

“CAROL DAVILA” UNIVERSITY OF MEDICINE AND PHARMACY

BUCHAREST

DOCTORAL SCHOOL

DOMAIN MEDICINE



“Performance and Health through Sports Medicine”

HABILITATION THESIS ABSTRACT

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ABSTRACT

The habilitation thesis “Performance and Health through Sports Medicine” illustrates the main results in the scientific, professional, and academic research activity pertaining to the specialized field in which I work. Written according to the recommendations elaborated by the National Council for Attestation of University Degrees, Diplomas and Certificates, the thesis is structured in three sections aimed at the areas of activity and the main directions of its development, on which I focused after obtaining a doctoral degree.

The first section of the thesis summarizes the scientific, professional, and academic activities of the postdoctoral period, which were mainly focused on:

- standardization of the national effort testing protocol within the periodic sports-medical examination by choosing the optimal ways of evaluating the effort capacity in relation to the different sports disciplines and directing the two effort capacities in the context of competitive training;

- confirming the importance of cardiovascular screening of athletes pre-participation in training and competitions to identify heart disease with an increased risk of sudden death during exertion or at rest;

- updating and standardizing at a European level of the sports-medical approval, both for performance athletes and for recreational sports;

- prophylaxis of overtraining, chronic pathological fatigue in athletes;

- updates on the anti-doping code and transgender athletes.

This section also mentions the published books and articles, my membership in the editorial teams of scientific journals indexed by international databases and of professional-scientific societies, both national and international, participation in research projects, innovation, development, and the recognition of my professional activity.

The second section deepens the three main directions of professional, scientific and academic career development, effort capacity assessment, the pre-participation exam for performance athletes and recreational sports and doping, based on the experience gained over a time period of over 27 years of direct involvement in the performance sports activity as a sports

medicine specialist, in the teaching activity and the activity of human resource management of teams actively involved in scientific research.

The third section is dedicated to development and evolution plans of my career both professionally and scientifically. Among the didactic objectives, I mention the continuance of the optional courses of Sports Medicine (Romanian and English) and Physiology and Pathophysiology of Effort at the Faculty of Medicine, aiming to familiarize students with basic notions of exercise physiology and the importance of movement for health, doping. In the context of the contemporary society, in which movement and sport represent a daily reality of health promotion and increase of the quality of life, I consider the knowledge and the content of this specialty, which does not pertain to any other medical discipline, of utmost importance.

Another strong objective of my professional development and evolution plans is to further spread the European EPH (Exercise Prescription for Health) program, aimed at the importance of physical exercise as a sanogenetic factor, given that obesity and the pathology generated by sedentary lifestyle are important causes of mortality worldwide. We need to make people move, create a movement reflex within them, make them understand that sport is a major factor in reducing physical and physiological decline and delaying the onset of chronic diseases. In order to achieve the expected effect and to not produce adverse reactions, exercise must be prescribed (like any medicine) in exact doses. It must have certain characteristics (intensity, duration, and volume) and take place in a predetermined framework.

In the process of developing my academic career, I focus on the improvement and diversification of teaching skills, the expansion of knowledge in the field of teaching and the forming and enlargement of new areas of teaching competence. Another important desideratum for the didactic and professional activity in the near future is the implementation of the e-learning program for the specialty, in collaboration with the European Federation of Sports Medicine Associations (EFSMA).

Further research aimed at evaluating sports performance is another direction in which I want to continue and expand my scientific activity and partnerships with teams pertaining to this field. In addition to aspects that have already been studied and that relate to medical supervision in performance sports, extremely engaging topics are selection procedures in sports, medical-biological support, and post-exercise recovery, with special focus for the use of ergogenic aids.

Continuing to publish articles in specialized journals with international visibility and participating in national and international scientific events, in which I can capitalize on the results of various studies conducted by me will be another important part of my scientific work. Of high importance and a strong aspect, I would like to mention here is the involvement of resident physicians and young specialists in publishing and research.

A permanent and ongoing concern is the organization of national and international scientific events, of good quality as well as interdisciplinary debates with specialists in fields related to Sports Medicine: cardiology, medical recovery, orthopedics-traumatology.

The last section belongs to the bibliographic references.