

# Sports medicine vs occupational medicine: two divergent specialties with a common past

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## Summary

Sports & Physical Education Medicine and Occupational Medicine are two medical specialties with a common past, the "school regime", which have evolved divergently. The purpose of this article is to review the regulations and documents to help understand the current situation of both specialties. To this, basic legislation has been revised, the related specialized training ones and other documents. The results show differences in the format of the training program, the existence/nonexistence of a regulation to develop the relevant law, the requirement or not mandatory to practice as a specialist in his professional field, the presence or not of an employment category associated, calls for public jobs and/or the presence/absence of public jobs in all the State Autonomous Communities. Basically we can say that while one of them (Occupational) has been consolidated in the system of specialized medical training; the other one (Sport) has disappeared in the latest calls. The fact that one of them has a legal support forcing hire doctors work in its scope (prevention services) has favored in the author's opinion, not only to stay in the internal specialist residence system but also its best employment both in the public health sector and private. Still, the present and the immediate future provide job opportunities for both specialties, with a common jurisdictional area in which to promote the health of the general population, workers and sports people. In this sense, would be essential to develop the Sports Act in the form of regulations, with the support of the Medical Societies reference to clarify the roles of the various professions and the realization of the specialty as competent to conduct medical examinations of fitness in sports activities and competitions.

## Key words:

Sports Medicine.  
Occupational Medicine.  
Medical Speciality.

## Medicina del deporte *versus* del trabajo: caminos divergentes de dos especialidades con un pasado común

### Resumen

La Medicina de la Educación Física y el Deporte, y la Medicina del Trabajo son dos especialidades con un pasado común, el régimen de "escuela", que han evolucionado de forma divergente. El motivo de este artículo es revisar la normativa y otros documentos para ayudar a comprender la situación actual. Para ello se ha consultado legislación básica, la relacionada con la formación especializada y aquella otra relativa a puestos de trabajo asociados. La revisión muestra diferencias respecto: al formato del programa formativo, la existencia o inexistencia de un reglamento que desarrolle la Ley pertinente, la exigencia o no de la obligatoriedad para ejercer como especialista en su ámbito profesional, la correlación o no de una categoría laboral asociada, las convocatorias de ofertas públicas de empleo y/o la presencia/ausencia de puestos de trabajo públicos en todas las Comunidades Autónomas. Básicamente se concluye que, mientras una de ellas (la del Trabajo) se ha consolidado en el sistema de formación médica especializada; la otra (del Deporte) ha desaparecido en la oferta de las últimas convocatorias. El hecho de que una de ellas tenga un soporte legal que obliga a contratar especialistas en su ámbito de actuación (los servicios de prevención) ha favorecido tanto su permanencia en el sistema para la formación de especialistas médicos como la inserción laboral en el sector de la sanidad pública y privada. Aun así, el presente y el futuro inmediato brindan oportunidades de trabajo para ambas especialidades, con un ámbito competencial común en lo que a la prevención y promoción de la salud de la población general, laboral y deportista se refiere. En este sentido, sería fundamental el desarrollo de la Ley del Deporte en forma de Reglamento, con el apoyo de las Sociedades Médicas de referencia, para clarificar las funciones de las diversas profesiones y concretar la especialidad competente para realizar los reconocimientos médicos de aptitud del deportista.

## Palabras clave:

Medicina del Deporte.  
Medicina del Trabajo.  
Especialidad médica.

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## Introduction

The specialties of Physical Education and Sports Medicine (SM), and Occupational Medicine (OM) have a shared past, with both having been specialties in the student system<sup>1</sup>. However, whilst the first is not currently offered in the new calls for access to positions within the training system specialised in Health Sciences, the second is<sup>2,3</sup>. This article offers a comparative perspective between both specialties, observing the evolution in regulatory development as a factor that has influenced the current situation, making suggestions for the future. In this respect, the aim is to review regulations and documents that are directly related to the issue, so as to reflect upon the current situation.

