

Letter to the Editor

Why Podiatry is a Must for the Healthcare System in Romania?

Ioan Andrei Veresiu^{1,2,3}

¹ Romanian Association of Podiatry, Romania

² Department of Diabetes, Nutrition and Metabolic Diseases, Iuliu Hatieganu University of Medicine and Pharmacy, Cluj-Napoca, Romania

³ County Clinical Emergency Hospital Cluj-Napoca, Cluj-Napoca, Romania

*Corresponding Author: Ioan Andrei Veresiu, Assoc. Prof., Department of Diabetes, Nutrition and Metabolic Diseases, Iuliu Hatieganu University of Medicine and Pharmacy, County Clinical Emergency Hospital Cluj-Napoca, Cluj-Napoca, Romania. 2-4 Clinicilor Str, 400006, Cluj-Napoca, Romania; E-mail: iveresiu@umfcluj.ro.

Received: May 24th, 2020 / Accepted: June 4th, 2020

Introductory Remarks

It can seem strange for the most of the health care professional from the western countries (and Australia) that, in the second decade of the XXI century, some of us are trying to convince regulatory bodies from our country (and from other countries from Eastern Europe) that podiatry, as a job, has an essential and time-honored place in the panel of the health care dedicated jobs.

Foot care is a job with documented roots in Ancient Egypt and has a rich history, from “corn cutters” to “chiroprody”, “podology” and reaching today to the worldwide recommended name “podiatry” and the degree of Doctor in Podiatric Medicine in the US (the equivalent of MD in the US). Some of the cornerstones of this long history are Paul of Aegina who in the VIIth century has given the first definition of “corn”, continuing with Nicolas Laurent Laforest, the author of the first textbook dedicated to foot care (“Art de Soigner les Pied”, 1781), with special persons as Isachar Zacharie, Abraham Lincoln’s “foot doctor”, a close friend and confidant and mainly the year 1895 when “The Pedic Society Incorporated”, the first officially recognized association of professionals dealing with foot care, was founded in New York. In 1912, the Society of Chiropodists was established in the UK, the first one of this kind in Europe. In 1947, ten podiatry organizations founded the International Federation of Podiatrists, which later became the International Federation of Podiatrists - Federation Internationale des Podologues (IFP-FIP); at this time, more than 30 organizations

from more than 30 countries are spread over six continents (<https://www.fip-ifp.org/fip-ifp/>). In 2019, IFP-FIP gave the actual worldwide accepted definition of podiatry which is “that profession of health sciences concerned with the research, prevention, diagnosis and treatment of deformities, pathologies and injuries of the foot and associated structures – in relation with the body as well as the manifestations of systemic diseases – by all appropriate systems and technologies using scientific and professional specialized knowledge”. For my further argumentation, it is important to mention the year 1991 when the first International Symposium on the Diabetic Foot was organized in Noordwijkerhout, Netherlands (in 1995, at the second edition of this International Symposium, I was honored with a poster prize).

All this wave of accelerated development of foot care in the XXth century, in the US, Western Europe, Canada, and Australia has barely touched our country (and other Eastern European countries). The first important and significant step forward was the publishing of the book “Gangrena Diabetică” by Prof. Gheorghe Băcanu in 1973 by the Facla publishing house, Timișoara. The small booklet for patient education, “Piciorul Diabetic”, published by my past distinguished colleague Dr. Nicolae Mosora must also be mentioned. In 1997, we succeeded in opening in our Diabetes Center and Clinic, the first medical office dedicated exclusively to the care of the diabetic foot, and shortly after, the same office was opened at the National Institute of Diabetes in Bucharest. In the same period, Prof. Con-



stantin Ionescu-Târgoviște tried to include the topic of diabetic foot in his BlackSeeDiab initiative.

Arguments for Podiatry as a Must for our Healthcare System

- The long experience of other countries demonstrated beyond any doubt that the professionals who are “traditionally” dealing with foot care, either do not have enough time (medical doctors such as orthopedists, surgeons, diabetologists, dermatologists) or they do not have the needed expertise (pedicurists, physiokinetothersapists) to face the high and increasing number of patients and with the increasing complexity of the foot and lower limb problems. This statement is supported by the fact that in the countries with a long tradition of podiatry, a long list of podiatry subspecialties has emerged (e.g., Reconstructive Foot and Ankle Surgery, General Podiatric Physician, Podiatric Medical Phy-

sician, Podiatric Orthopedic, Podiatric Sports Physicians, High-Risk Wound Care, Podiatric Rheumatology, Neuro-podiatrist, Onco-podiatrist, Podiatric Vascular Specialist, Dermatological Podiatrist, Gerontological Podiatrist, Podopediatrics, Forensic Podiatry) [1].

