



History of medical specialties in Nicaragua: genesis and perspectives

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INTRODUCTION

The history of medical specialties in Nicaragua is a topic that doctors, medical students, and all professionals and technicians related to human health or biomedicine, must know in its fundamental aspects to understand how our country has been advancing, little by little, in deepening the scientific-technical knowledge of doctors to improve the quality of the national health system, in the public sector, social security and in the private sector.

Some historical aspects of national medicine help us to better understand the relevance and impact of the institutionalization of medical and surgical specialties in the country. Medical studies in the Central American region began in Guatemala, at the San Carlos de Borromeo University, where the first Nicaraguan student was Francisco de Chavarría originally from the port of El Realejo; but it did not end because he died suddenly during an intense philosophical discussion with his fellow student Antonio Escobedo. Subsequently, two more Nicaraguans began and finished their medical studies in Guatemala, they were: Timoteo Mayorga and Juan Bautista Muñoz (Montalván, 1960; Fisher, 2010a).

De la Huerta y Caso founded the first chair of medicine in Nicaragua, in 1798, whose duration was short-lived (Pérez, Ulloa and Ramos, 2003) and was re-established in 1804

(Arellano, 2002). Because on May 15, 1807, the Seminary College of San Ramón was elevated to a Minor University, for which it could extend the title of Bachelor of Medicine, the next day (16-5-1807) began to teach the chair of medicine, Dr. Francisco Quiñónez, graduated from the University of San Carlos Borromeo of Guatemala (Arellano, 2002), and who was the only academic doctor throughout the Province of Nicaragua (Pérez et al., 2003).

The Protomedicato was formed on September 20, 1848, and was regulated in 1859, in León. It was an instance of colonial origin that reorganized the studies of medicine (Montalván, 1960; Korea, 2000). In the mid-1880s the university assumed the Napoleonic or professionalizing model to satisfy the need for professionals that the postcolonial state and oligarchy required, as was the case in other Latin American countries (Pérez et al., 2003).

In the last 25 years of the nineteenth century, some Nicaraguan doctors traveled to France or the United States to study medicine. Among the best known, members of the richest social classes in the country, are Luis Henry Debayle, a graduate of Paris, and Juan José Martínez Moya, a graduate of New York. These doctors came to apply antisepsis techniques and to modernize medicine and surgery. In addition, they operated different anatomical regions of the human body, from the eyes to the gallbladder (Fisher, 2011).

In the first eighty years of the twentieth century, Nicaraguan doctors conducted specialization studies in the United States, France, Mexico, Brazil, Chile, and Colombia. They opted for a scholarship or took the expenses on their own.

Special mention deserves the famous trio or quartet of the Soborna, Nicaraguan doctors, who studied at the famous University of Paris and who returned to practice medicine in the city of León, at the end of the year 1920; they were the following: Humberto Tijerino, Alfonso Argüello, Alcides Delgadillo and Alberto Martínez (Berríos, 1994).

The first Nicaraguan doctor, who traveled abroad, to carry out specialized studies in radiology was Dr. Inocente Lacayo, who returned from France around 1925-1926 and practiced radiology in the capital Managua (Fisher, 2015).

It was in 1955 that Nicaragua's first neurosurgeon returned to the country, Dr. César Amador Kühl, a graduate of the United States (Amador, 2012; Fisher, 2021a). On the other hand, the first four generations of ophthalmologists specialized in other countries (Fisher and Aragon, 2018).

If the historical stages of medicine in Nicaragua are seven: 1) magical; 2) galenic; 3) mestizo; 4) Pausterian; 5) specialized; 6) social; and 7) modern (Álvarez, 2013; Fisher, 2019a), then, the foundation and promotion of medical-surgical specialties would be part of the modern stage.

DEVELOPMENT

In 1979 the Sandinista Popular Revolution triumphed. We must remember that the history of national medicine indicates that it was in 1982-1983, in the middle of the Sandinista Revolution, that the process of formation of medical and surgical specialties began, with university certification; before which, doctors had to travel abroad, on scholarships or with their financial resources, to specialize (Fisher, 2014).

This initiative arose from within the National Directorate of the FSLN, was transmitted to the Governing Board of National Reconstruction, then to the National Council of Higher Education, as indicated by the doctor in experimental design Manuel Enrique Pedroza Pacheco (Fisher, 2021a).

Subsequently, the Ministry of Health finalized the government decision in coordination with UNAN-León, a university that initiated the university certification of the degrees of the new specialists. Nicaragua needed to start training and training its medical specialists, amid our reality and with our material and human resources (Fisher, 2014). No government had thought of making such a decision. When such a gigantic task began, the enemies of the Sandinista Revolution were criticized and mocked. History has proved the Sandinista rulers right. Almost 40 years later the results are there, in thousands of medical specialists attending to the people in the different spheres of medicine.