## Background

The Spanish Constitution of 1978<sup>4</sup> protects the right to work, to health and to its promotion through physical exercise. In fact, Article 43.3 establishes the promotion of physical education and sport, indicating in 148.19 the exclusive competency that the Autonomous Communities have in promoting sport and the appropriate use of leisure time<sup>4</sup>.

The General Health Act 14/1986<sup>5</sup> cited the improvement and specialisation of healthcare staff. In turn, Act 44/2003 governing the Organisation of Healthcare Professionals<sup>6</sup> (OHPA) indicated the right to the free exercising of healthcare professionals, including those with official qualifications in health sciences, by recognising specialised Health Science training as regulated and official training. Specialised training serves to fill specific work positions in public and private centres and establishments. The OHPA mentioned the suppression, modification or adaptation of healthcare specialties whose training system was not that of the residency<sup>6</sup>, a training system that emerged from a now removed legislation from 1984<sup>1</sup>.

## Current legislative situation

Article 21.2 of the Public Health Act 33/2011<sup>7</sup> states that *"health examinations can be carried out prior to sporting practice only when stipulated so by the sectoral regulation in force"*, leaving regulatory development open.

Recently, the seventh additional provision of the Royal Decree (RD) 639/2014<sup>8</sup> established that *"From the calling of selective trials 2015, for access in 2016 to specialised healthcare training positions, positions will not be offered in training for students in Medical Hydrology, Physical Education and Sport Medicine, Legal and Forensic Medicine, and Industrial and Galenical Pharmacy specialties"*. This was upheld, and despite the Supreme Court declaring the Royal Decree of core training to be invalid, the callings for the 2016 and 2017 exams have not offered any positions for access to the SM speciality<sup>2,3</sup>.

Why has this situation arisen? The comparative analysis of legislation related to both specialties can provide us with some keys, apart from other factors that have not been included within this review.

Analysing the Health Sciences Specialities training programmes on the Ministry of Health<sup>9</sup> website, we can see the first difference. And whilst the speciality of SM has maintained an unaltered programme, in the form of a 5-page supplement to a single-column supplement, which dates from 1996, entitled the *"Specialists training guide"*; the other speciality, of OM, changes this via the Order SCO/1526/2005 published in the Official State Gazette<sup>10</sup> (OSG), to which it dedicates 10 pages in double column<sup>10</sup>.

## The existence of an Act that pin points the necessity of speciality: a key factor

The existence of an act that supports and justifies the working category is the fundamental factor that differentiates both specialties. Article 22 of the Occupational Risk Prevention Act<sup>11</sup> (ORPA) from 1995 establishes that *"the monitoring and control measures for worker health should be performed by healthcare staff with technical competency, training and accredited capacity"*. Development regulations of the ORPA have specified which specialists have this competency, training and capacity. On the one hand, Article 37 of the Regulation of the Prevention Services<sup>12</sup> clearly mentions that: *"The prevention services that perform worker health monitoring and control duties should have a doctor specialising in Occupational Medicine..."* Explicitly revealing the legal requirement to have a speciality in OM to occupy work positions in the certified working category. On the other hand, RD 843/2011<sup>13</sup> in Article 4 indicates that *"healthcare personnel must have the healthcare qualifications to perform their professional competencies: doctors must be specialists in Occupational Medicine"*, adding that this must be the speciality of the technical director. This said, the medical director of the prevention service must be a specialist in OM.

The clarifying situation with regards to OM contrasts with that of the speciality of SM, with one legislation - Act 10/1990 of sport<sup>14</sup> - in which the Superior Board of Sports (SBS) already indicated that *"Spanish sporting federations may be required that to grant licences or participate in sporting competitions in the state field, an essential requisite is for the athlete to undergo a medical aptitude examination"* under specific conditions. It also indicates that *"the conditions for undertaking medical aptitude examinations, as well as the sports modalities and competitions in which they may be necessary, shall be established in the provisions developed in this Act"*. Note, that these conditions have not materialised to date. Aside from the other considerations regarding the protection of the health of athletes and about the prevention and fight against doping in athletes. Without specifying which medical specialist should carry out these tasks. Common sense rules that, at least prevention, should be the exclusive competency of the SM, with reference guides about the prevention of doping currently existing, drafted by experts in the speciality<sup>15</sup>.