- Diabetes and diabetic foot (one of the most frequent and invalidating diabetes complications) are widely accepted at this moment as important challenges for public health systems all over the world [2].
- The diabetes prevalence in our country is one of the highest in Europe, reaching 12.4% in the adult population [2].
- In a nationwide epidemiologic multiannual study on the frequency of diabetes-related lower limb amputations [3], we found out that this is a real an increasing burden for our healthcare system (Figure 1).
- We have also found that the regional distribution of diabetes-related lower limb amputations has a fairly wide and hard to be explained distribution (Figure 2).

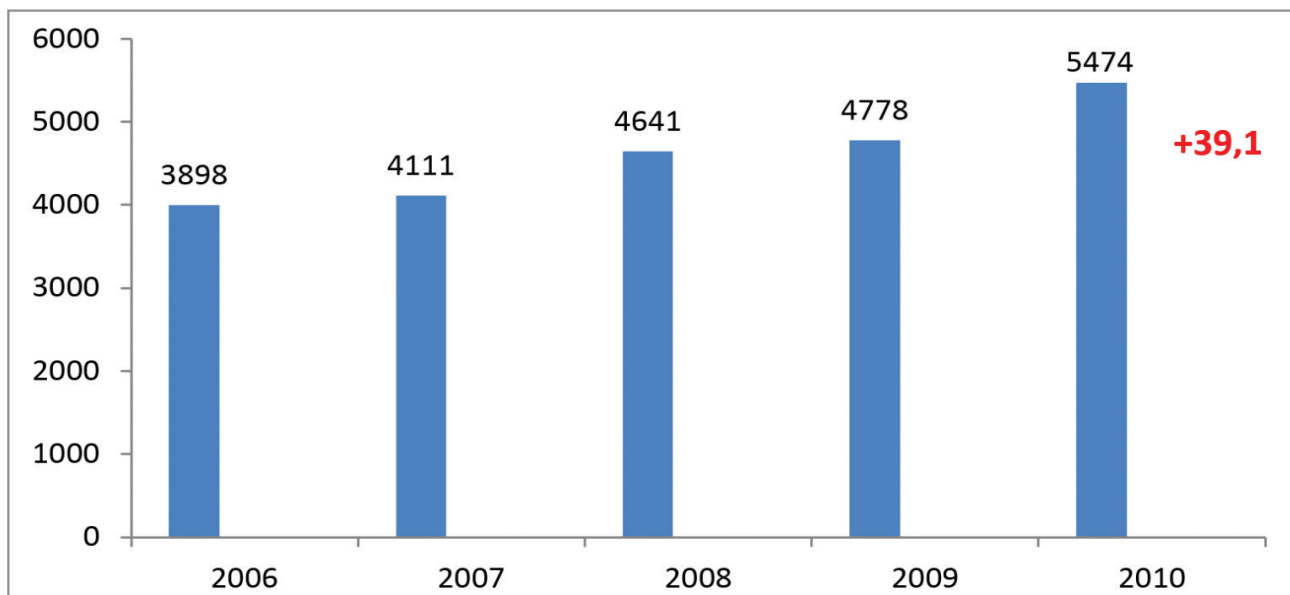


Figure 1: Multiannual trend in lower limb amputations in Romania (2006-2010).

