

ABSTRACT

This habilitation thesis reflects my scientific, professional and academic activity after obtaining the title of Doctor in Medicine with the thesis "Cardiovascular Risk Factors in Patients with Renal Pathology", confirmed by the National Council for Attestation of Titles , Diplomas and Certificates, by THE Order of the Minister of National Education no. 3876 of 19.05.2004.

The thesis is organized into four sections: 1. Introduction - a brief review of my teaching, professional and scientific work, 2. Author's main scientific research projects and publications, 3. Career evolution and development plans, 4. References

The following are the main aspects of my professional and teaching activity presented in the introduction.

Professional activity. I graduated from the Faculty of Medicine of the University of Medicine and Pharmacy in Târgu-Mureş in 1994 with a license degree of 9.80. I have gone through all stages of medical training on a competitive basis. I am a primary physician for internal medicine (Order of the Ministry of Health 271/2005) and primary physician in nephrology (Order of the Ministry of Health 1044/2013). Since 29.11.2001 I work in the Nephrology Department of the Mureş County Clinical Hospital. I am member of the Nephrology Commission of the National College of Physicians and the Nephrology Committee of the Mureş College of Physicians. Beginning in 2014 I am a member of nefrology specialty examination committees. I participated as principal investigator or as a member of the research team at 9 national and international clinical trials.

Teaching activity. I am a teacher in higher education since 1999 when I passed the exam for university assistant in the Department of Physiology. I followed this successive stages of didactic training: from 2005 - 2015 lecturer in the Department of Physiology, 2015 -2017 associate professor in the 4th Internal Medicine Department, University of Medicine and Pharmacy Tîrgu Mureş.

Throughout my university career I have been constantly concerned with the training and guidance of young specialists with their involvement in research (both students and resident doctors), demonstrated through the coordination of a number of 19 license papers and another 16 scientific papers presented at annual student conferences. I had tutoring activities for students and for undergraduate researchers (doctoral students), training for residents. I mention here that I was a coordinator and lecturer of a number of five postgraduate courses. I was invited to hold conferences at various national scientific events.

Between 1997 and 2014, I was the Secretary of the Editorial team at the Medical Journal of the University of Medicine and Pharmacy in Târgu-Mureş: "Revista de Medicină şi Farmacie - Orvosi es Gyogyszereszeti Szemle", actually "Acta Medica Marisiensis". Thanks to my participation and also of the distinguished editorial staff, the magazine became recognized by CNCSIS (C, then B and B +) and was included in EBSCO.

I am a peer review for 5 international publications (rated ISI and ISI indexed).

Scientific activity. I published 11 articles in extenso in ISI Thomson journal with impact factor (cumulative factor of more than 8) and 14 articles International Database Indexed journals. I also

published 11 articles in summary (4 as the first author) in quoted journals, two books as the first author.

The second part: author's main scientific research is a presentation of the projects, methods and results with discussions based on the literature. My projects are presenting as follows (on the main research themes):

a. Contributions to chronic kidney disease (CKD) etiopathogenesis and complications: a1. CKD screening: glomerular filtration rate estimation equation and their comparison for better CKD staging, a2. etiopathogenesis of CKD complications: CKD anemia - the role of inflammation and the use of hepcidin as a marker for oral iron therapy; secondary hyperparathyroidism - etiopathogenesis and consequences in chronic kidney disease; hypertension - methods of evaluating hypertension in patients with renal transplantation; obesity, metabolic syndrome and glucidic metabolism disorders - interrelations with inflammation in patients with CKD; contrast nephropathy, as the main in-hospital complication in the patient requiring imaging.

b. Monitoring therapy based on the pharmacokinetic criterion in CKD: b1. Monitoring of immunosuppressive therapy based on the pharmacokinetic criterion in renal transplant patients, b2. Pharmacokinetic-based antibiotherapy monitoring in patients with CKD: methods for detection and monitoring of ciprofloxacin in human plasma by LC-MS, with their subsequent use; population pharmacokinetics in the monitoring of ciprofloxacin therapy in CKD patients

The third part of the thesis is a brief description of the development plan for my university academic career. The plan follows the same two main directions presented in the first part of the paper: clinical research in CKD and its complications and monitoring of therapy in CKD based on the pharmacokinetic criterion. The main topics are extensively discussed in the thesis: 1. Estimated glomerular filtration rate, corrective parameter for clinical and therapeutic monitoring in elderly, obesity and kidney transplantation patients, 2. The relationship between diabetes-obesity--kidney disease anemia and inflammation, 3. Monitoring of immunosuppressive therapy in chronic kidney disease based on the pharmacokinetic criterion.

The last part contains the references that allowed us to discuss our results and compare them with the literature