

Approaching bronchopulmonary diseases from phenotypes and personalized inhaled therapies to early integration of palliative care

ABSTRACT

The habilitation thesis entitled "Approaching bronchopulmonary diseases from phenotypes and personalized inhaled therapies to early integration of palliative care" presents a brief review of my scientific, professional and academic activity from the postdoctoral period 2014-2023, being structured in two main parts (not including bibliographic references).

Part I includes three chapters and is dedicated to the main scientific and professional contributions from my work as a pulmonologist, according to the disciplinary and interdisciplinary thematic directions followed over the years.

Chapter 1 is addressed to the scientific achievements and it begins with a summary of the main milestones and research results synthetically quantified by the number and type of published articles, the number of citations in various databases, the activity as a member in the Scientific Committees of some national events organized under the auspices of the Romanian Society of Pneumology and of the National Association of Palliative Care and through the reviewer activity of ISI/BDI indexed journals.

Subchapter 1.1. makes a foray into the research fields addressed during the postdoctoral period, with the presentation of the most important scientific achievements related to each field of interest:

- pulmonary tuberculosis - from the premises of the doctoral research, to the new serum biomarkers such as the neutrophil/lymphocyte ratio with potential diagnosis in tuberculous pleurisy;
- smoking – from genetics and the inflammatory profile of nicotine addiction, to the impact on adolescents from the social protection system or on women during the COVID-19 period;
- chronic obstructive pulmonary disease – risk factors, endotypes and clinical phenotypes, comorbidities, development of guidelines, therapy, education, adherence;
- bronchial asthma – the inflammatory profile, complementary therapies and personalized biological therapies for severe asthma, problematic comorbidities;
- burnout syndrome among pulmonologists – before and during the COVID-19 pandemic;
- COVID-19 - the pandemic that challenged humanity and to which answers are still needed;
- palliative care in non-oncological and oncological respiratory diseases, a necessity nowadays. Starting from this reality, which the medical world faces both globally and nationally, I tried to identify the main milestones and needs in the field of pulmonary palliative care, combining my training as a pulmonologist with the new knowledge acquired within the Competence of Palliative care.

Subchapter 1.2. refers to the multicentric, international and national phase II, III and IV clinical research studies, focused on chronic obstructive pulmonary disease, bronchial asthma, bronchiectasis, community-acquired pneumonia, which I have coordinated with resident doctors and nurses.

Chapter 2 presents the path of my professional training and the main directions of development in the field of pneumology and at the border with other related specialties, summarizing

the internships and training courses, the skills /competences obtained and the professional experience I gained both as a student and as a invited lecturer at various scientific events in the country and abroad. Somnology, non-invasive ventilation, chronic obstructive respiratory diseases, tobacco, lung cancer, pulmonary interstitial diseases, rare respiratory diseases such as alpha-1-antitrypsin deficiency, lifestyle medicine and, in recent years, palliative care, are the areas of interest that I tried to explore with a curiosity and a drive that did not tired and motivate me to look for new valences in current clinical practice.

Chapter 3 is dedicated to the course of the teaching activity over a period of 21 years, starting from 2002, from Junior University Assitant to Lecturer within the Pneumology Discipline. The year 2021 was a turning point in my academic activity, through the establishment by "Iuliu Hațieganu" UMF Cluj-Napoca of the Discipline of Palliative Medicine where I became a member as Lecturer and from October 2022 Associate Professor, being also the Head of the discipline. The opening of new teaching horizons, bringing of academic staff with a Palliative Care competence, the design of course support and practical sessions for the 6th year students of the Faculty of Medicine of Romanian, English and French sections, as well as for the 4th year students of at the General Nursing study program, respectively the 2nd year students from the Balneophysiokinesitherapy and Medical Recovery, meant the work, energy, joy and dedication that I put into the last two years of my academic life. Understanding the concept of palliative care, with the identification and impeccable treatment of physical symptoms, but also of psycho-emotional, social and spiritual suffering, with the aim of improving the quality of life of patients with chronic incurable diseases and their families, is the central objective I want to achieve together with my team with each generation of students who cross the discipline.

Part II of the thesis brings together the main future directions of my scientific, professional and academic activity, which involve a continuation of the improvement efforts on all three dimensions, with a special focus on the field of palliative care, without, however, marginalizing pneumology, a dynamic specialty, full of challenges and new perspectives to explore.