

Preface for the Dedicated Issue: Doping and dietary supplements in sport as an emerging hazard for public health

*Prefazione al fascicolo 6/2019 dedicato a:
Il doping e gli integratori alimentari nelle attività sportive stanno
emergendo come problema di Sanità Pubblica*

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The idea of publishing a regular issue dedicated to the **Role of the National Health Service (NHS) in doping prevention** was born immediately, when we unanimously approved the **Erice 2018 statement** (1). After days of discussion, those ten statements appeared too narrow for all that was meant through the final consensus document. That was very clear among the over 130 attendees at the 53rd Residential Course on “Adapted Physical Activity in Sport, Wellness and Fitness. The role of the Departments of Prevention (DPs) and of the NHS in doping prevention and health promotion”, held on 15-19 May 2018 in Erice, Italy, at the “Ettore Majorana” Foundation and Centre for Scientific Culture, and promoted by the International School of Epidemiology and Preventive Medicine “G. D’Alessandro” and

by the Study Group on Movement Sciences for Health of the Italian Society of Hygiene, Preventive Medicine and Public Health. The event brought together colleagues from all Italian regions, with different backgrounds, different and valuable expertise, but all with a common passion and commitment for public health.

The Course was the core event of a national project that the Ministry of Health promoted to prevent doping by developing a permanent toolbox based on the DPs network and on the local structures of the Italian NHS (www.progettodoping.it). In order to approach the problem and assess appropriate strategies, the project involved local health facilities and operators in facing doping habits, including the misuse of drugs or the abuse of food supplements

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in the general population approaching sport at amateur level or accessing gyms for performing adapted physical activity. The final aim was to survey and recruit expertise in the field, train public health operators and support at local level a cascade of health education campaigns. Since the beginning, this strategy had a nationwide dimension, also considering that physical activity is included in the Prevention Plan 2014-2018 of the NHS (2).

Previously, another consensus document, The Erice 2015 Charter, represented a forerunner in the field of integrating adapted physical activity into a public health context (3). Only few years later those revolutionary conclusions became constitutive part of official documents and operative guidelines, turning innovative hints into established rights (4, 5). It remains a still valid and solid milestone on which the new Erice 2018 Charter has been developed.

The ten final statements of the Erice 2018 Charter summarize concepts that the reader will find in detail in the contributions of the present issue.

The opening paper from **Pasquarella et al** deals with the role and definitions of the DPs and reports original data from a national survey allowing to make the point on the preparedness and potentials of the Italian NHS in carrying on an effective doping prevention (6). The following papers will explore several key topics. **Savino et al** will present the institutional and regulatory frame of doping controls, providing also the basis to understand drug abuse in sport, and the question of the social impact of dietary supplements (7). **Fallace et al** will introduce the reader to the field of health education, focusing on peer education strategies (8). A specific peer educational tool, in the form of a book or e-book, was developed along the Project and during the activities of the 53rd Course. It is described by **Alonzo et al**, who support the concept of Mediterranean diet as a natural supplemental resource for

athletes (9). The following contributes by **Gallè et al** and by **De Santi et al** will briefly report two advanced frontiers for research and public health: the role of microbiota and the potential risks of cancer related to the exposure to doping and/or abuse of dietary supplements (10, 11). **Scatigna et al** highlight physical activity in a global health dimension, while **Goryakin et al** will discuss the effectiveness of sport and physical activity in public health, considering their potentials for prevention by reporting an original study on the return of investment in promoting sport and adapted physical activity as an advanced biotechnology for prevention (12, 13). The Erice 2018 Charter and the present dedicated issue of *Annali di Igiene* approach doping as a complex social phenomenon, focusing on the risks related to the general population and not just on the traditional and already well exploited question of doping in Olympic competitions or in top athletes. However, the doping habit seems to exceed both professional or amateur sport, involving huge interests often sustained by criminal organizations, as reported by **Tripi et al**, who show the repressive systems available in Italy to contrast illicit trafficking of drugs and food supplements, highlighting the priority need for empowerment and education to legality (14). This wider perspective considers doping as a social disease that can involve sportsmen, citizens of different ages and can also touch public health operators, whose preventive actions may interfere with the unlawful activities of the organized crime. A key topic that was anticipated by the Erice Charter 2015 and that today is present in different official documents, concerns the role of the new expertise coming from the higher education in sport sciences and physical activity and that represents a valuable and fundamental resource for public health, as reported by **Liguori et al** (15).

To conclude, we want to stress that all NHS actions aimed to promote healthy

lifestyles cannot ignore the role that a safe sport and a safe physical activity can represent for that purpose. Therefore, we feel that the moment has come that the graduates in sport and movement sciences (16), well prepared by many of our universities, be considered by the NHS as invaluable collaborators, within the DPs, to plan, organize and perform a series of qualified initiatives in favor of the population, such as offering occasions of practicing “doping-free” sport and a regular physical activity for all those interested, but mostly fighting sedentarity of children, adults and, overall, the elderly (17, 18). We believe that the national legislator should include their degree, with its unique expertise, in the list of the NHS professionals.

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Additional documents and the Italian version is available at: www.sitinazionale.it/BDS/muoversi and/or at link www.progettodoping.it

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