

# Sports injuries management update

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## Summary

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This paper takes a look at how sport injuries are managed considering factors such as: affected population, yielded benefits and costs generated by their practice. The analysis included below focuses on three specific sectors: Public healthcare administration, professional sport and recreational sport.

The aim of this paper is to show how sports injuries are currently managed as part of a healthy life style in Spanish society, so that the social system which takes care of the population's health becomes aware of the practice of a matter which has shown to have ever-increasing importance in today's society: physical activity and sport. We must assess whether the framework in which health care was established 20 years ago – and which is currently still applied- is an appropriate one under today's social conditions when it comes to dealing with all those deep changes-take for instance, the percentage of population which has decided to take up a regular practice of physical activity (and it's 10% increase in the last five years) and what this change means in terms of social expenses.

As well as mentioning economic concepts which may be considered as social costs as a direct result of recreational sports practice, I discuss which institutions are to cover such costs, the kind of situations which are considered secondary sick leaves from a labour point of view, how insurance companies and mutual insurance companies establish criteria when dealing with these events; I also deliberate on how each of these institutions' actions overlap with our public healthcare system when it comes to coping with them and finally, I analyse current preventive measures.

**Key words:**

Management. Injuries sports.  
Insurance.

In summary, I have addressed the impact sports practice has on today's society and I have also assessed the costs and possible alternative economic, regulatory, assistance, insurance and legislative conditions for it.

## Actualización de la gestión de las lesiones deportivas

### Resumen

En este artículo se realiza una reflexión sobre cómo gestionar la lesión deportiva teniendo en cuenta factores como: a qué población afecta; qué beneficios reporta y qué costes tiene la práctica deportiva. Es un análisis enfocado a tres ámbitos; como son la gestión desde la Administración Pública, el deporte profesional y el deporte amateur o de ocio.

El objetivo del presente trabajo de revisión es reflejar el estado actual de la gestión las lesiones deportivas dentro del sistema de prácticas saludables de la población española, con el fin de concienciar al sistema social que vela por la salud de la población de un tema, con un peso cada vez más importante como es el de la práctica deportiva. Debemos valorar si el marco en el que se movía el sistema hace 20 años es el adecuado hoy día, para hacer frente al cambio tan drástico que se ha producido en este ámbito.

El porcentaje de población que practica deporte se ha incrementado en los últimos cinco años un 10% y habrá que analizar cómo hacer frente al aumento asociado de gasto económico social que este hecho supone.

Se analizan medidas preventivas así como cuál es la entidad que se hará cargo de los costos económicos, bajas laborales secundarias... que plantea la lesión deportiva, a través de compañías de seguros, el sistema nacional de salud, las mutuas de seguro...

**Palabras clave:**

Gestión. Lesión deportiva.  
Seguros.

En resumen, se ha explicado la repercusión que en la sociedad actual tiene la práctica deportiva. Se ha valorado el coste, las posibilidades o no de variar las actuales condiciones económicas, reguladoras, asistenciales aseguradoras y legislativas en relación a la cobertura de dichos costes y al tratamiento de los mismos.

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## Introduction

When it comes to discussing sports injury management, clearly we should first define what we understand by management, as in today's society this term is often linked to numbers, accounts, results, benefits, expenses, etc. It is however true that in recent times the concept of management has changed considerably, and we use the term to refer to planning, strategy, targets, etc. This is why when focusing on an issue such as sports injury management, we are going to study and analyse it thoroughly within a more conceptual sphere as opposed to using figures.

We will therefore deal with this issue from a strategic and rational perspective. Given that sports injury is such a wide field, we will start by introducing the definition of a sports injury, then we will perform a potential market analysis, and finally we will study the possible management focuses that we could have. In this study the following angles will be presented: from the perspectives of Public Administrations; of professional sports; and of amateur level or leisure sports.

Sports injury can be considered as "damage that is produced in the human body as a result of practicing sport"<sup>1,2</sup>, but it is true that society evolves, and particularly so in recent years. Therefore, this concept is becoming limited and exiguous, making it more thorough to state that a sports injury is "any damage, whether physical or psychological, that the body may suffer whilst performing a sporting activity, on both an amateur and professional level, and which produces incapacity to train or compete"<sup>3</sup>.

## Potential market analysis

In terms of market analysis, to see what we are talking about and to establish the number of people that practice sport in Spain<sup>4</sup>, we can say that there were 3.5 million federated athletes in Spain in 2015, of which 78.5% were males and the rest were females. The top federation or sport in terms of federated members was still football, with around 900,000 federates, followed by basketball, hunting and golf.

