From the origin to the present: the history of sports and exercise medicine

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The dawn of sports and exercise medicine (SEM) dates back more than one century, when the first medical investigations on trained or untrained individuals were collected in the Sports Laboratory in Dresden, Germany, managed by Arthur Mallwitz, during the 1st International Hygiene Exhibition, from May to October 1911. One year later the 1st Congress for the scientific investigation of Sports and Physical Exercises was held in Oberhof, Germany, with topics about the physical education, woman and physical fitness, cardiovascular adaptations to the training and doping. The first SEM Association was founded during this meeting and it was called the "German Committee for Scientific Investigation of Sports and Physical Exercises".

After the First World War, in 1928 the first "Association Internationale Médico-Sportive" (AIMS) was founded in St. Moritz, Switzerland, during the 2nd Winter Olympic Games. The purposes of the AIMS were to protect the athlete's health and to develop the sciences and the studies concerning sport and exercise. In 1934 the AIMS became "Fédération Internationale de Médecine Sportive" (FIMS) and, subsequently in 1998, "Fédération Internationale de Médecine du Sport" (Tittel and Wesseling, 2005).

In the last decade the network of FIMS has been considerably expanded: in the year 2016, 118 nations belonged to the International Federation of Sports Medicine (FIMS) and thanks to the realization of the FIMS Collaborating Centres of Sports Medicine (CCSM) project, 24 Centres have been already accredited worldwide functioning as local ambassadors of FIMS´ vision and mission, helping to achieve our shared objectives in all parts of the world. To this respect, one of the most important milestones has undoubtedly been the establishment of the FIMS Headquarters at the Maison du Sport Internationale in Lausanne, Switzerland - a return to the roots where FIMS was founded.

The aims of the International Federation of Sports Medicine can actually be summarized as follows:

Vision

- Caring for the athletes and sports communities.
- Leading education and science in sports medicine worldwide.
- Promote ethics in sports and medicine.

Mission

- Be the leader and prime reference in education, ethics and science for sports physicians at all levels worldwide.
- Protect the physical and mental health and ensure the wellbeing of all who are engaged in sports and exercise.
- Promote a healthy and active lifestyle.

In order to fulfil these goals, an important part of the cooperation with the National Sports Medical Associations is to spread and share information about the scientific, theoretical and practical aspects of SEM. What we need to find out is how SEM is currently considered and what future worldwide directions SEM could take.

In 1958, during the foundation of the Institute for Cardiology and Sports Medicine in Cologne, Germany, SEM was given this definition by Wildor Hollmann, former President of FIMS, and subsequently adopted by the FIMS in 1977: *"Sport and Exercise Medicine includes those theoretical and practical branches of medicine which investigate the influence of exercise, training and sport on healthy and ill people, as well as the effects of lack exercise, to produce useful results for prevention, therapy, rehabilitation, and the athlete"* (Hollmann, 1988).

SEM is nowadays an independent medical area dedicated to practice, study, teaching and research. It is, unfortunately, noticeable how SEM did not reach the same consideration and regard in all countries of the world, and since its first references in the early 20th century, all the purposes haven't been univocally achieved; I believe that the main objective of SEM

remains to date the promotion and safeguard of the athlete's state of health in a multidisciplinary program. The importance given to SEM in different countries brought the governments to emanate laws that approve a mandatory pre-participation screening for athletes practicing physical activity at competitive or non-competitive level. In Italy, for example, this law is in effect for over 30 years since 1982, thus consistently reducing the number of sport sudden deaths through the years (Corrado et al., 2006).

Physical inactivity has become the greatest public health problem of our time together with an increase of chronic diseases, either communicable or not. For this purpose, it is universally accepted that the diffusion of SEM should be promoted for two main reasons: to prevent sport-related diseases including sudden deaths (with the use of the pre-participation screening and other specific medical assessments), and to include SEM in a more focused program called "sport-therapy", promoting the use of physical activity in the management of patients with risk factors or chronic diseases. Healthcare networks should begin to sustain the idea to *"prescribe exercise as a drug to patients"* and important organizations such as the American College of Sports Medicine and the European Federation of Sports Medicine Associations promoted in recent years respectively "ACSM's Recommendations for Exercise Preparticipation Health Screening" (Riebe et al., 2015) and the "Exercise prescription for health" projects, making physical activity part of the disease treatment.

In conclusion, I really do hope that SEM will be officially recognized worldwide as a standard part also of the management and prevention of chronic diseases, in order to improve general health, quality of life and reducing public health costs.

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