In the latest update of this Act, published in May 2015, the competency or the training of the doctors with the capacity to perform these aptitude examinations have not yet been specified. Nor have they been

specified by the Autonomous Communities, apart from the attempt of the Catalan Act of the Exercise of Sporting Professionals<sup>16</sup>, which established the compulsory nature of examinations for sporting aptitude.

By means of an example, similar legislation, such as the recently published *Sports Act of Andalusia*<sup>17</sup>, does not specify which medical specialist should carry out the health examinations of athletes; whereas it does develop other professions that intervene in sporting practice, such as: *“Teacher or physical education teacher, director or sports director, trainer or sports trainer, and instructor or sports instructor”*<sup>17</sup>.

The availability of a specific legislation in this field of activity is an opportunity that other specialities in the so-called “school system” have not had. For example, that of Hydrology, also “disappeared” in the offer of positions in the latest callings for specialised healthcare training<sup>2,3</sup>. Legal and Forensic Medicine<sup>2,3</sup> has also ceased to be offered, a speciality that could well follow other directions as its work positions depend on the Ministry of Justice. However, it does not appear to have influenced the speciality of SM as this depended on other Administrations other than that of healthcare. A situation that has occurred in at least some Autonomous Communities.

## **Correlation of the title of specialist with the corresponding working category in the public sphere**

Another difference between both specialities is the existence or not of an unequivocal associated working category, an issue that, evidently, favours the employability of any medical specialist in the public healthcare sector. This peculiar fact of specialities without associated work positions also occurs with the majority of those in nursing<sup>18</sup>, apart from in midwifery and occupational nursing.

There are currently doctors with a speciality of OM occupying work positions both in primary (healthcare districts) and specialised healthcare spheres (basically hospitals) in all Spanish Autonomous Communities. However, SM specialists are limited to occasional initiatives in Sports Medicine Units. This is the case of the “Sant Joan de Reus” University Hospital in Tarragona. There are also positions in those known as “High-Performance Centres” (HPC), such as those in Granada and Seville in Andalusia, or that of “Sant Cugat Del Vallés” in Catalonia, and those of the Sports Medicine Centres in Autonomous Communities such as those of the Government of Aragon, or that of the Junta of Andalusia (SMC), where despite doctors working there with a speciality in SM, it is not the officially required speciality. Furthermore, they appear as *“Sports Medicine Consultants”*; being able to work in those medical positions without a speciality or with other specialities, with a long time having passed since vacancies were offered in the cited SMC.

Other options for carrying out the speciality are the so-called “Sports Technification Centres”, such as that of “Illes Balears” in Palma de Mallorca, as well as the Sports Medicine Centre of the Higher Board of Sports in Madrid.

However, and differently to the speciality of OM, today there are no work positions associated with the speciality of SM in any of the Autonomous Communities, with a structural situation for the OM compared to the circumstantial situation of SM in which there are positions for the working category in the public healthcare sphere. The existence or not of Public Employment Offers (PEO) for the corresponding category in each of them is the proof of this. As far as is known, a PEO is an ideal way to consolidate a job position as statutory personnel, aside from the open-ended nature of some of the vacancies, such as “labour” ones (such as in the SMC, for example). Comparing the two specialities, whilst there have been PEOs for the speciality of OM, with new imminent positions, it is difficult to find any offers in the OSG or in the Official Gazette of the Autonomous Communities of the State with a speciality in SM.

Another labour opportunity is teaching in degree and post-graduate university studies for healthcare qualifications (medicine, nursing, physiotherapy, occupational therapy, podiatry, nutrition), and non-healthcare qualifications (Physical Activity Sciences and Sport). However, these options are usually part time and in optional subjects, apart from exceptions of professionals with acknowledged prestige in SM. For example, at the University of Oviedo, through the Regional Unit of Sports Medicine of the Principality of Asturias, and in private universities such as the “San Antonio Catholic University” in Murcia, and the “European University” in Madrid.