In terms of leisure athletes, the increase in recent years has been spectacular; in fact, in 2015, in a population aged over 14 years, some 53.5% practiced sport at least twice a week, whilst in 2010 this percentage was just 43%<sup>4</sup>. Consequently this equates as an increase of 10 percentage points in five years. It is also true that practicing certain sports is becoming a form of social status marker; as such, the cult of the body, of being healthy, seems to be an increasingly important factor in society.

In terms of the most practiced leisure sports, the gym is the outstanding leader, a trend that has grown considerably since 2010, followed by running, cycling and swimming.

If we take the case study that was carried out regarding injuries as a base study<sup>5</sup>, of 1616 injuries that occurred whilst practicing sport, the demographic under 35 years suffered approximately 70% of the injuries, whilst those over 35 years sustained the remaining injuries, with considerably more males than females suffering injuries<sup>6</sup>. The most injured parts of the body were the lower limbs, followed by the upper limbs. Furthermore, according to statistical and percentage data, these are practically identical in both men and women. In terms of the sport that produces the most injuries, football is at the top, followed by running,

indoor football and basketball. In football, predominantly males acquired injuries, whilst more women obtained injuries whilst running. Yet the rate of football injuries is still the highest. It is also true that most of the demographic studied practiced football. In terms of the causes of the injuries according to this study, coinciding with what the general public usually perceives, the most frequent type are muscular injuries, followed by strains, tendon injuries and joint injuries.

In terms of what this represents from a healthcare point of view, football is at the head, because 66% of those injured require medical attention, and 22% cause working leave. Of these injuries, in this study some 63% of football injuries required rehabilitation, and the weight in terms of healthcare was as follows: first football, second indoor football, and third tennis.

## Management focuses. Public Administration

Once the population subject to suffering a possible sports injury has been established, either from practicing federated, semi-professional or even professional sports or leisure sports, we are going to examine the angle that we could take from a public administration perspective. In a Public Administration study, we observed that in 2015 sport generated some 184,600 job positions in Spain, which equates as 1% of the working population. It also drives a total of 31,000 companies, also representing 1% of all Spanish companies<sup>4</sup>. In terms of public expenditure linked to sport, the statistics are not very recent. In 2010 this expenditure was around 3700 million euros, which fell to around 3,200 in 2011, and this figure has reduced gradually as a result of the financial crisis. However, sport also attracts a large number of tourists; in fact estimates position this figure at around 475 million euros of sport-related travel costs.

From the point of view of a public administration manager, in terms of the advantages that can sport can offer, we find that as a physical exercise, it is a fundamental part of the development and correct functioning of our organism, both physically and mentally. What are the benefits of the population doing sport?<sup>7</sup> It helps prevent pathologies such as obesity, diabetes, hypertension, and protects our locomotive system. It also helps in the everyday struggle against insomnia, stress, depression and low self-esteem. What are the disadvantages? Sports injury and its cost. In 1990 an act was created about healthcare received for sports injuries<sup>7</sup>, later developed by Royal Decree 849/93<sup>8</sup>, establishing the minimum conditions of compulsory sports insurance. It is true that this act – establishing that all federated athletes should have insurance that should be paid by the corresponding federation on a local, autonomic and state level – also covers a series of conditions that all federated athletes should know, and that in my point of view I believe very few people are aware of. These include having to provide a personal insurance certificate, stating the insurance company chosen, the cover that this policy provides, and the items that are excluded from this insurance. I feel that this is a grey area, which is vastly unclear for the demographic involved, and one that has not been transparent, which is why this issue requires improvement. Act 19/2007 was also developed (against violence, racism, xenophobia and intolerance in sport)<sup>9</sup>, which established that sport was an ideal vehicle for transmit-

ting culture and team spirit, and for avoiding gender-based violence, racism and xenophobia.

What actions do I believe should be performed from the perspective of a Public Administration manager? Clearly controlling federate insurance is a priority. We are talking about 3 and a half million potentially injury-prone federated athletes, and there should be a way of clarifying or controlling that these 3.5 million people have insurance. We believe that it is fundamental to control sporting events and the physical condition of athletes, because every weekend in Spain thousands of sporting events take place, whether running, ball sports such as football, basketball, paddle, etc. and there are no kinds of controls in these competitions. Anyone can run a marathon and the only requisite is to sign up and to receive a number. There are no previous sporting medical examinations, echocardiograms or minimum physical condition requirements.

Then we have the issue regarding the follow-up of health costs accumulated through all the staff and the healthcare systems that look after people with sports-based injuries. If an injured federated athlete, who should theoretically be covered by an insurance broker, goes to the public healthcare system, this causes a healthcare cost. The problem is that no one makes sure that this expense can be covered by an insurance broker, which is why the public healthcare system ends up increasing the healthcare material and personnel expenditure created by caring for this injured athlete, when a third party insurer could cover it. It is essential to educate the population in this issue. I believe that the system would run much smoother if everyone were educated in the costs entailed, and it would be essential to carry out prevention work with anyone practicing any kind of sport.