Without forgetting that university degrees were also extended to teachers of generations, with great experience and knowledge, as well as to doctors who trained theoretically and practically in hospitals in Managua and León, exercising the work of resident doctors, as was the custom until then, but who did not obtain a university degree at the end of their medical residency (Fisher, 2014).

For the programs of medical and surgical specialties to be promoted, the Central Commission formed by the Minsa and the U.N.A.N., demanded that all academic plans and programs be prepared before 1982 (Guevara, 2003; Fisher, 2014).

Among the 18 medical and surgical specialties that received university accreditation, from the transformative process begun in the 1980s, the following can be mentioned: internal medicine, gynecology, and obstetrics, surgery, pediatrics, orthopedics and traumatology, pediatric surgery, urology, psychiatry, physical medicine and rehabilitation, pathology, otolaryngology, anesthesiology, dermatology, plastic surgery, ophthalmology, radiology, maxillofacial surgery, and neurosurgery.

In addition, the number of students entering to study medicine was increased by 100, 200, and 300 percent; UNAN-Managua was founded in 1984 and its Faculty of Medicine. In

the mid-1970s the number of first-time medical students in León was between 50 and 70 each academic year.

The Faculty of Medicine, in Managua, emerged as a school in 1980, when 60 fourth and fifth-year medical students of the UNAN, whose headquarters were in the city of León, moved to receive medical training in the medical-surgical hospitals of Managua. In 1981, the first year of medical school opened in Managua at the Rubén Darío University Campus (Pérez et al., 2003).

Increasing the number of medical students favored the training of more resident doctors in medical or surgical specialization programs, but with the certainty of receiving a university degree as a specialist. Residency is the period of study, training, and work in which a doctor and surgeon specialize in a branch of the medical career, which is usually performed in a hospital environment, lasting three or four years, after which a university awards the title of specialist. Residency is the best stage of a doctor's life and training, some say; but not all doctors think alike (Fisher, 2010b).

The resident or resident doctor plays a double role: student and professional, worker. As a student, you should strive disciplined to learn all the theoretical and practical knowledge of the specialty you are studying. And as a worker, you must meet a daily work schedule of eight hours and also do night shifts or during the weekends. The work is so much (the more you do and see, the more you learn), that some claim that the resident has an entry time, but no check-out time. Because of this arduous pace of study and work, it is advisable to make the residency as young as possible (Fisher, 2010b).

During residency, a sense of selfish competition is wrongly stimulated, which is dangerous because in every competition someone always wins at the expense of the defeat or loss of another. In such a way, what should exist during the residency is cooperation (Fisher, 2010b).

Throughout 16 years of orthodox neoliberalism, the places or quotas of resident doctors were drastically reduced. President Daniel Ortega gave a total of 270 seats to the new president, Violeta Barrios, in 1990. In 2007, the new president Daniel Ortega received from the outgoing president, Enrique Bolaños, only 87 seats. Thus, Nicaragua could not train at least 2500 medical specialists (Fisher, 2009).

From 2007 onwards, the number of places for resident doctors was increased, reaching 300 new admissions. In addition, all residents were entitled to a scholarship worth an average of \$500 (Fisher, 2019b). Since 2007, this number of new residents began to decrease, partly due to the economic blockade actions on Venezuela, which affected some trade agreements with Nicaragua. Such a decline was aggravated by the soft coup d'état, which was driven by the forces

of the extreme right, which caused 1400 million dollars in losses to the country and around 170 thousand unemployed (Fisher, 2020).

During the almost four decades of the national specialization program, many doctors, already graduated as specialists, have subsequently carried out sub-specialization studies in other countries, mainly Latin America, such as Mexico, Guatemala, Brazil, or Colombia (Fisher and Aragon, 2018).

In recent years, the Ministry of Health has promoted specialization in emergenciology, intensive or critical care, perinatology, hospital management, and radiotherapy. Sub-specialization, or high specialization, as it is called in other countries, has begun in 2021, in the areas of cardiology, nephrology, and neurology (Fisher, 2021b). It would be reasonable if the material conditions existed, for sub-specialization to begin in the last year of the specialty because demand is high, the population is increasing, and life is not as long as it seems (Fisher, 2011b).