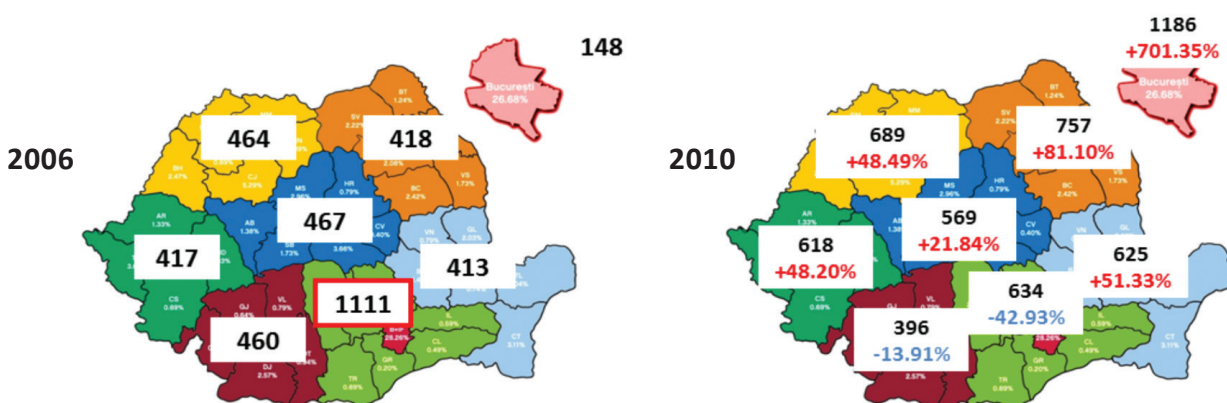


Figure 2: Regional distribution of diabetes-related lower limb amputations in Romania.

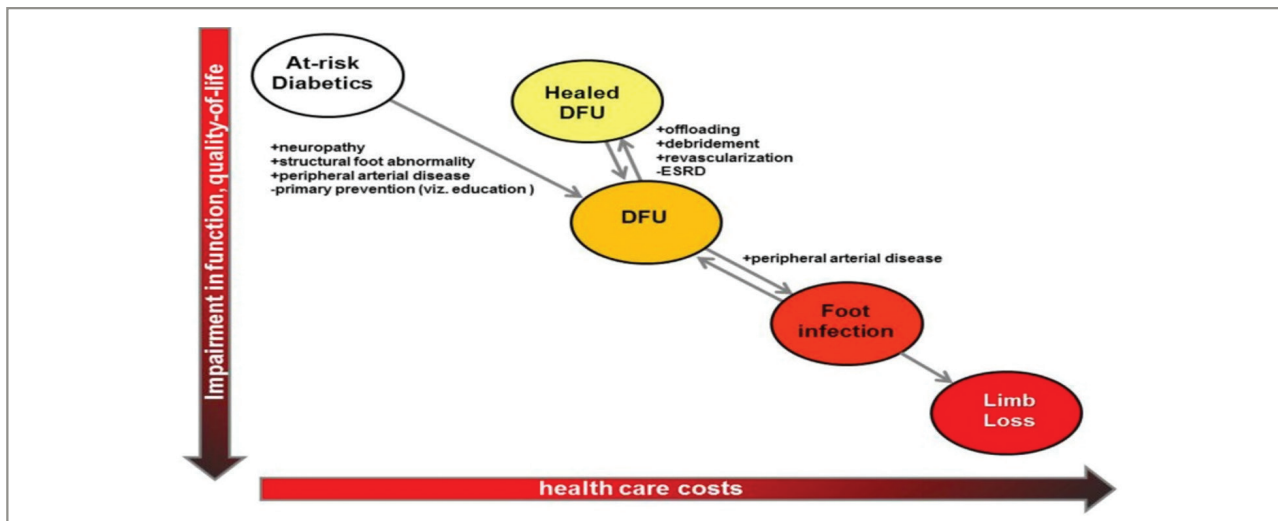


Figure 3: The correlation between quality of life and healthcare costs for diabetic foot complications. (adapted after [4]).