## **Correlation of the title of specialist with the corresponding labour category in the private sphere and opportunities in the sector**

The lack of this correlation with the speciality of SM has left a labour gap which is being taken advantage of by other medical specialities, such as Rehabilitation, Traumatology, Cardiology, Family Medicine and even OM.

Whilst it is clear for the OM who should work as a specialist in their own Prevention Service or as a Prevention Service employee within the private sector, it is not so clear in terms of SM. For example, with regards to sports centres that have arrangements with sports federations, sports clubs, city councils, associations or other bodies where physical activities and/or sports are carried out. Even in the field of professional athletes, where, despite also being workers, it should be made clear that the entire team of healthcare professionals should be led and/or coordinated by the specialist in SM. The sphere of professional athletes is a crossroads between both specialities, and an example that, despite that stipulated by the Law, medical examinations are sometimes carried out by other specialists. This converging setting generates reciprocal working opportunities. In this respect, and by means of an example, the RD 843/2011<sup>13</sup> offers the opportunity for those in SM to work in Prevention Services, with the literal mention that: *“Other specialist doctors or nurses in possession of the official title will be able to participate in the healthcare*

service, depending on the capacities associated to their speciality or subject", under the responsibility and management of a doctor specialising in OM. The Mutual Funds for Accidents in the Workplace that collaborate with the Social Security also constitute an employment niche for SM, as they are the most asked for after traumatology, rehabilitation and family medicine specialists.

Other employment opportunities in the private sector are Emergency services and units, both general and specialised, including the provision of first aid in the diverse modalities and sporting events with mass participation (the case of popular races such as half marathons and marathons, which have increased exponentially in recent years). Specialised units and centres also offer employment to SM in multi-disciplinary teams, which is the case of the Donostia Hospital Sports Medicine Unit, or the Sports Medicine and Traumatology Services available in various clinics in the other major cities, as well as the Medical Services of healthcare companies and of professional and amateur sports clubs.

The survey about the professional situation of SM specialists<sup>19</sup>, performed by the Spanish Sports Medicine Society (SEMED)<sup>19</sup>, indicates that the majority of its associates work in the private sector, mainly in consultations or their own medical centres, and in specialised centres or diverse consultancies. Many of them interact with diverse professionals: specialised doctors, physiotherapists, nurses, podiatrists, nutritionists, licensed individuals or graduates in Physical Activity and Sports Sciences (PASS) or others<sup>19</sup>.

## Trespassing in the sector

The ideal situation in any working setting is to work as a team, having previously clarified the roles. A consequence of the lack of clarity about which these are and to whom certain professional competencies correspond is trespassing. It is something that may be occurring, for example, with laboratory exertion tests, when they are carried out by non-medical professionals. A situation to which SEMED has demonstrated its clear opposition<sup>20</sup>. Regarding this, all Medical Societies affected should clarify the role of each professional in the areas of competency that come into conflict with the SM, differentiating performance tests from exertion tests. This trespassing does not occur when legislation backs up the speciality, which is the case of the speciality of OM, where it is unusual to find a situation of non-healthcare professionals carrying out tests that correspond to the speciality: spirometry, vision control, audiometry or the electrocardiogram, tests that are performed by Occupational Medicine specialists.

## Emission of aptitude in medical examinations

A key issue for both specialities is to establish to whom the act of issuing the aptitude corresponds for the work or physical activity and sport, respectively. Firstly, because it is a medical act, with the responsibility that this implies. Secondly, because it constitutes one of the essential tasks that define both specialities. Issuing aptitude for

**Table 1. Summary of the main difference between both specialities.**

	SM	OM
Training programme	1996 supplement	Order SCO/1526/2005, 5th May
Specific legislation	Sport Act	ORP Act
Regulation that develops it	No	Yes, the RPS and the RD 843/2011
Mentions the enforceability of the speciality to exercise	No	Yes
Associated working category	No	Yes
PEOs for the category	No	Yes
Specific public work positions in all the AC	No	Yes