The teaching hospitals that have trained medical specialists from the first half of the 1980s to the present day are the following: Oscar Danilo Rosales Argüello, in León. On the other hand, in Managua, they have been: Antonio Lenin Fonseca Martínez, Manolo Morales Peralta, Fernando Vélez Paiz, Manuel de Jesús Rivera, Bertha Calderón, Alejandro Dávila Bolaños, Alemán - Nicaragüense, Centro Nacional de Oftalmología, Psicosocial, Dermatológico, Aldo Chavarría. Subsequently, the Bautista, Carlos Roberto Huembes, Centro Nacional de Radioterapia, Bologna and Nuevo Monte España hospitals have been added.

The perspectives are an expansion of the specialization program, as well as the consolidation and expansion of the sub-specialties, especially with the construction of new and modern hospitals, to improve the health care of the Nicaraguan people, inclusive and free, as only a revolutionary government can do, since institutionalized the medical and surgical specialties, in the 1980s (Fisher, 2021b).

CONCLUSIONS

The history of medical specialties in Nicaragua can be divided into four stages. First, from 1920 to 1979 (specialization abroad). Second, from 1979 to 1990 (foundation and institutionalization of national specialization). Third, from 1990 to 2006 (stagnation and regression of specialization). Fourth, from 2007 to the present day (revitalization of specialization and beginning of sub-specialization).

The country has made a quantitative and qualitative leap in the number of specialist doctors and surgeons, articulating public policies through the Ministry of Health and the National Autonomous University of Nicaragua, both in León and Managua. The leading role

of the State has been decisive. The Sandinista Revolution has been the main sociological phenomenon influencing the complex process of specialization and sub-specialization of Nicaraguan doctors, as a reflection of the revolutionary transformation of the country through education in general, higher education and medical education in particular, to benefit all citizens with greater coverage, more quality and greater specialization of medical personnel.

REFERENCES

- Álvarez Montalván, E. (2013). Development of medicine in Nicaragua. In: Doctor of vocation and amateur in politics. Managua. The Press.
- Amador Kühl, C.A. (2012). Memories of my life. Cultural Promotion Fund Invercasa. Managua, Nicaragua.
- Arellano, J. E. (2002). Interpretation of Leonesity. In: Boletín nicaragüense de bibliografía y documentación. Rubén Darío and Leonesidad. Central Bank of Nicaragua. Imprimatur. Managua. Jan-Tue: 114
- Berrios Valladares, G. (1994). 90 years of surgery in León. Medical Bag. No. 6; Feb.: 4-6
- Corea Fonseca, E. (2000). History of medicine in Nicaragua. The Press. Managua.
- Fisher, L. (2009). On medical specialties: response to a former Dean. In: The anti-neoliberal revolution. Editronic. Managua, Nicaragua.
- Fisher, L. (2010a). University of Nicaragua: a historical review. In: History of the radiology in Nicaragua: the path of invisible light. University. Managua.
- Fisher, L. (2010b). The residence. In: History of radiology in Nicaragua: the path of invisible light. University. Managua.
- Fisher, L. (2011a). X-rays in Nicaragua. In: History of radiology in Nicaragua. 2da. ed. Universitaria. Managua.
- Fisher, L. (2011b). Specialization within radiology. In: History of the radiology in Nicaragua. 2nd ed. University. Managua.
- Fisher, L. (2014). Sandinista Revolution and medical-surgical specialties. In: Revolutionary writings of the XXI century. University. Managua, Nicaragua.
- Fisher, L. (2015). Nicaraguan radiology: 113 years of history. University. Managua.
- Fisher, L. Aragón Padilla, J.P. (2018). The history of ophthalmology and optometry in Nicaragua. Tutecotzimí University. Managua.
- Fisher, L. (2019b). Resident doctors and public policies in Nicaragua. School Nicaraguan Radiology. <https://colegionicaraguenseradiologia.blogspot.com/:3-3-19>
- Fisher, L. (2019a). Stages of Nicaraguan medicine. Nicaraguan School of Radiology.



- <https://colegionicaraguenseradiologia.blogspot.com/: 27-8-19>
- Fisher, L. (2020). Soft coup d'état, Nicaragua 2018: another victory of the FSLN. University. Managua.
- Fisher, L. (2021a). History of neurosurgery in Nicaragua. University. Managua.
- Fisher, L. (2021b). Medical subspecialties in Nicaragua. School Nicaraguan Radiology. <https://colegionicaraguenseradiologia.blogspot.com/: 2-4-21>
- Guevara Guerrero, U. (2003). History of pathology in Nicaragua. University. Lion.
- Montalván, L. H. (1960). Brief notes on medical ethics and history universal medicine. Hospice. National Autonomous University. Lion Nicaragua.
- Pérez Orozco, G., Ulloa González, A., Ramos Vega, D. (2003). Remembering with the heart... we build the future: 23 years of history of the Faculty of Medicine, UNAN-Managua. Imprimatur. Managua.