## Management approaches. Professional sport

From the perspective of professional sport management, when it comes to treating an injury, it seems obvious that in professional sport it would be essential to become an expert in preventing possible injuries that athletes can acquire, but this will always depend on the individual resources of each athlete.

It is also true that the best treatment option should be carefully considered, but again, the individual is not always the best candidate to choose the optimum treatment option because we depend on the necessary resources to get the best medical team, the best reference centre or the best diagnostic image centre, etc.

On a sporting level we could classify as elite footballers, it seems obvious that with an athlete that may cost 10 million or 20 million euros each year, no expense will be spared in carrying out any kind of test as quickly as possible and by the very best professional available. In these cases it is obvious that the cost is not greater than the return of the investment, but this is neither standard nor usual. The problem arises when the cost is greater than the return of the investment. What should be done in these cases? This athlete must wait for longer than an athlete with higher income. We must also discuss recovery from the injury, which is where we encounter the same problem. Where will this athlete recover? At the best centre? Where he/she can afford? What can

my income stretch to? Perhaps we should think that all of these issues should be linked to specific insurance covers, so that all athletes can always receive the optimum treatment. Yet once again, unfortunately, we find that insurance is pricy and if there is not enough money to cover it, we will have the recurring issue of funding to consider.

How is leave dealt with in professional sport? What happens when the leave occurs during a transfer to a national selection? Who covers this leave? Who pays for this leave? Efforts are always made to keep a kind of reference to make it clear who covers these leaves, but in reality selections do not usually have many resources, meaning they cannot easily pay for them. They do not usually want to designate resources to hiring insurance to cover these contingencies; it is an on-going debate. There are discussions, for example, in the world of football with the UEFA or with FIFA, because the cover that is usually taken on is very low for athletes that are transferred. We return to the fact that there should be specific insurance covers for this case, for these case studies, because they are insurance covers with costs that practically no federation can stretch to. It is also true that there are conditioning injuries, such as those of any athlete that is going to attend an important event (such as a European, World or Olympic event), in which case priority is usually given, in the case of a possible medal, to pouring more resources into recovery from an injury. However, we return to the inequality that occurs in the treatment of athletes because if a medal is not likely, the athlete will not be designated the same resources.

When discussing who covers a leave, I would firstly like to refer to the leave resulting from your working or mercantile relationship with the federation, team or whoever corresponds, and to establish who will cover it or not. In many cases, these leaves are not covered or paid for... the social system covers the minimum in the case of self-employed athletes, whilst in the case of athletes with a working relationship, this depends on the agreement with each club or federate member, which is an issue that we should take lengths to define.

## Management approaches. Amateur level/leisure

In terms of leisure sport, we find that in 2015, in Spain the national household expenditure linked to sport is 4,200 million euros, entailing an average cost per inhabitant of 92 euros<sup>4</sup>, which is a more than respectable figure. It is becoming a symptom of social status: nowadays when you go running, more care is taken regarding the choice of footwear and the calorie-heart rate control device used because it appears that you are being observed by society.

Leisure sports are performed an average of twice a week, and this is where we find ourselves before an economic term, perhaps applicable to this case study, which is usefulness. How can we measure the usefulness reported by a person that practices sport when this depends on the satisfaction that this sporting practice brings to each individual? This depends on each moment and on each person, which is why it is impossible to measure.

It is quite complicated and difficult to debate why people partake in so much leisure sport. In some cases even medically acceptable and beneficial limits are exceeded, almost constituting an illness or an

obsession. But of course, what problems do we find in leisure sport? It would seem that no one wants to talk about this. Who covers the leaves of leisure athletes? This demographic constitutes 20 million potentially injury-prone people. A large percentage of these people work, and if an injury occurs during leisure sport, work leave is taken, meaning that the company covers part and the state system the other part. We are talking about an enormous amount of money that no one wants to face or touch, because there are too many people practicing sport. In this issue measures must be taken, I am not sure whether this would entail certain additional insurance covers for this kind of athlete, but the population should be made aware that this has a very high economic cost and that someone or some system will have to pay for it.

## Conclusions

To conclude, we consider that, on an institutional level, social expenditure and insurance covers should be controlled, regardless of whether the federated individual is insured or not. We believe that it is key to educate, raise awareness and prepare the population for this issue. Equally vital is a drive to prevent all kinds of injuries whenever possible.

In professional sport the ideal solution would be to insist upon athlete injury prevention. This is not always equitable or fair, but we will evidently have to aim to minimise the expense and the corresponding leave: the shorter, the better.

In terms of leisure sport we strongly feel that measures should be applied to prevent the appearance of injuries and to educate the popu-

lation in terms of the entailing cost of them. Training and education are the sturdiest cornerstones of an advanced and progressive civil society.

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