ORP: Occupational Risk Prevention; RPS: Regulation of the Prevention Services. RD: Royal Decree; CA: Autonomous Communities; PEO: Public Employment Offer.

sporting or labour practice is, for both specialities, the same as issuing it to an ophthalmology specialist to operate on a cataract. Would anyone question the latter? Let us, then, reflect on "who" is today issuing aptitude for federated athletes: general doctors and/or family doctors, or other doctors from any other speciality. We should also reflect upon "how" (complacently by some colleagues) and even upon "where" these examinations are taking place. Regulation on the registration and records of healthcare centres is clear about this issue<sup>21</sup>.

If we differentiate between healthcare and preventive activity, at least the latter should be the exclusive competency of SM specialists, referred to medical examinations for sporting and pre-sporting competitive practice. The issuing of aptitude is the end result of these examinations, a reason why it should be the exclusive competency of SM, just as with health examinations with OM<sup>22</sup>.

Table 1 summarises the main differences between both specialities.

## Future of the speciality: challenges and opportunities

The future poses challenges to the speciality of SM. The main one is the development, in the form of Regulation, of the Sport Act<sup>14</sup>, a Regulation that, just as with OM<sup>12</sup>, could pin point the need and its role with regards to medical examinations, at least for federated athletes. As a result, SM must face the returning challenge of Appendix I of the relationship of medical specialities in Health Sciences through the residency system<sup>8</sup>, as the potential specific work positions for specialists will not be of any use unless there are qualified professionals that can cover this demand.

Another challenge that the speciality faces is the certification of the specialist qualification for the free transit between the countries of the European Community, a challenge that is also faced by nursing specialities<sup>18</sup>. In this respect, a study is required that specifies in which countries, such as Italy, there is an official speciality and the procedure

to certify these qualifications, due to the uncertainty that arises from the lack of positions in the latest callings for specialised healthcare training.

On the other hand, the speciality of SM has a promising immediate future for those that have detected the needs arising from contemporary physical inactivity. The regulation<sup>17</sup> mentions *“physical education and sport as an overriding principle of social and economic policy”*, with a potential impact on the economy and on employability. Both specialities have great possibilities on the common ground that is prevention and the promotions of health, in both labour and sporting spheres, and among the general population. The current problem faced by the Spanish population regarding obesity and excess weight is well-known. The same Public Health Act<sup>7</sup> dedicates an entire chapter - II - to the promotion of health, and III to the prevention of health problems and their causes. As an example, the person that wrote this article is in charge of the consultancy for hospital personnel to quit smoking, being aware of the importance of the appropriate prescription of physical exercise on the prevention of weight-gain, a consequence of quitting smoking, as well as on overcoming active smoking. As well as the implementation and development of Programmes to Promote Health in the Workplace (PHWP)<sup>23</sup>, in which a specific prescription of physical exercise is necessary. PHWP is increasingly required in corporate settings<sup>24</sup>.

To cover this demand, specialised training is required. In this respect, a course of Master university studies could be offered in this subject. It should be recalled that in terms of enforceability, under no circumstances should the title of these Masters be confused with that of the corresponding medical speciality<sup>6</sup>.

Finally, following the simile of the two rivers that emerge from the same source, that temporarily converged in the same channel in their past in the School system, and that have evolved divergently, SM and OM both face the challenge of converging once again in the future via a common core in the system of specialised medical training. The future offers open doors to those that have been able to spot opportunities in the promotion of health among the general public, the working and sporting demographics in diverse disciplines and related pathways, whether in the competitive sphere, in the leisure-recreational setting, or in the generation of health benefits, with possibilities in the preventive field (as “Health Monitoring for athletes”) and in the healthcare setting (in the Working Mutual Funds or other centres). Facts that will depend on the work carried out by the respective National Committees of Specialities, by the corresponding Medical Societies, and in how the need to specialists in Physical Education and Sports Medicine to be kept in the labour market is explained to society.

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