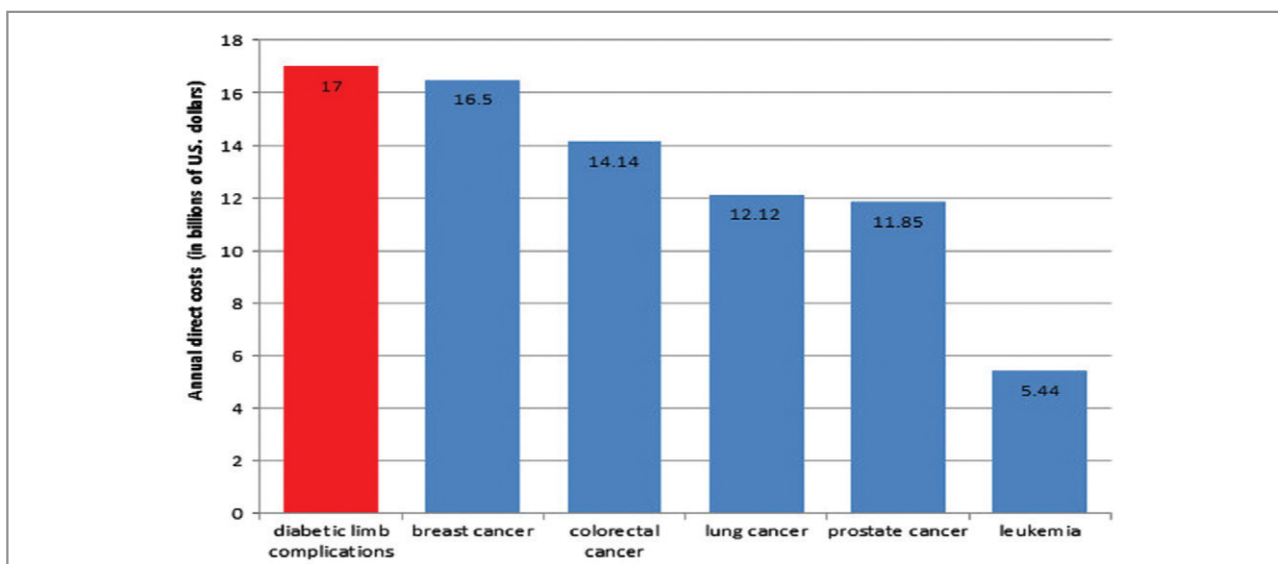


Figure 4: The estimated annual direct costs of diabetic limb complications in comparison to the annual direct costs of the five most costly cancers in the United States (adapted after [4]).

- A linear correlation has been demonstrated [4] between the quality of life and healthcare costs along the way from risk for foot ulceration to limb amputation (Figure 3).
- In another study [5], we have done a Markov simulation based on the epidemiological data on diabetic foot from our country and EURODIALE study data [6]. One of the results of this simulation showed that the 5 years' direct costs of unhealed ulcers in Romania is around 350,000,000€. It is worth to be mentioned that the costs of diabetic foot care are among the highest in countries with advanced healthcare systems (Figure 4).
- The most recent guidelines of the International Working Group for Diabetic Foot emphasize the fact that the podiatrist is one of the most important members of the foot care team [7].

• My last but not the least argument is that we have made the first steps for introducing “Podiatry” as a well-defined occupation in our country by the foundation of Romanian Association of Podiatry in 2015, by organizing three annual editions of the National Congresses on Podiatry (with important international opinion leaders participation), by initiating continuing medical education (CME) activities for nurses and obtaining in 2019 the official recognition of podiatry as an occupation in our country.

Conflict of Interest

The authors declare that there is no conflict of interest.

References

1. *** Accessed at: https://en.wikipedia.org/wiki/Podiatry#Podiatric_subspecialties
2. International Diabetes Federation. IDF Diabetes Atlas – 8th Edition. Accessed at: <https://www.idf.org/e-library/epidemiology-research/diabetes-atlas/134-idf-diabetes-atlas-8th-edition.html>.
3. Vereşiu IA, Iancu SS, Bondor C. Trends in diabetes-related lower extremities amputations in Romania — a five-year nationwide evaluation. *Diabetes Res Clin Pract* 109(2): 293–298, 2015.
4. Barshes NR, Sigireddi M, Wrobel JS, Mahankali A, Robbins JM, Kougias P, Armstrong DG. The system of care for the diabetic foot: objectives, outcomes, and opportunities. *Diabet Foot Ankle* 4:1, 2013
5. Giretti C, Griffiths RI, Creţeanu M jr, Vereşiu IA. Trends in the epidemiology and costs of feet ulcerations and diabetes related lower limb amputations associated with PAD in Romania. IIIrd National Congress of the Association of Podiatry, Bucharest, 2019 (Abstract - Oral Presentation).
6. Prompers L, Huijberts M, Apelqvist J, Jude E, Piaggese A, Bakker K et al. Optimal organization of health care in diabetic foot disease: Introduction to the Eurodiale study. *Int J Low Extrem Wounds* 6(1): 11-17, 2007.
7. Schaper NC, van Netten JJ, Apelqvist J, Bus SA, Hinchliffe RJ, Lipsky BA on behalf of the IWGDF. International Working Group on the Diabetic Foot (IWGDF) Practical guidelines on the prevention and management of diabetic foot disease 2019. Accessed at: <https://iwgdfguidelines.org/wp-content/uploads/2019/05/01-IWGDF-practical-guidelines-2019.pdf>