of some national sports federations including football and also as team doctors of national teams. They also have served in public sectors as consultants in cardiopulmonary exercise and rehabilitation centres, obesity clinics and sports and musculoskeletal soft tissue injuries clinics. SEM specialists played major roles in developing and running several major sports medicine centers in recent years including the first sports medicine and rehabilitation hospital in Iran, FIFA medical center of excellence, and FIMS collaborating centers of sports medicine in Iran. SEM specialists also have been active in education including teaching sports medicine to the undergraduate medical students and courses for team physicians and coaches (1).

SEM residents are encouraged to undertake research during their training and they publish papers in several topics include sports related medical problems of athletes (2), local needs of sports medicine research (e.g. Ramadan fasting athletes) (3, 4), epidemiology of local sports injuries (5), fitness and weight management (6) and exercise therapy of musculoskeletal problems such as low back pain (7).

We have several challenges in developing and launching the SEM specialty in Iran. Education of primary care sports medicine in different countries varies widely from a short term course to 3 to 5 year specialty programs including a one year fellowship program in north America and 1 - 2 year master's degree in some English speaking countries (8-10). This variety makes it difficult for countries who plan to start an SEM training program to get experience of other countries specially because some training courses do not cover exercise medicine. On the other hand the SEM specialty is not a known specialty among people and even among physicians and therefore, there are some difficulties for referring patients to SEM specialists. Also most insurance companies in Iran do not cover SEM services which limit some middle and low income people from being able to use these services. As the SEM specialty has not been de-

Table 1. Rotations of Sports and Exercise Medicine Residency Program in Iran

Year	
First	(2 months) emergency medicine
	(10 months) sports medicine clinic, and training courses on drugs in sports and doping, sports nutrition, sports psychology, sports anatomy and biomechanics, sports physiology, research methodology, physical fitness and training, sport environment and travel, medical problems of athletes
Second	(4 months) sports and musculoskeletal rehabilitation
	(3 months) orthopedics
	(4 months) cardiology and cardiac rehabilitation
	(1 month) musculoskeletal radiology
Third	(3 months) internal medicine including rheumatology, endocrinology, neurology, and respiratory medicine
	(2 months) orthopedics
	(3 months) exercise and physical therapy clinic
	(1 month) preventive and health promotion clinic
	(3 months) team physician
Fourth	(3 months) sports and musculoskeletal injury clinic
	(3 months) exercise and physical therapy clinic
	(3 months) team physician
	(3 months) self-selected rotation

financed properly in the healthcare system and some of the SEM services have been offered by general practitioners and other specialties, there is some resistance in the system to accept SEM specialists in some hospitals and clinics.

Though Iran has a young population with a considerable number of elite and recreational athletes; it is estimated that more than 2000 SEM specialists are needed in Iran; however there are only thirteen SEM residency positions which are open through a national exam. We are working on improving quality and quantity of SEM specialists in Iran.

Acknowledgments

We should thank and congratulate all the Iranian Sports medicine specialists and residents for their daily endeavor for promotion of Iranians' health through their services.

References

1. Kordi R, Dennick RG, Scammell BE. Developing learning outcomes for an ideal MSc course in sports and exercise medicine. *Br J Sports Med.* 2005;**39**(1):20-3. doi: [10.1136/bjsm.2003.009969](https://doi.org/10.1136/bjsm.2003.009969). [PubMed: [15618334](https://pubmed.ncbi.nlm.nih.gov/15618334/)].
2. Kordi R, Mansournia MA, Nourian RA, Wallace WA. Cauliflower Ear and Skin Infections among Wrestlers in Tehran. *J Sports Sci Med.* 2007;**6**(2):39-44.
3. Kordi R, Abdollahi M, Memari AH, Najafabadi MG. Investigating Two Different Training Time Frames during Ramadan Fasting. *Asian J Sports Med.* 2011;**2**(3):205-10. [PubMed: [22375240](https://pubmed.ncbi.nlm.nih.gov/22375240/)].
4. Memari AH, Kordi R, Panahi N, Nikookar LR, Abdollahi M, Akbarnejad A. Effect of ramadan fasting on body composition and physical performance in female athletes. *Asian J Sports Med.* 2011;**2**(3):161-6. [PubMed: [22375235](https://pubmed.ncbi.nlm.nih.gov/22375235/)].
5. Kordi R, Hemmati F, Heidarian H, Ziaee V. Comparison of the incidence, nature and cause of injuries sustained on dirt field and artificial turf field by amateur football players. *Sports Med Arthrosc Rehabil Ther Technol.* 2011;**3**:3. doi: [10.1186/1758-2555-3-3](https://doi.org/10.1186/1758-2555-3-3). [PubMed: [21306640](https://pubmed.ncbi.nlm.nih.gov/21306640/)].
6. Kordi R, Nourian R, Rostami M, Wallace WA. Percentage of body fat and weight gain in participants in the tehran high school wrestling championship. *Asian J Sports Med.* 2012;**3**(2):119-25. [PubMed: [22942998](https://pubmed.ncbi.nlm.nih.gov/22942998/)].
7. Kordi R, Abolhasani M, Rostami M, Hantoushzadeh S, Mansournia MA, Vasheghani-Farahani F. Comparison between the effect of lumbopelvic belt and home based pelvic stabilizing exercise on pregnant women with pelvic girdle pain; a randomized controlled trial. *J Back Musculoskeletal Rehabil.* 2013;**26**(2):133-9. doi: [10.3233/BMR-2012-00357](https://doi.org/10.3233/BMR-2012-00357). [PubMed: [23640314](https://pubmed.ncbi.nlm.nih.gov/23640314/)].
8. Beneke R. The German situation. *Br J Sports Med.* 2000;**34**(4):238-9. [PubMed: [10953888](https://pubmed.ncbi.nlm.nih.gov/10953888/)].
9. Fricker P. Sports medicine education in Australia. *Br J Sports Med.* 2000;**34**(4):240-1. [PubMed: [10953890](https://pubmed.ncbi.nlm.nih.gov/10953890/)].
10. Kannus P, Parkkari J. Sports and exercise medicine in Finland. *Br J Sports Med.* 2000;**34**(4):239-40. [PubMed: [10953889](https://pubmed.ncbi.nlm.nih.gov/10953889/)].